3 31

National

Vol. 7 No. 7 January 2017-June 2017 ISSN No. 2348 – 8298

chanakya
ಚಾಣಕ್ಯ

JOURNAL OF POLITICAL SCIENCE

A Refereed, Bi Annual, Bi Lingual, Peer Reviewed Social Science
Journal of Chanakya Alumni Association,
Department of Political Science,
Karnatak University, Pavate Nagar,
Dharwad-580003

complex set of social, political, economic, religious, demographic, educational and cultural factors that make up the full ecology of human life". In Karnataka, the policy makers too seem to have understood that there can be a domain specific choice of language- going by their near silence on the Supreme Court verdict.

Acknowledgement:

(I am indebted to Prof. N. Krishnaswamy of CIEFL for inspiring many like me to see the language issue from a non Western point of view and prodding me to work on this topic. I am indebted to Dr, J, Sadananda of Kuvempu Univerrsity for helping me to see this issue of language choice within a framework.)

Contributor:

Dr. Shakira Jabeen B is the Head of the Department of English at Nehru Memorial College, Sullia, Karnataka. She is an alumnus of CIEFL- Hyderabad, Dept. of Political Science, Kuvempu University- Shivmogga and a former faculty of RIESI, Bangalore. Her area of research is 'Language Policy'. Her other areas of interest are - Socio linguistics, Cultural Studies, Theory and ELT. (khan.shakira @gmail.com)

The Nature of Mother's Employment on Nurturing Campus Persistence among Undergraduate Students

Article · Asian Social Science · January 2017

Nehru Memorial College Sullia
26 PUBLICATIONS 1 CITATION

National Institute of Technology Karnataka
124 PUBLICATIONS 234 CITATIONS

Asian Social Science; Vol. 13, No. 6; 2017
ISSN 1911-2017 E-ISSN 1911-2025
Published by Canadian Center of Science and Education

The Nature of Mother's Employment on Nurturing Campus Persistence among Undergraduate Students

Vijayalakshmi N. S.[1] & A. H. Sequeira[1]

[1] School of Management, National Institute of Technology Karnataka, Surathkal, Mangalore, India

Correspondence: Vijayalakshmi N. S., School of Management, National Institute of Technology Karnataka, Surathkal, Mangalore, India. E-mail: vijaylakshmins@nitk.edu.in, nandalike17@gmail.com

Received: January 26, 2017 Accepted: February 14, 2017 Online Published: May 31, 2017
doi:10.5539/ass.v13n6p36 URL: https://doi.org/10.5539/ass.v13n6p36

Abstract

Objective: The study aims to empirically test the relationship between types of campus adaptations across students' mothers' level of nature of occupation among engineering undergraduate B. Tech students pursuing a four-year study at Indian Institutes of Technology (IIT's) and National Institutes of Technology (NIT's) in India.

Method: The Multivariate Analysis of Variance (Manova) test was run with SPSS vs. 21 to compare the student's campus adaptations of IIT's and NIT's by students' mothers' level of occupation. Multistage random sampling with n = 1420 students were selected comprising of employed at government (n = 172), employed at private (n =141), own a business (n = 71) employed as unskilled labourer (n = 10), farmer (n = 10), retired from government service or pensioner (n = 06), not alive (n = 03), unemployed (n = 107).

Result: In the academic adaptation, students' mothers' who were employed by the government, owned a business, employed as unskilled labourer and pursued farming had positive outcome while students' whose mothers' were employed at private, retired from government service, not alive and unemployed had negative outcomes. In social adaptation students' whose mothers' were employed by the government, owned a business, retired from government service and unemployed had positive outcomes while students' whose mothers' were employed at private, employed as an unskilled labourer, pursued farming and not alive had negative outcomes. In physical - psychological adaptation, students' mothers' who owned a business, not alive and unemployed had positive outcomes while student's mothers' employed at the government, employed at private, employed as an unskilled labourer, pursued farming and retired from government service had negative outcomes. In the institutional adaptation, students' mothers' employed at the government, employed at private own a business, employed as an unskilled labourer, retired from government service and not alive had positive outcomes and students whose mothers' were farmers and unemployed had negative outcomes.

Conclusion: Campus adaptations do vary across student's mother's level of occupation influencing student's experiences at IIT's and NIT's.

Keywords: socio-economic status, parents, mother, occupation, adaptation

1. Introduction

Parents' expectations and socio-cultural background influences overall adjustment and academic achievement of students (Balboni & Pedrabissi, 1998). Mothers' and mothers' attitudes differed toward their children's academic performance and perceptions of academic competence by gender (McGrath & Repetti, 2000). The socio-economic problems impact transition from knowledge-based economy to knowledge-based society (Mindeli & Pipiya, 2007) where socioeconomic differences in family size reflect cultural differences in confidence and social support for parenting (Newman, 2009). This reflects that social background differences in education and youth transitions in higher education (Iannelli & Smyth, 2008) impacts transitions to post-secondary and tertiary education (Tieben & Wolbers, 2010). The parent's academic involvement impacts students perceptions of achievement goals (Régner, Loose, & Dumas, 2009) with social and economic purposes of higher purposes of higher education (McArthur, 2011a). Ball and Vincent's concepts of 'hot' (informal) and 'cold' (formal) knowledge provide a complimentary resource for exploring students from low socio-economic status access knowledge (L. Smith, 2011). Though culture and economic factors are found to influence students decision towards higher education (Bowden & Doughney, 2012); parents' concerns exist over the inclusion of engineering education by its concepts of learning to lower levels of education (Kluin, 2012). Further engineering diversity can be enhanced by the inclusion of students from low socio-economic status into engineering (Lundy-wagner, 2013). In short, socio-economic status diversifies in higher education (Ahmar & Anwar, 2013) where parents vary by their profound influence college planning process (Hallett & Griffen, 2015) which has predictive effects of parental involvement on academic achievement (Veas, Gilar, & Miñano, 2016).

Parents Occupation: Maternal occupation influences college students by gender (Weer, Greenhaus, Colakoglu, & Foley, 2006) where mothers' full-time employment is found to vary self-efficacy of students' of a minority race (Buchanan & Selmon, 2008). Parental employment affect children's educational attainment (Schildberg - Hoerisch, 2011) with effectiveness of developing pathways to university entry for low socio-economic status of students' varies (Sydney, 2011).

The study seeks to analyse the relationship among mother's level of education on campus adaptations of students with the following research question and research objective.

Research Question: - What makes campus adaptations of academic, social, physical - psychological and institutional attachment unique across mother's level of nature of occupation?

Research Objectives: - To examine the existence of variance among campus adaptations of academic, social, physical psychological and institutional across mother's level of nature of the occupation.

2. Campus Adaptation

2.1 Academic Adaptation

Parents and career counseling centers have an impact on career orientations of students' (Salami, 2004). Parents especially mother' influenced girl's academic major choice of information technology (Adya & Kaiser, 2005) while the mothers' influence is yet to be known or discovered. Higher education needs to relocate itself with directions for change in the enhancement of experience on campus socio-economic status by women faculty in academics (Sheridan, Brennan, Carnes, & Handelsman, 2006). With social class often known to be impacting academic engagement (Kelly, 2008); the socio economic status is known leave its essentiality on learning ability and subsequent placement of students in the undergraduate study (Dar & Getz, 2007). The parental influence on work and family plans of adolescents diversifies by ethnic backgrounds (De Valk, 2008) where internet use for academic purpose is also found to be low among students with low socio-economic status (Aerschot & Rodousakis, 2008) with frequency of its use also varying by socio-economic status (Koc & Tamer, 2011). Thus there is an intergenerational link in educational attainment where family background and student characteristics impact academic achievement level of students (Pettit, Yu, Dodge, & Bates, 2009). Family systems predict career attitude maturity among students (S. K. Lee & Yi, 2010) where parents impact the development of gender attitudes on academic majors (Gunderson, Ramirez, Levine, & Beilock, 2012) and socio-economic status impacts scholastic achievement in students (Chaliha & Hazarika, 2012). In brief, parents support impacts learning goal orientation and career decision-making self-efficacy among students (Garcia, Restubog, Toledano, Tolentino, & Rafferty, 2012a) but parents and teacher's perceptions of information communication technology professionals vary by gender impacting students' academic major choice (Sáinz, Pálmen, & García-Cuesta, 2012). Therefore, parenting style impacted academic procrastination (Zakeri, Esfahani, & Razmjoee, 2013) where it is known that inter-parental conflict impact academic adjustment of first year students (Parsa, Panah, Parsa, & Ghaleiha, 2014) and socio-economic status influencing students' academic performance (Flor et al., 2015). However, though mother level of influence on academic achievement in high school students is intrigued (Marissa & Ishaaq, 2012); the mothers' level of influence by employment on her child's academics is still let unknown.

2.2 Social Adaptation

Family structure impacts women's education and works (Eapen & Kodoth, 2002) as it is family obligations that impact young women's transition to college (Sy & Brittian, 2008). Urban learning with the bandwagon of family background affects academic achievement (Geske, Grinfelds, & Dedze, 2003). Further communication with parents has its imprint on the adjustment of students (Agliata & Renk, 2008). Parents' educational goals differ by race impacting academic achievement (Chang et al., 2010). Thus the incidence of structural factors like leaving parental home as a transition to adulthood (A. Moreno, 2012) makes students travel or mobility essential (Shokoohi, Hanif, & Dali, 2012) towards distant places of higher learning institutions. Moreover, parental bonding promotes parental-child relationships essentially leaving its footprints on students' academics (Lian, 2008). In brief, gender norms and institutional culture which are found to influences socialisation of college students with family friendly vs motherly friendly institution (Sallee, 2013) being the only child in the family too engineering education by its concepts of learning to lower levels of education (Khun, 2012). Further engineering diversity can be enhanced by the inclusion of students from low socio-economic status into engineering (Lundy-wagner, 2013). In short, socio-economic status diversifies in higher education (Ahmar & Anwar, 2013) where parents vary by their profound influence college planning process (Hallett & Griffen, 2015) which has predictive effects of parental involvement on academic achievement (Veas, Gilar, & Miñano, 2016).

Parents Occupation: Maternal occupation influences college students by gender (Weer, Greenhaus, Colakoglu, & Foley, 2006) where mothers' full-time employment is found to vary self-efficacy of students' of a minority race (Buchanan & Selmon, 2008). Parental employment affect children's educational attainment (Schildberg - Hoerisch, 2011) with effectiveness of developing pathways to university entry for low socio-economic status of students' varies (Sydney, 2011).

The study seeks to analyse the relationship among mother's level of education on campus adaptations of students with the following research question and research objective

Research Question: - What makes campus adaptations of academic, social, physical - psychological and institutional attachment unique across mother's level of nature of occupation?

Research Objectives: - To examine the existence of variance among campus adaptations of academic, social, physical psychological and institutional across mother's level of nature of the occupation.

2. Campus Adaptation

2.1 Academic Adaptation

Parents and career counseling centers have an impact on career orientations of students' (Salami, 2004). Parents especially mother' influenced girl's academic major choice of information technology (Adya & Kaiser, 2005) while the mothers' influence is yet to be known or discovered. Higher education needs to relocate itself with directions for change in the enhancement of experience on campus socio-economic status by women faculty in academics (Sheridan, Brennan, Carnes, & Handelsman, 2006). With social class often known to be impacting academic engagement (Kelly, 2008); the socio economic status is known leave its essentiality on learning ability and subsequent placement of students in the undergraduate study (Dar & Getz, 2007). The parental influence on work and family plans of adolescents diversifies by ethnic backgrounds (De Valk, 2008) where internet use for academic purpose is also found to be low among students with low socio-economic status (Aerschot & Rodousakis, 2008) with frequency of its use also varying by socio-economic status (Koc & Tamer, 2011). Thus there is an intergenerational link in educational attainment where family background and student characteristics impact academic achievement level of students (Pettit, Yu, Dodge, & Bates, 2009). Family systems predict career attitude maturity among students (S. K. Lee & Yi, 2010) where parents impact the development of gender attitudes on academic majors (Gunderson, Ramirez, Levine, & Beilock, 2012) and socio-economic status impacts scholastic achievement in students (Chaliha & Hazarika, 2012). In brief, parents support impacts learning goal orientation and career decision-making self-efficacy among students (Garcia, Restubog, Toledano, Tolentino, & Rafferty, 2012a) but parents and teacher's perceptions of information communication technology professionals vary by gender impacting students' academic major choice (Sáinz, Pálmen, & García-Cuesta, 2012). Therefore, parenting style impacted academic procrastination (Zakeri, Esfahani, & Razmjoee, 2013) where it is known that inter-parental conflict impact academic adjustment of first year students (Parsa, Panah, Parsa, & Ghaleiha, 2014) and socio-economic status influencing students' academic performance (Flor et al., 2015). However, though mother level of influence on academic achievement in high school students is intrigued (Marissa & Ishaaq, 2012); the mothers' level of influence by employment on her child's academics is still let unknown.

2.2 Social Adaptation

Family structure impacts women's education and works (Eapen & Kodoth, 2002) as it is family obligations that impact young women's transition to college (Sy & Brittian, 2008). Urban learning with the bandwagon of family background affects academic achievement (Geske, Grinfelds, & Dedze, 2003). Further communication with parents has its imprint on the adjustment of students (Agliata & Renk, 2008). Parents' educational goals differ by race impacting academic achievement (Chang et al., 2010). Thus the incidence of structural factors like leaving parental home as a transition to adulthood (A. Moreno, 2012) makes students travel or mobility essential (Shokoohi, Hanif, & Dali, 2012) towards distant places of higher learning institutions. Moreover, parental bonding promotes parental-child relationships essentially leaving its footprints on students' academics (Lian, 2008). In brief, gender norms and institutional culture which are found to influences socialisation of college students with family friendly vs motherly friendly institution (Sallee, 2013) being the only child in the family too

[illegible]

[illegible] Description

The survey was conducted using a structured online questionnaire with reference to student's campus and non-campus [illegible] accounts. At all times, the students were informed of the anonymous, confidential, and voluntary nature of their participation and any doubts that arose were clarified.

Measures

All the [illegible] items in the questionnaire were measured with the rating on a five point likert scale ranging from "1 – strongly disagree" to "5 – strongly Agree". Reliability and validity of the questionnaire was tested.

4. Data Analysis

Multivariate analyses of variance (MANOVA) were conducted to assess occupational group differences in campus adaptation. This was followed by discriminant analysis to determine the nature of the effect of campus adaptations by each mother's occupational group. There are several assumptions behind an MANOVA, including multivariate normality, the linearity of relationships, the low influence of univariate and multivariate outliers, homogeneity of variance-covariance matrices and an absence of multicollinearity. Each assumption was tested, and no serious violations were noted.

Table [illegible]. [illegible] Correlation

Campus Adaptation	1	2	3	4	M	SD
1 Academic Adaptation	1.00				2.60	0.702
2 Social Adaptation	0.579	1.00			2.72	0.755
3 Physical – Psychological Adaptation	0.523	0.576	1.00		2.28	0.771
4 Institutional Adaptation	0.576	0.617	0.790	1.00	2.14	0.784

Note. n = 1420. Correlations greater than 0.05 are statistically significant

[illegible] Descriptive Statistics

Table [illegible]. Contribution of difference in dimensions of campus adaptations

Mother – Level of Employment	Academic		Social		Physical - Psychological		Institutional	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Employed at Government (n = [illegible])	2.60	0.688	2.83	0.724	2.28	0.745	2.12	0.738
Employed at Private (n = 141)	2.45	0.676	2.63	0.745	2.26	0.773	2.12	0.763
Own a Business (n = [illegible])	[illegible]	0.685	2.79	0.790	2.38	0.789	2.22	0.793
Employed as unskilled Labourer (n = [illegible])	[illegible]	0.922	2.82	0.960	2.26	1.011	2.18	0.968
Farmer (n = [illegible])	[illegible]	[illegible]	2.60	0.884	2.04	0.798	1.90	0.731
Retired from Government service as a Pensioner (n = [illegible])	2.91	1.118	2.43	0.674	1.86	0.413	2.13	0.776
Not Alive (n = [illegible])	[illegible]	[illegible]	[illegible]	0.721	2.10	0.692	2.33	0.808
Unemployed (n = [illegible])	[illegible]	[illegible]	2.71	0.755	2.28	0.774	2.14	0.795
Total (n = [illegible])	[illegible]	[illegible]	2.72	0.755	2.28	0.771	2.14	0.784

The mean in the descriptive statistics indicate that among undergraduate B.Tech students, students enjoyed high level of social adaptation irrespective mother's occupation, with mothers employed at government (M = 2.83, SD = 0.724) employed at private (M = 2.63, SD = 0.745) own a business (M = 2.79, SD = 0.790) unskilled labourer (M = 2.82, SD = 0.960) farmer (M = 2.60, SD = 0.884) unemployed (M = 2.71, SD = 0.755) with exception to parents employed retired had high level of academic adaptation (M = 2.91, SD = 1.118) and not alive ($M = 2.50$ $SD = 0.440$).

However, mother's occupation level across occupations had lower level of institutional adaptation with mother being employed at government ($M = 2.12$, $SD = 0.738$) employed at private ($M = 2.12$, $SD = 0.763$) own a business ($M = 2.22$, $SD = 0.793$) unskilled labourer ($M = 2.18$, $SD = 0.968$) farmer ($M = 1.90$, $SD = 0.731$) not alive ($M = 2.33$, $SD = 0.808$) and unemployed ($M = 2.14$, $SD = 0.795$). The exception being retired mother where students witnessed lowest level of Physical – psychological adaptation where ($M = 1.86$, $SD = 0.413$)

Further within Academic Adaptation students whose mothers' owned a business had high level of impact on adaptation ($M = 2.67$, $SD = 0.685$) and students whose mothers' were farmers had low level of adaptation ($M = 2.24$, $SD = 0.600$)

In Social Adaptation, who were employed at government had high level of impact on adaptation ($M = 2.83$, $SD = 0.724$) and students whose mothers' were not alive impacted in low level of adaptation ($M = 2.40$, $SD = 0.721$)

In Physical – Psychological adaptation, students whose mother owned a business had high impact on level of adaptation ($M = 2.38$, $SD = 0.789$) and students whose mother were retired impacted in low level of adaptation ($M = 1.86$, $SD = 0.413$)

In Institutional adaptation, students whose parents were not alive had high impact on student's level of adaptation ($M = 2.33$, $SD = 0.808$) and students whose mothers were farmers impacted on student's low level of adaptation ($M = 1.90$, $SD = 0.731$)

Overall, across campus adaptations and mothers' educational level groups, students had high level of social adaptation ($M = 2.72$, $SD = 0.755$) and low level of Institutional adaptation ($M = 2.14$, $SD = 0.784$). However, within mother's occupation level, parent mother' who was employed at government had high level of impact on student's social adaptation ($M = 2.83$, $SD = 0.724$) and students whose mother was a farmer had low level of institutional adaptation ($M = 1.90$, $SD = 0.731$)

4.2 Inferential Statistics

The Box's M value of 57.426 indicates a test of assumption of equality of covariance matrices are roughly equal as assumed with $p = 0.814$ ($p > 0.001$).

Using Manova test statistic of Pillai's Trace, there was a non-significant effect of mother's occupation on students' Academic, Social, Physical – Psychological and Institutional campus adaptations ($V = 0.022$, $F(28, 5648) = 1.121$ and $p = 0.301$) *($p > 0.05$).

Using Manova test statistic of Wilks Lambda, there was a non-significant effect of mother's occupation on students' Academic, Social, Physical – Psychological and Institutional campus adaptations ($\Lambda = 0.978$, $F(28, 5081) = 1.121$ and $p = 0.301$) *($p > 0.05$).

Using Manova test statistic of Hotelling's trace, there was a non significant effect of mother's occupation on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional ($T = 0.022$, $F(28, 5630) = 1.121$ and $p = 0.301$) *($p > 0.05$).

Using Manova test statistic of Roy's largest root, there was a significant effect of mother's occupation on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional ($\Theta = 0.012$, $F(7,1412) = 2.330$ and $p = 0.023$) *($p < 0.05$).

The univariate test statistic with Levene's test of equality of variances for each of the dependent variable is non-significant i.e $p > 0.05$ with an academic adaptation of 0.312, social adaptation of 0.827, physical – psychological adaptation of 0.839and institutional adaptation of 0.964 enabling the assumptions of homogeneity of variance being met.

However separate univariate analysis or ANOVA on the outcome with $F(7,1412)$ for Academic, social, Physical – Psychological and institutional adaptation revealed a non - significant effect with F value (1.203) (1.231) (0.609) and (0.302) with p-value (0.298) (0.282) (0.749) and (0.953)

Further, the between – subjects SSCP matrix indicates that the sum of squares for the error SSCP matrix are substantially bigger than in the model (or mother's occupation) SSCP matrix, whereas absolute values of cross products are fairly similar. This pattern of relationship indicates that the relationship between dependent variables is significant than individual dependent variables themselves. Thus to determine the nature of the effect of mother's employment among dependent variables Manova is followed with discriminant analysis.

The first discriminant function explained 51.8% of the variance with canonical $R^2 = 0.012$; the second discriminant function explained 31.7% of the variance with canonical $R^2 = 0.007$; the third discriminant function explained 11.3% of the variance with canonical R = 0.061, the fourth discriminant function explained 2.2% of the variance with canonical R = 0.000 indicates that the variance in the canonical derived dependent variable was associated with mother's level of occupation.

In combination these discriminant functions did not significantly discriminate the mother's occupation level with the first discriminant function Λ = 0.978, χ^2 (28) 31.361, p = 0.301 ($p > 0.05$). The second discriminant function Λ = 0.989, χ^2 (18) 15.135, p = 0.653 ($p > 0.05$). The third discriminant function Λ = 0.996, χ^2 (10) 5.173, p = 0.879 ($p > 0.05$) and the fourth discriminate function Λ = 1.000, χ^2 (4) 0.682, p = 0.954 ($p > 0.05$) indicates the non-significant effect of discriminant functions.

The correlations between outcomes and the discriminant functions revealed that social adaptation loaded highly on first function (r = 0.561) indicating it contributed more to the mother's occupation level group separation (Bragman, 1970) than the relatively fair high loading in positive relationship in second function (r = 0.533) third function (0.358) and fourth function (r = 0.552).

Academic adaptation loaded highly on second function (r = 0.797) indicating it contributed more to the mother's occupation level group separation than the relatively high loading in positive relationship with third function (r = 0.[illegible]) and fourth function (r = 0.232) negated by negative relationship in the fourth function (r = -0.234).

Physical – psychological adaptation loaded highly on third function with (r = 0.919) indicating it contributed more to the mother's occupation level group separation than the than relatively fair high loading in the first function (r = 0.152) second function (r = 0.011) and fourth function (r = 0.365).

Lastly institutional adaptation loaded highly on fourth function with (r = 0.882) indicating it contributed more to the mother's occupation level group separation than the relatively fair high loading in positive relationship with second function (r = 0.101) and third function (r = 0.550) with negative relationship in the first function (r = -0.[illegible]).

[illegible] Findings

The mother's occupation of being employed at government had positive academic (0.198) social (0.088) and institutional (0.009) adaptation with negative outcomes in physical – psychological (-0.041) adaptation.

The mother's occupation of being employed at private had positive outcome at institutional (0.009) adaptation with negative outcomes in academic (-0.036) social (-0.183) and physical - psychological (-0.031) adaptation.

The mother's occupation of owning a business had positive outcomes in academic (0.025) social (0.038) physical – psychological (0.122) and institutional (0.038) adaptation.

The mother's occupation of employed as unskilled labourer had positive outcome in academic (0.203) and institutional (0.186) adaptation with negative outcome in social (-0.084) and physical – psychological (-0.146) adaptation.

The mother's occupation of being son of soil, the farmer had positive outcomes in academic (0.264) adaptation with negative outcomes in social (-0.306) physical – psychological (-0.363) and institutional (-0.066) adaptation.

The mother's who are retired and now as government pensioner had positive outcome on students social (0.568) and institutional (0.077) adaptation with negative outcomes in academic (-1.049) and physical – psychological (-0.457).

The mother's whose mother had expired had positive physical – psychological (0.192) and institutional (0.152) adaptation with negative outcomes in academic (-0.536) and social (-0.510) adaptations.

The students whose mother was unemployed had positive social (0.010) and physical – psychological (0.010) with negative outcomes in academic (-0.027) and institutional (-0.008) adaptation.

Conclusion – Maternal employment has a significant bearing on the child's campus adaptation. It's the not that just the alternate hand at play for work in the family, but it is the best hand that ensures its efficiency domestically as well as occupational forefront. The support the mother creates for her child in his or her education can never be redundant as she is the only woman by heart and soul who would justify by her presence and other means to help out her child to emerge successfully as a student and better human being at the campus.

Implication – The study takes a look at mother's perspective alone of being employed and engaged on diverse nature of work on her child's adaptation to college which was earlier very much about parent's employment nature on students at the college. By analysing on a divergence in nature of employment different from a father's perspective who by far remained the major bread winner of the family, the study throws light that a mother's involvement in her nature of employment could have differed impact on student's adaptation at college. A future work on comparative nature of employment of parents on the child well-being and satisfaction at college could really add on to the vivid picture that often remains skewed to the gloomy glossy picture that a student is all fine at the campus and student's internal environment alone suffixes his or success.

References

Adya, M., & Kaiser, K. M. (2005). Early determinants of women in the IT workforce: a model of girls' career choices. *Information Technology & People, 18*(3), 230–259. https://doi.org/10.1108/09593840510615860

Aerschot, L. Van, & Rodousakis, N. (2008). The link between socio-economic background and Internet use: barriers faced by low socio-economic status groups and possible solutions. *Innovation: The European Journal of Social Science Research, 21*(4), 317–351. https://doi.org/10.1080/13511610802576927

Agliata, A. K., & Renk, K. (2008). College students' adjustment: The role of parent-college student expectation discrepancies and communication reciprocity. *Journal of Youth and Adolescence, 37*(8), 967–982. https://doi.org/10.1007/s10964-007-9200-8

Ahmar, F., & Anwar, E. (2013). Socio Economic Status and its relation to academic achievement of higher secondary school students. *Journal of Humanities and Social Science, 13*(6), 13–20.

Arulmani, G., Laar, V., Easton, D. and, & Simon. (2001). Career planning orientation of disadvantaged high school boys: a study of socioeconomic and social cognitive variables. *Journal of the Indian Academy of Applied Psychology, 27*(1/2), 7–17.

Baker, C. N., & Hoerger, M. (2012). Parental child-rearing strategies influence self-regulation, socio-emotional adjustment, and psychopathology in early adulthood: Evidence from a retrospective cohort study. *Personality and Individual Differences, 52*(7), 800–805. https://doi.org/10.1016/j.paid.2011.12.034

Balboni, G., & Pedrabissi, L. (1998). School Adjustment and Academic Achievement: Parental Expectations and Socio - cultural Background. *Early Child Development and Care, 143*(1), 79–93. https://doi.org/10.1080/0300443981430107

Bekerman, Z., & Tatar, M. (2009). Parental choice of schools and parents' perceptions of multicultural and co - existence education: the case of the Israeli Palestinian–Jewish bilingual primary schools. *European Early Childhood Education Research Journal, 17*(2), 171–185. https://doi.org/10.1080/13502930902951304

Biedinger, N. (2010). Early ethnic inequality: The influence of social background and parental involvement on preschool children's cognitive ability in germany. *Child Indicators Research, 3*(1), 11–28. https://doi.org/10.1007/s12187-009-9054-6

Bowden, M. P., & Doughney, J. (2012). The importance of cultural and economic influences behind the decision to attend higher education. *Journal of Socio-Economics, 41*(1), 95–103. https://doi.org/10.1016/j.socec.2011.10.003

Buchanan, T., & Selmon, N. (2008). Race and gender differences in self-efficacy: Assessing the role of gender role attitudes and family background. *Sex Roles, 58*(11–12), 822–836. https://doi.org/10.1007/s11199-008-9389-3

Chaliha, A., & Hazarika, M. (2012). North Lakhimpur College Scholastic Achievement of the Post-Graduate Students of Dibrugarh University, Assam in relation to Socio-Economic Status. *Social Science Researcher, 1*(July), 1–10.

Chang, E. S., Heckhausen, J., Greenberger, E., & Chen, C. (2010). Shared Agency with Parents for Educational Goals: Ethnic Differences and Implications for College Adjustment. *Journal of Youth and Adolescence, 39*(11), 1293–1304. https://doi.org/10.1007/s10964-009-9488-7

Chu, J. J., Khan, M. H., Jahn, H. J., & Kraemer, A. (2015). Only-child status in relation to perceived stress and studying-related life satisfaction among university students in China: A comparison with international students. *PLoS ONE, 10*(12), 1–18. https://doi.org/10.1371/journal.pone.0144947

Dar, Y., & Getz, S. (2007). Learning ability, socioeconomic status, and student placement for undergraduate studies in Israel. *Higher Education, 54*(1), 41–60. https://doi.org/10.1007/s10734-006-9045-1

De Valk, H. A. G. (2008). Parental influence on work and family plans of adolescents of different ethnic backgrounds in the Netherlands. *Sex Roles, 59*(9–10), 738–751. https://doi.org/10.1007/s11199-008-9464-9

Domitrovich, C. E., & Bierman, K. L. (2001). Parenting Practices and Child Social Adjustment: Multiple Pathways of Influence. *Merrill-Palmer Quarterly, 47*(2), 235–263. https://doi.org/10.1353/mpq.2001.0010

Eapen, M., & Kodoth, P. (2002). *Family Structure, Women' S Education and Work: Re-Examining the High Status of Women in Kerala*.

Filippin, A., & Paccagnella, M. (2012). Family background, self-confidence and economic outcomes. *Economics of Education Review, 31*(5), 824–834. https://doi.org/10.1016/j.econedurev.2012.06.002

Fischer, J. L., Forthun, L. F., Pidcock, B. W., & Dowd, D. a. (2007). Parent relationships, emotion regulation, psychosocial maturity and college student alcohol use problems. *Journal of Youth and Adolescence, 36*(7), 912–926. https://doi.org/10.1007/s10964-006-9126-6

Flor, M., Lima, O., Sarmento, D., Agripino, G., Verli, F., Carvalho, S., Marinho, S. (2015). Socioeconomic Profile and Academic Performance of Students on Campus VIII of the State University of Paraiba, Araruna, Brazil, 2013. *British Journal of Medicine and Medical Research, 5*(7), 903–913. https://doi.org/10.9734/BJMMR/2015/13060

Frederickson, N., & Petrides, K. V. (2008). Ethnic, gender, and socio-economic group differences in academic performance and secondary school selection: A longitudinal analysis. *Learning and Individual Differences, 18*(2), 144–151. https://doi.org/10.1016/j.lindif.2005.09.001

Garcia, P. R. J. M., Restubog, S. L. D., Toledano, L. S., Tolentino, L. R., & Rafferty, A. E. (2012a). Differential Moderating Effects of Student- and Parent-Rated Support in the Relationship Between Learning Goal Orientation and Career Decision-Making Self-Efficacy. *Journal of Career Assessment, 20*(1), 22–33. https://doi.org/10.1177/1069072711417162

Geske, A., Grinfelds, A., & Dedze, I. (2003). School Quality and Equity in Central and Eastern Europe Family Background, School Quality and Rural-Urban Disparities in Student Learning Achievement in Latvia. *Prospects, XXXIII*(4), 419–431.

Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (2012). New Directions for Research on the Role of Parents and Teachers in the Development of Gender-Related Math Attitudes: Response to Commentaries. *Sex Roles, 66*(3–4), 191–196. https://doi.org/10.1007/s11199-011-0100-8

Hallett, R. E., & Griffen, J. (2015). Empowering Parents in the College-Planning Process: An Action-Inquiry Case Study. *Journal of Education for Students Placed at Risk (JESPAR), 20*(1–2), 101–119. https://doi.org/10.1080/10824669.2014.984035

Iannelli, C., & Smyth, E. (2008). Mapping gender and social background differences in education and youth transitions across Europe. *Journal of Youth Studies, 11*(2), 213–232. https://doi.org/10.1080/13676260701863421

Kelly, S. (2008). Race, social class, and student engagement in middle school English classrooms. Social Science Research, 37(2), 434–448. https://doi.org/10.1016/j.ssresearch.2007.08.003

Kim, C. W. H. a, & Dembo, M. H. (2001). Social-cognitive factors in uencing success on college entrance exams in South Korea. *Social Psychology of Education,* (4), 95–115. https://doi.org/10.1023/A:1009659529840

Kluin, J. Y. (2012). AC 2012-4385: Parents' Concerns about the Inclusion of Engineering Education into P-12 Classrooms. In *American Society for Engineering Education,* 2012 (pp. 1–17).

Koc, M., & Tamer, S. L. (2011). The investigation of Turkish high school students' Internet use profiles across their demographics. *Procedia - Social and Behavioral Sciences, 15,* 2912–2916. https://doi.org/10.1016/j.sbspro.2011.04.213

Kumar, P. (2013). A Study of Emotional Stability and Socio-Economic. *International Journal of Education and Information Studies, 3*(1), 7–11.

Lee, S. K., & Yi, H. S. (2010). Family systems as predictors of career attitude maturity for Korean high school students. *Asia Pacific Education Review, 11*(2), 141–150. https://doi.org/10.1007/s12564-009-9054-8

Leppel, K., Williams, M. L., & Waldauer, C. (2001). The impact of parental occupation and socioeconomic status on choice of college major. *Journal of Family and Economic, 22*(4), 373–394. https://doi.org/10.1023/A:1012716828901

Lian, T. C. (2008). Parental Bonding and Parent-Child Relationship Among Tertiary Students. *Sunway Academic Journal, 5*(5), 111-127.

Lipschitz-Elhawi, R., & Itzhaky, H. (2005). Social support, mastery, self-esteem and individual adjustment among at-risk youth. *Child and Youth Care Forum, 34*(5), 329–346. https://doi.org/10.1007/s10566-005-3

Low, S. F., & Ishak, Z. (2012). A Priori Model of Students' Academic Achievement: The Effect of Gender as Moderator. *Procedia - Social and Behavioral Sciences*, *65*(0), 1092–1100. https://doi.org/http://dx.doi.org/10.1016/j.sbspro.2013.02.122

Lundy-wagner, V. C. (2013). Reimagining engineering diversity: A study of academic advisors' perspectives on socioeconomic status Reimagining engineering diversity: A study of institutional. In *120th ASEE Annual conference and Exposition* (pp. 1–10).

Marissa, A., & Ishaaq, F. I. (2012). The Correlation of Perception on the Role of Mother with Academic Achievement in Senior High School Student. *Procedia - Social and Behavioral Sciences*, *69*(Iceepsy), 1369–1373. https://doi.org/10.1016/j.sbspro.2012.12.074

Martin, N. D. (2012). The Privilege of Ease: Social Class and Campus Life at Highly Selective, Private Universities. *Research in Higher Education*, *53*(4), 426–452. https://doi.org/10.1007/s11162-011-9234-3

Mazur, J., Malkowska-Szkutnik, A., & Tabak, I. (2014). Changes in family socio-economic status as predictors of self-efficacy in 13-year-old Polish adolescents. *International Journal of Public Health*, *59*(1), 107–115. https://doi.org/10.1007/s00038-013-0458-1

McArthur, J. (2011a). Reconsidering the social and economic purposes of higher education. *Higher Education Research & Development*, *30*(6), 737–749. https://doi.org/10.1080/07294360.2010.539596

McGrath, E. P., & Repetti, R. L. (2000). Mothers' and Mothers' Attitudes Toward Their Children's Academic Performance and Children's Perceptions of Their Academic Competenece. *Journal of Youth and Adolescence*, *29*(6), 713–723. https://doi.org/10.1023/A:1026460007421

Mindeli, L. E., & Pipiya, L. K. (2007). Conceptual aspects of formation of a knowledge-based economy. *Studies on Russian Economic Development*, *18*(3), 314–327. https://doi.org/10.1134/S1075700707030100

Misran, N., Sahuri, S. N. S., Arsad, N., Hussain, H., Zaki, W. M. D. W., & Aziz, N. A. (2012). The Influence of Socio-Economic Status among Matriculation Students in Selecting University and Undergraduate Program. *Procedia - Social and Behavioral Sciences*, *56*(2005), 134–140. https://doi.org/10.1016/j.sbspro.2012.09.640

Moreno, A. (2012). The Transition to Adulthood in Spain in a Comparative Perspective: The Incidence of Structural Factors. *Young*, *20*(1), 19–48. https://doi.org/10.1177/110330881102000102

Newman, L. a. (2009). Do socioeconomic differences in family size reflect cultural differences in confidence and social support for parenting? *Population Research and Policy Review*, *28*(5), 661–691. https://doi.org/10.1007/s11113-008-9124-3

Onatsu-Arvilommi, T. P., & Nurmi, J.-E. (1997). Family background and problems at school and in society: The role of family composition, emotional atmosphere and parental education. *European Journal of Psychology of Education*, *12*(3), 315–330. https://doi.org/10.1007/BF03172879

Panorama, M., & Jdaitawi, T. (2011). Relationship between Emotional Intelligence and Work-Family Conflict of University Staff in Indonesia. In Proceeding of the International Conference on Social Science, Economics and Art 2011 (pp. 272–277).

Parsa, P., Panah, M. A., Parsa, N., & Ghaleiha, A. (2014). The Relationship between Perceived Inter-parental Conflict and Academic Adjustment in First Year Students' Hamadan, Iran. *Procedia - Social and Behavioral Sciences*, *152*, 720–724. https://doi.org/10.1016/j.sbspro.2014.09.310

Pettit, G. S., Yu, T., Dodge, K. a., & Bates, J. E. (2009). A Developmental Process Analysis of Cross Generational Continuity in Educational Attainment. *Merrill-Palmer Quarterly*, *55*(3), 250–284. https://doi.org/10.1353/mpq.0.0022

Régner, I., Loose, F., & Dumas, F. (2009). Students' perceptions of parental and teacher academic involvement: Consequences on achievement goals. *European Journal of Psychology of Education*, *24*(2), 263–277. https://doi.org/10.1007/BF03173016

Sáinz, M., Pálmen, R., & Garcia-Cuesta, S. (2012). Parental and Secondary School Teachers' Perceptions of ICT Professionals, Gender Differences and their Role in the Choice of Studies. *Sex Roles*, *66*(3–4), 235–249. https://doi.org/10.1007/s11199-011-0055-9

Salami, S. O. (2004). A path model to examine factors influencing career orientations of school-going adolescents in Nigeria. *International Journal for the Advancement of Counselling*, *26*(1), 79–94. https://doi.org/10.1023/B:ADCO.0000021551.61838.0

Sallee, M. W. (2013). Gender Norms and Institutional Culture: The Family-Friendly Versus the Mother-Friendly University. *Journal of Higher Education, 84*(3), 363–396. https://doi.org/10.1353/jhe.2013.0017

Schildberg-Hoerisch, H. (2011). Does parental employment affect children's educational attainment? *Economics of Education Review, 30*(6), 1456–1467. https://doi.org/10.1016/j.econedurev.2011.07.013

Sheridan, J., Brennan, P. F., Carnes, M., & Handelsman, J. (2006). Discovering directions for change in higher education through the experiences of senior women faculty. *Journal of Technology Transfer, 31*(3), 387–396. https://doi.org/10.1007/s10961-006-7210-4

Smith, B., Ray, G. E., Stefurak, T., & Zachar, P. a. (2007). College student evaluations of parent-child disciplinary situations. *Journal of Family Violence, 22*(8), 757–767. https://doi.org/10.1007/s10896-007-9123-x

Smith, L. (2011). Experiential "hot" knowledge and its influence on low-SES students' capacities to aspire to higher education. *Critical Studies in Education, 52*(May 2015), 165–177. https://doi.org/10.1080/17508487.2011.572829

Shokoohi, R., Hanif, N. R., & Dali, M. (2012). Influence of the Socio-Economic Factors on Children's School Travel. *Procedia - Social and Behavioral Sciences, 50*(July), 135–147. https://doi.org/10.1016/j.sbspro.2012.08.022

Sy, S. R., & Brittian, A. (2008). The impact of family obligations on young women's decisions during the transition to college: A comparison of Latina, European American, and Asian American students. *Sex Roles, 58*(9–10), 729–737. https://doi.org/10.1007/s11199-007-9385-z

Sydney, W. (2011). Effectiveness of Developing Pathways to University Entry for Low Socioeconomic Status Students, 1–6.

Taylor, R. D. (2015). Kin Social Undermining, Adjustment and Family Relations Among Low-Income African American Mothers and Adolescents: Moderating Effects of Kin Social Support. *Journal of Child and Family Studies, 24*(5), 1271–1284. https://doi.org/10.1007/s10826-014-9935-2

Teodor, M. (2012). The Influence of Socio-Economic Status on School Performance. *Romanian Journal of Experimental Applied Psychology, 3*(2), 21–28.

Tieben, N., & Wolbers, M. H. J. (2010). Transitions to post-secondary and tertiary education in the Netherlands: A trend analysis of unconditional and conditional socio-economic background effects. *Higher Education, 60*(1), 85–100. https://doi.org/10.1007/s10734-009-9289-7

Utter, J., Denny, S., Dixon, R., Ameratunga, S., & Teevale, T. (2012). Family support and weight-loss strategies among adolescents reporting sustained weight loss. *Public Health Nutrition, 16*(3), 1–6. https://doi.org/10.1017/S1368980012002820

Veas, A., Gilar, R., & Miñano, P. (2016). The Influence of Gender, Intellectual Ability, Academic Self-Concept, Self-Regulation, Learning Strategies, Popularity and Parent Involvement in Early Adolescence.

Wang, Y., Liang, H., Tussing, L., Braunschweig, C., Caballero, B., & Flay, B. (2007). Obesity and related risk factors among low socio-economic status minority students in Chicago. *Public Health Nutrition, 10*(9), 927–938. https://doi.org/10.1017/S1368980007658005

Weer, C. H., Greenhaus, J. H., Colakoglu, S. N., & Foley, S. (2006). The role of maternal employment, role-altering strategies, and gender in college students' expectations of work-family conflict. *Sex Roles, 55*(7–8), 535–544. https://doi.org/10.1007/s11199-006-9107-y

Wright, R. J., Bean, A. G.,(1974). The Influence of Socioeconomic Status on the Predictability of College Performance. *Journal of educational measurement, 11*(4), 277–284.

Zakeri, H., Esfahani, B. N., & Razmjoee, M. (2013). Parenting Styles and Academic Procrastination. *Procedia - Social and Behavioral Sciences, 84*, 57–60. https://doi.org/10.1016/j.sbspro.2013.06.509

Copyrights

3.4 3.3.1

International Journal of Advanced Scientific Research

Peer Reviewed Journal, Refereed Journal, Indexed Journal

ISSN: 2456-0421, Impact Factor: RJIF 5.32

Publication Certificate

This certificate confirms that **"Dr. Sandesh KS"** has published manuscript titled **"Supportive care of patients with breast cancer: The role of the onco social worker with special reference to India"**.

Details of Published Article as follow:

Volume	:	**2**
Issue	:	**5**
Month	:	**Sep-Oct**
Year	:	**2017**
Page Number	:	**47-49**

Certificate No.: **2-6-11**
Date: **01-09-2017**

Yours Sincerely,

Nikhil Gupta
Publisher
International Journal of Advanced Scientific Research
www.allscientificjournal.com
Tel: 9999888931

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

International Journal of Advanced Scientific Research
ISSN: 2456-0421
Impact Factor: RJIF 5.32
www.allscientificjournal.com
Volume 2; Issue 5; September 2017; Page No. 47-49

Supportive care of patients with breast cancer: The role of the onco social worker with special reference to India

[1] Dr. Sandesh KS, [2] Dr. Shethal Rajshekar Rai, [3] Dimple Rajshekar Rai, [4] Rakshitha Preethu D'Souza
[1] Head of the Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India
[2] Public Health Dentist, Sullia, Karnataka, India
[3] Ph.D. Scholar (Medical Social Work) Kidwai Memorial Institute of Oncology, Bangalore, Karnataka, India
[4] Lecturer Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India

Abstract
This study looks into the meaning of breast cancer and supportive care. It then reviews who onco social workers are, and the role played by them. Research is made using previous studies and finally conclusions made with new knowledge concerning the supportive care and role of onco social workers.

Keywords: breast cancer, social workers

Introduction

"Breast cancer is the most common cancer among women" (Christina, 2017) [1]. It is the second leading cause of cancerous deaths among women, after lung cancer (HRSA, 2010).

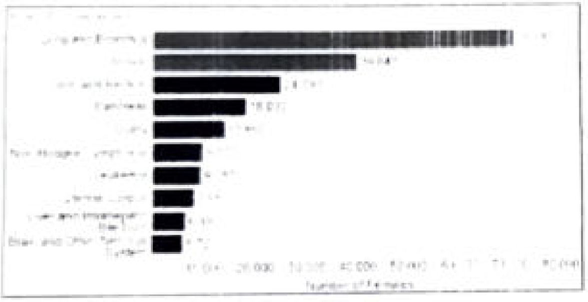


Fig 1: leading Causes of Cancer deaths among females (All Ages), by Site, 2010 estimates

Cancer is a situation whereby there is an excessive growth of cells in the body. Breast cancer can be a ductal carcinoma, which is the most common and starts in the milk duct, or lobular carcinoma, which begins from the lobules. It can further be invasive or noninvasive. Invasive breast cancer is one, which the cells break out from the ducts, or lobules while non-invasive is one, which the cancer is still in the origin (Christina, 2017) [1]. Some of the symptoms of breast cancer include armpits pain, redness of breast skin, rash around nipples, sunken nipple, nipple discharge, change in breast size and shape, and peeling of breast skin.

Supportive care is care that is given to help relieve "symptoms caused by serious illnesses like cancer" (Society, 2017) [2]. The main of such care is to make an ill patient feel comfortable. Oncology social workers are professionals who offer to counsel people affected by cancer. They also provide emotional support and aid in getting practical help (Ginny, 2015) [3]. Oncology social workers usually assist either individually or in support groups. An oncology social worker and breast cancer are so related hence a reasonable basis for a study finding more on the role of an oncology social worker in handling breast cancer.

Literature Review

There are so many previous studies made concerning breast cancer. Research shows that cancer has become a fast-spreading non-communicable disease in low and middle-income countries. The problem is that these countries are not well equipped with the right personnel and equipment (Julia, et al., 2016). A group of researchers, on the other hand, emphasized on offering treatment-related toxicities, which offer supportive care. They claimed that this aspect might be overlooked in lower-middle-income countries (Fatima, et al., 2013). Another group gave a solution of making use "of primary care networks and community-based programs" (Patricia, et al., 2013) [7] to offer adequate support to breast cancer patients despite the shortage of personnel and equipment. When compared to China and the United states, WHO gave an analysis that India lost the largest number of people due to breast cancer (The Pink Initiative, 2015) as shown in the table below.

3.4

International Journal of Law

ISSN: 2455-2194, Impact Factor: RJIF 5.12

Editorial Certificate

Ref: AKINIK/LM/38
Date: 12-10-2017

Dr. Sandesh Ks
Head of The Department
Nehru Memorial College, Sullia, Karnataka, India

Dear **Dr. Sandesh Ks**

Sub: Confirmation for Appointment for the Post of Associate Editor

This letter confirms that **"Gupta Publications"** appoint you as **"Associate Editor"** of **"International Journal of Law "**.

This contract can be terminated by either party without any obligation.

In extending my sincere congratulation to you, I would like to express my deep satisfaction for the possibility to profit from your competent collaboration.

Yours Sincerely,

Nikhil Gupta
Publisher
International Journal of Law
www.lawjournals.org
Tel: +91-9999551477

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

International Journal of Multidisciplinary Research and Development

ISSN Online: 2349-4182, ISSN Print: 2349-5979, CODEN: IJMRN5, Impact Factor: RJIF 5.72

Editorial Certificate

Ref: AKINIK/LM/302
Date: 10-10-2017

Dr Sandesh Ks
Head of The Department
Department of PG Studies in Social Work, Nehru
Memorial College, Kurunjibhag, Sullia, Karnataka, India

Dear **Dr Sandesh Ks**

Sub: Confirmation for Appointment for the Post of Associate Editor

This letter confirms that **"Gupta Publications"** appoint you as **"Associate Editor"** of **"International Journal of Multidisciplinary Research and Development"**.

This contract can be terminated by either party without any obligation.

In extending my sincere congratulation to you, I would like to express my deep satisfaction for the possibility to profit from your competent collaboration.

Yours Sincerely,

Nikhil Gupta
Publisher
International Journal of Multidisciplinary Research and Development
www.allsubjectjournal.com
Tel: +91-9999551477

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA D.K. - 574 327

International Journal of Humanities and Social Science Research

ISSN: 2455-2070

Editorial Certificate

Ref: AKINIK/LM/50
Date: 29-06-2017

Dr. Sandesh KS
Head of the Department
Department of PG Studies In Social Work, Nehru Memorial College, Puthanampatti, Tamil Nadu, India

Dear **Dr. Sandesh KS**

Sub: Confirmation for Appointment for the Post of Associate Editor

This letter confirms that "**International Journal of Humanities and Social Science Research**" appoint you as " **Associate Editor**".

This contract can be terminated by either party without any obligation.

In extending my sincere congratulation to you, I would like to express my deep satisfaction for the possibility to profit from your competent collaboration.

Yours Sincerely,

Akhil Gupta

Akhil Gupta
Publisher
International Journal of Humanities and Social Science Research
Web: www.socialsciencejournal.in

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

3.4

International Journal of Multidisciplinary Research and Development

Peer Reviewed Journal, Refereed Journal, Indexed Journal

ISSN Online: 2349-4182, ISSN Print: 2349-5979, CODEN: IJMRN5, Impact Factor: RJIF 5.72

Publication Certificate

This certificate confirms that **"Dr. Sandesh KS"** has published manuscript titled **"Awareness about cancer among the public in Dakshina Kannada district of Karnataka, India"**.

Details of Published Article as follow:

Volume	:	**4**
Issue	:	**11**
Month	:	**Nov**
Year	:	**2017**
Page Number	:	**21-23**

Certificate No.: **4-11-15**
Date: **01-11-2017**

Yours Sincerely,

Nikhil Gupta
Publisher
International Journal of Multidisciplinary Research and Development
www.allsubjectjournal.com
Tel: 9999888931

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

International Journal of Multidisciplinary Research and Development
Online ISSN: 2349-4182, Print ISSN: 2349-5979
Impact Factor: RJIF 5.72
www.allsubjectjournal.com
Volume 4; Issue 11; November 2017; Page No. 21-23

Awareness about cancer among the public in Dakshina Kannada district of Karnataka, India

[1] Dr. Sandesh KS, [2] Dr. Sheethal Rajshekar Rai, [3] Dimple Rajshekar Rai, [4] Dinesh Kumar A
[1] Head of the Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India
[2] Public Health Dentist, Sullia, Karnataka, India
[3] Ph.D. Scholar Kidwai Memorial Institute of Oncology Bangalore, India
[4] Assistant Professor, Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India

Abstract

Cancer is a curable disease that can turn terminal when presented for treatment in its later stages. While it is a non-communicable illness, many factors contribute to its prevalence including genetics, lifestyle and exposure to toxic waste. Social work involves helping individuals, families and communities to improve their overall well-being to enhance social functioning (Healy, 2014). Oncology social workers help patients and their families cope with the distress brought on by cancer from its onset to the treatment or terminal stage (Mostert, 2017). Social workers in the Dakshina Kannada area, therefore, must create awareness on the causes of various cancers, their advancement and treatment to increase the current cancer survival rate (Mostert, 2017; National Institute of Cancer Prevention and Research, 2017). This paper reviews the cancer awareness levels in the Dakshina Kannada district of Karnataka state in India to determine the levels of cancer awareness causal factors and possible solutions that social workers can use to solve the issues this raises.

Keywords: cancer, treatment

Introduction

India has the most cancer incidences and deaths in the world. Cancer incidences in Karnataka between 2011 and 2014 increased from 52099 to 56330 while deaths increased from 22923 to 24785 (Indiastat, 2014) [4]. The leading causes of cancer deaths in India are oral, breast and cervical cancer where the latter is the key reason for death amongst women (Breast Cancer India, 2014; World Health Organization, 2016) [12]. This paper reviews studies conducted in Dakshina Kannada, a rural district located in Karnataka, to determine the level of cancer awareness and outline recommendations that oncology social workers can use to improve the condition in this area.

Acknowledgements

We would like to thank Dr. Janet Parameshwara Head, Medical Social Work (Oncology), Kidwai memorial Institute of Oncology, Bangalore for giving us the guidance we needed to finish this paper.

Literature review

A study of 3 different rural areas of Dakshina Kannada conducted by the Department of Oral & Maxillofacial Surgery at the Nitte University shows that people are aware of the existence and dangers of cancer but they are still slow to seek medical care due to their social economic state and widespread stigma associated with cancer. Another study conducted by WHO in Nigeria lists stigma, discrimination, poverty and illiteracy as the main drivers of lack of awareness of breast cancer among women. A research published in the South Asia journal of cancer in 2014 lists the cognitive barrier as the main cause of lack of awareness where family history contributes to awareness levels. "Social Work Theories in Context: Creating Frameworks for Practice" is a book that outlines the duties of a social worker in creating change for vulnerable populations such as women, the poor and those with disabilities. One of the most effective strategies they use is providing these populations with knowledge about the problems they face and their possible solutions (Healy, 2014) [3].

Methods

Three studies that detail the incidence of oral, breast and cervical cancer are intensely reviewed to pick out what they state about the level of cancer awareness presented in various areas of Dakshina Kannada. The first article is "Oral cancer awareness in rural Karnataka - are they aware?" By Gopinath Thilak P.S., Renita D'leema & Vinayak Kamath (2015) [2], the second is "A Profile of Breast Cancer Cases in Dakshina Kannada District: A Hospital Based Study" by Hezil Deepika Saldanha, Leena J B (2014) [10] and "Profile of cervical cancer patients attending Tertiary Care Hospitals of Mangalore, Karnataka: A 4 year retrospective study" by Aadhya Sharma (2017) [6]

Findings

The first study uses questionnaires to determine the level of awareness regarding the causes of oral cancer, how it spreads, its relation to AIDS and family history and the levels of stigmatization. The results are shown in the table below (Gopinath Thilak, D'leema, & Kamath, 2015) [2].

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

International Journal of Multidisciplinary Research and Development

Peer Reviewed Journal, Refereed Journal, Indexed Journal

ISSN Online: 2349-4182, ISSN Print: 2349-5979, CODEN: IJMRN5, Impact Factor: RJIF 5.72

Publication Certificate

This certificate confirms that **"Dr. Sandesh KS"** has published manuscript titled **"The effect of socioeconomic status on treatment of cancer in India"**.

Details of Published Article as follow:

Volume	:	**4**
Issue	:	**11**
Month	:	**Nov**
Year	:	**2017**
Page Number	:	**28-30**

Certificate No.: **4-11-16**
Date: **01-11-2017**

Yours Sincerely,

Nikhil Gupta
Publisher
International Journal of Multidisciplinary Research and Development
www.allsubjectjournal.com
Tel: 9999888931

International Journal of Multidisciplinary Research and Development
Online ISSN: 2349-4182, Print ISSN: 2349-5979
Impact Factor: RJIF 5.72
www.allsubjectjournal.com
Volume 4; Issue 11; November 2017; Page No. 28-30

The effect of socioeconomic status on treatment of cancer in India

[1] Dr. Sandesh KS, [2] Dr. Sheethal Rajshekar Rai, [3] Dimple Rajshekar Rai, [4] Ishwara Naik CH
[1] Head of the Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India
[2] Public Health Dentist, Sullia, Karnataka, India
[3] Ph.D. Scholar Kidwai Memorial Institute of Oncology, Bangalore, Karnataka, India
[4] Lecturer, Department of PG Studies in Social Work, Nehru Memorial College, Sullia, Karnataka, India

Abstract
Healthcare is an essential element in the lives of all humans, yet it is controlled by so many factors that determine how it can be delivered. The difference in the social class and economic status of individuals contribute to the disparity in the treatment of some conditions mostly because of the costs incurred and processes required. As for the case of India and its population, the significant factors hindering cancer treatment include late diagnosis of the condition affected by various social beliefs and cultures. On the other hand, while cancer centers do exist, the infrastructure in some regions deters most patients from accessing the services provided. It is also observed that the high numbers of cancer patients exceed that of the oncologists giving them a hard time to manage each as required and expected. Despite the information and rate of literacy among Indian women, breast cancer is prevailing making it a concern to all involved stakeholders. The research conducted on what causes cancer and the reasons it is on the rise has helped healthcare practitioners to come up with relevant solutions that ease treatment and allocation of information. The goal of all cancer centers is to inform individuals of all the cancer causes for them to play a role in prevention. On the other hand, more oncologists are needed, so training as many individuals a possible will help curb the patient: doctor ratio disparity.

Keywords: cancer, India, socioeconomic

Introduction

Cancer has for a long time been considered a fatal disease which renders its victims hopeless. Moreover, assumptions identify the illness as one that only affected the wealthy. Contrary to these, the transformation and advancements taking place in the healthcare system have ensured that diseases like cancer can be managed and treated if diagnosed at an early stage (Reddy 2012) [8]. It is through the extensive and analytical research, technology, and screening that have aided in the efficiency of cancer management and treatment. On the other hand, while the factors that contribute to cancer development have increased, the condition is not limited to a particular group of individuals. India has a significant population hence the socioeconomic status of its people varies from region to region. As reckoned by Singh, Sharma, and Nagesh (2017), a nation's health relies on its citizen's socioeconomic status.

Literature Review

Bhawa Sirohi (2014), indicate that close to one million people are diagnosed with cancer annually in India. The numbers of late diagnosis are higher in rural places and contribute to increased mortality and morbidity. On the other hand, despite the level of literacy in urban dwellers, their busy lives are contributors to late diagnosis of the disease. Fletcher-Brown (2017) affirms this with the rate of breast cancer in Indian women who dwell in urban areas and have emulated western ways of life that have dictated their ability to forgo, Indian culture and engage in a modernized lifestyle. Moreover, Mallath *et al.* (2014) [5], highlights the fact the health infrastructure in well-developed and has high standards hence can provide quality services to individuals worldwide. On the contrary, the Indian citizens in rural areas have difficulty in accessing the established cancer centers making it difficult for the condition to be treated in time (Kulkarni, Ramesh Masthi & Gangaboraiah, 2013) [3].

Methods

In identifying the relationship between the socioeconomic status of the Indians and the treatment of cancer, various research reports were analyzed to compile the result found. Moreover, interviews were conducted in the cancer centers and society in India to get more information concerning the disparities, challenges and the strengths in of the cancer doctors. The research was also purposed to analyze the most common cancer conditions that keep arising annually, the causes and efforts made to manage it.

Results

The rates of cancer case in India are immense. Reports record close to one million diagnoses of cancer annually. Karim *et al.* (2016) confirm that with the high numbers of cancer patients, the ratio of oncologists to that of the patients is 1:2000. Despite the advancement in cancer treatment, management and availability of expertise, the rate of the patients is still very high making it difficult for physicians to adequately give individualized care. The distribution of the condition is spread in different regions and unequally between the genders. The conventional cancer conditions are lung, stomach, cancer, and

The Bond between Language and Script

Translated by Dr Shakira Jabeen

Rahamath Tarikere

Indian cultural

December 22, 2017

I have always believed that travelling is more rewarding than reading. Unless one travels the length and breadth of India, there is no way to understand the diversity that adorns her. It was not until I visited Tripura did I know that Kokborok is one of the official languages spoken by lakhs of people written in Roman and Bengali scripts. On my trip to Meghalaya I learnt that Khasi was written in Roman script. Anyone who knows English can effortlessly read the Kokborok and Khasi newspapers. That person can only read and not understand a single word. This reflects the relationship language shares with script. Language and script do not share one to one relationship. There is no guarantee that one would understand a language through a script. The connection between language and script is arbitrary—any language can be written in any script and all languages can be written in one script. Presently, Generally, there cannot be a script without language unless it is meant to hold secrets. But, there are languages without scripts. In modern times, a script is inevitable for a language. Languages like Koraga, Lambani, Kodava, Omma Kodava, and Byary have trailed due to their lack of script. The knowledge systems held in these oral languages get confined to small areas. Languges like Khasi, which have adopted the Roman script, have broken the shackles and moved forward, proving, in turn, that all languages can be written in any script. Ideally, every language should have its own script to be able to express the unique sounds in those languages. But this wish would go against the arbitrary relationship that script shares with language. More often than not, the borrowed scripts don't represent all the sounds of a language. For example, the retroflex "l" which is absent in English is represented with "zh" while writing the word "tamizh", knowing full well that "zh" does not stand for the retroflex "l". The "z" sound of Persian, Urdu and English are represented in Kannada with "j".

There are deeper problems even when a language has its own script. The cultural baggage a language carries forms a barrier while expressing diverse cultural views. Women find it difficult to express their inner feelings and trepidations in a language designed by men. The marginalised find standard languages inadequate to express their experiences. The same is true of people who bear the cultural burden of languages which are not of this soil. Worst of all is the state where a foreign language, script, and culture arer imposed on a speech community. The loss that the community faces in terms of memory, culture, and knowledge system is nothing less than the death of that speech community.

Rahamath Tarikere is a Professor at the Kannada University in Hampi and a Sahitya Akademi Award winning writer. He returned his Sahitya Akademi Award to protest against the killings of scholar M M Kalburgi and rationalists Narendra Dabholkar and Govind Pansare

Dr. Shakira Jabeen B is from the Department of English, Nehru Memorial College, Sullia, Karnataka

Donate to the Indian Writers' Forum, a public trust that belongs to all of us.

Perils of an Imagined Enemy

Translated from Kannada by Dr Shakira Jabeen

Rahamath Tarikere

January 12, 2018

An incident that took place twenty 25 ago has the capacity to question many of our notions about land, language, and their enemy. I was invited to a town, to the proliferation of such "tigers" in many part of the country.

thronging to the cities of Karnataka. The cosmopolitanism that's emerging out of this hybridity is pushing the regional language communities to the periphery. Their disgruntlement becomes a fertile ground for harvesting followers for the fanatic organisations. A similar narrative of injustice and loss of employment opportunities was floated in USA. President Donald Trump's victory owes much to this neo-Nazi imagination. Trump's America has seen an escalation in race related attacks.

We create a lethal mixture of fundamentalism by inciting the feelings of the oppressed and legitimising mindless offensive attitude. It is the same as enormous physical energy, without proper mental makeup, turning man into a beast. It is these mindless bodies that go around devouring vulnerable human beings. They spare the strong. It is pitiable that, in imagining the enemy, there is also gloating about religion and nation. History is proof that imagining the enemy has only made the real enemies more powerful. There is a need to remember that fundamentalism and cruelty are not the armaments of the mighty. Similarly, they cannot be the weapons of the soulless and insecure beings either.

Rahamath Tarikere is a Professor at the Kannada University in Hampi and a Sahitya Akademi Award winning writer. He returned his Sahitya Akademi Award to protest against the killings of scholar M M Kalburgi and rationalists Narendra Dabholkar and Govind Pansare
Dr. Shakira Jabeen is from the Department of English, Nehru Memorial College, Sullia, Karnataka

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Ref No : IJCRT/Vol 6 / Issue 1/ 122

To,
Mrs. MAMATHA .K

Subject: Publication of paper at International Journal of Creative Research Thoughts.

Dear Author,

With Greetings we are informing you that your paper has been successfully published in the International Journal of Creative Research Thoughts - IJCRT (ISSN: 2320-2882). Thank you very much for your patience and cooperation during the submission of paper to final publication Process. It gives me immense pleasure to send the certificate of publication in our Journal. Following are the details regarding the published paper.

About IJCRT	: Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool) , Multidisciplinary, Monthly, Indexing in all major database & Metadata, Citation Generator, Digital Object Identifier(DOI)
Registration ID	: IJCRT_210624
Paper ID	: IJCRT1134122
Title of Paper	: RURAL DEVELOPMENT AND PANCHAYATH RAJ SYSTEM IN KARNATAKA STATE
Impact Factor	: 7.97 (Calculate by Google Scholar) | License by Creative Common 3.0
Publication Date	: 2018-01-01 06:07:48
DOI	:
Published in	: Volume 6 | Issue 1 | January 2018
Page No	: 706-713
Published URL	: http://www.ijcrt.org/viewfull.php?&p_id=IJCRT1134122
Authors	: Mrs. MAMATHA .K
Notification	:

Thank you very much for publishing your article in IJCRT.

Editor In Chief
International Journal of Creative Research Thoughts - IJCRT
(ISSN: 2320-2882)

International Journal of Creative Research Thoughts (IJCRT) ISSN 2320-2882 IJCRT

PRINCIPAL
...IAL COLLEGE
...K. - 574 327

Rural Development and Panchayath Raj System in Karnataka State

Mrs. MAMATHA .K.

Department of Political Science.

Nehru Memorial College, Sulya, DK district, Karnataka

Abstract:

The rural development and panchayath Raj system made its growing path after the 73rd and the 74th amendments to the constitution of India, enacted in 1992, lay down ground rules with basic structural framework for decentralized governance at district and lower levels which can sustain themselves against external interference and emerge as effective and strong people's institutions in the name of panchayath Raj System. The Amendments mandate that every state shall establish a three-tier system of Panchayat, at the village, Taluk and district levels. State of Karnataka is mainly dependent on agriculture, nearly 65 per cent of the people residing in rural areas. So, in the rural area the panchayaths, taluk areas taluk panchayaths and district level Zilla Panchayath have to be involved in planning, decision making, monitoring and execution of development programmes in order to facilitate the process of development in support of the Government, to cater the needs of the large number of populations. Rural development is the method of enhancing the quality of life and financial well-being of individuals in rural areas, specifically living in populated and remote areas. Traditionally, rural development was centred on the misuse of land-intensive natural resources such as forestry and agriculture. In Karnataka, majority of the population, resides in rural communities. The development of all aspects within rural communities is vital for the effective development of the country. These include, education, employment opportunities, infrastructure, housing, civic amenities and the environmental conditions. The development of all aspects within rural communities is vital for the effective development of the country. These include, education, employment opportunities, infrastructure, housing, civic amenities and the environmental conditions' all development aspects realised only after 1992.

Key words: Rural Development, Agriculture, panchayath Raj institutions, Community.

Introduction:

Panchayath Raj institutions Participation and Sustainability Program and rural development awareness among the communities about the value of participation in making local institutions vibrant and improving the last mile delivery of government programs. It incorporates local knowledge and choices in village development programs for inclusive and sustainable development. However, it is important challenges due to gaps in information and inadequate participation at grassroots level makes it difficult to fully achieve the stated objectives. Members of village-level institutions are also constrained by poor awareness, insufficient skills and limited resources, and therefore struggle to lead development activities in villages through panchayath raj institutions. Rural women are at an added disadvantage due to wide gender gaps in education and skill development, as well as, limited knowledge on health and hygiene, financial security and general lack of confidence these are hindering the development of the village so panchayath raj institutions made a drastic change in the rural development. It is leading to more equitable and sustained outcomes. It enables rural population take part an active lead and eventually own the development program or initiative, thus validating the effort of agencies and ensuring sustainability of the impact created with the help of panchayath raj institutions. The Panchayati Raj Institutions are the nodal point at the district level. Their role is to help plan, coordinate, monitor and wherever required regulate the implementation of various national programmes in the process of development. The panchayath Raj institutions will serve as conserve natural resources for holistic village development. It further creates awareness about important health and sanitation issues, and promotes usage of digital technologies to widen the reach and benefits of government programs to the community's people at rural areas. The role of PRIs no doubt can be pivotal for the success of various rural development programmes, and all programmes should be implemented in correct manner. It would be important in various activities relating to the education, rehabilitation, awareness generation and training programmes of the disabled. They can also provide important feedback for the purpose of planning, monitoring and improvement(s) in coordination. Therefore, it is obvious that PRIs should be provided with all the relevant and necessary information so as to enable rural community participation in implementation of these programmes at the grass root level. It further stresses the role of PRIs by providing a comprehensive list of activities, which they should undertake in this regard over all progress of the rural development.

Statement of Problem

The panchayath Raj system it is needed good governance for rural development, to address the issues and challenges to the effectiveness of functions of panchayath Raj institutions to facilitate rural development, the first question raised in this study is for what purpose is the Panchayath Raj are functioning? In the process of effective functioning of Panchayath Raj Institutions the ideal administration, good governance will be facilitated for rural development. When they function through the elected members of political parties can interact among all civilian about their needs of the localities, this will enhance the quality of administration, governance, easy to reach and they can also communicate efficiently and effectively with different types of the people there by rural development is possible. Thus, the objective of this research is to explore good governance of Panchayath Raj by the use elected members in the rural development process. The main purpose of this research is to expand on existing panchayath raj institutions with this research literature and create greater scope for further research, this study also explores the relationship between the effects of good governance of panchayath raj instructions and reach people at all village level in the process of rural development.

Research questions

1. Which is the most important role in rural development.
2. Why political parties taking more serious about panchayath raj institutions.

Objectives of the study.

1. To highlight impact of panchayath raj institutions on rural development
2. To enlist different functions of panchayath raj institutions.

In the present study is focused through Interpretative phenomenological analysis (IPA) of qualitative research methodology has been used in this research. The study was conducted among the different aged people in the rural areas, who have involved in Panchayath Raj institutions functions and also actively participating in state of Karnataka, India Only few selected are selected, Semi-structured in-depth interviews were conducted to understand the role of Panchayath raj institutions.

History of panchayath raj system and composition.

The development of panchayath Raj system is analysed in India can be starting from Vedic period, in Vedas old Sanskrit scriptures, word 'Panchayati' has been mentioned which means a group of five persons, including a spiritual man. Panchayati raj originated in 2nd millennium BCE in India during Vedic times. Since Vedic times, the village (gram) in the country is considered as the basic unit for regional self-administration. Mahatma Gandhi advocated Panchayati Raj as the foundation of India's political system, as a decentralized form of government in which each village would be responsible for its own affairs. The term for such a vision was *Gram Swaraj* ("village self-governance"). Instead, India developed a highly centralized form of government. However, this has been moderated by the delegation of several administrative functions to the local level, empowering elected gram panchayats. The Panchayat Raj system was first adopted by the state of Bihar by the Bihar Panchayat Raj Act of 1947. It was a continued legacy of local self-government started by Lord Ripon in the British era. Later it was implemented by Rajasthan in Nagaur district on 2 October 1959. Rajasthan was the first state to introduce the panchayat system in India after independence. During the 1950s and 60s, other state governments adopted this system as laws on 24 April 1993, the Constitutional (73rd amendment) Act of 1992 came into force in India to provide constitutional status to the Panchayati Raj institutions. This amendment was extended to Panchayats in the tribal areas of eight states, namely: Andhra Pradesh, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Odisha, and Rajasthan beginning on 24 December 1996. This amendment contains provisions for the devolution of powers and responsibilities to the panchayats, both for the preparation of economic development plans and social justice, as well as for implementation in relation to 29 subjects listed in the eleventh schedule of the constitution, and the ability to levy and collect appropriate taxes, duties, tolls and fees. The important committees constituted for recommendations regarding Panchayati Raj in India: Balwant Rai Mehta 1957, Krishnamacharya 1960, Ashok Mehta Committee 1978.They are tasked with "economic development, strengthening social justice and implementation of Central and State Government Schemes including those 29 subjects listed in the Eleventh Schedule. the Gram Panchayats at village level the Panchayat Samiti at block level and the Zila Parishad at district level. In states or Union Territories with less than two million inhabitants there are only two levels of PRIs. Local government in India refers to governmental jurisdictions below the level of the state. India is a

Objectives of the study.

1. To highlight impact of panchayath raj institutions on rural development
2. To enlist different functions of panchayath raj institutions.

In the present study is focused through Interpretative phenomenological analysis (IPA) of qualitative research methodology has been used in this research. The study was conducted among the different aged people in the rural areas, who have involved in Panchayath Raj institutions functions and also actively participating in state of Karnataka, India Only few selected are selected, Semi-structured in-depth interviews were conducted to understand the role of Panchayath raj institutions.

History of panchayath raj system and composition.

The development of panchayath Raj system is analysed in India can be starting from Vedic period, in Vedas old Saṇskrit scriptures, word 'Panchayati' has been mentioned which means a group of five persons, including a spiritual man. Panchayati raj originated in 2nd millennium BCE in India during Vedic times. Since Vedic times, the village (gram) in the country is considered as the basic unit for regional self-administration. Mahatma Gandhi advocated Panchayati Raj as the foundation of India's political system, as a decentralized form of government in which each village would be responsible for its own affairs. The term for such a vision was *Gram Swaraj* ("village self-governance"). Instead, India developed a highly centralized form of government. However, this has been moderated by the delegation of several administrative functions to the local level, empowering elected gram panchayats. The Panchayat Raj system was first adopted by the state of Bihar by the Bihar Panchayat Raj Act of 1947. It was a continued legacy of local self-government started by Lord Ripon in the British era. Later it was implemented by Rajasthan in Nagaur district on 2 October 1959. Rajasthan was the first state to introduce the panchayat system in India after independence. During the 1950s and 60s, other state governments adopted this system as laws on 24 April 1993, the Constitutional (73rd amendment) Act of 1992 came into force in India to provide constitutional status to the Panchayati Raj institutions. This amendment was extended to Panchayats in the tribal areas of eight states, namely: Andhra Pradesh, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Odisha, and Rajasthan beginning on 24 December 1996. This amendment contains provisions for the devolution of powers and responsibilities to the panchayats, both for the preparation of economic development plans and social justice, as well as for implementation in relation to 29 subjects listed in the eleventh schedule of the constitution, and the ability to levy and collect appropriate taxes, duties, tolls and fees. The important committees constituted for recommendations regarding Panchayati Raj in India: Balwant Rai Mehta 1957, Krishnamacharya 1960, Ashok Mehta Committee 1978.They are tasked with "economic development, strengthening social justice and implementation of Central and State Government Schemes including those 29 subjects listed in the Eleventh Schedule. the Gram Panchayats at village level the Panchayat Samiti at block level and the Zila Parishad at district level. In states or Union Territories with less than two million inhabitants there are only two levels of PRIs. Local government in India refers to governmental jurisdictions below the level of the state. India is a federal republic with three spheres of government: central, state and local. The 73rd and 74th constitutional amendments give recognition and protection to local governments and in addition each state has its own local government legislation. Since 1992, local government in India takes place in two very distinct forms. Urban localities, covered in the 74th amendment to the Constitution, have Nagar Palika but derive their powers from the individual state governments, while the powers of rural localities have been formalized under the *Panchayati raj* system, under the 73rd amendment to the Constitution. Within the Administrative setup of India, the democratically elected Local self-governance bodies are called the *"municipalities"* (abbreviated as the *"MC"*) in urban areas and the *"Panchayati Raj Institutes (PRI)"* (simply called the *"panchayats"*) in rural areas. There are 3 types of municipalities based on the population, Municipal Corporation (Nagar Nigam) with more than 1 million population, Municipal Councils (Nagar Palika) with more than 25,000 and less than 1 million population, and Municipal Committee (Nagar Panchayat) with more than 10,000 and less than 25,000 population. PRIs in rural areas have 3 hierarchies of panchayats, Gram panchayats at village level, Mandal or block panchayats at block level, and Zilla panchayats at district level. So, this is the way they work in the process of rural development. Our panchayat consists of gram sabha; it is a village assembly consists of all eligible voters within the area of panchayat. The gram sabha discusses the developmental plans called gram panchayat development plan (GPDP) and it is executed by elected leader. The act gives reservation to all SC, ST candidate at all three tiers. For women not less than one-third of the seats to be reserved. Tenure or term of office is 5 years and the panchayat can be dissolved before completion of a term. The function of panchayat is directed by state legislature, panchayat work as a preparation of plans and implementation of schemes and policies for social and economic development. State legislature may authorize them to collect taxes, duties and fees in accordance with the law. So, these are the above features of panchayath institutions.

The functions of panchayath institutions towards rural development.

Panchayati Raj is a local self-government followed in Karnataka. It is meant to ensure that local administrative affairs, particularly in rural areas, should be resolved by local government units constituted with elected members. Some of the important functions of a Panchayat Union Council are Construction, repair and maintenance of all Panchayat union roads, Construction of water works for the supply of water for drinking, washing and bathing purposes, Construction and maintenance of elementary and middle schools at their localities. By giving the importance of social sector. Implementation of schemes for the development of agriculture and infrastructure Establishment of primary health centres and primary schools It should be one of the top priorities that all of the PRIs must strive to get every child with disability enrolled into a primary school for their comprehensive evaluation. This is done by a team consisting of a qualified physician, clinical psychologist and a special educator. This process of evaluation also determines the best setting of education as suited to each of such child. Children with mild to moderate disabilities may be integrated into normal schools. Those with severe disabilities would benefit most from the special schools. Children who drop out or have problems learning in the normal school have an option to join either an open or remedial school. There are children who only have a learning disability, they are managed in normal schools Children with locomotor handicaps (O.H.)Mildly and moderately hearing impaired ,Partially sighted children, Mentally handicapped educable group (IQ 50-70) Children with multiple handicaps (blind and orthopaedic, hearing impaired and orthopaedic, educable mentally retarded and orthopaedic, visual impaired and mildhearing impaired, Supply of clean drinking water, Imposing water usage charges has always been a politically sensitive issue. Currently, charges for domestic use are quite ad hoc and nominal and even these are not fully recovered by the water supply departments of various state governments, leading to poor maintenance of the network. At present, only 18% of India's rural households (approximately 3.2 crore) have access to piped water. The Centre hopes to take this figure to 100% in five years under the Jal Jeevan Mission. Drainage and construction/repair of roads, it will also involve construction of small shallow channels/trenches along the gradient and drainage path in the village which will be mapped by 3D mapping technology. The Department of Space has already started sharing details of the same with the Jal Shakti ministry. These channels preferably closed at the top will lead to sinks at natural drainage points to ensure that ground water sources are recharged and sustainable. Development of a cottage and small-scale industries, and the opening of cooperative societies, Establishment of youth organisations in India Every industry either small or large scale is depended on agriculture and allied sector for its advancement, mountainously large number of youth with impeccable skills and practical mindset is residing in every corner of rural area and they are considered as real entrepreneurs, of "Atmanirbhar Bharat", they are also the upcoming leaders and a true representative of every administrative and local governmental body. With the growing population in rural areas, it is essential to have better health infrastructure, education institutions, transportation facilities, availability of water and electricity, and an institution to settle disputes, and for that the government at local level or Panchayati raj institution is established for the village welfare. The different committees suggested locating means to ensure availability of adequate financial resources for Panchayati Raj Institutions. We can suggest a pattern of compulsory and optional levies for PRIs in order to enable them to function effectively. Inadequacy of staff has seriously affected the functioning of the PRIs whose expenditure needs are rising due to requirement for additional administrative, trained and technical staff for schools, water supply, communications, accounts, tax collection, sweeping, drain cleaning etc. Staff costs can be reduced by attrition, maintaining core professional staff and drawing local expertise (Bird and Rodriguez 1995). To summarize, steps required to make PRIs financially stronger to meet their needs include a carrots and stick approach.

Finding of the study.

The success of the Genuine fiscal federalism i.e., fiscal autonomy accompanied by fiscal responsibility can provide a long-term solution without this PRIs will only be an expensive failure. State govt should adopt the concept of 'activity mapping, wherein each state clearly delegates the responsibilities and roles for the different tiers of the government. Rural people's issues are addressed at the grass-roots level by local self-government. It gains democracy. The major idea behind democratic decentralization or village panchayat is to uplift the poor and marginalized people. All gram panchayat has been entrusted for social-economic development. It can lead to closer relationship between government officials and village people, all the developmental plans in village includes less privileged class to discuss as participation of people is the important pillar of good governance. This system also leads to exchange of information and better coordination among local leader and gram sabha. They interact with each other in developmental Plans and issues arising in the village and for the effective functioning of gram panchayat, state government ensures their training at state rural development institutes. After the panchayat there is a visible change in Infrastructure development in terms of road connectivity, health facilities with proper medical Equipments and well-trained nursing staff, education has also improved with proper sanitation, toilets, skilled and knowledgeable teachers, mid-day meals etc., some villages are availing 24*7 water and electricity facilities, this is what the true form of functional democracy demands. Many panchayats contributed significant efforts in employment generation and growth of small and cottage industries, encouraged farmers and labour class to contribute in agriculture in more scientific way and other related sectors, this assured village people a sense of security. Recently the government launched the scheme SVAMITVA (survey of village and mapping with improvised technology in village areas) with the objective of socio- economic empowerment of people living in rural areas. The scheme aims to provide the 'record of rights' to household owners residing in rural areas and issuance of property cards to the property owners. However, some of challenges of panchayath raj are, Insufficient funding: in spite of constitutional provision, the local government faces shortage of grants and funding to carry out activities assigned to them. There is a general demand to make Panchayati raj institution financially stronger. Most of the gram panchayat found reluctant to raise own source of revenue (OSR) in form of tax, rents and fees and this has led to delay in developmental plans. Gram panchayats faces a problem of inadequate infrastructure, they have no separate building to carry out their day-to-day activities and because of that they carry meeting in schools. And some panchayats have building without electricity, toilet, this governance structure is well-suited to the needs of a single village. The burden of responsibility imposed on the state government is significantly diminished by the local government. Any important and vibrant Grama Sabha is essential for the effective functioning of Village Panchayats by promoting transparency and accountability in administration, enhancing public participation in the planning and implementation of schemes and in the choice of beneficiaries, and paving the way for social audit though it is a challenge one but, require to achieve it.

Conclusion:

The maximization of the quantity of development funding or increase in the social sector expenditure to maximization of development outcomes and effectiveness of public service delivery through a change in work culture, better policies and sound delivery mechanisms. In the process of Successful implementation of rural programmes depends also on an effective delivery system for rural development. An important element of expenditure reform therefore relates to effective monitoring of these programmes to assess not only the physical but also the financial progress in implementation to ensure that benefits reach the target groups of the rural areas in tern it will leads to rural development. At the village level the need of the hour is to bring about a holistic change in the lives of beneficiaries among the villagers by uplifting their socio-economic and health status through effective linkages by different govt schemes for this platform is LSG are most important. In this connection Government should take remedial action in the interest of Rural people, The PRIs in Karnataka suffer from certain colonial hangovers. The ZPs have been given only administrative roles. The hangover thus continues even today. In the political parties Once, the dominant castes have managed to occupy important positions where the decisions are made, they find it easy to manipulate the plans to serve their best interests. With this, the schism of caste grows wider day by day, alienating the low castes farther and farther from participating in rural development programmes. A strong decentralized authority is needed at district level, in order to strengthen panchayat administration in the state. Karnataka government has undoubtedly taken a number of steps to grant greater responsibilities, powers and financial resources to the PRIs. setting up of a Social Justice Committee to safeguard and promote the interests of the vulnerable social and economic groups, imparting training to Panchayat members etc. LSG play vital role in social inclusion and cooperative federalism. People's demands for the sustainable decentralisation and advocacy should focus on a decentralisation agenda. The framework needs to be evolved to accommodate the demand for decentralisation. It is important to have clarity in the assignment of functions and the local governments should have clear and independent sources of finance then only complete success of LSG is possible. They need better tax collection authority and capacity, more untied grants and help with improving accounting and record keeping. But at the same time, they also need to work towards expenditure reform and vitalized service delivery. Linking Central Finance Commission transfers to more effective fiscal decentralization by states would add to the gains. The local needs are only fulfilled when the local government comes more closer to its people and act as a guardian and responsible representative in order to build trust and faith among its people, so every nation can march towards progress and prosperity.

References

1. Government of India, 2001, National Human Development Report, Planning Commission. Government of India, 2002, Tenth Five-Year Plan (2002-07), New Delhi: Planning Commission.
2. Indian Express, 2002, Lack of faith is destroying the panchayat system: Why are people still not benefiting from the 73rd Constitution amendment?, Sreelatha Menon, Thursday, April 11, web edition.
3. Jha, Shikha, 2000, Fiscal Decentralization in India: Strengths, Limitations and Prospects for Panchayati Raj Institutions, Background Paper for "Overview of Rural Decentralization in India", World Bank.
4. Jha, Shikha, 2002, Strengthening Local Governments: Rural Fiscal Decentralization in India, Economic and Political Weekly June 29, p. 2611-2623.
5. McCarten, W. and V. Vyasulu, 2003, Democratic Decentralization in Madhya Pradesh: Neither Big Bang nor Gradualism, South Asia Decentralization Series, World Bank.
6. Rajaraman, I., 2003, A Fiscal Domain for Panchayats, Oxford University Press, New Delhi. Rajaraman, I., 2001, Growth accelerating fiscal devolution to the third tier, NIPFP, mimeo.
7. Tehelka, 2002, Devolution of funds, functions and functionaries to Panchayat Raj Institutions - a perspective, (based on a working paper by the Union government for the national convention of panchayat presidents, organised by the Ministry of Rural Development New Delhi, April 5-6.). http://www.tehelka.com/channels/currentaffairs/2002/apr/5/ca040502panchayati1.htm

suffer from certain colonial hangovers. The ZPs have been given only administrative roles. The hangover thus continues even today. In the political parties Once, the dominant castes have managed to occupy important positions where the decisions are made, they find it easy to manipulate the plans to serve their best interests. With this, the schism of caste grows wider day by day, alienating the low castes farther and farther from participating in rural development programmes. A strong decentralized authority is needed at district level, in order to strengthen panchayat administration in the state. Karnataka government has undoubtedly taken a number of steps to grant greater responsibilities, powers and financial resources to the PRIs. setting up of a Social Justice Committee to safeguard and promote the interests of the vulnerable social and economic groups, imparting training to Panchayat members etc. LSG play vital role in social inclusion and cooperative federalism. People's demands for the sustainable decentralisation and advocacy should focus on a decentralisation agenda. The framework needs to be evolved to accommodate the demand for decentralisation. It is important to have clarity in the assignment of functions and the local governments should have clear and independent sources of finance then only complete success of LSG is possible. They need better tax collection authority and capacity, more untied grants and help with improving accounting and record keeping. But at the same time, they also need to work towards expenditure reform and vitalized service delivery. Linking Central Finance Commission transfers to more effective fiscal decentralization by states would add to the gains. The local needs are only fulfilled when the local government comes more closer to its people and act as a guardian and responsible representative in order to build trust and faith among its people, so every nation can march towards progress and prosperity.

References

1. Government of India, 2001, National Human Development Report, Planning Commission. Government of India, 2002, Tenth Five-Year Plan (2002-07), New Delhi, Planning Commission.
2. Indian Express, 2002, Lack of faith is destroying the panchayat system; Why are people still not benefiting from the 73rd Constitution amendment?, Sreelatha Menon, Thursday, April 11, web edition.
3. Jha, Shikha, 2000, Fiscal Decentralization in India: Strengths, Limitations and Prospects for Panchayati Raj Institutions, Background Paper for "Overview of Rural Decentralization in India", World Bank.
4. Jha, Shikha, 2002, Strengthening Local Governments: Rural Fiscal Decentralization in India, Economic and Political Weekly June 29, p. 2611-2623.
5. McCarten, W. and V. Vyasulu, 2003, Democratic Decentralization in Madhya Pradesh: Neither Big Bang nor Gradualism, South Asia Decentralization Series, World Bank.
6. Rajaraman, I., 2003, A Fiscal Domain for Panchayats, Oxford University Press, New Delhi. Rajaraman, I., 2001, Growth accelerating fiscal devolution to the third tier, NIPFP, mimeo.
7. Tehelka, 2002, Devolution of funds, functions and functionaries to Panchayat Raj Institutions - a perspective, (based on a working paper by the Union government for the national convention of panchayat presidents, organised by the Ministry of Rural Development New Delhi, April 5-6.). http://www.tehelka.com/channels/currentaffairs/2002/apr/5/ca040502panchayati1.htm

8. Vithal, C.P., 1997, Aspects of panchayat finances: An analysis of Panchayat Acts, Journal of RuralDevelopment 16(1), 123-134.
9. Vyasulu, V., 2000, Decentralisation from above. Panchayati Raj in the 1990s, Centre for Budget andPolicy Studies, Bangalore, March
10. B.S. Bhargava (1982), "Panchayat Raj System in Tamilnadu" , Panchayat Sandes, Jan
11. Haricandran (1983), 'Panchayat Raj and Rural Development'', Concept, New Delhi.
12. Abdul Aziz (2002), 'Decentralized Governance and Planning, A Comparative Study in South Indian States', Macmillan India Ltd., Delhi.
13. Choudhury R.C. and Jain S.P. (2002), Patterns of Decentrlized Governance in Rural India, NIRD, Hyderabad [3] Palanithurai K.V. (1990), 'Decentralized Planning in India', A Handbook, New Delhi
14. Ramesh K. Arora 'Management in Government'.Government of Karnataka, Policy Note 2007-08, 2009-10 Karnataka Panchayat Raj Act 1993, edition 2011.
15. Singh, Vijandra (2003). "Chapter 5: Panchayate Raj and Gandhi". Panchayati Raj and Village Development: Volume 3, Perspectives on Panchayati Raj Administration. Studies in public administration. New Delhi: Sarup & Sons. pp. 84–90.
16. Dwivedi, Ritesh, Poddar, Krishna (1 December 2013). "Functioning of Panchayati Raj Institutions in India: A Status aper". Adhyayan. 3 (2). doi:10.21567/adhyayan.v3i2.10183.
17. Panchayati Raj: The Grassroots Dynamics in Arunachal Pradesh, p. 13, APH Publishing, 2008, Pratap Chandra Swain
18. Sisodia, R. S. (1971). "Gandhiji's Vision of Panchayati Raj". Panchayat Aur Insan. 3 (2): Sharma, Manohar Lal (1987). Gandhi and Democratic Decentralization in India. New Delhi: Deepand Deep Publications. OCLC 17678104. Hathi
19. Bird, Richard, M and Michael Smart (2002). Intergovernmental Fiscal Transfers: International Lessons for Developing Countries, World Development, 30 (6).
20. CBPS (2013). Study on Understanding Determinants of Own Source Revenue in Gram Panchayats of Karnataka. Bangalore: Centre for Budget and Policy Studies.
21. Devarajan, Shantayanan, Khemani, Stuti, and Shekhar Shah (2007). The Politics of Partial Decentralization. The World Bank.
22. Government of Karnataka (1988). District Governments and Decentralised Planning. Government of Karnataka.
23. (1993). Karnataka Panchayat Raj Act, 1993. Government of Karnataka.
24. (1996). Report of the State Finance Commission relating to Panchayat Raj Institutions (FirstSFC after 73rd Constitution Amendment).
25. (2010). Provision of Salary Grants to Zilla Panchayats for the year 2010-11, Annexure – B(Staff) (in Kannada). Government of Karnataka.

...tificate of Publication

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | ISSN: 2320 - 2882

An International Open Access, Peer-reviewed, Refereed Journal

The Board of

International Journal of Creative Research Thoughts

Is hereby awarding this certificate to

Mrs. MAMATHA .K

In recognition of the publication of the paper entitled

RURAL DEVELOPMENT AND PANCHAYATH RAJ SYSTEM IN KARNATAKA STATE

Published In IJCRT (www.ijcrt.org) & 7.97 Impact Factor by Google Scholar

Volume 6 Issue 1 , Date of Publication:January 2018 2018-01-01 06:07:48

International Journal of Creative Research Thoughts(IJCRT) ✦ ISSN 2320-2882 IJCRT

EDITOR IN CHIEF

PAPER ID : IJCRT1134122

Registration ID : 210624

IJCRT | ISSN: 2320-2882 | IJCRT.ORG

IJRAR | E-ISSN 2348-1269, P- ISSN 2349-5138

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR)

An International Open Access Journal | Approved By ISSN and UGC

Ref No : IJRAR/Vol 5 / Issue 2/ 877

To,
Mrs. MAMATHA .K
Publication Date 2018-05-10 10:40:24

Subject: Publication of paper at International Journal of Research and Analytical Reviews (IJRAR).

Dear Author,

With Greetings we are informing you that your paper has been successfully published in the International Journal of Research and Analytical Reviews (IJRAR) - IJRAR (E-ISSN 2348-1269, P- ISSN 2349-5138). Thank you very much for your patience and cooperation during the submission of paper to final publication Process. It gives me immense pleasure to send the certificate of publication in our Journal. Following are the details regarding the published paper.

About IJRAR	:	UGC and ISSN Approved - International Peer Reviewed Journal, Refereed Journal, Indexed Journal, Impact Factor: 5.75, E-ISSN 2348-1269, P- ISSN 2349-5138
UGC Approval	:	Journal No: 43602
Registration ID	:	IJRAR_236850
Paper ID	:	IJRAR19D2877
Title of Paper	:	ISSUES AND CHALLENGES OF LOCAL SELF-GOVERNANCE IN KARNATAKA STATE
Impact Factor	:	5.75 (Calculate by Google Scholar) | License by Creative Common 3.0
DOI	:	
Published in	:	Volume 5 | Issue 2 | May 2018
Publication Date	:	2018-05-10 10:40:24
Page No	:	22-29
Published URL	:	http://www.ijrar.org/viewfull.php?&p_id=IJRAR19D2877
Authors	:	Mrs. MAMATHA .K

Thank you very much for publishing your article in IJRAR. We would appreciate if you continue your support and keep sharing your knowledge by writing for our journal IJRAR.

R.B.Joshi

Editor In Chief
International Journal of Research and Analytical Reviews - IJRAR
(E-ISSN 2348-1269, P- ISSN 2349-5138)

International Journal of Research and Analytical Reviews E-ISSN 2348-1269, P- ISSN 2349-5138 IJRAR

PRINCIPAL ... COLLEGE ... D.K. - 574 327

Issues and Challenges of local Self-Governance in Karnataka State

Mrs. MAMATHA .K.

Asst. Professor of Political Science.

Nehru Memorial College, Sulya, DK district, Karnataka

Abstract: This paper made a modest attempt the issues and challenges of local self-Governance in Karnataka state. The 73rd and the 74th amendments to the constitution of India, enacted in 1992, lay down ground rules with basic structural framework for decentralized governance at district and lower levels which can sustain themselves against external interference and emerge as effective and strong people's institutions. The Amendments mandate that every state shall establish a three-tier system of Panchayat, at the village, Taluk and district levels. State of Karnataka is mainly dependent on agriculture, nearly 65 per cent of the people residing in rural areas. So, in the rural area the panchayaths, taluk areas taluk panchayaths and district level Zilla Panchayath have to be involved in planning, decision making, monitoring and execution of development programmes in order to facilitate the process of development in support of the Government, to cater the needs of the large number ofpopulations. The state governments as well as PRIs are also addressing the issue through other means such as reduction of personnel through privatization, issue of secured redeemable bonds, user charges for services, etc. Besides, the Government of India decided to allow direct lending to Gram Panchayat, Self Help Groups and NGOs for providing roads, drinking water, primary schools, Govt must self-rule through grants and by conferring autonomy on them. When there is a financial resource are adequate in LSG with issues and challenges, they can make wonders.

Key words: local Self – governance, Grama Panchayath, Development, Villages, Panning.

Introduction

The important Attributes of good governance must be determined by the nation's vision of the larger social and economic goal(s) and the value system has to promote. to reach a consensus in the case the latter is extremely difficult. It is however, possible to move towards a minimal common agenda across the spectrum of political thinking on a value system that would be promoted through panchayath Raj system. In this connection Govt. of India introduced 73rd and 74th Constitutional Amendments and were passed by Parliament in December, 1992. Through these amendments local self-governance was introduced in rural and urban India. Panchayati Raj Institutions (PRIs) are the best instruments to meet the needs of people as the programmes are a manifestation of the needs of the masses at local level. Three-tier system of panchayats at village, intermediate block/taluk/Mandal and district levels except in States with population is below 20 lakhs (Article 243B).in Karnataka with the introduction of panchayath raj act 1993, the local self Govt. (LSG) became popular. The state of Karnataka in India has been in the forefront of administrative decentralization and devolution of powers to the panchayats as envisaged in the Constitution. It has been observed that the Panchayat Raj institution's structure in Karnataka has now been stabilized and strengthened with four elections. The Gram panchayat are responsible for the overall development of the village and play a key role in providing basic services for therural health and well-being of rural people, like, Rural Road, drinking water and sanitation. LSG also approveof the plans, programmes and projects for social and economic development. LSG will take up for implementation by the Panchayat at the village level (Panchayat at the village level is otherwise known as Gram Panchayat). It is also responsible for the identification or selection of persons as beneficiaries under the poverty alleviation, employment generation and other programmes. Every LSG at the village level are obtaining from the Gram Sabha a certification of utilization of funds for programmes and projects implemented at various schemes, by the Panchayat for such plans are approved by LSG. However, increasing role of Market Mechanism, civil societies and non-government organizations cannot compensate the inadequacies of governance, even though their role is crucial in shaping the quality of governance. Government is the important point for instituting good governance as all other institutions function within the overall institutional framework provided by the government to meet needs of the people. An incremental approach to quality of governance cannot meet the emerging challenge of rapid is needed.

Statement of Problem

It is very important in the local self-government it is needed good governance, to address the issues and challenges to the effectiveness of functions of panchayath Raj institutions, the first question raised in this study is for what purpose is the Panchayath Raj are functioning? In the process of effective functioning of Panchayath Raj Institutions the ideal administration, good governance is needed. When they function through the elected members of political parties can interact among all publics about their needs of the localities, this will enhance the quality of administration, governance, easy to reach and they can also communicate efficiently and effectively with different types of the people. Thus, the objective of this research is to explore the issues and challenges of Panchayath Raj by the use elected members in the good governance process. The main purpose of this research is to expand on existing local self govt research literature and create greater scope for further research, this study also explores the relationship between the effects of good governance of local self-government and reach people at different level according to their local needs.

Research questions

1. Which is the most important challenging issue in the local self-governance.
2. Why political parties taking more serious about local self – governance elections.

Objectives of the study.

1. To highlight impact of issues and challenges on local self -governance
2. To enlist different functions of local self- government.

In the present study is focused through Interpretative phenomenological analysis (IPA) of qualitative research methodology has been used in this research. The study was conducted among the different aged people, who have involved in Panchayath Raj institutions active participation in state of Karnataka, India Only few selected are selected, Semi-structured in-depth interviews were conducted to understand the issues and challenges of Panchayath raj governance.

History of panchayath raj system and composition.

The development of panchayath Raj system is analysed in India can be starting from Vedic period, in Vedas old Sanskrit scriptures, word 'Panchayati' has been mentioned which means a group of five persons, including a spiritual man. later the concept of the inclusion of a spiritual man in such groups vanished so this is real beginning of the solving problem at local level. In the Rigveda, there is a mention of Sabha, Samiti and Vedanta as local self-units. These were the democratic bodies at the local level. The king used to get the approval of these bodies regarding certain functions and decisions. Epic Era indicates the two great epic periods of India, that is, the Ramayana and the Mahabharata. The study of Ramayana indicates that the administration was divided into two-part Pur and Janpad or city and village. In India Local self govt. which consist consists of the Panchayati Raj Institutions (PRIs) through which the self- government of villages is realized. They are tasked with "economic development, strengthening social justice and implementation of Central and State Government Schemes including those 29 subjects listed in the Eleventh Schedule. the Gram Panchayats at village level the Panchayat Samiti at block level and the Zila Parishad at district level. In states or Union Territories with less than two million inhabitants there are only two levels of PRIs. Local government in India refers to governmental jurisdictions below the level of the state. India is a federal republic with three spheres of government: central, state and local. The 73rd and 74th constitutional amendments give recognition and protection to local governments and in addition each state has its own local government legislation. Since 1992, local government in India takes place in two very distinct forms. Urban localities, covered in the 74th amendment to the Constitution, have Nagar Palika but derive their powers from the individual state governments, while the powers of rural localities have been formalized under the *Panchayati raj* system, under the 73rd amendment to the Constitution. Within the Administrative setup of India, the democratically elected Local self-governance bodies are called the *"municipalities"* (abbreviated as the *"MC"*) in urban areas and the *"Panchayati Raj Institutes (PRI)"* (simply called the *"panchayats"*) in rural areas. There are 3 types of municipalities based on the population, Municipal Corporation (Nagar Nigam) with more than 1 million population, Municipal Councils (Nagar Palika) with more than 25,000 and less than 1 million population, and Municipal Committee (Nagar Panchayat) with more than 10,000 and less than 25,000 population. PRIs in rural areas have 3 hierarchies of panchayats, Gram panchayats at village level, Mandal or block panchayats at block level, and Zilla panchayats at district level. The development of local self govt. for the first instance Panchayat Raj system was first adopted by the state of Rajasthan in Nagpur district on 2 Oct 1959 but first started by Andhra Pradesh. During the 1950s and 60s, other state governments adopted this system as laws were passed to establish panchayats in various states. The Gram Sabha consists of all registered voters living in the area of a Gram Panchayat and is the organization through which village inhabitants participate directly in local government. Elections for the members of the Panchayats at all levels take place every five years. The Panchayats must include members of Scheduled Castes (SCs) and Scheduled Tribes (STs) in the same proportion as in the general population. One third of all seats and chairperson posts must be reserved for women, in some state's half of all seats and chairperson posts. In Karnataka the Mysore Government in 1902 passed the Mysore Local Boards Act with a view to revealing the rural local Government. In 1918, the Mysore Government enacted the Mysore Local Boards and Village Panchayat Act making provisions for elected representatives at the district and taluk levels. The first independent legislation on Panchayat Raj Institutions was enacted by the Ramakrishna Hegde Government in 1983 and was brought into effect from April 1987 with the first elections to these local bodies in rural areas. The modern Panchayati Raj system was introduced in India by the 73rd constitutional amendment in 1993, although it is based upon the historical Panchayati raj system. It introduced in India in April 1993 as the 73rd Amendment to the Constitution, following a study conducted by a number of Indian committees on various ways of implementing a more decentralized administration. This was amended during 1993. Structure of PRIs Grama Panchayat Section 4 of the PRI Act provides for constituting Panchayat for the area comprising of a village or group of villages having a population of 5000 and not more than 7000. Taluk Panchayat Samiti Section 145 of the Act lists four main functions with 28 detailed functions to be performed by the Panchayat. Zilla Panchayat Section 184 of the Act lists four main functions and 29 detailed functions are given in Schedule, there are 5 Standing Committees: Finance, Audit and Planning Committee, General Standing Committee, Social Justice Committee, Education and Health at the various level. The Panchayath is headed by the Adyaksha and assisted by the Upadyaksha, a team of elected members, and MLAs, MLCs and MPs who are ex-officio members of ZP. elected members who take decisions regarding the financial, social and developmental matters of the district. There are 5 sub-committees, Planning, Finance and Audit sub-committee headed by the ZP Adyaksha, General Standing sub-committee headed by ZP Upadyaksha, Education and Health sub-committee, Agriculture and Industry sub-committee, Social Justice sub-committee. The executing authority is the Chief Executive Officer appointed by the Government. The Chief Executive Officer is assisted by The Deputy Secretary (ADM) The Deputy Secretary (DEV) The Chief Planning Officer, The Chief Accounts Officer and Project Director

An analysis of functions, issues and challenges of LSG

The LSG in rural, semi-rural and urban areas issue of ambiguity in the division of functions and funds has allowed concentration of powers withthe states and thereby restraining the elective representatives who are more aware and sensitive to the ground level issues to take control. The impact upon the daily life of the citizen of the functions which local authorities carry out. Local Government provides public amenities and services which are necessary for the convenience, healthful living and welfare of the individual and the community. Local Governments both in urban and rural areas have, thus, to shoulder manifold and complex responsibilities. The central and state governments are conscious of the short-comings from which local government suffered in the past. It is to generate proposals and determine the priority of all schemes and development programmes to be implemented in the Panchayat area by the Ward Sabhas through the GramaPanchayat any development is observed with proper planning so, LSG has plan properly for ideal implementation of govt schemes in the expected manner. The increasing complexity of societal problems has changed governing forms and multi-level governance systems have emerged of which local government is a part. the societies have become more globalised, urbanised and socially diverse. Low voter turnout and weaker political parties are undermining traditional forms of local representative democracy. Resource scarcity, in many countries linked to the financial crisis, and aging and more ethnically mixed populations put pressures on local services. LSG has to identify and select the most eligible persons from the Panchayat area for beneficiary-oriented schemes on the basis of criteria fixed by the GramaPanchayat and Govt. LSG need to conserve and maintain public properties such as Gomala, tanks, tank beds,ground water, grazing grounds of the cattle, mines etc., within the limits of the Gram Panchayats there by public property will be protected by the people representatives, but here there are some issues people representatives sometimes they working not favouring to the system. The local self-governments have their own advantages. Some of them are, Quick and easy solutions at low levels Encourages local political and social leadership, new experiments can be made with respect to new laws in a grass root level has to take action to prevent discrimination on the basis of caste, religion and sex etc., which will bring social inclusion but some placesit is challenging. Gram Panchayaths to not to grant license to shops vending liquor or narcotic drugs or place of gambling or any other activities prejudicial to public interest, using power grama panchayats are some of places they are showing discriminatory character in practice. LSG has to identity the child labourers fany, present within the limits of the Grama Panchayaths and to take action to rehabilitate them and to assist in implementation of the legal action specified by the Central and State Government but this is not implemented in Some of LSG are grey area is the lack of adequate funds. There is a need to enlarge the domain of panchayats to be able to raise their own funds it is also challenging in nature. The interference of area MPs and MLAs in the functioning of panchayats also adversely affected their performance. The transfer of various governance functions like the provision of education, health, sanitation, and water was not mandated. Instead, the amendment listed the functions that could be transferred, and left it to the state legislature to actually devolve functions in this area they need to be perform in very effective manner. There has been very little devolution of authority and functions in the last 26 years. LSG has to disseminate information on development and welfare programmes and to render assistance in effective implementation of development schemes by providing facilities locally available and to provide feedback on the performance of the same since these institutions.

Finding of the study

Panchayat Raj system ensures greater participation of people in rural development programs. ULBs ensures greater participation of people in semi urban for development programs and Mahanagara Palike ensures greater participation of people in semi urban for development programs. Panchayats function as institutions of self-governance and it settles disputes between villages and individuals and this power has been decentralized by Government of India to function at the village level. The success of the Genuine fiscal federalism i.e., fiscal autonomy accompanied by fiscal responsibility can provide a long-term solution without this PRIs will only be an expensive failure. State govt should adopt the concept of 'activity mapping, wherein each state clearly delegates the responsibilities and roles for the different tiers of the government. Rural people's issues are addressed at the grass-roots level by local self-government. It gains democracy. This governance structure is well-suited to the needs of a single village. The burden of responsibility imposed on the state government is significantly diminished by the local government. Any important and vibrant Grama Sabha is essential for the effective functioning of Village Panchayats by promoting transparency and accountability in administration, enhancing public participation in the planning and implementation of schemes and in the choice of beneficiaries, and paving the way for social audit though it is a challenge one but, require to achieve it. The important problems Unscientific distribution of functions, Incompatible relation between the three-tiers, Inadequate finance, Lack of cordial relation between officials and people, Lack of conceptual clarity, Undemocratic composition of various Panchayati Raj institutions, Disillusionment on structural-functional front there is need for bottom-up planning by adapting all levels Govt. schemes, especially at the village level, semi urban level based on grassroots inputs received from Gram Sabha and patina panchayaths Such practices need to be replicated in other states for strengthening the true character of local self-governance.

Conclusion

The manipulative nature of rural politics, semiurban politics and Mahanagara Palike politics is manifest in the techniques used at the time of elections. The research observes that the caste system in rural India as well as urban India has made a mockery of the concept of rural development. Even the Panchayat elections are fought on caste grounds and the traditional dominant castes have manoeuvred in such a way that they still occupy the positions of power in the changed set-up. At the village level the need of the hour is to bring about a holistic change in the lives of beneficiariesamong the villagers by uplifting their socio-economic and health status through effective linkages by different govt schemes for this platform is LSG are most important. In this connection Government shouldtake remedial action in the interest of Rural people, The PRIs in Karnataka suffer from certain colonial hangovers. The ZPs have been given only administrative roles. The hangover thus continues even today. In the political parties Once, the dominant castes have managed to occupy important positions where the decisions are made, they find it easy to manipulate the plans to serve their best interests. With this, the schism of caste grows wider day by day, alienating the low castes farther and farther from participating in rural development programmes. Astrong decentralized authority is needed at district level, in order to strengthen panchayat administration inthe state. Karnataka government has undoubtedly taken a number of steps to grant greater responsibilities,powers and financial resources to the PRIs. setting up of a Social Justice Committee to safeguard and promote the interests of the vulnerable social and economic groups, imparting training to Panchayat members etc. LSG play vital role in social inclusion and cooperative federalism. People's demands for the sustainable decentralisation and advocacy should focus on a decentralisation agenda. The framework needs to be evolved to accommodate the demand for decentralisation. It is important to have clarity in the assignment of functions and the local governments should have clear and independent sources of finance then only complete success of LSG is possible. The different committees suggested locating means to ensure availability of adequate financial resources for Panchayati Raj Institutions. We can suggest a pattern of compulsory and optional levies for PRIs in order to enable them to function effectively.

References

1. M. Mohan Kumari[1] and Dr. Ashok Kumar, H Socio-economic and political status of panchayats Elected representatives (A Study of Mysore District-Karnataka) International Journal of Humanitiesand Social Science InventionISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
2. Ashok Kumar.H and Dr. T.M. Mahesh(2013)Rural Local Governance in Karnataka: Issues and Trends, International Journal of Humanities and Social Science InventionISSN (Online):2319 – 7722, ISSN (Print): 2319 – 7714
3. B.S. Bhargava (1982), "Panchayat Raj System in Tamilnadu" , Panchayat Sandes, Jan.
4. Haricandran (1983), "Panchayat Raj and Rural Development", Concept, New Delhi.
5. Abdul Aziz (2002), 'Decentralized Governance and Planning, A Comparative Study in South IndianStates', Macmillan India Ltd., Delhi.
6. Choudhury R.C. and Jain S.P. (2002), Patterns of Decentrlized Governance in Rural India, NIRD,Hyderabad. [3]. Palanithurai K.V. (1990), 'Decentralized Planning in India', A Handbook,New Delhi.
7. Ramesh K. Arora 'Management in Government'.Government of Karnataka, Policy Note 2007-08,2009-10.
8. Karnataka Panchayat Raj Act 1993, edition 2011.
9. Singh, Vijandra (2003). "Chapter 5: Panchayate Raj and Gandhi". Panchayati Raj and Village Development: Volume 3, Perspectives on Panchayati Raj Administration. Studies in public administration. New Delhi: Sarup & Sons. pp. 84–90.
10. Dwivedi, Ritesh; Poddar, Krishna (1 December 2013). "Functioning of Panchayati Raj Institutionsin India: A Status aper". Adhyayan. 3 (2). doi:10.21567/adhyayan.v3i2.10183.
11. Panchayati Raj: The Grassroots Dynamics in Arunachal Pradesh, p. 13, APH Publishing, 2008,Pratap Chandra Swain
12. Sisodia, R. S. (1971). "Gandhiji's Vision of Panchayati Raj". Panchayat Aur Insan. 3 (2): 9–10.
13. Sharma, Manohar Lal (1987). Gandhi and Democratic Decentralization in India. New Delhi: Deepand Deep Publications. OCLC 17678104. Hathi
14. Bird, Richard, M and Michael Smart (2002). Intergovernmental Fiscal Transfers: International Lessons for Developing Countries, World Development, 30 (6).
15. CBPS (2013). Study on Understanding Determinants of Own Source Revenue in Gram

Panchayats ofKarnataka. Bangalore: Centre for Budget and Policy Studies.

16. Devarajan, Shantayanan, Khemani, Stuti, and Shekhar Shah (2007). The Politics of Partial Decentralization. The World Bank.

17. Government of Karnataka (1988). District Governments and Decentralised Planning. Government of Karnataka.

18. (1993). Karnataka Panchayat Raj Act, 1993. Government of Karnataka.

19. (1996). Report of the State Finance Commission relating to Panchayat Raj Institutions (First SFC after 73rd Constitution Amendment).

20. (2010). Provision of Salary Grants to Zilla Panchayats for the year 2010-11, Annexure – B (Staff) (in Kannada). Government of Karnataka.

21. McKinnon, Ronald I (1995). Intergovernmental Competition in Europe With and Without a Common Currency. Journal of Policy Modelling, 17 (5): 463-78.

22. (1995). Market-Preserving Fiscal Federalism in the American Monetary Union. In Mario I Blejer and Teresa Ter-Minassian (eds), Macroeconomic Dimensions of Public Finance: Essays in honour of Vito Tanzi. London: Routledge.

23. Oates, Wallace, E (1972). Fiscal Federalism. New York: Harcourt Brace Jovanovich.

24. (2008). On the Evolution of Fiscal Federalism: Theory and Institutions. National Tax Journal, LXI (June): 313-34.

Certificate of Publication

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | E-ISSN 2348-1269, P- ISSN 2349-5138

An International Open Access Journal

The Board of

International Journal of Research and Analytical Reviews (IJRAR)

Is hereby awarding this certificate to

Mrs. MAMATHA .K

In recognition of the publication of the paper entitled

ISSUES AND CHALLENGES OF LOCAL SELF-GOVERNANCE IN KARNATAKA STATE

Published In IJRAR (www.ijrar.org) UGC Approved (Journal No : 43602) & 5.75 Impact Factor

Volume 5 Issue 2 , Date of Publication:May 2018 2018-05-10 10:40:24

R.B. Joshi

EDITOR IN CHIEF

PAPER ID : IJRAR19D2877

Registration ID : 236850

UGC and ISSN Approved - International Peer Reviewed Journal, Refereed Journal, Indexed Journal, Impact Factor: 5.75 Google Scholar

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS | IJRAR

An International Open Access Journal | Approved by ISSN and UGC

Website: www.ijrar.org | Email id: editor@ijrar.org | ESTD: 2014

IJRAR | E-ISSN 2348-1269, P- ISSN

International Journal of Innovative Studies in Sociology and Humanities
(IJISSH)
ISSN 2456-4931 (Online)
www.ijissh.org
Volume: 3 Issue: 6 | June 2018

Campus Environments - An Institutional Perspective

Dr. Vijayalakshmi N.S

Faculty, Post Graduate Department of Economics, University College Mangalore, Hampankatta, Mangalore

Dr. A.H. Sequeira

Professor and Dean Faculty Welfare, School of Management, N.I.T.K surathkal, Mangalore

Abstract: *Higher education is known for multitude of institutions who are on a rampage to provide for best of best education to every student. A student is often left with dilemmas where all institute provide for similar courses of same duration. The choice of one's institute is often left with multiple parameters though often striding the take away with the availability of ones choice of academic major. Nevertheless, over the years of being one at campus, the student often relinquishes the internal and external environment of institution to be a cherished with said parameters that serve as benchmarks for future generations to opt as one.*

1. INTRODUCTION

Institutional Adjustment versus Institutional Adaptation

Institutional Adjustment

Early adjustment to university has positive outcomes such as relatively high grades and credit completion (Grayson, 2003). The student perception of institutional climate impacts socio-emotional and academic adjustment (Jia et al., 2009). This also personified by gender-typed behaviors negatively persuading one's institutional adjustment (Ueno & McWilliams, 2010). Further adjustment to college varied by place of residence (Al-Qaisy, 2010) as growing up in foster families' impacts institutional attachment (Nowacki & Schoelmerich, 2010). Thus temperament of students towards institution adjustment (Al-Hendawi, 2013) within an institutional culture (Cesaroni & Peterson-Badali, 2013) varies on academic and social adjustment perspective across different institutions (Al-hattami et al., 2014). However, student attachment to place as an institutional attachment (Terrazas-Carrillo et al., 2014) could be hindered with negative life events impact adjustment to the institutions psychological capital (Liu et al., 2015).

Institutional Adaptation

Students increasingly adapt their career goals to their environment which is positively related to interest and achievement but achievement overtakes interest in adaptation (Hirschi & Vondracek, 2009). Thus affirmation and adaptation values of the elite residential college institutions vary (Gomes, 1999) which seeks sneak peek into systemic adaptation to a changing environment in higher education as a move towards the next generation of quality assurance models (Jeliazkova & Westerheijden, 2002).

2. STRUCTURAL COMPONENTS OF INSTITUTIONAL ADAPTATION

Age

Age is a predictor of persistence at an institution (Cabrera et al., 1992). An age of early entry indicates an improvement in institutional quality (Bommier & Lambert, 2000) where significant differences in institution readiness among students of same age cohort persisted (Gagne & Gagnier, 2004).

Gender

Institutionalisation of gender and diversity management in engineering education (Leicht-Scholten et al., 2009) recognizes identity formation and learning the culture as gendered barriers for women's persistence in engineering education (Wolffram et al., 2009). Re-engineering engineering education to retain women has retention relying on retention of academically elite women students without engineering backgrounds in undergraduate engineering education are impacted by the culture of engineering education (McLoughlin, 2009). Household and regional gender equality impact choice of the institution (Kambhampati, 2009) and persistence in engineering differ by gender (Lord et al., 2009). Retention of women in undergraduate program (Kasarda et al., 2010) relies on retention and attrition of women in engineering (Godfrey et al., 2010). A mixed-methods study of retention, and career plans of women in engineering (Paretti et al., 2010) states that gender-typed behaviors impact institutional adjustment (Ueno & McWilliams, 2010) and women's confidence and self-rated abilities affects completion (Chao & Cohoon, 2010).

Disability

The theory of planned behavior predicts graduation among college and university students with disabilities (Fichten et al., 2014). Further student motivation and decision to utilize support services was framed by the level of acceptance of their disability i.e., their integration of their disability to their authentic self (O'Shea & Meyer, 2016). Hence institutions need to provide barrier-free campus environment for students with disabilities (Chen et al., 2015) stressing that physical environment of campus like institution building more significantly impacts students experience on campus (Coulson et al., 2015).

Academic Year

Students expectations and preparedness encourage a better match between student and institution among first year (Jansen et al., 2013) students who attended single-sex two year pre-secondary institute had higher rate of attendance at later four-year bachelor education colleges than students with coeducational academics (Park et al., 2013) grades and financial status have a bearing on student retention (Djulovic & Li, 2013) determining that first year academic performance influences persistence in academics in future years of study at college (Cabrera et al., 2013) where first-year programs like orientation programs impact adaptation of students resulting in retention of students (Mayo, 2013). The causes for retention and attrition in first-year transition, academic advising, career planning and placement etc (Zerna & Ph, 2014) has more to do with student engagement in the type of academic and social engagement influencing bachelorette attainment or degree completion in four-year institutions (Flynn, 2014). Though course preference, and first-year educational performance were significant predictors of attrition (Harvey & Luckman, 2014); knowledge and skills imparted among first-year influencing retention of students (Pande et al., 2014). Lastly, effective academic library use and e-resources in campus positively affects academic performance of the first year undergraduate students impacting their retention (Tewell, 2015).

Academic Major

Academic governance and product design should be in relation to the requirements to the educational market (Adina & Liviu, 2013) as it remains a well acknowledged fact that education predicts markets for employment (Damnjanovic et al.,2013). The students patterns of use as per ones academic major classifies an academic institution (Bahr, 2013a) where students have limited access to institutions when it comes to selecting prestigious top institutions and choice of academic major that relied heavily on institution feasibility (Tavares, 2013). Further academic failure results in attrition with unsuccessful academic major leading towards transfer to other academic major that ensure academic success by undoing failure (Arias Ortiz & Dehon, 2013). Thereby college persisters differ in their academic majors and career choices (Morgan et.al 2013) and persistence in engineering academic major determine career outcomes in engineering (Xu, 2013). Moreover with lack of completion of previous years course or academic major revere degree completion (Donhardt, 2013) with attributed failure at academic major competencies lowering rate of degree completion (Bahr, 2013b). This could also have a long lasting effect on returns to education in terms of earning diversifying by the type of academic major course chosen (Hérault & Zakirova, 2013). Lastly, persistence patterns of students differ in engineering academic majors and non-engineering academic major (Wei et al., 2014) as it observed that switching over to alternate academic major deters persistence of students (Higgins & Staley, 2014) especially impacting retention of female students in engineering academic major course (Varol & Varol, 2014).

Religion

Student spiritual identity is formed at religiously affiliated university to a greater extent (Forward et al., 2014). Persistence patterns of religious minority students are at a greater level of introspection in religious affiliated universities (Patten & Rice, 2008) as it is observed that attendance at religious services influences persistence and retention of students at four-year higher education institutions (Burks & Barrett, 2009). Further individual privileged religious experience impacts spiritual development of students within dynamics of the institution (Bowman & Small, 2010) especially when religion performs a support factor function among women of race or colour impacting their persistence towards degree attainment (Ceglie, 2013). Moreover, attending an institution with an inclusive religious worldview climate is positively associated with participation in student engagement (Bowman et al., 2015).

Caste

Institutional barriers to diversity persist in inclusion efforts (Elliott et al., 2013) with thrust efforts on recruitment and retention of students of a native minority race in higher education institutions (Mosholder et al., 2013). The college persistence thus of minority students of race differs among ethnic students of a minority race (Rigali-Oiler & Kurpius, 2013) impacting their academic achievement (Boyraz et al..,2013). Institutional support predicts learning among students of race (Lundberg, 2014) where cross-racial interaction and interracial interactions is influenced students by institutional characteristics and participation in a student organisation (Bowman & Park, 2014). The students racial identification preferences also seem to change between the time they enter and leave college (Harper, 2014). Institutional responses to social inclusion (Kilpatrick & Johns, 2014) with retention of minority students of race in higher education is vital (Samuel & Scott, 2014). Student involvement in ethnic student organizations also has its civic outcomes even after graduation (Bowman et al.,2014).Thus race impacts choice of institutions (Squire & Mobley, 2014). Race is celebrated leading towards institutional diversity persisting in multiracial spaces (Hikido & Murray, 2015b). Institutions may have on individuals' race frames or colour blind frames impacting diversity (Warikoo & de Novais, 2015) leaving its embracement on skill development by a race having its replicated effect on admissions into selective institutions (Roksa & Arum, 2015). In short, students commitment to the institution is fundamental to academic success and it varies by race (Ansong et al., 2016).

Generation Status

Institutional culture impacts first generation college students (Erin & Nadine, 2014) The early experiences and integration in the persistence of first-generation college students in engineering and non-engineering academic majors (Dika & D'Amico, 2016) needs an on look as the supposed attrition factors could hard hit first generation more (Ishitani, 2003) resulting in lack of belongingness in lower academic achievement school dropouts, and less institutional involvement among first generation students (Williams & Ferrari, 2015). Hence retention of first generation students need to be focused with special attention (Watt et al., 2008) on for their success (Hawthorne & Young, 2010) where first generation students often are left demining with lower grades (D'Amico & Dika, 2013). This can be tethered further by positive academic engagement among first generation students resulting in successful retention over the academic years (Soria & Stebleton, 2012) with concerns of retention of first generation minority students in post-secondary institutions still brewing over the matter for long (Harrell & Forney, 2003). The less spoken off living learning community positively impacts academic performance of first-generation college students (Flynn et al., 2015) with residence halls greatly influencing the academic and social transition of first generation students (Inkelas et al., 2007). Further, it leaves one jaw down where one notices that first generation or non-native english speakers have high rate of degree completion (Schuetz, 2014).

College Expense

The ability to pay to college influences persistence of students (Cabrera et al.,1990) with financial aid adding on to the mileage of students persistence at college (Cabrera et al., 1992). Pricing and financial aid vary by institutions diversifying students responses towards college experiences (Basch, 1997) even when increasing in government funding by student aid prude on persistence (John, 1999). However academic and social integration have seeped into persistence than financial aid (Wetzel et al., 1999). It is observed that financial and academic problem led to attrition (Errico et al., 2000) but appropriate financial aid impacts retention (John, 2000) and influences persistence especially of underrepresented minority students in engineering (Fenske et al., 2000). The short-term budget cuts by government can have long-term impact on functioning of higher educational institutions or university (De Pillis

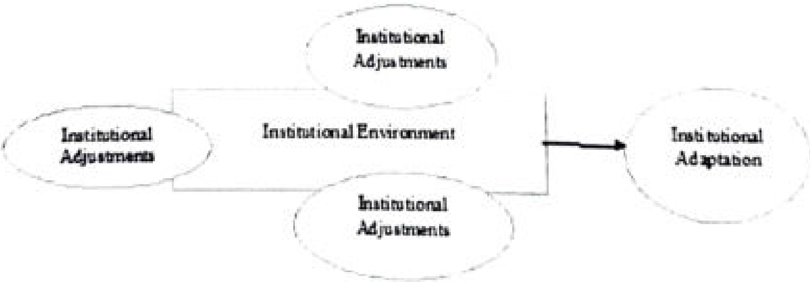
& De Pillis, 2001) where frequent changes in institutional aid and policy by government lowers enrollment (Desjardins, 2001) and state grants in terms of financial aid influences persistence (St et al., 2001).

The institutional expenditure patterns influence development of leadership competencies in students (Smart et al., 2002) and the institution are sponsored research expenditures are positively related to undergraduates' graduation (Kim et al., 2003).The cost and benefit factors (Pasternak, 2005) and financial aid (Kim, 2004) influence the institutional choice of students. The financial resources enhance students learning and development affecting student engagement and student development (Ryan, 2005). In other words, It is resources that have a sway in students retention especially of a minority race (Seidman, 2005). The financial context of institutions influences students persistence and completion of college at four-year institutions (Titus, 2006). The government financial aid to is a booster towards persistence and completion (Singell & Stater, 2006). Loans too are not left far behind in impacting students persistence towards college and educational attainment (Dowd & Coury, 2006) resource allocation being uneven in public research universities (Santos, 2007) raises a commoners brow on successful retention of low-income students (Tinto & Tinto, 2007). It is vivid that financial aid impacts students drop out or attrition by income level (Chen & DesJardins, 2008) encompassing debt constraint on the choice of university too (Callender & Jackson, 2008b). Further financial aspects like debt n credit issues deliver persistence of students towards the second year of higher education (Buzynski, 2010). Added on though scholarship lead to students college attendance, choice, financial aid renewal, persistence, and graduation (Zhang et al.,2013) with economic composition of institution stressing on persistence of students (Niu & Tienda, 2013); the education policy always needs to determine access to college a reconsideration of the national education (Daun-Barnett, 2013). Never the less, the seeming funding has its large foot hold on institutional engagement (Weerts, 2014) revering growing costs of attending college fall on retention (Marsh, 2014). Student loan thus has a bearing on persistence (McKinney & Burridge, 2014) with institutional diversity-related to funding of university (Piché, 2015) predetermining that money influences life-satisfaction among students especially between new and old Indian Institutes of IIT's students institution (Mukherjee, Nargundkar, & Manjaly, 2014).

Socio-economic status of the family by parent's education, occupation and income

Family variables impact individual relation with institutional adjustment (Jiménez et al., 2009) where parenting styles, family structure, birth order, gender and academic achievement impacts commitment to college adjustment or retention (Hickman & Crossland, 2005). Institutional financial context is also said to impacts college completion of students especially from low socio-economic status (Titus, 2006). Further socio-economic trends in engineering enrolments are an indication in itself of persistence and academic achievement (Orr, 2011). It is thus social class that impacts persistence of college students (Muñoz & Maldonado, 2012) with parenting relationship with child embarking adult functioning patterns at dorms (Rostad et al., 2014).

3. A CONCEPTUAL FRAMEWORK INSTITUTIONAL ENVIRONMENT ENABLING ADAPTATION AMIDST MULTIPLE ADJUSTMENTS



From the above conceptual framework, it is evident that every student in every institutional set up faces multiple adjustments over a period of time. It becomes thus very imperative for a student who stands amidst multiple choices of institutes to have the one institute that would abide by all adjustments and provide for an aspired institutional environment.

4. SUMMARY OF INSTITUTIONAL ADAPTATION

Campuses are known by their institutional identity. It is this identity that establishes the institute in the academic arena as the epitome of excellence. While private institutes are in a rat race thriving to espionage their entity, the public institutions like IIT's and NIT's have been functioning since long in academic arena providing education towards excellence with a drive in their vision and mission. Thus, it's vital to know undergraduate student realm of vision envisioned for their commitment towards persistence and successful graduation.

REFERENCES

[1] Adina, N., & Liviu, N. (2013). "Academic governance and product design in relation to the requirements of the educational market." *Procedia - Social and Behavioral Sciences*, 83, 552–556. https://doi.org/10.1016/j.sbspro.2013.06.105

[2] Al-hattami, A. A. D. (2012). "Differential predictive validity of high school GPA and college entrance test scores for university students in Yemen" (April).14 (3), 213 – 214

[3] Al-Hendawi, M. (2013). "Temperament, school adjustment, and academic achievement: existing research and future directions." *Educational Review*, 65(2), 177–205. https://doi.org/10.1080/00131911.2011.648371

[4] Al-Qaisy, L. (2010). "Adjustment of college freshmen: The importance of gender and the place of residence." *International Journal of Psychological Studies*, 2(1), 142–150. Retrieved from http://ccsenet.org/journal/index.php/ijps/article/viewFile/6327/5074

[5] Ansong, D., Chowa, G. A., & Masa, R. D. (2016). "Cross-Cultural Adaptation and Validation of the Commitment-to-School Scale Using a Sample of Junior High School Youth in Ghana." *The Journal of Experimental Education*, *973*(March), 1–15. https://doi.org/10.1080/00220973.2015.1123666

[6] Arias Ortiz, E., & Dehon, C. (2013). "Roads to Success in the Belgian French Community's Higher Education System: Predictors of Dropout and Degree Completion at the Universit? Libre de Bruxelles." *Research in Higher Education*, 54(6), 693–723. https://doi.org/10.1007/s11162-013-9290-y

[7] Bahr, P. R. (2013). "The Aftermath of Remedial Math: Investigating the Low Rate of Certificate Completion among Remedial Math Students." *Research in Higher Education*, 54(2), 171–200.https://doi.org/10.1007/s11162-012-9281-4

[8] Basch, D. L. (1997). "Private Colleges' Pricing Experience in the Early 1990s: The Impact of rapidly Increasing College-Funded Grants." *Research in Higher Education*, 38(3).

[9] Bommier, A., & Lambert, S. (2000). "Education demand and age at school enrollment in Tanzania." *Journal of Human Resources*, 177-203.

[10] Bowman, N. A., & Park, J. J. (2014). "Interracial Contact on College Campuses: Comparing and Contrasting Predictors of Cross-Racial Interaction and Interracial Friendship." *The Journal of Higher Education*, 85(5), 660–690. https://doi.org/10.1353/jhe.2014.0029

[11] Bowman, N. A., & Small, J. L. (2010). "Do college students who identify with a privileged religion experience greater spiritual development? Exploring individual and institutional dynamics." *Research in Higher Education*, 51(7), 595-614.

[12] Boyraz, G., Horne, S. G., Owens, A. C., & Armstrong, A. P. (2013). "Academic Achievement and College Persistence of African American Students With Trauma Exposure." *Journal of Counseling Psychology*, 60(4), 582–92. https://doi.org/10.1037/a0033672

[13] Burks, S. A., & Barrett, T. G. (2009). "Student characteristics and activity choices of college freshmen and their intent to persist in religiously affiliated institutions." *Christian Higher Education*, 8(5), 351-392.

[14] Cabrera, A. F., Nora, A., & Castaneda, M. B. (1992). "The role of finances in the persistence process: A structural model." *Research in Higher Education*, 33(5), 571–593. https://doi.org/10.1007/BF00973759

[15] Cabrera, A. F., Stampen, J. O., & Hansen, W. L. (1990). "Exploring the effects of ability to pay on Persistence in College." *The Review of Higher Education*, 13(3), 303–336.

[16] Cabrera, N. L., Miner, D. D., & Milem, J. F. (2013). "Can a Summer Bridge Program Impact First-Year Persistence and Performance?: A Case Study of the New Start Summer Program." *Research in Higher Education*, 54(5), 481–498. https://doi.org/10.1007/s11162-013-9286-7

[17] Callender, C., & Jackson, J. (2008). "Does the fear of debt constrain choice of university and subject of study?" *Studies in Higher Education*, 33(4), 405–429. https://doi.org/10.1080/03075070802211802

[18] Ceglie, R. (2013). "Religion as a Support Factor for Women of Color Pursuing Science Degrees : Implications for Science Teacher Educators." *Journal of Science Teacher Education*, 24, 37–65. http://doi.org/10.1007/s10972-012-9286-z

[19] Cesaroni, C., & Peterson-Badali, M. (2013). "The importance of institutional culture to the adjustment of incarcerated youth and young adults." *Canadian Journal of Criminology and Criminal Justice*, 55(4), 563–575. https://doi.org/10.3138/cjccj.2012.ES04

[20] Chao, J., & Cohoon, J. M. (2010). "Can I really complete this CSE doctoral degree? Women's confidence and self-rated abilities." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 1–7). https://doi.org/10.1109/FIE.2010.5673647

[21] Chen, R., & DesJardins, S. L. (2008). "Exploring the effects of financial aid on the gap in student dropout risks by income level." *Research in Higher Education*, 49(1), 1–18. https://doi.org/10.1007/s11162-007-9060-9

[22] Chen, Y. C., Wang, Y. H., Shiau, Y. C., & Wang, Y. J. (2015). "Preventing campus accidents among disabled students." *Artificial Life and Robotics*, 20(1), 1–6. http://doi.org/10.1007/s10015-014-0171-z

[23] Coulson, J., Roberts, P., & Taylor, I. (2015). "The future of the campus: Architecture and master planning trends." *Perspectives: Policy and Practice in Higher Education*, 19(4), 116–121. http://doi.org/10.1080/13603108.2015.1026421

[24] D'Amico, M. M., & Dika, S. L. (2013). "Using data known at the time of admission to predict first-generation college student success." *Journal of College Student Retention: Research, Theory and Practice*, 15(2), 173–192. https://doi.org/10.2190/CS.15.2.c

[25] Damnjanovic, I., Faghihi, V., Scott, C., Mctigue, E., & Reinschmidt, K. (2013). "Educational Prediction Markets : Construction Project Management Case Study." *Journal of Professional issues in Engineering Education and Practise*, 5(April), 134–138. https://doi.org/10.1061/(ASCE)EI.1943-5541.0000127.

[26] Daun-Barnett, N. J. (2013). "Access to College: A Reconsideration of the National Education Longitudinal Study (NELS)." *Educational Policy*, 27(1), 3–32. https://doi.org/10.1177/0895904811429290

[27] De Pillis, E. G., & De Pillis, L. G. (2001). "The long-term impact of university budget cuts: A mathematical model." *Mathematical and Computer Modelling*, 33(8–9), 851–876. https://doi.org/10.1016/S0895-7177(00)00285-5

[28] Desjardins, S. L. (2001). "Assessing the Effects of Changing Institutional Aid Policy." *Research in Higher Education*, 42(6), 653–678.

[29] Dika, S. L., & D'Amico, M. M. (2016). "Early experiences and integration in the persistence of first-generation college students in STEM and non-STEM majors." *Journal of Research in Science Teaching*, 53(3), 368–383. https://doi.org/10.1002/tea.21301

[30] Djulovic, A., & Li, D. (2013). "Towards Freshman Retention Prediction: A Comparative Study." *International Journal of Information and Education Technology*, 3(5). https://doi.org/10.7763/IJIET.2013.V3.324

[31] Donhardt, G. L. (2013). "The Fourth-Year Experience: Impediments to Degree Completion." *Innovative Higher Education*, 38(3), 207–221. https://doi.org/10.1007/s10755-012-9234-z

[32] Dowd, A. C., & Coury, T. (2006). "The Effect of Loans on the Persistence and Attainment of Community College Students." *Research in Higher Education*, 47(1), 33–62. https://doi.org/10.1007/s11162-005-8151-8

[33] Elliott, C. M., Stransky, O., Negron, R., Bowlby, M., Lickiss, J., Dutt, D.,Barbosa, P. (2013). "Institutional Barriers to Diversity Change Work in Higher Education." *SAGE Open*, 3(2), 2158244013489686-. https://doi.org/10.1177/2158244013489686

[34] Erin, D., & Nadine, D. (2014). "E-Scholarship provides open access, scholarly publishing services to the University of California and delivers a dynamic research platform to scholars worldwide. InterActions: UCLA" *Journal of Education and Information Studies*, 4(3), 1-18. https://doi.org/10.5811/westjem.2011.5.6700

[35] Errico, M., Valeri-gold, M., Deming, M. P., Kearse, W., Kears, W., Callahan, C.,Deming, P. (2000). "Interviewing as an Assessment Tool to Examine Developmental Learners Reasons for Leaving College." *Research and Teaching in Developmental Education*, 17(1), 49–61.

[36] Fenske, R., Porter, J., & DuBrock, C. (2000). "Tracking financial aid and persistence of women, minority, and needy students in science, engineering, and mathematics." *Research in Higher Education*, 41(1), 67–94. https://doi.org/10.2307/40196389

[37] Fichten, C. S., Nguyen, M. N., Amsel, R., Jorgensen, S., Budd, J., Jorgensen, M., ... & Barile, M. (2014). "How well does the theory of planned behavior predict graduation among college and university students with disabilities?." *Social Psychology of Education*, 17(4), 657-685.

[38] Flynn, D. (2014). "Baccalaureate Attainment of College Students at 4-Year Institutions as a Function of Student Engagement Behaviors: Social and Academic Student Engagement Behaviors Matter." *Research in Higher Education*, 55(5), 467–493. https://doi.org/10.1007/s11162-013-9321-8

[39] Flynn, M. a., Everett, J. W., & Whittinghill, D. (2015). "The impact of a living learning community on first-year engineering students." *European Journal of Engineering Education*, 3797(July), 1–11. https://doi.org/10.1080/03043797.2015.1059408

[40] Forward, G. L., Moore, J., Richardson, M., & Shimansky, M. (2014). "Children of a Lesser God:The Effects of Communication and Interaction Patterns on Student Spiritual Identity at a Church-Related University." *Studies in Media and Communication*, 2(1). http://doi.org/10.11114/smc.v2i1.326

[41] Godfrey, E., Aubrey, T., & King, R. (2010). "Who leaves and who stays? Retention and attrition in engineering education." *Engineering Education*, 5(2), 26–40. https://doi.org/10.1109/FIE.2010.5673625

[42] Gomes, P. J. (1999). "Affirmation and adaptation: values and the elite residential college". *Daedalus*, 128(1), 101–102.

[43] Grayson, J. P. (2003). "The consequences of early adjustment to university.pdf." *Higher Education*, (1996), 411–429.

[44] Harper, C. E. (2014). "Pre-college and college predictors of longitudinal changes in multiracial college students' self-reported race." *Race Ethnicity and Education*, (June), 1–23. https://doi.org/10.1080/13613324.2014.911161

[45] Harrell, P. E., & Forney, W. S. (2003). "Ready or Not, Here We Come: Retaining Hispanic and First-Generation Students in Postsecondary Education." *Community College Journal of Research and Practice*, 27(2), 147–156. https://doi.org/10.1080/713838112

[46] Hawthorne, M., & Young, A. (2010). "First-Generation Transfer Students' Perceptions: Implications for Retention and Success." *The Journal of College Orientation and Transition*, 17(2), 29–39.

[47] Hérault, N., & Zakirova, R. (2013). "Returns to education: accounting for enrolment and completion effects." *Education Economics*, 23(1), 84–100. https://doi.org/10.1080/09645292.2013.805184

[48] Hickman, G. P., & Crossland, G. L. (2005). "The predictive nature of humor, authoritative parenting style, and academic achievement on the initial personal-emotional, social, academic, and commitment to college adjustments among male and female college freshmen." *Journal of College Student Retention*, 6, 219-239.

[49] Higgins, D., & Staley, P. (2014). "A time Hazard Analysis of Student Persistence: A US University Undergraduate Mathematics Major Experience" *International Journal of Science and Mathematics Education*, 4(april), 1–22. Retrieved from http://link.springer.com/article/10.1007/s10763-014-9538-9

[50] Hikido, A., & Murray, S. B. (2015). "Whitened rainbows: how white college students protect whiteness through diversity discourses." *Race Ethnicity and Education*, (April 2015), 1–23. https://doi.org/10.1080/13613324.2015.1025736

[51] Hirschi, A., & Vondracek, F. W. (2009). "Adaptation of career goals to self and opportunities in early adolescence." *Journal of Vocational Behavior*, 75(2), 120–128. https://doi.org/10.1016/j.jvb.2009.05.005

[52] Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2007). "Living–learning programs and first-generation college students' academic and social transition to college." *Research in Higher education*, 48(4), 403-434.

[53] Ishitani, T. T. (2003). "A longitudinal approach to assessing attrition behavior among first-generation students: Time-Varying Effects of Pre-College Characteristics." *Research in Higher Education*, 44(4), 433–449. https://doi.org/10.1023/A:1024284932709

[54] Jansen, E., André, S., & Suhre, C. (2013). "Readiness and expectations questionnaire: A cross-cultural measurement instrument for first-year university students." *Educational Assessment, Evaluation and Accountability*, 25(2), 115–130. https://doi.org/10.1007/s11092-013-9161-2

[55] Jeliazkova, M., & Westerheijden, D. F. (2002). "Systemic adaptation to a changing environment: Towards a next generation of quality assurance models." *Higher Education*, 44(3–4), 433–448. https://doi.org/10.1023/A:1019834105675

[56] Jian, H. L., & Sandnes, F. E. (2009). "Taiwanese and Norwegian engineering students' self-image of academic abilities, grades and course satisfaction." *In IEEM 2009 - IEEE International Conference on Industrial Engineering and Engineering Management* (pp. 993–996). https://doi.org/10.1109/IEEM.2009.5373521

[57] Jiménez, L. O., O'Neill-Carrillo, E., & Rodríguez, M. (2009). "An introductory learning module on ethics and academic integrity for freshman engineering students." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 21–26). https://doi.org/10.1109/FIE.2009.5350546

[58] John, E. P. S. (1999). "Evaluating Washington's State Aid programs." *Research in Higher Education*, 40(2), 149–169.

[59] Kambhampati, U. S. (2009). "Child Schooling and Work\nDecisions in India: The Role of Household and Regional Gender Equity" \n. *Feminist Economics*, 15(4), 77–112. https://doi.org/10.1080/13545700903153997

[60] Kasarda, M., Brand, B., Weigand, E., Yochum, H., & Collver, M. (2010). "Work in progress - Initial identification of program components leading to retention of women in a pre-engineering high school program, and an undergraduate engineering program." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 26–28). https://doi.org/10.1109/FIE.2010.5673615

[61] Kilpatrick, S., & Johns, S. (2014). "Institutional Responses to Social Inclusion in Australian Higher Education: Responsible Citizenship or Political Pragmatism?" *Widening Participation and Lifelong Learning*, 16(2), 27–45. https://doi.org/10.5456/WPLL.16.2.27

[62] Kim, D. (2004). "The effect of financial aid on students' college choice: Differences by racial groups." *Research in Higher Education*, 45(1), 43–70. https://doi.org/10.1023/B:RIHE.0000010046.57597.43

[63] Leicht-Scholten, C., Weheliye, A., & Wolffram, A. (2009). "Institutionalisation of gender and diversity management in engineering education." *European Journal of Engineering Education*, 34(5), 447–454. https://doi.org/10.1080/03043790903137700

[64] Liu, C., Zhao, Y., Tian, X., Zou, G., & Li, P. (2015). "Negative life events and school adjustment among Chinese nursing students: The mediating role of psychological capital." *Nurse Education Today*, 35(6), 754–759. https://doi.org/10.1016/j.nedt.2015.02.002

[65] Lord, S. M., Brawner, C. E., Camacho, M. M., Layton, R. a, Ohland, M. W., & Wasburn, M. H. (2009). "Engineering students' disciplinary choices: Do race and gender matter?" *In 39th ASEE/IEEE Frontiers in Education Conference* (pp. 1–2). Retrieved

[66] Lundberg, C. a. (2014). "Institutional Support and Interpersonal Climate as Predictors of Learning for Native American Students." *Journal of College Student Development*, 55(3), 263–277. https://doi.org/10.1353/csd.2014.0027

[67] Marsh, D. (2014). A Different Viewpoint on Student Retention. Higher Learning Research Communications, 4(3), 23–41.

[68] Mayo, T. (2013). "First-Year Course Requirements and Retention for Community Colleges." *Community College Journal of Research and Practice*, 37(10), 764–768. https://doi.org/10.1080/10668921003723292

[69] McKinney, L., & Burridge, A. B. (2014). "Helping or Hindering? The Effects of Loans on Community College Student Persistence." *Research in Higher Education*, 56(4), 299–324. https://doi.org/10.1007/s11162-014-9349-4

[70] McLoughlin, L. a. (2009). "Success, recruitment, and retention of academically elite women students without STEM backgrounds in US undergraduate engineering education." *Engineering Studies*, 1(2), 151–168. https://doi.org/10.1080/19378620902911592

[71] Morgan, G. B., D'Amico, M. M., & Hodge, K. J. (2013). "Major differences: modeling profiles of community college persisters in career clusters." *Quality and Quantity*, 1–20. https://doi.org/10.1007/s11135-013-9970-x

[72] Mosholder, R., Waite, B., & Goslin, C. (2013). "Examining Native American recruitment and retention in higher education." *Academia Journal of Educational Research*, 1(5), 72–84. https://doi.org/10.15413/ajer.2013.0131

[73] Mukherjee, S., Nargundkar, M., & Manjaly, J. A. (2014). "Monetary Primes Increase Differences in Predicted Life-Satisfaction Between New and Old Indian Institutes of Technology (IITs)." *Psychological Studies*, 59(2), 191–196. https://doi.org/10.1007/s12646-014-0259-5

[74] Muñoz, S. M., & Maldonado, M. M. (2011). "Counter stories of college persistence by undocumented Mexicana students: navigating race, class, gender, and legal status." *International Journal of Qualitative Studies in Education*, 25(3), 293–315. https://doi.org/10.1080/09518398.2010.529850

[75] Niu, S. X., & Tienda, M. (2013). "High School Economic Composition and College Persistence." *Research in Higher Education*, 54(1), 30–62. https://doi.org/10.1007/s11162-012-9265-4

[76] Nowacki, K., & Schoelmerich, A. (2010). "Growing up in foster families or institutions: attachment representation and psychological adjustment of young adults." *Attachment & Human Development*, 12(6), 551–566. https://doi.org/10.1080/14616734.2010.504547

[77] O'Shea, S. (2014). "Transitions and turning points: exploring how first-in-family female students story their transition to university and student identity formation." *International Journal of Qualitative Studies in Education*, 27(2), 135–158. https://doi.org/10.1080/09518398.2013.771226

[78] Orr, M. K., Ngambeki, I., Long, R. a., & Ohland, M. W. (2011). "Performance trajectory of students in the engineering disciplines." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 3–6). https://doi.org/10.1109/FIE.2011.6143005

[79] Pande, S., Pande, S., Parate, V., Pande, S., & Sukhsohale, N. (2014). "Evaluation of retention of knowledge and skills imparted to first-year medical students through basic life support training." *AJP: Advances in Physiology Education*, 38(1), 42–45. https://doi.org/10.1152/advan.00102.2013

[80] Paretti, M., Jones, B. D., Matusovich, H., & Moore, J. (2010). "Work in progress - A mixed-methods study of the effects of first-year project pedagogies on the motivation, retention, and career plans of women in engineering." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 26–28). https://doi.org/10.1109/FIE.2010.5673331

[81] Park, H., Behrman, J. R., & Choi, J. (2013). "Causal Effects of Single-Sex Schools on College Entrance Exams and College Attendance: Random Assignment in Seoul High Schools." *Demography*, 50(2), 447–469. https://doi.org/10.1007/s13524-012-0157-1

[82] Pasternak, R. (2005). "Choice of Institutions of Higher Education and Academic Expectations: The Impact of Cost-Benefit Factors." *Teaching in Higher Education*, 10(2), 189-201. https://doi.org/10.1080/135625104200337945

[83] Patten, T. A., & Rice, N. D. (2008). "Religious minorities and persistence at a systemic religiously-affiliated university." *Christian Higher Education*, 8(1), 42-53.

[84] Piché, P. G. (2015). "Institutional diversity and funding universities in Ontario: is there a link?" *Journal of Higher Education Policy and Management*, 37(1), 52–68. https://doi.org/10.1080/1360080X.2014.991537

[85] Rigali-Oiler, M., & Kurpius, S. R. (2013). "Promoting academic persistence among racial/ethnic minority and european american freshman and sophomore undergraduates: Implications for college counselors." *Journal of College Counseling*, 16(3), 198–212. https://doi.org/10.1002/j.2161-1882.2013.00037.x

[86] Roksa, J., & Arum, R. (2015). "Inequality in skill development on college campuses." *Research in Social Stratification and Mobility*, 39, 18–31. https://doi.org/10.1016/j.rssm.2014.09.001

[87] Rostad, W. L., Silverman, P., & McDonald, M. K. (2014). "Daddy's Little Girl Goes to College: An Investigation of Females' Perceived Closeness With Fathers and Later Risky Behaviors." *Journal of American College Health*, 62(4), 213-220.

[88] Ryan, J. F. (2005). "Institutional Expenditures and Student Engagement: A Role for Financial Resources in Enhancing Student Learning and Development?" *Research in Higher Education*, 46(2), 235–249. https://doi.org/10.1007/s

[89] Samuel, K. R., & Scott, J. A. (2014). "Promoting Hispanic student retention in two Texas community colleges." *Research in Higher Education*, 25, 1–13. https://doi.org/http://dx.doi.org/10.1108/17506200710779521

[90] Santos, J. L. (2007). "Resource Allocation in Public Research Universities." *The Review of Higher Education*, 30(2), 125–144. https://doi.org/10.1353/rhe.2006.0077

[91] Schuetz, P. (2014). "Unit Completion Ratio: Assessing Influences of Campus on Community College Student Success." *Community College Journal of Research and Practice*, 38(7), 612–624. https://doi.org/10.1080/10668926.2012.676502

[92] Seidman, A. (2005). "Minority Student Retention: Resources for Practitioners." *New Directions for Institutional Research*, 7–24

[93] Singell, L., & Stater, M. (2006). "Going, going, gone: The effects of aid policies on graduation at three large public institutions." *Policy Sciences*, 39(4), 379–403. https://doi.org/10.1007/s11077-006-9030-7

[94] Smart, J. C., Ethington, C. a., Riggs, R. O., & Thompson, M. D. (2002). "Influences of institutional expenditure patterns on the development of students' leadership competencies." *Research in Higher Education*, 43(1), 115–132. https://doi.org/10.1023/A:1013074218134

[95] Soria, K. M., & Stebleton, M. J. (2012). "First-generation students' academic engagement and retention." *Teaching in Higher Education*, 17(March 2015), 1–13. https://doi.org/10.1080/13562517.2012.666735

[96] Squire, D. D., & Mobley, S. D. (2014). "Negotiating Race and Sexual Orientation in the College Choice Process of Black Gay Males." *The Urban Review*. https://doi.org/10.1007/s11256-014-0316-3

[97] Tavares, O. (2013). "Routes towards Portuguese higher education: students' preferred or feasible choices?" *Educational Research*, 55(1), 99-110. https://doi.org/10.1080/00131881.2013.767028

[98] Terrazas-Carrillo, E. C., Hong, J. Y., & Pace, T. M. (2014). "Adjusting to new places: International student adjustment and place attachment." *Journal of College Student Development*, 55(7), 693–706. https://doi.org/10.1353/csd.2014.0070

[99] Tewell, E. C. (2015). "Use of library services can be associated with a positive effect on first-year students' GPA and retention." *Evidence Based Library and Information Practice*, 10(1), 79–81. https://doi.org/10.1016/j.acalib.2013.12.002

[100] Tinto, V., & Tinto, V. (2007). "Research and Practice of Student Retention: What Next?" *Journal of College Student Retention*, 8(1), 1–19. https://doi.org/10.2190/C0C4-EFT9-EG7W-PWP4

[101] Titus, M. A. (2006). "Understanding the Influence of the Financial Context of Institutions on Student Persistence at Four-Year Colleges and Universities." *Journal of Higher Education*, 77(2), 353–375. https://doi.org/10.1353/jhe.2006.0009

[102] Ueno, K., & McWilliams, S. (2010). "Gender-Typed Behaviors and School Adjustment." *Sex Roles*, 63(7–8), 580–591. https://doi.org/10.1007/s11199-010-9839-6

[103] Varol, H., & Varol, C. (2014). "Improving Female Student Retention in Computer Science during the First Programming Course." *International Journal of Information and Education Technology*, 4(5), 394–398. https://doi.org/10.7763/IJIET.2014.V4.437

[104] Warikoo, N. K., & de Novais, J. (2015). "Colour-blindness and diversity: race frames and their consequences for white undergraduates at elite US universities." *Ethnic and Racial Studies*, 38(6), 860–876. https://doi.org/10.1080/01419870.2014.964281

[105] Watt, K. M., Johnston, D., Huerta, J., Mendiola, I. D., & Alkan, E. (2008). "Retention of First-Generation College-Going Seniors in the College Preparatory Program Avid." *American Secondary Education*, 37(1), 17–40. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=35693971&site=ehost-live

[106] Weerts, D. J. (2014). "State Funding and the Engaged University: Understanding Community Engagement and State Appropriations for Higher Education." *The Review of Higher Education*, 38(1), 133–169. https://doi.org/10.1353/rhe.2014.0038

[107] Wei, X., Christiano, E. R. A., Yu, J. W., Blackorby, J., Shattuck, P., & Newman, L. A. (2014). "Postsecondary pathways and persistence for STEM versus non-STEM majors: Among college students with an autism spectrum disorder." *Journal of Autism and Developmental Disorders*, 44(5), 1159–1167. https://doi.org/10.1007/s10803-013-1978-5

[108] Wetzel, J. N., O'Toole, D., & Peterson, S. (1999). "Factors affecting student retention probabilities: A case study." *Journal of Economics and Finance*, 23(1), 45–55. https://doi.org/10.1007/BF02752686

[109] Williams, S. M., & Ferrari, J. R. (2015). "Identification Among First-Generation Citizen Students and First-Generation College Students: an Exploration of School Sense of Community." *Journal of Community Psychology*, 43(3), 377–387. https://doi.org/10.1002/jcop.21685

[110] Wolffram, A., Derboven, W., & Winker, G. (2009). "Women withdrawers in engineering studies: Identity formation and learning culture as gendered barriers for persistence?" *Equal Opportunities International*, 28(1), 36–49. https://doi.org/10.1108/02610150910933622

[111] Xu, Y. J. (2013). "Career Outcomes of STEM and Non-STEM College Graduates: Persistence in Majored-Field and Influential Factors in Career Choices." *Research in Higher Education*, 54(3), 349–382. https://doi.org/10.1007/s11162-012-9275-2

[112] Zerna, S. E. S., Cruz, R. c, & Nuqui, A. V. (2014). "Factors Affecting Retention and Attrition Rates of La Consolation University Philippines : Examining Students ' Experiences." *International Journal of Trends in Economics Management and Technology (IJTEMT)*, 3(2), 1–7.

[113] Zhang, L., Hu, S., & Sensenig, V. (2013). "The Effect of Florida's Bright Futures Program on College Enrollment and Degree Production: An Aggregated-Level Analysis." *Research in Higher Education*, 54(7), 746–764. https://doi.org/10.1007/s11162-013-9293-8.

International Journal of Applied Social Science
Volume 5 (6), June (2018) : 870-877
Received : 02.05.2018; Revised : 11.05.2018; Accepted : 26.05.2018

RESEARCH ARTICLE
ISSN : 2394-1405

A conceptual framework on perspectives of student experiences at campuses throttling student satisfaction

N.S. VIJAYALAKSHMI*[1] AND A.H. SEQUEIRA[2]
[1]Faculty and [2]Professor & Dean Faculty Welfare
[1]P.G Department of Economics, University College Mangalore
Hampankatta, Mangalore (Karnataka) India
[2]School of Management, N.I.T.K Surathkal, Mangalore (Karnataka) India

ABSTRACT

This research paper focuses on vivacity of student experiences at divergent campuses. The peak in serenity of institutes with not so spacious campuses irks the noise among students on quality versus quantity perpetuation of education. The conceptual framework is an effort to realise that it is students experiences at large moulds and sustains student satisfaction making campuses a memorable demystifying the personification of multitudinal functioning of campuses.

Key Words : Constraints, Improved production technology, Socio-economic profile, Suggestions

INTRODUCTION

Student experiences :

For long the quality of education rested on customers perceptions of quality, their vital ratings often loomed large assuming towards overall satisfaction (Owlia and Aspinwall, 1998). The university as a quality measure on student growth (Tam, 2002) finds a divergence in its early regular and late registration affecting college students success (Smith *et al.*, 2002). College experience determines students educational plans (Pascarella *et al.*, 2003) forecasting that student adaptation to new learning environments can have unexpected outcomes (Taylor *et al.*, 2004). This has called out for a collective approach to enhancing engineering education for undergraduates (Mcalpine *et al.*, 2005) with strategies for improved academic and social outcomes needs to enhance student success skills (Webb and Bringman, 2006) that nourishes students perceptions in educational choices (Aboh, 2006). Further the undergraduate college experiences impact workforce of the 21st century (Engberg, 2007). The perceptions of education among students of engineering (High and Dockers, 2007) acts as a planning process perspective on upward influence determining campus change (Barnett *et al.*, 2008) of college students towards personal growth of recognition and life satisfaction (Stevic and Ward, 2008).

Uncovering hidden information within university's student enrolment (Siraj and Abdoulha, 2009) has its demography correlates with domain-based life satisfaction of college students (Zullig *et al.*, 2009) transcending towards student engagement (Queensland, 2009). The undergraduate education satisfaction of the higher education institutions (He and Xiaohua, 2010) is based on customer

How to cite this Article: Vijayalakshmi, N.S. and Sequeira, A.H. (2018). A conceptual framework on perspectives of student experiences at campuses throttling student satisfaction. *Internat. J. Appl. Soc. Sci.*, **5** (6) : 870-877.

satisfaction has a great impact on customer behavior. Service quality and image of colleges (Jing-yan *et al.*, 2010) pressures up the multilevel model of educational expectations (Lowman and Elliott, 2010).

A snapshot of young India's perspective in education from access to satisfaction and future undergraduate education at the Indian Institutes of Technology (Varma and Kapur, 2010) reflects students perceptions of university life (Lin, 2010) treading a path of student satisfaction with higher education being of teaching, skills and knowledge acquired and not just the curriculum itself (Gibson, 2010). However much noticeably student satisfaction differs from full time to part time students (Moro-Egido and Panades, 2010).

A transformative collegiate discourse (Ortlieb, 2011) at college campus help students to find the purpose of life that contributes to a lot of meaning making of student life (Chesbrough, 2011). The student satisfaction with higher education is critical for student development (Lourdes *et al.*, 2011) and all of the students educational experiences must relate to student satisfaction (El Ansari, 2011) as it only student understanding of satisfaction contributes to student performance (Walker and Palmer, 2011). Thus it is quality of life at campus that impact subjective wellbeing of students (Malkoç, 2011) that often leaves a student rendezvous with memorable messages of navigating across college life (Nazione *et al.*, 2011).

College education emancipates ecumenical worldview development among students (Mayhew, 2012). Student satisfaction depends on students perceptions of quality of institutions (Wilkins *et al.*, 2012) relies on students experiences at college (Julia and Veni, 2012) and especially among students of engineering (Wilson *et al.*, 2012). The implementation of student satisfaction index model in higher educational institutions (Temizer and Turkyilmaz, 2012) sets apart the institutional differences in student satisfaction (Barnes and Randall, 2012) that relates to a much farther end that students educational experiences impact student satisfaction (Zhai, 2012).

Student success in engineering education that start off with students' background and disposition variables, education attributes, variables concerning educational climate etc. (van den Bogaard, 2012) needs a deeper understanding of undergraduate students' experience (Chambers and Chiang, 2012) which though has its initial steps of measurement with enrollment differences towards student satisfaction (Barnes and Randall, 2012) seeking out that less has been worked about on students satisfaction with teaching ,learning and overall university experiences impacting engineering students performance (Choudhary, 2012) and the less talked about life satisfaction out of one's educational experiences (Daraei and Mohajery, 2013). Thus an assessment of factors that impacts success for incoming college students (Reisel *et al.*, 2012) is vital.

Engineering undergraduate experience which is a qualitative experience (Ganguly *et al.*, 2013) has to have its Quality Function Deployment (QFD) technique as a total quality management (TQM) tool, for planning and improvement of quality to gain competitive edge by satisfying student needs (Verma and Dawar, 2013). The customer focus in higher education has to speak volumes of student satisfaction (Mark, 2013) that always has been dwindling in between demographic and attitudinal factors of student satisfaction (Nwenyi and Baghurst, 2013).

Student life helps in identity construction (Lairio *et al.*, 2013) with the ability towards lifelong learning (Lord *et al.*, 2013) and more of self-reported learning gains experiences at college (Porter, 2013). So as students identity with science impacts students performance (Merolla and Serpe, 2013), it's the virtual academic performance determine life satisfaction of college students (Malik *et al.*, 2013). Therefore though the eventual personal development of youth expeditions (Stott *et al.*, 2013) transcends students satisfaction in higher education differing by gender age academic year and other parameters (De Jager and Gbadamosi, 2013), the national priority always depends on a student equation of Academic learning + social - emotional learning = national priority (Weissberg and Cascarino, 2013).

Student satisfaction:

Student satisfaction differed among different college students (Sarrico and Rosa, 2014). The Student Quality Circle (SQC), an initiative for raising the bar of quality learning and quality teaching impact on students' traits, learning attitudes etc (Faridi *et al.*, 2014) emphasises Quality of College Life (QCL) of students towards students' life satisfaction and identification (Arslan and Akkas, 2014). The gap between students' expectation and experiences at colleges and institutions of higher learning (Awang *et al.*, 2014) reflect on student aspirations may be extremely resistant to change and intervention, but students' understanding of 'where science can lead' may be more amiable to intervention (Archer *et al.*, 2014) towards a better understanding of becoming an excellent student among engineering undergraduates (Monteiro *et al.*, 2014).

Further the construction of college students' satisfaction model (Guo *et al.*, 2014) highlights problems students face at university (Kiraz, 2014) where even foreign undergraduate students' experiences diversity of the university (Liu and Winder, 2014). This indicates that though academic quality primarily intensifies student satisfaction (Negricea *et al.*, 2014) every student has a personal responsibility of building and making an inclusive campus (Abes, 2014) that converges cultural humility towards transformative complicity and empowerment among undergraduate students in higher education (Duntley-Matos, 2014).

Lastly, college students must speak success (Fauria and Zellner, 2015). The far long educational strategies that aim academic success (Milne *et al.*, 2016) has been unidirectional focusing only on academic engagement that leads to student satisfaction and success (Thalluri, 2016). It more often forgotten that students wellbeing impacts academic progress (Sibley *et al.*, 2016). The quality of academic life impacts academic performance, loyalty and institutional or university recommendations (Pedro *et al.*, 2016) ensuring in the long run the quality of students institutional experiences and their level of integration into the academic and social systems of their academic institutions results in successful retention (Aljohani, 2016). After all college students subjective wellbeing is all vital at the campus (Renshaw and Bolognino, 2016).

The conceptual framework on perspectives of student experiences at campuses throttling student satisfaction.

Student Experiences at campus	→	Student Satisfaction on campus

From the above literature it is evident that a student lives amongst students and relatively his or her experiences of superlative degree is vital for sustenance at campus. The scope of conceptual framework could be an initiative drive to improve and enhance student experiences at campus which by far has been bound to numbers of enrolment only.

Conclusion:

Campuses evolve and change drastically. Student experiences is the heart of academic imperatives so that information, guidance, support and practical advice could be viable towards student satisfaction through student life cycle. Student activities could go a desirable step further which interlinks student welfare via academic that transcends student experience transitions to a new level of authenticity.

REFERENCES

Abes, E.S. (2014). Why Aren't We There Yet? Taking Personal Responsibility for Creating an Inclusive Campus ed. by Jan Arminio, Vasti Torres, Raechele L. Pope. *J. College Student Development,* **55**(8) : 858–861. https://doi.org/10.1353/csd.2014.0079.

Aboh, S.S.F. (2006). What It Means To Become Somebody?: The Power of Perception and Girls TM Educational Choices in Benin , Africa. *The J. Negro Education,* **75**(4) : 606–620. Retrieved from http://www.jstor.org/stable/40034661.

Aljohani, O. (2016). A Review of the Contemporary International Literature on Student Retention in Higher Education. *Internat. J. Education & Literacy Studies,* **4**(1) : 40–52. https://doi.org/10.7575/aiac.ijels.v.4n.1p.40

Archer, S.N., Laing, E.E., Möller-Levet, C.S., van der Veen, D.R., Bucca, G., Lazar, A. S., ... Dijk, D.J. (2014). Mistimed sleep disrupts circadian regulation of the human transcriptome. *Proceedings of the National Academy of Sciences,* **111**(6) : E682–E691. https://doi.org/10.1073/pnas.1316335111

Arslan, S. and Akkas, O.A. (2014). Quality of College Life (QCL) of students in Turkey: Students' life satisfaction and identification. *Soc. Indicators Res.,* **115**(2) : 869–884. https://doi.org/10.1007/s11205-013-0235-9

Awang, M.M., Ahmad, A.R., Bakar, A., Hashim, Z., Asrul, M. and Ibrahim, H. (2014). Examining Gaps between Students' Expectations and Experiences in a Private University. *Mediterranean J. Soc. Sci.,* **5**(8) : 396–401. https://doi.org/10.5901/mjss.2014.v5n8p396

Barnes, B.J. and Randall, J. (2012). Doctoral student satisfaction: An examination of disciplinary, enrollment and institutional differences. *Res. Higher Education,* **53**(1) : 47-75.

Barnett, K., Ropers-Huilman, R. and Aaron, L. (2008). A Planning-Process Perspective on Student Activists' Upward Influence Attempts to Effect Campus Change. *Southern Communication J.,* **3203**(September). https://doi.org/10.1080/10417940802418833

Chambers, T. and Chiang, C.H. (2012). Understanding undergraduate students' experience: A content analysis using NSSE open-ended comments as an example." *Quality & Quantity,* **46**(4) : 1113–1123. https://doi.org/10.1007/s11135-011-9549-3

Chesbrough, R.D. (2011). Helping College Students Find Purpose: The Campus Guide to Meaning-Making (review). *J. College Student Development,* **52**(4) : 505–507. https://doi.org/10.1353/csd.2011.0049

Choudhary, M. (2012). Factors Influencing Engineering Students ' Performance and their Relationship with the Student Satisfaction with the Teaching , Learning as well as Overall University Experiences." *In 2012 International Conference on Information Technology Based Higher Education and Training (ITHET)* (pp. 5–9). https://doi.org/http://dx.doi.org/10.1109/ITHET.2012.6246023

Daraei, M. and Mohajery, A. (2013). The impact of socioeconomic status on life satisfaction. *Social Indicators Res.,* **112**(1) : 69-81.

De Jager, J. and Gbadamosi, G. (2013). Predicting students' satisfaction through service quality inhigher education. *Internat. J. Management Education,* **11**(3) :107–118. https://doi.org/10.1016/j.ijme.2013.09.001

Duntley-Matos, R. (2014). Transformative Complicity and Cultural Humility: De- and Re-Constructing Higher Education Mentorship for Under-represented Groups." *Qualitative Sociol.,* **37**(4) : 443–466. https://doi.org/10.1007/s11133-014-9289-5

El Ansari, W. (2011). Factors associated with students' satisfaction with their educational experiences and their module grades: Survey findings from the United Kingdom. *Educational Res.*, **2**(11) : 1637–1647.

Engberg, M.E. (2007). Educating the workforce for the 21st century: A cross-disciplinary analysis of the impact of the undergraduate experience on students' development of a pluralistic orientation. *Res. Higher Education*, **48**(3) : 283–317. https://doi.org/10.1007/s11162-006-9027-2

Faridi, M.R., Al Kahtani, N.S., Alam, T. and Malki, S. (2014). An Introduction to Student Quality Circle at College of Business Administration, Salman bin Abdulaziz University, Al Kharj, Kingdom of Saudi Arabia-An Empirical Study. *Internat. Education Studies*, **7**(9) : 148–160. https://doi.org/10.5539/ies.v7n9p148

Fauria, R.M. and Zellner, L.J. (2015). College Students Speak Success. *J. Adult Development*, **22**(2) : 90–99. https://doi.org/10.1007/s10804-014-9203-0

Ganguly, S., Kulkarni, M. and Gupta, M. (2013). The Engineering Undergraduate Experience: A Qualitative Perspective. *Psychological Studies*, **58**(3) : 248–258. https://doi.org/10.1007/s12646-013-0202-1

Gibson, A. (2010). Measuring business student satisfaction: a review and summary of the major predictors. *J. Higher Education Policy & Management*, **32**(3) : 251–259. https://doi.org/10.1080/13600801003743349

Guo, S., Teng, F., Guo, J. and Sun, Y. (2014). The construction of college student's satisfaction model based on structural equation model. *J. Chemical & Pharmaceu. Res.*, **6**(6) : 164–169. Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-84924748807&partnerID=40&md5=f88a31528e8ad65595c7fd3bd66e445e

He, G. and Xiaohua, R. (2010). Study on the Undergraduate Education Satisfaction of the Higher Education Institutions. *In 2010 3rd International Conference on Information Management, Innovation Management and Industrial Engineering* (Vol. 1, pp. 352–355). https://doi.org/10.1109/ICIII.2010.91

High, K.A. and Dockers, J.E. (2007). Work in Progress - Perceptions of Education Students of Engineering. *In 37th ASEE/IEEE Frontiers in Education Conference* (pp. 13–14).

Jing-yan, L.J.L., Xiao-chen, D.X.D. and Yu-hong, L.Y.L. (2010). Research on Relationship of Customer Satisfaction in Chinese Higher Education. 2010 Second International Workshop on *In Education Technology and Computer Science (ETCS)* (Vol. 2, pp. 1997–2000). https://doi.org/10.1109/ETCS.2010.105

Julia, M. and Veni, B. (2012). An analysis of the factors affecting students' adjustment at a University in Zimbabwe. *Internat. Education Studies*, **5**(6) : 244–250. https://doi.org/10.5539/ies.v5n6p244

Kiraz, Z. (2014). Investigating the University Student's Problems Faced in University Life: A Sample of Turkey. *Procedia - Social and Behavioral Sciences*, 116, 4905–4909. https://doi.org/10.1016/j.sbspro.2014.01.1047

Lairio, M., Puukari, S. and Kouvo, A. (2013). Studying at University as Part of Student Life and Identity Construction. *Scandinavian J. Educational Res.*, **57**(2) : 115–131. https://doi.org/10.1080/00313831.2011.621973

Lin, Y. (2010). Taiwanese university students' perceptions of university life. *Counselling Psychol. Quarterly*, **23**(2) : 189–202. https://doi.org/10.1080/09515071003798220

Liu, D.W.Y. and Winder, B. (2014). Exploring foreign undergraduate students' experiences of university. *Internat. J. Qualitative Studies Education*, **27**(1) : 42–64. https://doi.org/10.1080/09518398.2012.736643

Lord, S.M., Brawner, C.E., Camacho, M.M., Layton, R. a, Ohland, M.W. and Wasburn, M.H. (2009). Engineering students' disciplinary choices: Do race and gender matter? *In 39th ASEE/IEEE Frontiers in Education*

Conference (pp. 1–2). Retrieved from http://ieeexplore.ieee.org.libweb.lib.utsa.edu/xpls/abs_all.jsp?arnumber=5350589

Lord, S.M., Mcgaughey, K.J., Chen, J.C. and Chang, V.W. (2013). Measuring Propensity for Lifelong Learning?: *In 2013 IEEE Global Engineering Education Conference (EDUCON)* (pp. 329–334).

Lowman, J. and Elliott, M. (2010). A multilevel model of educational expectations of secondary school students in the United States. *Soc. Psychol. Edu.*, **13**(1) : 77-110. https://doi.org/10.1007/s11218-009-9099-x

Malik, M., Nordin, N., Zakaria, A. and Sirun, N. (2013). An Exploratory Study on the Relationship between Life Satisfaction and Academic Performance Among Undergraduate Students of UiTM, Shah Alam. *Procedia - Soc. & Behavioral Sci.*, **90**(InCULT 2012) : 334–339. https://doi.org/10.1016/j.sbspro.2013.07.099

Malkoç, A. (2011). Quality of life and subjective well-being in undergraduate students. *Procedia - Soc. & Behavioral Sci.*, **15** : 2843–2847. https://doi.org/10.1016/j.sbspro.2011.04.200

Mark, E. (2013). Student satisfaction and the customer focus in higher education. *J. Higher Education Policy & Management*, **35**(1) : 2–10. https://doi.org/10.1080/1360080X.2012.727703

Mayhew, M.J., Seifert, T.A. and Pascarella, E.T. (2012). How the First Year of College Influences Moral Reasoning Development for Students in Moral Consolidation and Moral Transition. *J. College Student Development*, **53**(1) : 19–40. https://doi.org/10.1353/csd.2012.0004

Mcalpine, L., Gandell, T., Winer, L., Gruzleski, J., Mydlarski, L., Nicell, J. and Harris, R. (2005). A collective approach towards enhancing undergraduate engineering education. *European J. Engg. Edu.*, **30**(3) : 377–384. https://doi.org/10.1080/03043790500114599

Merolla, D.M. and Serpe, R.T. (2013). STEM enrichment programs and graduate school matriculation: The role of science identity salience. *Soc. Psychol. Educ.*, **16**(4) : 575–597. https://doi.org/10.1007/s11218-013-9233-7

Milne, T., Creedy, D.K. and West, R. (2016). Integrated systematic review on educational strategies that promote academic success and resilience in undergraduate indigenous students. *Nurse Educ. Today*, **36** : 387–394. https://doi.org/10.1016/j.nedt.2015.10.008

Monteiro, S., Almeida, L.S., Vasconcelos, R.M. and Cruz, J.F.A. (2014). Be(com)ing an excellent student: a qualitative study with engineering undergraduates. *High Ability Studies*, (November 2014), 37–41. https://doi.org/10.1080/13598139.2014.966066

Moro-Egido, A.I. and Panades, J. (2010). An analysis of student satisfaction: Full-time vs. part-time students. *Soc. Indicators Res.*, **96**(2) : 363–378. https://doi.org/10.1007/s11205-009-9482-1

Nazione, S., Laplante, C., Smith, S.W., Cornacchione, J., Russell, J. and Stohl, C. (2011). Memorable Messages for Navigating College Life. *J. Appl. Communication Res.*, **39**(2) : 123–143. https://doi.org/10.1080/00909882.2011.556138

Negricea, C.I., Edu, T. and Avram, E.M. (2014). Establishing Influence of Specific Academic Quality on Student Satisfaction. *Procedia - Soc. & Behavioral Sci.*, **116** : 4430–4435. https://doi.org/10.1016/j.sbspro.2014.01.961

Nwenyi, S. and Baghurst, T. (2013). Demographic and attitudinal factors influencing doctoral student satisfaction. *Canadian Soc. Sci.*, **9**(6) : 47–56. https://doi.org/10.3968/j.css.1923669720130906.3040

Ortlieb, E. (2011). A Transformative Collegiate Discourse. *SAGE Open*, **1**(1). https://doi.org/10.1177/2158244011408117

Owlia, M.S. and Aspinwall, E.M. (1998). A framework for measuring quality in engineering education. *Total Quality Management*, **9**(6) : 501–518. https://doi.org/10.1080/0954412988433

Pascarella, E.T., Wolniak, G.C. and Pierson, C.T. (2003). Influences on Community College Students ' Educational Plans. *Res. Higher Edu.*, **44**(3) : 301–314.

Pedro, E., Leitão, J. and Alves, H. (2016). Does the Quality of Academic Life Matter for Students' Performance, Loyalty and University Recommendation? *Appl. Res. Quality Life*, **11**(1) ; 293–316. https://doi.org/ 10.1007/s11482-014-9367-6

Porter, S.R. (2013). Self-Reported Learning Gains: A Theory and Test of College Student Survey Response. *Res. Higher Educ.*, **54**(2) : 201–226. https://doi.org/10.1007/s11162-012-9277-0

Queensland, S. (2009). What makes students happy?? Factors influencing student engagement using student evaluation data what makes students happy?? Factors influencing student engagement using student evaluation data. *In FYE Curriculum Design Symposium 2009: Showcase* (pp. 59–63).

Reisel, J.R., Jablonski, M., Hosseini, H. and Munson, E. (2012). Assessment of factors impacting success for incoming college engineering students in a summer bridge program. *Internat. J. Mathematical Education Sci. & Technol.*, **43**(4) : 421-433. https://doi.org/10.1080/0020739X.2011.618560

Renshaw, T.L. and Bolognino, S.J. (2016). The College Student Subjective Wellbeing Questionnaire: A Brief, Multidimensional Measure of Undergraduate's Covitality. *J. Happiness Studies*, **17**(2) : 463–484. https:/ /doi.org/10.1007/s10902-014-9606-4

Sarrico, C.S. and Rosa, M.J. (2014). Student satisfaction with Portuguese higher education institutions: the view of different types of students. *Tertiary Education & Management*, **20**(2) : 165–178. https:// doi.org/10.1080/13583883.2014.900108

Sibley, J., Hamilton, D. and Chugh, R. (2016). International Student Wellbeing and Academic Progress. *Internat. Student Experience J.*, **3**(2) : 1–9.

Siraj, F. and Abdoulha, M.A. (2009). Uncovering hidden information within university's student enrollment data using data mining. *In Proceedings - 2009 3rd Asia International Conference on Modelling and Simulation, AMS* 2009 (pp. 413–418). https://doi.org/10.1109/AMS.2009.117

Smith, A.B., Street, M.A. and Olivarez, A. (2002). Early , Regular and Late Registration and Com M Unity College Student Success?: a Case Study. *Community College J. Res. & Practice*, **26**(December 2014), 261–273. https://doi.org/10.1080/106689202317245455

Stevic, C.R. and Ward, R.M. (2008). Initiating personal growth: The role of recognition and life satisfaction on the development of college students. *Soc. Indicators Res.*, **89**(3) : 523–534. https://doi.org/10.1007/ s11205-008-9247-2

Stott, T., Allison, P., Felter, J. and Beames, S. (2013). Personal development on youth expeditions: a literature review and thematic analysis. *Leisure Studies*, (October), 1–33. https://doi.org/10.1080/ 02614367.2013.841744

Tam, M. (2002). University Impact on Student Growth: A quality measure? *J. Higher Edu. Policy & Management*, **24**(2) : 211–218. https://doi.org/10.1080/1360080022000013527

Taylor, P.G., Pillay, H. and Clarke, J.A. (2004). Exploring student adaptation to new learning environments: some unexpected outcomes. *Internat. J. Learning Technol.*, **1**(1) : 100. https://doi.org/10.1504/ IJLT.2004.003684

Temizer, L. and Turkyilmaz, A. (2012). Implementation of Student Satisfaction Index Model in Higher Education Institutions. *Procedia - Soc. & Behavioral Sci.*, **46** : 3802–3806. https://doi.org/10.1016/ j.sbspro.2012.06.150

Thalluri, J. (2016). Bridging the gap to first year health science: Early engagement enhances student satisfaction and success. *Student Success*, 7(1) : 37. https://doi.org/10.5204/ssj.v7i1.305

Van den Bogaard, M. (2012). Explaining student success in engineering education at Delft University of Technology: a literature synthesis. *European J. Engg. Edu.*, **37**(1) : 59–82. https://doi.org/10.1080/03043797.2012.658507

Varma, R. and Kapur, D. (2010). Access, satisfaction and future: Undergraduate education at the Indian Institutes of Technology. *Higher Edu.*, **59**(6) : 703–717. https://doi.org/10.1007/s10734-009-9275-0

Verma, D.S. and Dawar, R. (2013). Application of Quality Function Deployment in an Engineering College Using Analytical Hierarchy Process. *J. Engg. Res. & Applications*, **3**(5) : 1993–2004.

Webb, L.D. and Bringman, G.A. (2006). Student Success Skills: Tools and Strategies for Improved Academic and Social Outcomes. *Professional School Counselling*, **2**(2) : 112–120. Retrieved from http://www.jstor.org/stable/24029154

Weissberg, R.P. and Cascarino, J. (2013). Learning nationaLpriori Policy makers need to challenges of the world. *The Phi Delta Kappan*, **95**(2) : 8–13.

Wilkins, S., Balakrishnan, M. and Huisman, J. (2012). Student satisfaction and student perceptions of quality at international branch campuses in the United Arab Emirates. *J. Higher Education Policy & Management*, **34**(5) : 543–556. https://doi.org/10.1080/1360080X.2012.716003.

Wilson, Z.S., Iyengar, S.S., Pang, S.S., Warner, I.M. and Luces, C.A. (2012). Increasing Access for Economically Disadvantaged Students: The NSF/CSEM & S-STEM Programs at Louisiana State University. *J. Sci. Edu. & Technol.*, **21**(5) : 581–587. https://doi.org/10.1007/s10956-011-9348-6

Zhai, L. (2012). Initial Validation of an Instrument to Measure Community College Student Satisfaction. *Community College J. Res. & Practice*, **36**(1) : 47–58. https://doi.org/10.1080/10668920802648916

Zullig, K.J., Huebner, E.S. and Pun, S.M. (2009). Demographic correlates of domain-based life satisfaction reports of college students. *J. Happiness Studies*, **10**(2) : 229–238. https://doi.org/10.1007/s10902-007-9077-y.

****

RESEARCH REVIEW JOURNALS
Volume-03
Issue-06
June-2018

ISSN: 2455-3085 (Online)
RESEARCH REVIEW International Journal of Multidisciplinary
www.rrjournals.com [UGC Listed Journal]

Physical and Psychological adaptation at Campus Environments

*1Dr. Vijayalakshmi N. S & 2Dr. A. H. Sequeira

*1Faculty, Post Graduate Department of Economics, University College Mangalore, Hampankatta, Mangalore (India)
2Professor and Dean Faculty Welfare, School of Management, N.I.T.K surathkal, Mangalore (India)

ARTICLE DETAILS

Article History
Published Online: 12 June 2018

Keywords
Physical, Psychological, Adjustment, Students perceptions, expectancies

***Corresponding Author**
Email: nandalike17[at]gmail.com

ABSTRACT

A sound mind in a healthy body – this phrase articulates the interconnectedness of the psyche and physic. It is necessary to observe that every student has peculiar strengths and different needs. Thus it remains resourceful to acknowledge the campus environments that serve as perpetual entities of adaptation to students mentally and physically.

1. Introduction

Physical – Psychological Adjustment versus Physical – Psychological Adaptation

Physical – Psychological Adjustment

Physical factors influence adjustment of students to college (Adler et al., 2008). At college, the psyche on social adjustment of students (Hersh & Hussong, 2006) relies on college adjustment that deters health (Adler et al., 2008). Poor adjustment to college life mediates the relationship between drinking motives and alcohol consequences (LaBrie, et al., 2012). This couples with physical aggression impacting social and psychological adjustments (Kawabata et al., 2012) and any poor adjustment to college life mediates the relationship between drinking motives (LaBrie et al., 2012) having its association of acculturation alongside psycho social adjustment and weight status among students (Chang & Halgunseth, 2015).

Students perceptions of institutional climate vary across years impacting psychological and behavioral adjustment (Way et al., 2007). The ethnocultural person–environment fit has its different level of college adjustment (Hutz et al., 2007) as it's often the psychological and behavioral adjustment that deters students perception of campus climate (Way et al., 2007). The students role is sought to be maximized when perfectionism is linked with college adjustment (Chang et al., 2011). The domain specific approach of optimism and pessimism impacts college adjustment and educational outcome expectancies (Chang et al., 2011). Students initial poor adjustment at institution can be guarded by emotional management and emotional self-efficacy (Nightingale et al., 2013) where negative emotions (Nyamayaro & Saravanan, 2013) self-esteem (Pasha & Munaf, 2013) along with psychological capital (PsyCap) and proactive behaviours influences new comer's adjustment to college (Klemme Larson et al., 2013). Students who have better cognitive abilities and socio-emotional adjustment charge over-representation in college academic major (Chen et al., 2013) and students who have similar types of enhanced cognitive abilities have better socio-emotional adjustment (Chen et al., 2013). The social predict adjustment of engineering students to be varying by ethnicity (Lent et al., 2013) manoeuvres callous-unemotional traits and behaviours (Ciucci et al., 2014) to seek out coping (Cristina & Dias, 2014) and emotional maturity (Sinha, 2014) towards psychological need satisfaction from early to late adolescence as a predictor of adjustment in institution (Ratelle & Duchesne, 2014). After all it is planfulness among college students that impacts psychological adjustment (Yang & Chang, 2016).

Physical – Psychological Adaptation

Students adaptation to college measures mental health variables, satisfactions, interpersonal orientations, and assessments of the learning environments (Rooijen, 1986). Based on social adaptation theory, the task and habit situation are vital elements of attitude and behavior making a personality, social support and emotional intelligence determining personal and emotional adaptation in universities or institutions environment (Tomás et al., 2014). This also leverages ahead on college freshmen's self-efficacy, effort regulation and perceived stress on students' adaptation to college (Seong, 2014). In short, student experience three styles of adaptation - A person-focused approach on patterns of wellbeing - positive and connected, unconnected and finally the style of adaptation of stressed (Russell et al., 2010) that overall perspires the threshold over adaptation.

2. Structural Components of students Physical – Psychological Adaptation

Age

Age is an unchangeable attribute of an individual with a personal human face characteristic (Thornton et al., 2016). On health grounds, college-age young adults are among those who consume the greatest amount of sugar-sweetened beverages, with half reporting daily consumption (Byrd-Bredbenner et al., 2012). Thus age influences health and its priorities. As for safety, the perception of safety significantly varied across student age groups on campus (Patton & Gregory, 2014).

populated with individuals in the most at-risk age group for sexual and physical relationship violence. (Yazedjian et al.,2009).

On the emotional front, age is a centre for association of interest (Swenson et al., 2008) Age influences how people treat. Appropriate behaviors are associated with age groups where same age group has similar interests impacting individual behaviors (Panizzon & Levins, 1997). Age influences levels of both aggression and depression (Laible et al., 2000) among college students where life experiences that varied by age; impacted education (Ardelt, 2010).

Gender

Health behaviors of students differed by gender (Stock et al., 2001) influencing eating disorders among students impacting health where the erratic eating disorder is observed in females than male students (Sciacca et al., 1991). An increase [illegible]l safety while enhancing women's freedom and mobility on and near campus as sexual assault exists on campus (Day, 1995). Campus safety among male and female college students and issues on self-reported campus victimization (Jennings et al., 2007) also reflect on transgender issues on a college campus (Beemyn et al., 2005). With respect to expenditures per household for health, there is an observed gender difference (Rout, 2010) signifying that cardiovascular fitness in females is poor due to obesity among undergraduates. The eating disorder which is higher among undergraduate women students (Villarroel et al., 2011) reveals that gender is a significant predictor of students food choices on a college campus (Boek et al.,2012). However formal food and nutrition education impacts dietary behaviour among female young adults (Kanabur & Reddy, 2014).

The social-cognitive theory provides a valuable framework for studying student academic confidence that varies by gender (Litzler et al., 2014). Psychopathic personality traits risky sexual behavior, impacts psychological adjustment among college women (Fulton et al., 2014) as a psychological difference by gender varied among college students living in a hostel and living in the home (Manickam, 2014). Lastly, though stress and its coping strategies differ among college students by gender (Lee & Padilla, 2014); self-esteem and gender was negatively correlated with anxiety among college students (Mustafa et al., 2015).

Disability

Physically disabled students faced physical abuse at university (McQuiller Williams & Porter, 2014) and on campuses (Findley et al., 2015). It is noted that disability magnifies by the sexual orientation of the students (Harley et al., 2002). This is followed by poor health & hyperactivity increasing the odds of having a disability about two to three times, while poor close perceived friendship & academic competencies predicted disability of same magnitude (Vaz et al., 2015) with oral health conditions and behaviours of disabled and non-disabled students differing vastly (Vichayanrat & Kositpumivate, 2014). In this regard a prominent step could be the university staff who must have adequate awareness on disabilities of students in postsecondary educational institutions (Wehman, 2001) as they are the most revered people, disabled students can rely on campuses. Personal characteristics play an important role in higher education among students with disabilities (Swart & Greyling, 2011) especially to that of one's attitude that makes immense difference to students with disabilities (Rodríguez Martín & Álvarez Arregui, 2013). It was found that non-disabled peer had negative thoughts about disabled students in campus (Fichten et al., 1988) highlighted by theory of planned behaviour of intentions on non-disabled students to play with disabled students (Obrusnikova et al.,2011) with of only recent positive attitude developing towards disabled students (Sanchez et al., 2011). So more importantly, its attitude toward the sexuality of persons with a physical disability showing better adaptability (Hasson-Ohayon et al., 2014). This could be attributed to the self-determination of physically disabled students contributing to positive educational outcomes for students with disabilities (Wehmeyer, 1997).

Further psychologically, disabled students are mostly depressed (Elliott et al.,1988) with non-disclosure of disability possessed by negative attitude amongst wider non-disabled student body (Miller et al.,2009) coupled in low self-efficacy (Jenson et al.,2010) enhancing stress making them more vulnerable to adverse psychological wellbeing (Koca-Atabey et al., 2011). This nugget the interpersonal theory that physically disabled students are more inclined towards suicide (Khazem et al., 2015). However social support systems which come to rescue of disabled students in this regard provide better ways of coping with disability and college adjustment (Okoye, 2010 ; Murray et al., 2013). After all, it is the coping strategy, that eases of their psychosocial adaptation to disability (Livneh & Wilson, 2003) and strategies for building a belief in ability and self-esteem (Hearn et al.,2014) can be of immense help.

Academic year

The flourishing and substance use have an effect on students involvement or engagement in the first year of entering college (Low, 2011) rendering that health behavior impacts academic performance of first-year student (Deliens et al., 2013). The body weight also correlates to academic performance in first-year university students (Deliens et al., 2013) where any indication of chronic illness among first-year students has an indefinite bearing on students academic performance (Herts et al., 2014). From a health perspective, social context for sexual behavior among college students of first years also varied (Uecker, 2015). Psychological distress of students increased over four years of education at university campus (Sher & Wood, 1970).

More observable, first-year students have high levels of stress (Al-Daghri et al., 2014) and test anxiety that creates psychological distress dampening academic motivation among first-year students (Rajiah et al., 2014). Further self-perception, beliefs control over events (feeling of mastery), believe human nature, trust in people feeling of alienation (David & Niță, 2014) pressures up identity diffusion and identity distress envisaging identify coping among first-year students (Sica et al.,2014). Psychological capital determines adaptive to stress among first-year students (Wen & Lin, 2013). The personality type variables

(Adeniyi et al., 2014) coupled with loneliness (Wohn & Larose, 2014) and self-perception, trust, mastery and alienation impacts adjustment of first-year students to university (David & Nită, 2014). However much-needed optimism and self-efficacy has a slow maneuvering on transition and adjustment of first-year students (Mergler & Boman,2014; Nikfal Azar & Reshadatjoo, 2014). Lastly, though the behavioral perceptions of students experience persist in terms of bullying at high school; it is carried forward at college having an endurance on motivation (Goodboy et al.,2016) between college students and older adults (Buchanan et al., 2015).

Academic Major

Cognitive predictors impact academic acquisitions in academic majors towards academic success (Stan, 2013). Students who have better cognitive abilities and socio-emotional adjustment impact over-representation in college and academic major (Chen et al., 2013). The emotion experienced in the classroom has been shown to influence subject-level academic major satisfaction and loyalty to the institution (White, 2013). Emotional maturity and decision making styles do differ among women students of engineering and non-engineering majors (Punithavathi, 2013). Psycho communication disorder impacts academic major performance (Touri et al., 2014) where students academic drift of student faculty interaction with academic major has its footprints on academic self-concept of students (Kim & Sax, 2014). An observed academic misconduct too has a bearing on academic performance which varies by academic majors (Freire, 2014). Further expected earnings and perceived ability with heterogeneous tastes impact academic major choice (Wiswall & Zafar, 2014) making the role of industry attitude of perceived social status, and salary expectations impacting career prospect and industry commitment (Penny Wan et al., 2014).

Religion

There is an interrelationship between spirituality religiosity and health (Tomasso et al., 2011) where delving towards spirituality reduces stress among students of Indian institute of technology bombay (Yadav & Khanna, 2014) with parent's religious involvement influencing psychological health, family functioning and development of their children (Kong & Chan, 2014). The purpose in life is also said to mediate the relationship between religiosity and happiness (Aghababaei & Błachnio, 2014). Spirituality influenced the quality of life of undergraduate students impacting cognitive and psychosocial development (Lau et al., 2015). Thus there is a relationship between religion and spirituality and students who are religious have better mental health (Ahmadi & Shahmohammadi, 2015) with observed positive psychosocial functioning in adolescents and young adults (Sanders et al., 2015). Spirituality among students helps to combat anxiety (ecl et al., 2015) and it tethered that students resiliency can be predicted by spirituality (Mehrinejad et al.,2015).

Religious belief aspects and customs with religiousness (Ahmadi & Shahmohammadi, 2015) enhances quality of life with religious awareness (Parniyan et al., 2016) required especially among students of minority race, low socioeconomic status students at first academic year (Zhao et al., 2015). Of late, prayers, the aspect mostly ignored by students at higher education at large could help in restoring the mental wellbeing (Shaikh et al., 2015). Religion also helps to combat depression and homesickness among college students (Longo & Kim-spoon, 2013) which is higher among first generation students than non-first generation students (Ferrari et al., 2015). In brief, spirituality undoubtedly impacts mental health (Karimipour & Md.Sawar, 2015) with its extended hand of attitude towards the external environment with nature at its green side (Nunn et al., 2016) and religiousness soaring high on psychological outcomes with subjective wellbeing impacting life satisfaction (Aghababaei et al., 2016).

Caste

Race and ethnic diversity impacts campus safety (Stotzer & Hossellman, 2012). The perceptions and experiences of women student on safety in campus differed by race where most often they witnessed chilly climate (Kelly & Torres, 2006). This is fuelled by hate crimes on campus (Stotzer & Hossellman, 2012) along with alcohol and other drug use among sexual minority college students (Manning et al., 2012) creating incivility and hostility on campus especially towards students of race by drugged and alcoholic students (Woodford et al.,2012). Further social life correlates gender to casual sexual activity (Lyons et al.,2015) with ethnicity having its toll even on weight status among students (Chang & Halgunseth, 2015) reveals that dietary practises of students varied by racial and ethnic differences in the home food environment (Ranjit et al.,2015). Added to this stress impacts self-esteem resulting in eating disorder among students of race adversely affecting their health (Claudat et al., 2016).

Further race and ethnicity impacts stress leading to depression among minority students of race (Arbona & Jimenez, 2014) especially of current times where campus life is moving to online and online racial discrimination culminating online stress and has a significantly more negative view of campus racial climate (Tynes et al., 2013). Socio-cultural competence impacts the development and delivery of socio-emotional learning among students of race (Garner et al., 2014) where social networking sites impact students acculturation stress and psychological well-being among student of race (Park et al., 2014). The psychological and experiences at campus climate affects students academic and social integration on campus especially of sexual minority students (Woodford & Kulick, 2014). This is reflected on Bean and Eaton's psychological model of retention where stress influences students persistence of race in campus (Johnson et al., 2014). Hence social cognitive and self-construal factors influence wellbeing of students of race at college (Ezeofor & Lent, 2014) though at times self-efficacy of underrepresented students is low (Enriquez et al., 2014) focusing that counselling programs should aim at mental health status of minority students (Smith et al., 2014). In brief, ethnicity impacts psychosocial adjustment (Chang & Halgunseth, 2015) where ethnic identity in ethnic group association results in discrimination impacting depressive symptoms (Brittian et al., 2015). Social exclusion thus enhances the ability to manage others emotions (Cheung & Gardner, 2015) where self-perceived feeling of marginalisation by students of race on campus (Wilson et al.,2015) are very much dependent on cognitive factors that predict academic motivation among students of race (Piña-Watson et al., 2015).

Generation Status

Psychology differs among generations (Lub et al., 2016) with family achievement guilt impacting the mental well-being of college students (Covarrubias et al., 2014). Social cognitive career theory states that self-efficacy outcome expectations, barriers, and goals can help with career and academic decision-making meeting the needs of first generation college students (Gibbons & Shoffner, 2004) resulting in lower self-efficacy of first generation students (Gibbons & Borders, 2010) adversely impacting their academic performance and college adjustment (Ramos-Sánchez & Nichols, 2007). Self-efficacy also impacts academic success among ethnically diverse students of minority race of the first generation (Majer, 2009) where social academic self-efficacy differs among first and non-first generation students of higher education (Finch, 2016). Further self-efficacy, coping efficacy impacts underrepresented first generation low-income college students persistence towards graduation (Tate et al., 2015). Students at campuses face a lack of social support influencing depression impacting life satisfaction of first generation college students (Jenkins et al., 2013).

First generation students also witness higher bullying, violence and suicidal behaviors than the third generation (Pottie et al., 2014) impacting self-esteem and locus of control that differs among first generation and continuing generation (Aspelmeier et al., 2012).This builds up the stress which varies by the generation of students where the second generation is able to counter balance stress effectively (Shields, 2002). Hence stressors and supports differ among first generation and non-first generation students (Dumais et al., 2013). To this, the great source of help could arrive at the campus is through counseling. Counseling impacts retention of first generation college students (Pham & Keenan, 2011) by enhancing the sense of belonging (Stebleton et al., 2014) especially facilitating first generation female college students transition into higher education environment which is challenged with the process of forming self-identity (O'Shea, 2014). Counselling thereby gives a sense of direction to first generation students who are often stranded by time constraints and inadequate guidance (Hailu & Ku, 2014). Thus behavioural typology of first-time first generation students (Bahr, 2010) reflect that social cognitive factors impact academic and student life satisfaction varies among first and non-first generation students (Garriott et al., 2015).

College Expense

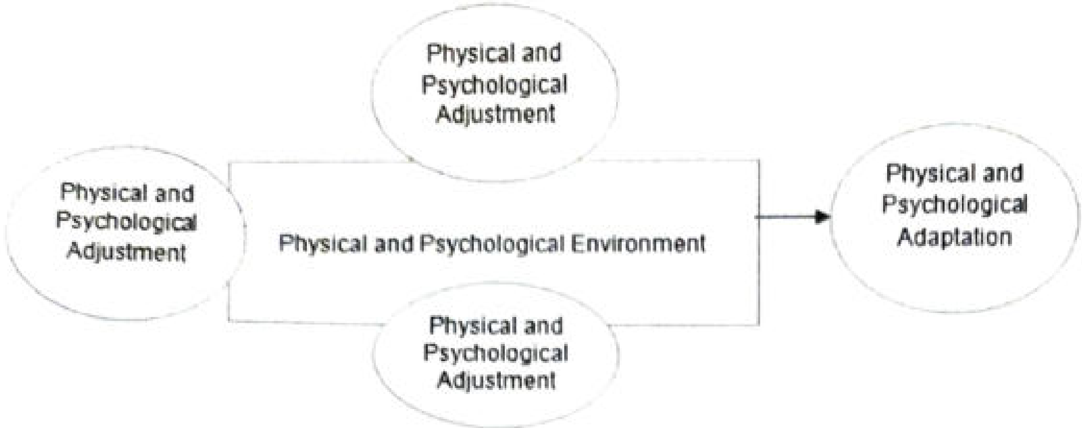
Student loans impact suicide where engineering student Rajani's suicide urgently address issues of equity in our educational system where student loans and lack of repayment impacts suicide (kanitkar, 2004). Early resources result in psychological adjustment influencing college adjustment (Zamostny et al., 1993). The financial difficulties bereave psychological wellbeing among university staff as well. (Winefield et al., 2003). Though a solution persists where seminar participation can change college students financial knowledge attitudes and behaviors (Borden et al., 2008); sensation-seeking and risk-taking add on more to problematic financial behaviors of college students (Worthy et al., 2010). The financial behavior on financial wellbeing of college students (Gutter & Copur, 2011) creates tendencies of loan aversion among students (Johnson et al., 2011) as it is known that students financial attitude vary over time among college students (Norvilitis, 2014). Moreover with financial knowledge contributing subjective risk tolerance among college students (Ramudzuli & Muzindutsi, 2015); the correlations between materialism, spending tendencies, and debt are prominently significant among college students (Naruetharadhol et al., 2015).

3. Socioeconomic status of the family by parent's education, occupation, and income

Socio-economic status impacts health in developing countries (Bollen et al., 2001). Socio-economic differences in eating-related attitudes behaviors and environments impact health (Utter et al., 2011) especially among students who find it difficult to adjust to dietary practices at distant location institute campuses. A much-noted feature here is the parenting styles that impacts substance use like alcohol and drugs among students (Luk et al., 2015) causing adverse health hazards. Parental attachment and psychological separation impacted undergraduate students adjustment to college (Schwartz & Buboltz, 2004) with family support providing an emotional outlet for reducing stress among students (Barnett, 2004) impacting individual coping style among undergraduate students adjustment to college (David & Leichtentritt, 1999).

Parental attitude impacts students decision-making skills (Doğan & Kazak, 2010) with perceived parenting style and the five-factor model of personality affecting first-year student adjustment to college severely (Schnuck, 2011). This could be due to the accumulated past of parental behavior of harsh punishment on children resulting in the holocaust of behavioral problems in children (Manrique Millones et al., 2014). Further perceptions of class status impact socioeconomic status (Zang, 2012) where parents socio-economic status impacts childhood intelligence, adult personality traits, social status and mental well-being (Cheng & Furnham, 2014) with stressful life events also leaving an extended hand on college students (Yan et al., 2014). Hence amongst all, the autonomy support from teacher's peers, fathers and mothers act as psychological mediators influencing self-determined motivation predicting basic competencies of students (Moreno et al., 2015). In short, parental levels of education are significant predictors of anxiety and depression among college students (Ozer, 2015) with the mental health status of students being heavily dependent on socio-economic status (Yarnold, 2016).

A Conceptual Framework on Physical – Psychological Adaptation of students



From the conceptual framework above, it remains evident that physical and psychological adjustment tender from the physical psychological environment that enables physical and psychological adaptation of students with diverse needs in the long run.

4. Conclusion on Physical – Psychological Adaptation

"A sound mind in a sound body" – this phrase indicates the interconnectedness between the physical entity of a human being and the psychological persistence in it. The student life at beginning of adolescent age ventures out into a new arena of exploration where socialisation boosts up the psychological forefront. It could add up to the multiplicity of adventures at campus or destitute into emotional metamorphism that could endanger students' persistence and commitment to undergraduate education. Thus a perfect approach that helps a student to balance on mental being with his outward physicality at the campus is worth a check of introspection.

References

1. Adeniyi, W. O., Adediran, V. O., & Okewole, J. O. (2014). "Personality Types, Demographic Variables and Academic Adjustment of Fresh Undergraduates of Obafemi Awolowo University, Ile-Ife, Nigeria." *Journal of Educational and Social Research*, 4(6), 493–502. https://doi.org/10.5901/jesr.2014.v4n6p493
2. Aghababaei, N., & Blachnio, A. (2014). "Purpose in life mediates the relationship between religiosity and happiness: evidence from Poland." *Mental Health, Religion & Culture*, 17(8), 827–831. https://doi.org/10.1080/13674676.2014.928850.
3. Aghababaei, N., Sohrabi, F., Eskandari, H., Borjali, A., Farrokhi, N., & Chen, Z. J. (2016). "Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators." *Personality and Individual Differences*, 90(February), 93–98. http://doi.org/10.1016/j.paid.2015.10.046.
4. Ahmadi, A., & Shahmohammadi, N. (2015). "Studying the Relationship between Mental Health, Spirituality and Religion in Female Students of Tehran Azad University: South Branch." *Procedia - Social and Behavioral Sciences*, 205(May), 236–241. http://doi.org/10.1016/j.sbspro.2015.09.065
5. Al-Daghri, N. M., Al-Othman, A., Albanyan, A., Al-Attas, O. S., Alokail, M. S., Sabico, S., & Chrousos, G. P. (2014). "Perceived stress scores among Saudi students entering universities: A prospective study during the first year of university life." *International Journal of Environmental Research and Public Health*, 11(4), 3972–3981. https://doi.org/10.3390/ijerph110403972.
6. Arbona, C., & Jimenez, C. (2014). "Minority stress, ethnic identity, and depression among Latino/a college students." *Journal of Counseling Psychology*, 61(1), 162–168. https://doi.org/10.1037/a0034914
7. Ardelt, M. (2010). "Are Older Adults Wiser Than College Students? A Comparison of Two Age Cohorts." *Journal of Adult Development*, 17(4), 193–207. https://doi.org/10.1007/s10804-009-9088-5
8. Aspelmeier, J. E., Love, M. M., McGill, L. a., Elliott, A. N., & Pierce, T. W. (2012). "Self-Esteem, Locus of Control, College Adjustment, and GPA Among First- and Continuing-Generation Students: A Moderator Model of Generational Status." *Research in Higher Education*, 53(7), 755–781. https://doi.org/10.1007/s11162-011-9252-1
9. Bahr, P. R. (2010). "The Bird's Eye View of Community Colleges: A Behavioral Typology of First-Time Students Based on Cluster Analytic Classification." *Research in Higher Education*, 51(8), 724–749. https://doi.org/10.1007/s11162-010-9180-5
10. Barnett*, Ronald. "Learning for an unknown future." *Higher Education Research & Development* 23, no. 3 (2004): 247-260.
11. Beemyn, B., Curtis, B., Davis, M., & Tubbs, N. J. (2005). "Transgender issues on college campuses." *New Directions for Student Services*, 2005(111), 49–60. https://doi.org/10.1002/ss.173
12. Boek, S., Bianco-Simeral, S., Chan, K., & Goto, K. (2012). "Gender and Race are Significant Determinants of Students' Food Choices on a College Campus." *Journal of Nutrition Education and Behavior*, 44(4), 372–378. https://doi.org/10.1016/j.jneb.2011.12.007
13. Bollen, K. A., Glanville, J. L., & Stecklov, G. (2001). "Socioeconomic status and class in studies of fertility and

health in developing countries." *Annual review of sociology*, 27(1), 153-185.

14. Borden, L. M., Lee, S. a., Serido, J., & Collins, D. (2008). "Changing college students' financial knowledge, attitudes, and behavior through seminar participation." *Journal of Family and Economic Issues*, 29(1), 23–40. https://doi.org/10.1007/s10834-007-9087-2
15. Brittian, A., Umaña-taylor, A. J., Kim, S. Y., Armenta, B. E., Lee, R. M., Schwartz, S. J., ... Hudson, M. L. (2015). "Do dimensions of ethnic identity mediate the association between perceived ethnic group discrimination and depressive symptoms ?" *Cultural Diversity and Ethnic Minority Psychology*, 21(March 2016), 41–53. https://doi.org/10.1037/a0037531
16. Buchanan, J. A., Lai, D., & Ebel, D. (2015). "Differences in perception of gerotranscendence behaviors between college students and community-dwelling older adults." *Journal of Aging Studies*, 34(March 2016), 1–9.
17. Byrd-Bredbenner, C., Johnson, M., Quick, V. M., Walsh, J., Greene, G. W., Hoerr, S., ... Horacek, T. M. (2012). "Sweet and salty. An assessment of the snacks and beverages sold in vending machines on US post-secondary institution campuses." *Appetite*, 58(3), 1143–1151. https://doi.org/10.1016/j.appet.2012.02.055
18. Chang, E. C., Lin, N. J., Herringshaw, A. J., Sanna, L. J., Fabian, C. G., Perera, M. J., & Marchenko, V. V. (2011). "Understanding the link between perfectionism and adjustment in college students: Examining the role of maximizing." *Personality and Individual Differences*, 50(7), 1074–1078. https://doi.org/10.1016/j.paid.2011.01.027
19. Chang, Y., & Halgunseth, L. C. (2015). "Early Adolescent's Psychosocial Adjustment and Weight Status Change: The Moderating Roles of Gender, Ethnicity, and Acculturation." *Journal of Youth and Adolescence*, 44(4), 870–886. https://doi.org/10.1007/s10964-014-0162-3
20. Chen, C., Chen, C., Moyzis, R. K., He, Q., Lei, X., Li, J. Dong, Q. (2013). "Genotypes over-represented among college students are linked to better cognitive abilities and socioemotional adjustment." *Culture and Brain*, 1(1), 47–63. http://doi.org/10.1007/s40167-013-0003-3
21. Cheng, H., & Furnham, A. (2014). "The associations between parental socio-economic conditions, childhood intelligence, adult personality traits, social status and mental well-being." *Social indicators research*, 117(2), 653-664.
22. Cheung, E. O., & Gardner, W. L. (2015). "The way I make you feel: Social exclusion enhances the ability to manage others' emotions." *Journal of Experimental Social Psychology*, 60, 59–75. https://doi.org/10.1016/j.jesp.2015.05.003
23. Ciucci, E., Baroncelli, A., Franchi, M., Golmaryami, F. N., & Frick, P. J. (2014). "The association between callous-unemotional traits and behavioral and academic adjustment in children: Further validation of the inventory of callous-unemotional traits." *Journal of Psychopathology and Behavioral Assessment*, 36(2), 189–200. https://doi.org/10.1007/s10862-013-9384-z
24. Claudat, K., White, E. K., & Warren, C. S. (2016). "Acculturative Stress, Self-Esteem, and Eating Pathology in Latina and Asian American Female College Students." *Journal of Clinical Psychology*, 72(1), 88–100. https://doi.org/10.1002/jclp.22234
25. Covarrubias, R., Romero, A., & Trivelli, M. (2014). "Family Achievement Guilt and Mental Well-being of College Students." *Journal of Child and Family Studies*. https://doi.org/10.1007/s10826-014-0003-8
26. Cristina, A., & Dias, G. (2014). "College adjustment and coping in Brazilian college students : A review of literature Adaptação Acadêmica e Coping em Estudantes Universitários Brasileiros : Revista Brasileira" *De Orientacao Professional*, 15(2), 177–186.
27. David, A. B.-, & Leichtentritt, R. (1999). "Ethiopean and Israeli Students' Adjustment to College: The effect of the Family, Social Support and Individual Coping Styles." *Journal of Comparative Family Studies*, 30(2), 297–313. Retrieved from http://www.jstor.org/stable/41603631
28. David, L. T., & Nită, G. L. (2014). "Adjustment to First Year of College – Relations among Self-perception, Trust, Mastery and Alienation." *Procedia - Social and Behavioral Sciences*, 127, 139–143. https://doi.org/10.1016/j.sbspro.2014.03.228
29. Day, K. (1995). "Assault Prevention as a Social Control : Women and Sexual assault Prevention on Urban College Campuses." *Journal of Environmental Psychology*, 15, 261–281.
30. Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B. (2013). "Weight, socio-demographics, and health behaviour related correlates of academic performance in first year university students." *Nutrition Journal*, 12(1), 162. https://doi.org/10.1186/1475-2891-12-162
31. Doğan, T., & Kazak, M. (2010). "The investigation of the relationship between students' decision making skills and parental attitudes." *Procedia-Social and Behavioral Sciences*, 2(2), 2556-2560.
32. Dumais, S. a., Rizzuto, T. E., Cleary, J., & Dowden, L. (2013). "Stressors and Supports for Adult Online Learners: Comparing First- and Continuing-Generation College Students." *American Journal of Distance Education*, 27(2), 100–110. https://doi.org/10.1080/08923647.2013.783265
33. Ecl, C., Dh, I., Cc, M., Lc, C., Am, S., & Ec, C. (2015). "Anxiety and spirituality in university students : a cross-sectional study." *Revista Brasileira De Enfermagem*, 68(3), 444–449. http://doi.org/10.1590/0034-7167.2015680318i
34. Elliott, T. R., Frank, R. G., & Brownlee-Duffeck, M. (1988). "Clinical inferences about depression and physical disability." *Professional Psychology: Research and Practice*, 19(2), 206–210. https://doi.org/http://dx.doi.org/10.1037/0735-7028.19.2.206
35. Enriquez, A. G., Pong, W., Ozer, N. M., Ha, id M., & Jiang, H. (2014). "Developing a summer engineering program for improving the preparation and self-efficacy of underrepresented students" *Developing a Summer Engineering Program for Improving the Preparation. In 121st ASEE Annual Conference and Exposition* (pp. 1–24).
36. Ezeofor, I., & Lent, R. W. (2014). "Social cognitive and self-construal predictors of well-being among African college students in the US." *Journal of Vocational Behavior*, 85(3), 413–421. https://doi.org/10.1016/j.jvb.2014.09.003
37. Ferrari, J. R., Drexler, T., & Skarr, J. (2015). "Finding a Spiritual Home : A Pilot Study on the Effects of a Spirituality Retreat and Loneliness among Urban Homeless Adults," (February), 210–216.
38. Fichten, C. S., & Amsel, R. (1988). "Thoughts concerning interaction between college students who have a physical disability and their non- disabled peers." *Rehabilitation Counseling Bulletin*, 32(1), 22–40.
39. Finch, A. R. (2016). "Social Identity and Social / Academic Self-Efficacy Among First-Generation (Versus Non-First-Generation) College Students, (February)".
40. Findley, P. A., Plummer, S.-B., & McMahon, S. (2015). "Exploring the Experiences of Abuse of College Students With Disabilities." *Journal of Interpersonal Violence*, 0886260515581906-. https://doi.org/10.1177/0886260515581906
41. Freire, C. (2014). "Academic Misconduct Among Portuguese Economics and Business Undergraduate Students- A Comparative Analysis with Other Major Students." *Journal of Academic Ethics*, 12(1), 43–63.

42. Fulton, J. J., Marcus, D. K., & Zeigler-Hill, V. (2014). "Psychopathic Personality Traits, Risky Sexual Behavior, and Psychological Adjustment Among College-Age Women." *Journal of Social and Clinical Psychology*, 33(2), 143–168. https://doi.org/10.1521/jscp.2014.33.2.143
43. Garner, P. W., Mahatmya, D., Brown, E. L., & Vesely, C. K. (2014). "Promoting Desirable Outcomes Among Culturally and Ethnically Diverse Children in Social Emotional Learning Programs: A Multilevel Heuristic Model." *Educational Psychology Review*, 26(1), 165–189. https://doi.org/10.1007/s10648-014-9253-7
44. Garriott, P. O., Hudyma, A., Keene, C., & Santiago, D. (2015). "Social cognitive predictors of first- and non-first-generation college students' academic and life satisfaction." *Journal of Counseling Psychology*, 62(2), 253–263. https://doi.org/10.1037/cou0000066
45. Gibbons, M. M., & Borders, L. D. (2010). "Prospective First-Generation College Students: A Social-Cognitive Perspective." *The Career Development Quarterly*, 58(3), 194–208. https://doi.org/10.1002/j.2161-0045.2010.tb00186.x
46. Gibbons, M. M., & Shoffner, M. F. (2004). "Prospective First-Generation College Students : Meeting Their. ASCA, "8(1), 91–97.
47. Goodboy, A. K., Martin, M. M., & Goldman, Z. W. (2016). "Students' Experiences of Bullying in High School and Their Adjustment and Motivation During the First Semester of College." *Western Journal of Communication*, 80(1), 60–78. https://doi.org/10.1080/10570314.2015.1078494
48. Gutter, M., & Copur, Z. (2011). "Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey." *Journal of Family and Economic Issues*, 32(4), 699–714. https://doi.org/10.1007/s10834-011-9255-2
49. Hailu, T. E., & Ku, H. (2014). "The Adaptation of the Horn of Africa" *Immigrant Students in Higher Education*, 19, 1–19.
50. Harley, D. A., Nowak, T. M., Gassaway, L. J., & Savage, T. A. (2002). "Lesbian, gay, bisexual, and transgender college students with disabilities: A look at multiple cultural minorities." *Psychology in the Schools*, 39(5), 525–538. https://doi.org/10.1002/pits.10052
51. Hasson-Ohayon, I., Hertz, I., Vilchinsky, N., & Kravetz, S. (2014). "Attitudes toward the sexuality of persons with physical versus psychiatric disabilities." *Rehabilitation Psychology*, 59(2), 236–41. https://doi.org/10.1037/a0035916
52. Hersh, M. a., & Hussong, A. M. (2006). "High school drinker typologies predict alcohol involvement and psychosocial adjustment during acclimation to college." *Journal of Youth and Adolescence*, 35(5), 741–754. https://doi.org/10.1007/s10964-006-9067-0
53. Herts, K. L., Wallis, E., & Maslow, G. (2014). "College Freshmen with Chronic Illness: A Comparison With Healthy First-Year Students." *Journal of College Student Development*, 55(5), 475–480. https://doi.org/10.1353/csd.2014.0052
54. Hutz, A., Martin, W. E., & Beitel, M. (2007). "Ethnocultural person–environment fit and college adjustment: Some implications for college counselors." *Journal of College Counseling*, 10, 130–141
55. Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durõn, K. M. (2013). "First-generation undergraduate students' social support, depression, and life satisfaction." *Journal of College Counseling*, 16(2), 129–142. https://doi.org/10.1002/j.2161-1882.2013.00032.x
56. Jennings, W. G., Gover, A. R., & Pudrzynska, D. (2007). "Are Institutions of Higher Learning Safe? A Descriptive Study of Campus Safety Issues and Self-Reported Campus Victimization among Male and Female College Students." *Journal of Criminal Justice Education*, 18(2), 191–208. https://doi.org/10.1080/10511250701383327
57. Jenson, R. J., Petri, A. N., Day, A. D., Truman, K. Z., & Duffy, K. (2010). "Perceptions of Self-Efficacy among STEM Students with Disabilities." *Journal of Postsecondary Education and Disability*, 24(4), 269–283.
58. Johnson, D. R., Wasserman, T. H., Yildirim, N., & Yonai, B. a. (2014). "Examining the Effects of Stress and Campus Climate on the Persistence of Students of Color and White Students: An Application of Bean and Eaton's Psychological Model of Retention." *Research in Higher Education*, 55(1), 75–100. https://doi.org/10.1007/s11162-013-9304-9
59. Kanabur, V., & Reddy, R. P. L. (2014). "A Study on Influence of Formal Food and Nutrition Education on Dietary Behaviour among Female Young Adults" *The International Journal of Humanities and social Studies*, 2(4), 24–27.
60. Kanitkar, A. (2004). "Student Loans and Suicide." *Economic & Political Weekly*, (september 4), 3980.
61. Karimipour, M., & Md.Sawar, S. S. (2015). "Scrutinizing the Effect of Spirituality on Huffaz students Mental Health In Itqan Institute." *Research Journal of Social Science and Management*, 5(7), 92–
62. Kawabata, Y., Tseng, W. L., Murray-Close, D., & Crick, N. R. (2012). "Developmental trajectories of chinese children's relational and physical aggression: Associations with social-psychological adjustment problems." *Journal of Abnormal Child Psychology*, 40(7), 1087–1097. https://doi.org/10.1007/s10802-012-9633-8
63. Kelly, B. T., & Torres, A. (2006). "Campus safety: Perceptions and experiences of women students." *Journal of College Student Development*, 47(1), 20–36. https://doi.org/10.1016/j.palaeo.2005.11.042
64. Khazem, L. R., Jahn*, D. R., Cukrowicz, K. C., & Anestis, M. D. (2015). "Physical Disability and the Interpersonal Theory of Suicide." *Death Studies*, 39(10), 641–646. https://doi.org/10.1080/07481187.2015.1047061
65. Kim, Y. K., & Sax, L. J. (2014). "The Effects of Student–Faculty Interaction on Academic Self-Concept: Does Academic Major Matter?" *Research in Higher Education*, 55(8), 780–809. https://doi.org/10.1007/s11162-014-9335-x
66. Klemme Larson, R. E., Bell, A. a., & Larson, R. E. K. (2013). "Newcomer Adjustment Among Recent College Graduates: An Integrative Literature Review." *Human Resource Development Review*, 12(3), 284–307. https://doi.org/10.1177/1534484313475869
67. Koca-Atabey, M., Karanci, a N., Dirik, G., & Aydemir, D. (2011). "Psychological wellbeing of Turkish university students with physical impairments: an evaluation within the stress-vulnerability paradigm." *International Journal of Psychology : Journal International de Psychologie*, 46(2), 106–18. https://doi.org/10.1080/00207594.2010.513413
68. Kong, H., & Chan, J. W. K. Y. Y. (2014). "Parents ' Religious Involvement , Family Socialization and Development of Their Children in a Chinese Sample." *Social Indicators Research*, 117, 987–1010. http://doi.org/10.1007/s11205-013-0371-2
69. LaBrie, J. W., Ehret, P. J., Hummer, J. F., & Prenovost, K. (2012). "Poor adjustment to college life mediates the relationship between drinking motives and alcohol consequences: A look at college adjustment, drinking motives, and drinking outcomes." *Addictive Behaviors*, 37(4), 379–386. https://doi.org/10.1016/j.addbeh.2011.11.018
70. Laible, D. J., Carlo, G., & Raffaelli, M. (2000). "The differential relations of parent and peer attachment to adolescent adjustment." *Journal of Youth and Adolescence*, 29(1), 45–59. https://doi.org/10.1023/A
71. Lau, W. W. F., Hui, C. H., Lam, J., Lau, E. Y. Y., & Cheung, S.-F. (2015). "The relationship between spirituality and

cross-lagged panel analysis." *Higher Education*, 69(6), 977–990. http://doi.org/10.1007/s10734-014-9817-y

72. Lee, D. S., & Padilla, A. M. (2014). "Acculturative Stress and Coping: Gender Differences Among Korean and Korean American University Students". *Journal of College Student Development*, 55(3), 243–262. https://doi.org/10.1353/csd.2014.0025
73. Lent, R. W., Miller, M. J., Smith, P. E., Watford, B. a., Lim, R. H., Hui, K.,Williams, K. (2013). "Social cognitive predictors of adjustment to engineering majors across gender and race/ethnicity." *Journal of Vocational Behavior*, 83(1), 22–30. https://doi.org/10.1016/j.jvb.2013.02.006
74. Litzler, E., Samuelson, C. C., & Lorah, J. a. (2014). "Breaking it Down: Engineering Student STEM Confidence at the Intersection of Race/Ethnicity and Gender." *Research in Higher Education*, 55(8), 810–832. https://doi.org/10.1007/s11162-014-9333-z
75. Livneh, H., & Wilson, L. M. (2003). "Coping Strategies as Predictors and Mediators of Disability-Related Variables and Psychosocial Adaptation: An Exploratory Investigation." *Rehabilitation Counseling Bulletin*, 46(4), 194–208. https://doi.org/10.1177/003435520304600401
76. Longo, G. S., & Kim-Spoon, J. (2013). "Homesickness in college students: The role of religion in combating depression." *Mental Health, Religion & Culture*, 16(5), 489-500.
77. Low, K. G. (2011). "Flourishing, substance use, and engagement in students entering college: a preliminary study." *Journal of American College Health : J of ACH*, 59(6), 555–561. https://doi.org/10.1080/07448481.2011.563432
78. Lub, X. D., Bal, P. M., Blomme, R. J., & Schalk, R. (2016). "One job, one deal…or not: do generations respond differently to psychological contract fulfillment?" *The International Journal of Human Resource Management*, 27(6), 653–680. https://doi.org/10.1080/09585192.2015.1035304
79. Lyons, H. A., Manning, W. D., Longmore, M. A., & Giordano, P. C. (2015). "Gender and Casual Sexual Activity From Adolescence to Emerging Adulthood: Social and Life Course Correlates." *The Journal of Sex Research*, 52(5), 543–557. https://doi.org/10.1080/00224499.2014.906032
80. Majer, J. M. (2009). "Self-efficacy and academic success among ethnically diverse first-generation community college students." *Journal of Diversity in Higher Education*, 2(4), 243–250. https://doi.org/10.1037/a0017852
81. Manning, P., Pring, L., & Glider, P. (2012). "Relevance of Campus Climate for Alcohol and Other Drug Use among LGBTQ Community College Students: A Statewide Qualitative Assessment." *Community College Journal of Research and Practice*, 36(7), 494–503. https://doi.org/10.1080/10668926.2012.664088
82. McQuiller Williams, L., & Porter, J. L. (2014). "A Comparison of Deaf College Students' and Hard of Hearing College Students' Experiences and Risk Factors of Psychological and Physical Abuse." *SAGE Open* , 4(1). https://doi.org/10.1177/2158244013518930
83. Mehrinejad, S. A., Rajabimoghadam, S., & Tarsafi, M. (2015). "The Relationship between Parenting Styles and Creativity and the Predictability of Creativity by Parenting Styles." *Procedia-Social and Behavioral Sciences*, 205, 56-60.
84. Mergler, G, A., & Boman, P. (2014). "Managing the transition : the role of optimism and self-efficacy for first-year Australian university students." *Australian Journal of Guidance and CounSelling*, 24(1), 90–108.
85. Miller, S., Ross, S., & Cleland, J. (2009). "Medical students' attitudes towards disability and support for disability in medicine." *Medical Teacher*, 31(6), E272–E277.
86. Moreno, M., Besterfield-Sacre, M., Shuman, L. J., Wolfe, H., & Atman, C. J. (2000). "Self-assessed confidence in EC-2000 outcomes: a study of gender and\nethnicity differences across institutions." *In 30th Annual Frontiers in Education Conference. Building on A Century of Progress in Engineering Education. Conference Proceedings* (IEEE Cat. No.00CH37135) (Vol. 1, pp. 23–28). http://doi.org/10.1109/FIE.2000.897524
87. Murray, C., Lombardi, A., Bender, F., & Gerdes, H. (2013). "Social support: Main and moderating effects on the relation between financial stress and adjustment among college students with disabilities." *Social Psychology of Education*, 16(2), 277–295. https://doi.org/10.1007/s11218-012-9204-4
88. Mustafa, S., Melonashi, E., Shkembi, F., Besimi, K., & Fanaj, N. (2015). "Anxiety and Self-esteem among University Students: Comparison between Albania and Kosovo." *Procedia - Social and Behavioral Sciences*, 205(May), 189–194. https://doi.org/10.1016/j.sbspro.2015.09.057
89. Naruetharadhol, P., Ketkaew, C., Kerdpech, P., Kaoplod, P., & Kannarat, R. (2015). "Prospective Human Capital: How Materialistic are Thai College Students? An Analysis of Spending Tendencies and Debts." *Procedia - Social and Behavioral Sciences*, 195(March), 258–267. https://doi.org/10.1016/j.sbspro.2015.06.357
90. Nightingale, S. M., Roberts, S., Tariq, V., Appleby, Y., Barnes, L., Harris, R. A.,Qualter, P. (2013). "Trajectories of university adjustment in the United Kingdom: Emotion management and emotional self-efficacy protect against initial poor adjustment." *Learning and Individual Differences*, 27, 174–181. https://doi.org/10.1016/j.lindif.2013.08.004
91. Nikfal Azar, N., & Reshadatjoo, H. (2014). "Designing a model to improve first year student adjustment to university." *Management Science Letters*, 4(5), 1051–1058. https://doi.org/10.5267/j.msl.2014.3.003
92. Norvilitis, J. M. (2014). "Changes over Time in College Student Credit Card Attitudes and Debt: Evidence from One Campus." *Journal of Consumer Affairs*, 48(3), 634–647. https://doi.org/10.1111/joca.12043
93. Nunn, P. D., Mulgrew, K., Scott-Parker, B., Hine, D. W., Marks, A. D. G., Mahar, D., & Maebuta, J. (2016). "Spirituality and attitudes towards Nature in the Pacific Islands: insights for enabling climate-change adaptation." *Climatic Change*, 1–17. http://doi.org/10.1007/s10584-016-1646-9
94. Nyamayaro, P. C., & Saravanan, C. (2013). "The Relationship Between Adjustment and Negative." *Asian Journal of Social Sciences and Humanities*, 2(3), 270–278.
95. O'Shea, S. (2014). "Transitions and turning points: exploring how first-in-family female students story their transition to university and student identity formation." *International Journal of Qualitative Studies in Education*, 27(2), 135–158. https://doi.org/10.1080/09518398.2013.771226
96. Obrusnikova, I., Dillon, S. R., & Block, M. E. (2011). "Middle School Student Intentions to Play with Peers with Disabilities in Physical Education: Using the Theory of Planned Behavior." *Journal of Developmental and Physical Disabilities*, 23(2), 113–127. https://doi.org/10.1007/s10882-010-9210-4
97. Okoye, U. O. (2010). "Support systems and coping strategies available to physically challenged students in University of Nigeria , Nsukka." *Educational Research*, 1(December), 666–671.
98. Ozer, S. (2015). "Predictors of international students' psychological and sociocultural adjustment to the context of reception while studying at Aarhus University, Denmark." *Scandinavian Journal of Psychology*, 56(6), 717–725. https://doi.org/10.1111/sjop.12258

99. Panizzon, D., & Levins, L. (1997). "An analysis of the role of peers in supporting female students choices in science subjects." Research in Science Education, 27(2), 251–270. https://doi.org/10.1007/BF02461320
100. Park, N., Song, H., & Lee, K. M. (2014). "Social networking sites and other media use, acculturation stress, and psychological well-being among East Asian college students in the United States." Computers in Human Behavior, 36, 138–146. https://doi.org/10.1016/j.chb.2014.03.037
101. Pasha, H. S., & Munaf, S. (2013). "Relationship of Self-esteem and Adjustment in Traditional University Students." Procedia - Social and Behavioral Sciences, 84(1988), 999–1004. https://doi.org/10.1016/j.sbspro.2013.06.688
102. Patton, R. C., & Gregory, D. E. (2014). "Perceptions of safety by on-campus location, rurality, and type of security/police force: The case of the community college." Journal of college student development, 55(5), 451-460.
103. Penny Wan, Y. K., Wong, I. K. A., & Kong, W. H. (2014). "Student career prospect and industry commitment: The roles of industry attitude, perceived social status, and salary expectations." Tourism Management, 40, 1–14. https://doi.org/10.1016/j.tourman.2013.05.004
104. Pham, C., & Keenan, T. (2011). "Counseling and college matriculation : Does the availability of counseling affect college-going decisions among highly qualified first-generation college-bound high school graduates?" Journal of Applied Economics and Business Research, 1(February), 12–24.
105. Piña-Watson, B., López, B., Ojeda, L., & Rodriguez, K. M. (2015). "Cultural and cognitive predictors of academic motivation among Mexican American adolescents: Caution against discounting the impact of cultural Processes." Journal of Multicultural Counseling and Development, 43(2), 109–121. https://doi.org/10.1002/j.2161-1912.2015.00068.x
106. Pottie, K., Dahal, G., Georgiades, K., Premji, K., & Hassan, G. (2014). "Do First Generation Immigrant Adolescents Face Higher Rates of Bullying, Violence and Suicidal Behaviours Than Do Third Generation and Native Born?" Journal of Immigrant and Minority Health, 17(5), 1557–1566. https://doi.org/10.1007/s10903-014-0108-6
107. Rajiah, K., Coumaravelou, S., & Ying, O. W. (2014). "Relationship of Test Anxiety , Psychological Distress and Academic Motivation among First Year Undergraduate Pharmacy Students." International Journal of Applied Psychology, 4(2), 68–72. https://doi.org/10.5923/j.ijap.20140402.04
108. Ramos-Sánchez, L., & Nichols, L. (2007). "Self-efficacy of first-generation and non-first-generation college students: The relationship with academic performance and college adjustment." Journal of College Counseling, 10(1), 6–18. https://doi.org/10.1002/j.2161-1882.2007.tb00002.x
109. Ramudzuli, P. M., & Muzindutsi, P.-F. (2015). "Financial knowledge and subjective financial risk tolerance among students at a South African university." Risk Governance & Control: Financial Markets & Institutions, 5(3), 180–185.
110. Ranjit, N., Evans, A. E., Springer, A. E., Hoelscher, D. M., & Kelder, S. H. (2015). "Racial and ethnic differences in the home food environment explain disparities in dietary practices of middle school children in Texas." Journal of Nutrition Education and Behavior, 47(1), 53–60. https://doi.org/10.1016/j.jneb.2014.09.001
111. Ratelle, C. F., & Duchesne, S. (2014). "Trajectories of Psychological Need Satisfaction From Early to Late Adolescence as a Predictor This study was supported by the Canada Research Chair Program , the Social Sciences." Contemporary Educational Psychology, 39, 388–400. https://doi.org/10.1016/j.cedpsych.2014.09.003
112. Rodríguez Martín, A., & Álvarez Arregui, E. (2013). "Development and validation of a scale to identify attitudes towards disability in Higher Education." Psicothema, 25(February), 370–6. https://doi.org/10.7334/psicothema2013.41
113. Rooijen, A. L. Van. (1986). "Advanced students adaptation to college." Higher Education, 15(3), 197–209.
114. Rout, H. S. (2010). "Gender and Household Health Expenditure in Odisha," India. Journal of Health Management, 12(4), 445–460. https://doi.org/10.1177/097206341001200403
115. Russell, J., Rosenthal, D., & Thomson, G. (2010). "The international student experience: Three styles of adaptation." Higher Education, 60(2), 235–249. https://doi.org/10.1007/s10734-009-9297-7
116. Sanders, P. W., Allen, G. E. K., Fischer, L., Richards, P. S., Morgan, D. T., & Potts, R. W. (2015). "Intrinsic Religiousness and Spirituality as Predictors of Mental Health and Positive Psychological Functioning in Latter-Day Saint Adolescents and Young Adults." Journal of Religion and Health, 54(3), 871–887. http://doi.org/10.1007/s10943-015-0043-4
117. Schnuck, J., & Handal, P. J. (2011). "Adjustment of college freshmen as predicted by both perceived parenting style and the five factor model of personality—Personality and adjustment." Psychology, 2(04), 275.
118. Schwartz, J. P., & Buboltz, W. C. (2004). "The relationship between attachment to parents and psychological separation in college students." Journal of College Student Development, 45(5), 566-577.
119. Sciacca, J. P., Melby, C. L., Hyner, G. C., Brown, a C., & Femea, P. L. (1991). "Body Mass Index and perceived weight status in young adults." Journal of Community Health, 16(January 1991), 159–168. https://doi.org/10.1007/BF01323974
120. Seong, C. (2014). "College Freshmen's Self-Efficacy, Effort Regulation, Perceived Stress and their Adaptation to College." Asian Journal of Humanities and Social Sciences (AJHSS), 2(2), 107–117.
121. Shaikh, M. A., Kamal, A., & Naqvi, I. (2015). "Gender association of prayer for health - perspective from university students in Islamabad and Rawalpindi. JPMA." The Journal of the Pakistan Medical Association, 65(10), 1116–8. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/26440845
122. Sher, K., & Wood, P. (1970). "The course of psychological distress in college: A prospective high-risk study." Journal of College Student Development, 37(1), 42–51. Retrieved from http://psycnet.apa.org/psycinfo/1996-94176-004
123. Shields, N. (2002). "Anticipatory socialization, adjustment to university life, and perceived stress: Generational and sibling effects." Social Psychology of Education, 5(4), 365–392. https://doi.org/http://dx.doi.org/10.1023/A:1020929822361
124. Sica, L. S., Aleni Sestito, L., & Ragozini, G. (2014). "Identity Coping in the First Years of University: Identity Diffusion, Adjustment and Identity Distress." Journal of Adult Development, 21(3), 159–172. https://doi.org/10.1007/s10804-014-9188-8
125. Sinha, V. K. (2014). "A Study of Emotional Maturity and Adjustment of College Student." Indian Journal of Applied Research, (May), 594–595.
126. Smith, M. K., Vinson, E. L., Smith, J. a., Lewin, J. D., & Stetzer, M. R. (2014). "A Campus-Wide Study of STEM Courses: New Perspectives on Teaching Practices and Perceptions." Cell Biology Education, 13(4), 624–635. https://doi.org/10.1187/cbe.14-06-0108
127. Stan, M. M. (2013). "Cognitive Predictors of Academic Acquisitions in Mathematics at the Beginning of School." Procedia - Social and Behavioral Sciences, 78, 677–681.

128. Stebleton, M. J., Soria, K. M., Huesman, R. L., & Torres, V. (2014). "Recent Immigrant Students at Research Universities: The Relationship Between Campus Climate and Sense of Belonging." *Journal of College Student Development*, 55(2), 196–202. https://doi.org/10.1353/csd.2014.0019

129. Stock, C., Wille, L., & Krämer, A. (2001). "Gender-specific health behaviors of German university students predict the interest in campus health promotion." *Health Promotion International*, 16(2), 145–154. https://doi.org/10.1093/heapro/16.2.145

130. Stotzer, R. L., & Hossellman, E. (2012). "Hate Crimes on Campus: Racial/Ethnic Diversity and Campus Safety." *Journal of Interpersonal Violence*, 27(4), 644–661. https://doi.org/10.1177/0886260511423249

131. Swart, E., & Greyling, E. (2011). "Participation in higher education: experiences of students with disabilities." *Acta Academica*, 43(4), 81–110.

132. Tate, K. a., Fouad, N. a., Marks, L. R., Young, G., Guzman, E., & Williams, E. G. (2015). "Underrepresented First-Generation, Low-Income College Students' Pursuit of a Graduate Education: Investigating the Influence of Self-Efficacy, Coping Efficacy, and Family Influence." *Journal of Career Assessment*, 23(3), 427–441. https://doi.org/10.1177/1069072714547498

133. Thornton, A. M., Bricheno, P., Iyer, P., Reid, I., Wankhede, G., & Green, R. (2016). "Title : Getting diverse students and staff to talk about integration on campus , and what they say when they do : A UK-India collaborative case study, (February). 27. 12(2), 447 – 463.

134. Tomás, R. A., Ferreira, J. A., Araújo, A. M., & Almeida, L. S. (2014). "Personal and emotional adaptation in University's environment: contribution of personality, social support and emotional intelligence." *Revista Portuguesa de Pedagogia*, 48(2), 87–107. https://doi.org/10.14195/1647-8614_48-2_5

135. Tomasso, C. D. S., Beltrame, I. L., & Lucchetti, G. (2011). "Knowledge and attitudes of nursing professors and students concerning the interface between spirituality, religiosity and health." Revista *Latino-Americana de Enfermagem*, 19(5), 1205–1213. http://doi.org/10.1590/S0104-11692011000500019

136. Touri, B., Talbi, M., Soubhi, F. Z., & Lima, L. (2014). "Psycho-communication Disorders among Moroccan University Hard Science Major Students." *Procedia - Social and Behavioral Sciences*, 116(April 2016), 5058–5062. https://doi.org/10.1016/j.sbspro.2014.01.1073

137. Tynes, B. M., Rose, C. a, & Markoe, S. L. (2013). "Extending campus life to the Internet: Social media, discrimination, and perceptions of racial climate." *Journal of Diversity in Higher Education*, 6(2), 102–114. https://doi.org/http://dx.doi.org/10.1037/a0033267

138. Uecker, J. E. (2015). "Social context and sexual intercourse among first-year students at selective colleges and universities in the United States." *Social Science Research*, 52, 59–71. https://doi.org/10.1016/j.ssresearch.2015.01.005

139. Utter, J., Denny, S., Crengle, S., Ameratunga, S., Clark, T., Maddison, R., & Percival, T. (2011). "Socio-economic differences in eating-related attitudes, behaviours and environments of adolescents." *Public health nutrition*, 14(04), 629-634.

140. Vaz, S., Cordier, R., Falkmer, M., Ciccarelli, M., Parsons, R., McAuliffe, T., & Falkmer, T. (2015). "Should schools expect poor physical and mental health, social adjustment, and participation outcomes in students with disability?" *PLoS ONE*, 10(5). https://doi.org/10.1371/journal.pone.0126630

141. Vichayanrat, T., & Kositpumivate, W. (2014). "Oral health conditions and behaviors among hearing impaired and normal hearing college students at Ratchasuda College, Nakhon Pathom, Thailand." *Southeast Asian Journal of Tropical Medicine and Public Health*, 45(5), 1228.

142. Villarroel, A. M., Penelo, E., Portell, M., & Raich, R. M. (2011). "Screening for eating disorders in undergraduate women: Norms and validity of the spanish version of the eating disorder examination questionnaire (EDE-Q)." *Journal of Psychopathology and Behavioral Assessment*, 33(1), 121–128. https://doi.org/10.1007/s10862-009-9177-6

143. Way, N., Reddy, R., & Rhodes, J. (2007). "Students' Perceptions of School Climate During the Middle School Years: Associations with Trajectories of Psychological and Behavioral Adjustment." *American Journal of Community Psychology*, 40(3–4), 194–213. https://doi.org/10.1007/s10464-007-9143-y

144. Wehman, P. (2001). "Postsecondary Education and Disability." *Journal of Vocational Rehabilitation*, 25(1), 1–98.

145. Wehmeyer, M. (1997). "Self-determination as an educational outcome: A definitional framework and implications for intervention." *Journal of Developmental and Physical Disabilities*, 9(3), 175–209. https://doi.org/http://dx.doi.org/10.1023/A:1024981820074

146. Wen, M. L.-Y., & Lin, D. Y.-C. (2013). "Does Psychological Capital Combat Learning and Adaptive Stress of College Freshmen." *Journal of Studies in Education*, 4(1), 25. https://doi.org/10.5296/jse.v4i1.4684

147. White, C. J. (2013). "Higher education emotions: a scale development exercise." *Higher Education Research & Development*, 32(2), 287–299. https://doi.org/10.1080/07294360.2012.674496

148. Wilson, C. P., Wilson, S. a., & Chamberlain, J. M. (2015). "Evaluating legitimacy and marginalization: Campus policing in the State of Rhode Island." *Cogent Social Sciences*, 1(1), 1006091. https://doi.org/10.1080/23311886.2015.1006091

149. Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). "Occupational stress in Australian university staff: Results from a national survey." *International Journal of Stress Management*, 10(1), 51–63. https://doi.org/10.1037/1072-5245.10.1.51

150. Wiswall, M., & Zafar, B. (2014). "Determinants of College Major Choice: Identi...cation using an Information Experiment." *The Review of Economic Studies*, 82(2), 791–824. https://doi.org/10.1093/restud/rdu044

151. Wohn, D. Y., & Larose, R. (2014). "Effects of loneliness and differential usage of Facebook on college adjustment of first-year students." *Computers and Education*, 76, 158–167. https://doi.org/10.1016/j.compedu.2014.03.018

152. Woodford, M. R., & Kulick, A. (2014). "Academic and Social Integration on Campus Among Sexual Minority Students: The Impacts of Psychological and Experiential Campus Climate." *American Journal of Community Psychology*, 55(1–2), 13–24. https://doi.org/10.1007/s10464-014-9683-x

153. Woodford, M. R., Silverschanz, P., Swank, E., Scherrer, K. S., & Raiz, L. (2012). "Predictors of heterosexual college students' attitudes toward LGBT people. Journal of LGBT Youth" 9(4), 297–320. https://doi.org/10.1080/19361653.2012.716697

154. Worthy, S. L., Jonkman, J., & Blinn-Pike, L. (2010). "Sensation-Seeking, Risk-Taking, and Problematic Financial Behaviors of College Students." *Journal of Family and Economic Issues*, 31(2), 161–170. https://doi.org/10.1007/s10834-010-9183-6

155. Way, N., Reddy, R., & Rhodes, J. (2007). "Students' Perceptions of School Climate During the Middle School Years: Associations with Trajectories of Psychological and Behavioral Adjustment." *American Journal of Community Psychology*, 40(3–4), 194–213. https://doi.org/10.1007/s10464-007-9143-y

156. Wehman, P. (2001). "Postsecondary Education and

157. Wehmeyer, M. (1997). "Self-determination as an educational outcome: A definitional framework and implications for intervention." *Journal of Developmental and Physical Disabilities*, 9(3), 175–209. https://doi.org/http://dx.doi.org/10.1023/A:1024981820074
158. Wen, M. L.-Y., & Lin, D. Y.-C. (2013). "Does Psychological Capital Combat Learning and Adaptive Stress of College Freshmen." *Journal of Studies in Education*, 4(1), 25. https://doi.org/10.5296/jse.v4i1.4684
159. White, C. J. (2013). "Higher education emotions: a scale development exercise." *Higher Education Research & Development*, 32(2), 287–299. https://doi.org/10.1080/07294360.2012.674496
160. Wilson, C. P., Wilson, S. a., & Chamberlain, J. M. (2015). "Evaluating legitimacy and marginalization: Campus policing in the State of Rhode Island." *Cogent Social Sciences*, 1(1), 1006091. https://doi.org/10.1080/23311886.2015.1006091
161. Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). "Occupational stress in Australian university staff: Results from a national survey." *International Journal of Stress Management*, 10(1), 51–63. https://doi.org/10.1037/1072-5245.10.1.51
162. Wiswall, M., & Zafar, B. (2014). "Determinants of College Major Choice: Identi…cation using an Information Experiment." *The Review of Economic Studies*, 82(2), 791–824. https://doi.org/10.1093/restud/rdu044
163. Wohn, D. Y., & Larose, R. (2014). "Effects of loneliness and differential usage of Facebook on college adjustment of first-year students." *Computers and Education*, 76, 158–167. https://doi.org/10.1016/j.compedu.2014.03.018
164. Woodford, M. R., & Kulick, A. (2014). "Academic and Social Integration on Campus Among Sexual Minority Students: The Impacts of Psychological and Experiential Campus Climate." *American Journal of Community Psychology*, 55(1–2), 13–24. https://doi.org/10.1007/s10464-014-9683-x
165. Woodford, M. R., Silverschanz, P., Swank, E., Scherrer, K. S., & Raiz, L. (2012). "Predictors of heterosexual college students' attitudes toward LGBT people. Journal of LGBT Youth" 9(4), 297–320. https://doi.org/10.1080/19361653.2012.716697
166. Worthy, S. L., Jonkman, J., & Blinn-Pike, L. (2010). "Sensation-Seeking, Risk-Taking, and Problematic Financial Behaviors of College Students." *Journal of Family and Economic Issues*, 31(2), 161–170. https://doi.org/10.1007/s10834-010-9183-6
167. Yadav, R., & Khanna, A. (2014). "Impact of Spirituality on Stress: With the Special Reference of Engineering Students of Indian Institute of Technology." *Research on Humanities and Social Science*, 4(25), 29–35.
168. Yang, H., & Chang, E. C. (2016). "Is the PGIS-II redundant with the Hope Scale?: Evidence for the utility of the PGIS-II in predicting psychological adjustment in adults." *Personality and Individual Differences*, 94(January), 124–129. https://doi.org/10.1016/j.paid.2016.01.019
169. Yarnold, P. (2016). "Pairwise Comparisons using UniODA vs . Not Log-Linear Model : Ethnic Group and Schooling in the 1980 Census Pairwise Comparisons using UniODA vs . Not Log-Linear Model : Ethnic Group and Schooling in the 1980 Census." *Optimal Data Analysis*, 5(May), 19–23.
170. Yazedjian, A., Toews, M. L., & Navarro, A. (2009). "Exploring Parental Factors, Adjustment, and Academic Achievement Among White and Hispanic College Students." *Journal of College Student Development*, 50(4), 458–467. https://doi.org/10.1353/csd.0.0080
171. Zamostny, K. P., Slyter, S. L., & Rios, P. (1993). "Narcissistic injury and its relationship to early trauma, early resources, and adjustment to college." *Journal of Counseling Psychology*, 40(4), 501–510. https://doi.org/10.1037/0022-0167.40.4.501
172. Zang, A. Y. (2012). "Evidence on the tradeoff between real manipulation and accrual manipulation." *The Accounting Review*, 87(2), 675–703.
173. Zhao, C.-M., Kuh, G. D., & Carini, R. M. (2005). "A Comparison of International Student and American Student Engagement in Effective Educational Practices." *The Journal of Higher Education*, 76(2), 209–231. https://doi.org/10.1353/jhe.2005.0018.

International Journal of Research in Advent Technology, Vol.6, No.7, July 2018
E-ISSN: 2321-9637
Available online at www.ijrat.org

Campus Environment–A Study of Adjustment versus Adaptation on Academic Forefront

Dr.Vijayalakshmi N.S, Dr. A.H.Sequeira
Faculty, Post Graduate Department of Economics
University College Mangalore, Hampankatta
Mangalore – 575001
Email: - nandalike17@gmail.com
School of Management
N.I.T.K surathkal
Mangalore – 575025
Email: - aloysiushs@gmail.com ahs@nitk.edu.in

Abstract- Campus environments are studied to improve students' quality of life and well-being that enhance transforming their total educational experiences. The focus is to understand student's perception of academic environment which by default has to be academically fulfilling juxtaposing between adjustments towards adaptation. Thus, student experiences on academic forefront necessitates for adaptation which is undoubtedly through multiple componential level of student adjustments.

1. INTRODUCTION

1.1 Academic Adjustment

Academic adjustment and attachment best predicts academic success of students (Fastre et al., 2008) who keep refining academic goals (Sheldon, 2008). The adjustment to the university also has its say majorly on academic performance (Petersen et al.,2009) as adjustment problems faced by students also vary by faculty perceptions (Jenkins & Galloway, 2009). The prominent among them being curriculum adjustment towards academic performance (Chang et al.,2009) with self-efficacy and motivation determining the academic adjustment of students in higher education institutions (Thomas et al., 2009). Further with motivation and learning strategies determining academic adjustment of college students (Cazan & Anitei, 2010), the academic achievement on the fore lore of academic adjustment among first-year college students (Calaguas, 2011) makes academic self-concept churn academic adjustment in higher education (Wouters et al., 2011). Academic adjustment in found gendered among students of minority race (Kiang et al.,2012) with students adjustment to college differing by gender and study level of academic year (Al-Khatib et al., 2012) and having its say on self-regulated learning of academic adjustment (Cazan, 2012). The extra-curricular involvement also derails academic adjustment and achievement in higher education (Leandro et al., 2012). Thus academic achievement impacts college adjustment of students (Sangeeta & Chirag, 2012). Students' academic adjustment also relies on english language difficulty that acts as a barrier impacting social adjustment which indirectly influences academic adjustment at university (Sam et al., 2013). Students with specific types of reading spelling disorders also differ in their adjustment problems (Müller et al.,2013).

Academic adjustment, social adjustment, psychological adjustment and institutional attachment varies among international students (Rajab et al.,2014) with academic adjustment to university (Clinciu & Cazan, 2014) predetermining academic resilience towards academic adjustment of first year students (Cazan, 2014). Academic self-efficacy along with academic motivation and satisfaction at college environment affects college adjustment of first-year students (Salmain et al.,2014). The academic self-efficacy positively influences adjustment to college (Azar & Reshadatjoo, 2014) with demographic variables impacting academic adjustment of first-year students (Adeniyi et al.,2014) and determining adjustment that delve to the academic achievement of students (Patel, 2014). Of late, even with test anxiety having its role in academic adjustment (Rana & Mahmood, 2015), supplemental instruction in engineering education enhances students to adjust to and succeed in university institutions (Malm et al.,2015).

1.2 Academic Adaptation

Adaptation level to university environments influences academic grades (Hewitt, 1975). The students adaptation to college in terms of academic adaptation differed by gender (Valeri-gold et al., 1998) with insights also largely snooping off adapting curriculum to patterns and perception of students of race and colour (Sawyer, 2000).

2. STRUCTURAL COMPONENTS OF ACADEMIC ENVIRONMENT

Age

Academic goal achievement changes with age (Cowan, 2011) as students of diverse age have a motivational conflict that develops only with age (Grund et al.,2015). Attendance in regular classroom teaching influences academic performance of students in engineering institutes in India (Singh & Rajoria, 2014) where increase in age negatively influences grades and lowers students academic performance (Ercan et al.,2013).The regular assessment of engineering courses, improves quality and it's an initiative drive to step up the academic performance of students across age groups (Grimoni & Nakao, 2007) while 'context - based' teaching of faculty that parts away from relating it to daily life are regarded as 'not – adequate' influencing academic performance of students adversely (Ültay & Usta, 2016). Thus, age influences the performance of students academically.

Gender

It is vital to debunk myths on gender and academic achievement (Kane & Mertz, 2012) as academic failure differs by gender where for male students teacher-student interaction and socio-demographic factors contribute towards it (Jeludar et al.,2012). The need for horizontal analysis of gender equality in different academic areas (Silander et al.,2013) stresses on academic experiences that differed among undergraduates on manhood and masculinity identities (Strayhorn & Tillman-Kelly, 2013). In brief, gender bias in engineering admission persists in Karnataka (Rajasenan, 2014) as fundamentally its gender difference in learning styles that impact academic performance of students (Rahimabadi, 2014). Lastly, teachers' effect on students creative self-beliefs is moderated by students gender (Karwowski et al.,2015). So gender difference exists in attitude, knowledge and career choice among students (Mudavanhu, 2016) influencing students overall academic success (Altermatt & Painter, 2016).

Disability

Learning difficulties are associated with the health status of students especially the ones with disability (Soubhi et al.,2015) At the academic forefront, individual differences and situational factors moderate relationships between physical disabilities and early career opportunities (Feldman, 2004). This increases the urge on the need to speed up recruitment strategies for disabled students in engineering (Martin et al., 2011) while ensuring employability skills valued by employers as important for entry-level employees with disabilities (Ju et al.,2012). On the other hand, faculty must show a positive attitude toward disability to promote inclusive practices using alternative methodologies, make curriculum adaptations, use new technologies and be trained in attending the needs derived from disabilities (Morina et al.,2015) who often when observed on the contrary distance their behaviours towards students with disabilities impacting the later academic performance (van Jaarsveldt & Ndeya-Ndereya, 2015). Faculties on the contrary face difficulties of adapting university teaching to students with disabilities (Alvarez-Perez, et al., 2012). The major block often noticed in this regard is attitudes of faculties that impacts inclusiveness of students with disabilities (Novo-Corti et al.,2015) and that it differed across institutions (Lombardi & Murray, 2011). Therefore faculty adaptation standard to teaching especially in favour of students with disabilities (Browder et al., 2012) need to sharpen faculty attitudes towards students with disabilities in regular classroom (Dukmak, 2013) impacting adaptation of academic course by disabled students (Di Nardo, 2014). In short, learning experiences of disabled students indicate need for more of inclusion practices (Kioko & Makoelle, 2014) as academic achievement does vary by disability (Dawn, 2007).

Academic year

Undergraduate students academic performance differed across academic levels of first to final year (Akinrefon & Adejumo, 2012) as knowledge and interest in engineering academic majors differ across academic levels from the first year to final years (Jin et al., 2012). Developing independent learning and non-technical skills amongst final year engineering students (Knobbs & Grayson, 2012) is possible by self-directed learning in the first year of engineering (Taratutin et al., 2012). The greatest help that could occur for first-year engineering students in transition is by promoting transformative learning in the student by faculty development (Leung et al.,2012). Added on an engineering introductory seminar course for first year engineering students (Fan et al., 2012) or an introduction of activity week into the first year of a chemical engineering undergraduate (Gan et al., 2012) may contribute to academic engagement influencing learning at four-year institution (Sinanan, 2012).

Moreover academically, the four main engineering elements which are inquiry, design, optimisation and sustainability differ from the first year to final year (Phang et al., 2012). As observed the first semester academic results in terms of fail or pass influences student motivation (Stanton & Siller, 2012) as it is students academic preparation with students backgrounds develop problem-solving skills in the first year that helps to close gap achievement gaps between diverse student population (Grigg & Benson, 2012). Academic engagement impacts students engagement in four-year institutions (Flynn, 2014) towards baccalaureate attainment of college students at 4-year institutions (Flynn, 2014). In short, though grades have a dampening effect on academic performance of students at post-secondary institutions (Rajandran et al., 2015 ; Jacobs et al., 2015) and varying perception of attendance of students across academic years (Lowder et al., 2015) could hopefully set right by seminar intervention to enhance first-year academic performance (Jacobs & Pretorius, 2016).

3. ACADEMIC MAJOR

Holistic approach is needed to develop engineering outcome from academic major programs (Al-atabi et al., 2013) by integrating multidisciplinary engineering knowledge (Wolffa & Lucke, 2013). For this hour of instruction has been impacting students competency in engineering academic majors (Perdigones et al.,2013). Further, though elite engineering education programme is a way to attract talented students into engineering (Chuchalin et al.,2013); critical thinking acts as a resilience factor in an engineering academic major program (Benitez & Canales, 2013). Moreover, digital proficiency leads to digital inclusion across academic major where information technology increases personal performance and professional knowledge and skills (Marques et al.,2013). Thus students who valued science and engineering courses planned to continue their education, made good grades and had varied types of career expectations for jobs as engineers (Mativo et al.,2013). Never the less, though students choice of academic major relies on image, interest, laboratory work, enrichment activities, and physics textbooks (Oon & Subramaniam, 2013); motivation and strategic self-regulation have impacted post-secondary students persistence in academic major (Shell & Soh, 2013) influencing academic performance (Murphy et al., 2013) and academic major achievement that reveres on test score and curriculum performance (Taniguchi et al., 2013). Campus-wide study of engineering academic major courses impacts teaching perceptions and practices (Smith et al.,2014) as teacher's ability determines students' performance in an academic major (Espinoza,2014). The merit-based academic major programs are more effective (Domina, 2014) paving way for learning experiences and role model predominance of female academic major choice (Bieri Buschor et al., 2014) perpetuating academic motivation on learning strategies that varies by academic domains like maths science which requires laborious learning than humanities major (Andrei et al.,2014). It was also felt that choice of engineering as an academic major was related to higher competencies in mathematics and placed more importance on pursuing investigative activities (Bieri Buschor et al., 2014). Moreover, the plethora of low representation of female staff to teach academic majors (Giannoula, 2014) has hard hit the departmental climate on student-faculty interaction varying by race of students and faculty accessibility (Kim & Sax, 2014) proving detrimental on attitudes (Ali et al.,2014) and anxiety levels of academic motivation and academic achievement in academic majors (Lavasani et al.,2014). Thus student representation in an academic major heavily relies on academic motivation (Alivernini et al., 2015; Maican et al.,2016) which needs to be massively strengthened especially in engineering education.

Religion

Religious faith impacts performance (Aruguete et al., 2012) where spiritual wellbeing influenced good academic achievement (Mansor & Syahidah, 2012). Religion influenced students academic major choice (Nudelman, 1972) which is supported of recent that religious variables are generally strong predictors of attitudes toward individual involving contested science issues like human evolution and other (Jelen & Lockett, 2014) as opposed to students perceptions of conflict on dichotomy of religion and science (Martin-Hansen, 2008). The frequency of religious service attendance impacted college adjustment varying by gender and achievement (Suppaiah, 2003) revealing that students who had non-religious club involvement and non-religious attendance service had the higher academic achievement (Good & Willoughby, 2011). Further, it is observed that spirituality impacts learning (Sucylaite, 2013) and individuals who have a strong spiritual relationship with a higher power and are religious due to intrinsic motivation tend to be more confident in their ability to make a career (Duffy & Blustein, 2005). Hence students who are spiritual are more motivated as students than non-spiritual students (Barmola, 2016) and college students who are more religiously engaged have a positive academic performance (Mayrl & Oeur, 2009).

Caste

College experience differs by race impacting academic achievement at institution (Guiffrida & Douthit, 2010). Academic success among students of race needs initiatives (Palmer et al., 2010) as disparities in engineering academic major does not vary by race (Riegle-Crumb & King, 2010). Ethnic differences affected women enrolment in engineering academic field (Varma, 2010) thus enhancing research experience in engineering education for minority race could strengthen the engineering pipeline (Pender et al.,2010). Earlier days of childhood has social class and sense of belonging laying the foundation for students career aspirations (Ostrove et al., 2011) that vary among adolescents by race (Riegle-Crumb et al.,2011). The ethnic patterns penetrate mathematic skills in early childhood (Lee et al., 2011) deterring career aspirations in youth (Howard et al., 2011). The discrimination awareness oblivious in occupational interests (Hughes, 2011) influences occupational aspirations to vary by race (Plata & Pirtle, 2011).

Academic adjustment in gendered among students of a minority race (Kiang et al., 2012). The earning benefits of majoring in engineering academics is only among high-achieving minority students of race (Melguizo & Wolniak, 2012) indicating that ethnic difference persists as perceived career barriers (Lipshits-Braziler & Tatar, 2012). The factors influencing career choice among students of race are the family; the ability to the learner self to identify higher preferred career choice; and teacher (Shumba & Naong, 2012). Grades, however, seem to impact minority student success in the long run (Slovacek et al.,2012) as predictors of learning differs by students of race (Lundberg, 2012). Further the representation of faculty of minority race in higher education is low (Henry et al.,2012) and such racialised faculty (James, 2012) especially women of minority race in engineering (Lee et al.,2012) have lower motivation to engage in research activities impacts faculty of race in higher education (Lechuga, 2012). This could also have a ripple effect on understanding students experience of transition from lecture mode to case-based teaching (Roy & Banerjee, 2012).

Moreover students of race witness participatory challenges and experiences in career choices in academics (Fletcher & Cox, 2012) as the role of ethnicity, academic and social impacts the academic performance of college students (Rienties et al.,2012). Career trajectories relies on individual traits like race (Kim, 2013) where ethnic differences in precollege mathematics impacts engineering pathways (You, 2013) but e – learning tools could emerge as a major rescue for progress in academic performance of minority race students (Johnson & Galy, 2013) enhancing overall academic achievement (Nesbitt, et al., 2013) in near future. Students of the race felt disconnected from teachers and process of education (West, 2013) as strength and liability of faculty of race in institutions (Philip, 2013) relies on campus racial climate determining faculty satisfaction at four-year institutions (Victorino et al., 2013).

College experience differs by race impacting merit or academic performance (Park & Liu, 2014) the academic performance of other backward castes (OBC) students in universities (Lens, 2014) reveals that race impacts academic performance (Malcolm & Mendoza, 2014; Stewart, 2014) and that career choice are tokenised in particular occupational field is chosen by race and not by ability (Poon, 2014). To fuel achievement among students of race, academic motivation differs among students of race (Cokley, 2014) with social inclusive teaching in higher education affecting retention , bridging social incongruity (Thomas & Heath, 2014). In short, unequal access impacts differential consequences in academic achievement (Agirdag et al.,2015) rendering the fact that ethnicity and schooling influences learning (Yarnold, 2016) with long-term engagement and identity-in-practice determinig underrepresented youths in engineering (Rahm & Moore, 2016).

Generation Status

First generation students academic transition in higher education (Inkelas et al., 2007) impacts student engagement by generation status (Gibson & Slate, 2010). The intellectual development transformation observed in first and second generation students (Pike & Kuh, 2005) sharpens generic skills and competency development among undergraduate students (Choi & Rhee, 2014). It is observed that non-first generation students have higher levels of academic involvement positively resulting in better academic performance than first generation students (Grayson, 1997) reflecting on the fact that educationally purposeful activity supports academic performance of first-generation college students (Carr et al., 2014). Further with impressive learning on the go with generation Y students (Blashki et al., 2007) motivation and integration of first-generation college students impacts their academic performance (Próspero & Vohra-Gupta, 2007) contributing to academic achievement (Trevino & DeFreitas, 2014) that fosters educational attainment especially of first generation ethnic students of race (Próspero & Vohra-Gupta, 2007). This is backed up by the current scenario of self-regulated learning – the online learning revealing that first generation students report significantly lower levels of self-regulation for online learning than second generation students (Williams & Hellman, 2004) impacting class attendance that varied by student of race of first and second generation students (Keller & Tillman, 2008). Further with academic dishonesty also differing by generation status (Wotring & Bol, 2011) creating cross-generational co-learning opportunities through inquiry-based curricula (Théroux, 2009) could better the grades often differing among first generation and continuing generation (Aspelmeier et al., 2012) which in long run replicates as barriers to career plans among engineering students of first generation (Fernandez et al.,2008).

With regard to academic disciplines, first generation undergraduates students experiences at college differ at first year (Padgett et al.,2012) and across academic disciplines (Peguero et al., 2015) especially among engineering academic disciplines (Hicks & Prairie, 2014). This may be due to lack of proper guidance among first generation students on the prominence of academic disciplines compared to continuing generation students (Trenor, 2009) impacting students persistence in engineering academic major (Virnoche & Eschenbach, 2010). It could also have the sibling effect, where sibling educational choices impact educational choices of the next sibling towards a particular academic discipline (Meurs et al., 2016). The extended academic arena of student–faculty interaction also vary by first generation status of students (Kim & Sax, 2009) as first generation traditional college students understanding of faculty expectations (Collier & Morgan, 2008) and undergraduate expectations and preferences for instructors vary (Trammell & Aldrich, 2016) impacting college success of first generation students (McKay & Estrella, 2008). This acts as a paranoid with undergraduate college students especially of a minority race who differ by gender and generation status on their views of the effectiveness of faculty (Schulte et al.,2011). Never the less, soft skills could gear up the first generation teacher students interaction (Thirumalai, 2014) that positively facilitates the academic and social transition of first generation students in the academic arena. Thus college academic activities differ in levels among the first generation and non-first generation engineering students (Hicks & Prairie, 2014) influencing academic achievement to vary by generation status (Duong et al.,2016) and educational achievements to vary from first and subsequent generation in education (Pandey, 2015).

College Expense

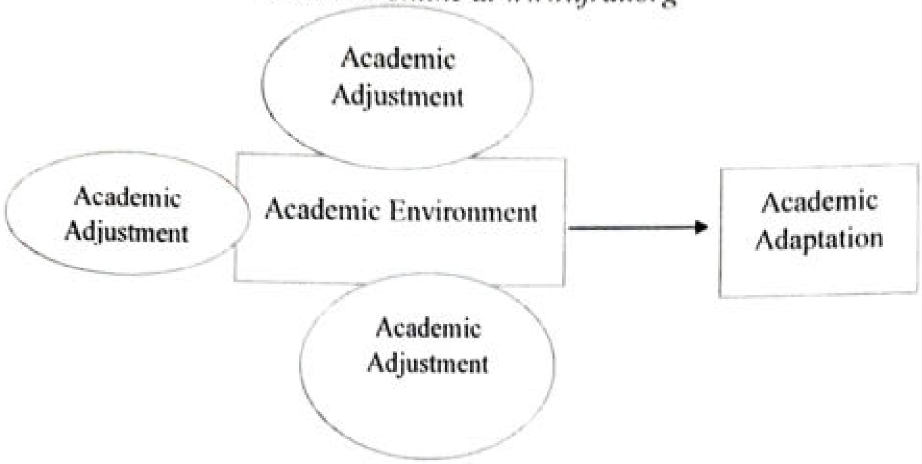
Scholarships and academic recognition should be given to gifted learners to support high aspirations towards excellence in academic performance (Robinson, 1997). The financial payoff on academic majors influences educational choices of students (Xie & Goyette, 2003). The reasons for non-attendance or absenteeism also relies on financial hardships (Paisey & Paisey, 2004) as more evidently it's the access to resources that determines students achievements in academics (Darling-Hammond, 2004). Never the less, one could always say that the cost and benefit factors influence academic expectation (Pasternak, 2005). Further, as educational expenditure impacts student engagement (Pike et al.,2006), it is the academic scholarship program for engineering as per one's academic major acts as a survivor (Anderson-Rowland, 2006). As already known abolishing school fees influences education access and equity (Al-Samarrai & Zaman, 2007) that could change the course equity effects and institutional risk amid policy shift in financing higher education (Ishmael et al.,2008) focusing students perceptions of higher education services - academic advising , instructional effectiveness ,"recruitment and financial aid" and "student-centeredness" (Nadiri, 2006). Debt constrain influences choice of academic major (Callender & Jackson, 2008) making college attendance embark on college earnings (Fan et al.,2009) revering always that financial aid determines post-secondary choices even by students of race (Kim et al., 2009). Scholarships aid in improving success rates of students in undergraduate engineering academic majors (Navarra-Madsen et al., 2010) making student success dependable on an academic scholarship (Anderson-Rowland, 2011). Undergraduate students who are not satisfied with their financial status and academic achievement were depressed (Shalini et al.,2011). Students continued to remain stressed mainly due to financial and academic reasons (Al-Dubai et al., 2011). Thus merit-based financial aided academic programs could only positively lead to students degree attainment in engineering (Zhang, 2011). Further financial aid policy contributes to postsecondary enrolment choices (Kim, 2012) determining person-job fit and financial rewards on career choice of engineers (Choo et al., 2012). College academic integration and financial aid receipt exhibit differential effects on entering engineering (Xueli Wang, 2013). The financial information influences students borrowing behavior and academic performance (Schmeiser et al., 2015). Lastly poverty impact attendance (Chen et al.,2015) and its poverty that leaves a huge maneuvering on academic abilities of especially of low-income students (Kaya et al., 2016).

Socio-economic status of the family by parent's education, occupation, and income

Students quality of academic performance enhances by parent's education (Farooq et al., 2011). Further parental control over academic behaviors impacts academic adjustment of students (Bernardo, 2012) reflected in students attitude to examination and academic performance (Okorodudu, 2013). Hence, socioeconomic status impacts students academic achievement even to that of students of minority race (Nesbitt et al.,2013) leaving an observable note that socialisers like parents especially fathers prove as motivational factors for employment, profession money status and more importantly career choice (Muhammad & Rasool, 2014).

In short, parenting styles influence academic motivation and academic achievement in students (Reshvanloo & Hejazi, 2014) making learning experiences vivid with parental support and role models from one's academic major choice (Bieri Buschor, et al.,2014) to that of enhancing lower verbal abilities cripples unduly by poverty towards academic performance (Kaya et al., 2016).

A Conceptual Framework on Academic Environment Transgressing Amongst Multiple Adjustments Towards Sustainable Adaptation



The conceptual framework stated above brings us to the focal point that academically a student faces challenges mostly from real world applications to emerge as a typical student amidst diverse backgrounds and interests. Thus, there is need for wide-ranging support services designed to assist your academic pursuits.

4. CONCLUSION

Students live through a non-routine work or a less automated routine defining and refining the possibilities of benefits. It's more of like if a student shows up in academics daily, does the entire required academic regularly would enable him or her to be over average and raise the bars of potential benefits. So every student works towards individual contribution – create a 'value-added' perspective as the world pays off for what one knows or for the desired productivity results of students but not for their efforts. In brief if a student doesn't commit to finish his academics, he or she is finished.

REFERENCES

1. Adeniyi, W. O., Adediran, V. O., & Okewole, J. O. (2014). "Personality Types, Demographic Variables and Academic Adjustment of Fresh Undergraduates of Obafemi Awolowo University, Ile-Ife, Nigeria." *Journal of Educational and Social Research*, 4(6), 493–502. https://doi.org/10.5901/jesr.2014.v4n6p493
2. Agirdag, O., Yazici, Z., & Sierens, S. (2015). "Trends in pre-school enrolment in Turkey: unequal access and differential consequences." *Comparative Education*, 68 (September), 1–18.https://doi.org/10.1080/03050068.2015.1081796
3. Akinrefon, A. A., & Adejumo, A. O. (2012). "A Study of Undergraduate Stu Dents ' Performance in Nigeria." *Bulgarian Journal of Science and Education Policy (BJSEP)*, 6(2), 273–291.
4. Al-atabi, M., Namasivayam, S., & Chong, C. H. W. a. (2013). "A Holisitc Approach to Develop Engineering Programme Outcomes: A Case study of Taylor at Univeristy." *Journal of Engineering Science and Technology*, 19–30.
5. Al-Dubai, S. A. R., Al-Naggar, R. A., Alshagga, M. A., & Rampal, K. G. (2011). "Stress and coping strategies of students in a medical faculty in Malaysia." *The Malaysian Journal of Medical Sciences : MJMS*, 18(3), 57–64. https://doi.org/10.5549/IJSR.1.2.45-50.
6. Al-Khatib, B. A., Awamleh, H. S., & Samawi, F. S. (2012). "Student's Adjustment to College Life at Albalqa Applied University." *American International Journal of Contemporary Research*, 2(11), 7–16. Retrieved from http://www.aijcrnet.com/journals/Vol_2_No_11_November_2012/2.pdf
7. Al-Samarrai, S., & Zaman, H. (2007). "Abolishing School Fees in Malawi: The Impact on Education Access and Equity 1." *Education Economics*, 15(3), 359–375. https://doi.org/10.1080/09645290701273632
8. Ali M, et al. (2014) "Stress-dependent Proteolytic Processing of the Actin Assembly Protein Lsb1 Modulates a Yeast Prion." *Journal of Biol Chem* 289(40):27625-39.
9. Alivernini, F., Cavicchiolo, E., Palmerio, L., & Girelli, L. (2015). "Representations of Study and Students' Academic Motivation." *Procedia - Social and Behavioral Sciences*, 205(April 2016), 302–305. https://doi.org/10.1016/j.sbspro.2015.09.086
10. Altermatt, E. R., & Painter, J. K. (2016). "I Did Well. Should I Tell? Gender Differences in Children's Academic Success Disclosures." *Sex Roles*, 74(1–2), 46–61. https://doi.org/10.1007/s11199-015-0549-y
11. Alvarez-Perez, P. R., Alegre-de-la-Rosa, O. M., & Lopez-Aguilar, D. (2012). "The difficulties of adapting university teaching for students with disabilities: An analysis focussed on inclusive guidance." *RELIEVE - Revista Electronica de Investigacion Y Evaluacion Educativa*, 18(2), 1–16. https://doi.org/10.7203/relieve.18.2.1992

12. Anderson-Rowland, M. R. (2006). "Evaluating an academic scholarship program for engineering and computer science transfer students." *In 36th ASEE/IEEE Frontiers in Education Conference Proceedings - Frontiers in Education Conference, FIE* (pp. 18–25). https://doi.org/10.1109/FIE.2006.322554
13. Anderson-Rowland, M. R. (2011). "Evaluation of a ten year life planning assignment for an Academic Scholarship Success Class." *In 41st ASEE/IEEE Frontiers in Education Conference Proceedings - Frontiers in Education Conference, FIE* (pp. 1–7). https://doi.org/10.1109/FIE.2011.6142896
14. Andrei, C., Izabela, V. P., & Valentina, Z. (2014). "Comparative Study between Study Tracks: Math and Sciences or Humanities, Regarding Academic Motivation and Learning Strategies in the 9th Grade Students." *Procedia - Social and Behavioral Sciences,* 128, 432–437. https://doi.org/10.1016/j.sbspro.2014.03.183
15. Aruguete MS, DeBord KA, Yates A, Edman J. "Ethnic and gender differences in eating attitudes among black and white college students." *Eat Behaviours* 2005;6: 328-336.
16. Aspelmeier, J. E., Love, M. M., McGill, L. a., Elliott, A. N., & Pierce, T. W. (2012). "Self-Esteem, Locus of Control, College Adjustment, and GPA Among First- and Continuing-Generation Students: A Moderator Model of Generational Status." *Research in Higher Education,* 53(7), 755–781. https://doi.org/10.1007/s11162-011-9252-1
17. Azar, N. N., & Reshadatjoo, H. (2014). "Adjustment Amongst First year Students in an Iranian." *Journal of Education Research and Behavioral Sciences*, 3(5), 102–105
18. Barmola, K. (2016). "Spirituality and Motivation of College Students." *The International Journal of Indian Psychology,* 3(2), 84–88.
19. Benitez, & Canales. (2013). "Critical Thinking as a Resilience Factor in an Engineering Program." *Creative Education*, 4(9), 611–613.
20. Bernardo, A. B. I. 2012. "Perceived legitimacy of parental control over academic behaviors and adolescent students' academic adjustment". *European Journal of Psychology of Education,* 27(4): 557–571. http://doi.org/10.1007/s10212-011-0095-0
21. Bieri Buschor, C., Berweger, S., Keck Frei, A., & Kappler, C. (2014). "Majoring in STEM—What Accounts for Women's Career Decision Making? A Mixed Methods Study." *The Journal of Educational Research,* 107(3), 167–176. https://doi.org/10.1080/00220671.2013.788989
22. Blashki, K., Nichol, S., Jia, D., & Prompramote, S. (2007). "The future is old": immersive learning with generation Y engineering students. European *Journal of Engineering Education,* 32(4), 409–420. https://doi.org/10.1080/03043790701334228
23. Browder, D. M., Trela, K., Courtade, G. R., Jimenez, B. a., Knight, V., & Flowers, C. (2012). "Teaching Mathematics and Science Standards to Students With Moderate and Severe Developmental Disabilities." *The Journal of Special Education,* 46(1), 26–35. https://doi.org/10.1177/0022466910369942
24. Calaguas, G. M. (2011). "Academic achievement and academic adjustment difficulties among college freshmen." *Journal of Arts, Science & Commerce*, 2(3), 221–226.
25. Callender, C., & Jackson, J. (2008). "Does the fear of debt constrain choice of university and subject of study?" *Studies in Higher Education,* 33(4), 405–429. https://doi.org/10.1080/03075070802211802
26. Carr, J. M., Jackson, D. D., & Murphy, M. K. (2014). "Using Educationally Purposeful Activities to Support First-Generation College Students in Chemistry," (February 2016).
27. Cazan, A. M. (2012). "Self regulated learning strategies - Predictors of academic adjustment." *Procedia - Social and Behavioral Sciences*, 33, 104–108. https://doi.org/10.1016/j.sbspro.2012.01.092
28. Cazan, A. M., & Anitei, M. (2010). "Motivation, learning Strategies and Academic Adjustment." *Romanian Journal of Experimental Applied Psychology.* https://doi.org/10.1016/j.sbspro.2012.06.174
29. Chang, C.-L., Lin, K.-Y., & Hu, T.-C. (2009). "A study of academic persistence of science and technology university students in a Taiwan University." *Asia Pacific Education Review,* 10(4), 517–523. https://doi.org/10.1007/s12564-009-9046-8
30. Chen, Y. C., Wang, Y. H., Shiau, Y. C., & Wang, Y. J. (2015). "Preventing campus accidents among disabled students." *Artificial Life and Robotics,* 20(1), 1–6. http://doi.org/10.1007/s10015-014-0171-z
31. Choo, L. S., Norsiah, M., & Tan, L. I. (2012). "What drives the career choice among engineers? A case in Malaysian manufacturing plant." *International Journal of Research Studies in Management,* 1(2), 15–24. https://doi.org/10.5861/ijrsm.2012.v1i2.60
32. Chuchalin, A. I., Soloviev, M. A., Zamyatina, O. M., & Mozgaleva, P. I. (2013). "Elite Engineering Education Programme in Tomsk Polytechnic University - The way to attract talented students into Engineering." *In IEEE Global Engineering Education Conference, EDUCON* (pp. 1004–1008). https://doi.org/10.1109/EduCon.2013.6530230

33. Clinciu, A. I., & Cazan, A.-M. (2014a). "Academic Adjustment Questionnaire for the University Students." *Procedia - Social and Behavioral Sciences*, 127, 655–660. https://doi.org/10.1016/j.sbspro.2014.03.330
34. Cokley, K. (2014). "A Confirmatory Factor Analysis of the Academic Motivation Scale With Black College Students." *Measurement and Evaluation in Counseling and Development*, 48(2), 124–139. https://doi.org/10.1177/0748175614563316
35. Collier, P. J., & Morgan, D. L. (2008). "Is that paper really due today? Differences in first-generation and traditional college students' understandings of faculty expectations." *Higher Education*, 55(4), 425–446. https://doi.org/10.1007/s10734-007-9065-5
36. Cowan, B. W. (2011). "Forward-thinking teens: The effects of college costs on adolescent risky behavior." *Economics of Education Review*, 30(5), 813–825. http://doi.org/10.1016/j.econedurev.2011.04.006
37. Darling-Hammond, L. (2004). "The Color Line in American Education: Race, Resources, and Student Achievement." *Du Bois Review: Social Science Research on Race*, 1(2), 213–246. https://doi.org/10.1017/S1742058X0404202X
38. Dawn, R. A. (2007). "Self-esteem, adjustment and academic achievement of blind students in integrated and non-integrated schools," (SEPTEMBER 2015). https://doi.org/10.13140/RG.2.1.1097.1360
39. Di Nardo, M., Kudlacek• , M., Tafuri, D., & Sklenarikova, J. (2014). "Attitudes of preservice physical educators toward individuals with disabilities at University Parthenope of Napoli." *Acta Universitatis Palackianae Olomucensis.Gymnica*, 44(4), 211–221. https://doi.org/10.5507/ag.2014.022
40. Domina, T. (2014). "Does Merit Aid Program Design Matter? A Cross-Cohort Analysis." *Research in Higher Education*, 55(1), 1–26. https://doi.org/10.1007/s11162-013-9302-y
41. Duffy, R. D., & Blustein, D. L. (2005). "The relationship between spirituality, religiousness, and career adaptability." *Journal of Vocational Behavior*, 67(3), 429-440.
42. Dukmak, S. J. (2013). "Regular Classroom Teachers' Attitudes towards Including Students with Disabilities in the Regular Classroom in the United Arab Emirates." *Journal of Human Resource and Adult Learning*, 9(1), 26–39.
43. Duong, M. T., Badaly, D., Liu, F. F., Schwartz, D., & McCarty, C. A. (2016). "Generational Differences in Academic Achievement Among Immigrant Youths: A Meta-Analytic Review." *Review of Educational Research*, 86(1), 3–41. https://doi.org/10.3102/0034654315577680
44. Ercan, O., Bilen, K., & Bulut, A. (2013). "The Effect of Web-based Instruction with Educational Animation Content at Sensory Organs Subject on Students' Academic Achievement and Attitudes." *World Conference on Educational Sciences (WCES2013)*, 116, 2430–2436. doi:10.1016/j.sbspro.2014.01.587
45. Espinoza, P., Arêas da Luz Fontes, A. B., & Arms-Chavez, C. J. (2014). "Attributional gender bias: Teachers' ability and effort explanations for students' math performance." *Social Psychology of Education*, 17(1), 105–126. https://doi.org/10.1007/s11218-013-9226-6
46. Fan, H., Dong, Z., Hu, G., Song, J., Wang, Q., Zhang, M., & Tang, Y. (2012). "An engineering introductory seminar course for first-year college students." *In Proceedings of IEEE International Conference on Teaching, Assessment, and Learning for Engineering, TALE* 2012 (pp. 18–21). http://doi.org/10.1109/TALE.2012.6360323
47. Fan, M., Zhang, J., & Chen, Q. (2009). "Matching estimates of the effect of college attendance on individual income." *In 2008 International Seminar on Business and Information Management, ISBIM 2008* (Vol. 2, pp. 405–408). http://doi.org/10.1109/ISBIM.2008.234
48. Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). "Factors affecting students' quality of academic performance: a case of secondary school level." *Journal of quality and technology management*, 7(2), 1-14.
49. Fastre, G., Gijselaers, W. H., & Segers, M. (2008). "Selection to Ensure Study Success: Looking for Multiple Criteria in the Case of a European Master of Science Program in Business." *Journal of Education for Business*, 84(1), 47–54. https://doi.org/10.3200/JOEB.84.1.47-54
50. Feldman, D. C. (2004). "The role of physical disabilities in early career: Vocational choice, the school-to-work transition, and becoming established." *Human Resource Management Review*, 14(3), 247–274. https://doi.org/10.1016/j.hrmr.2004.06.002
51. Fernandez, M. J., Trenor, J. M., Zerda, K. S., & Cortes, C. (2008). "First generation college students in engineering: A qualitative investigation of barriers to academic plans." *In Proceedings - Frontiers in Education Conference, FIE (pp. 1–5).* http://doi.org/10.1109/FIE.2008.4720256
52. Fletcher, E. C., & Cox, E. D. (2012). "Exploring the Meaning African American Students Ascribe to Their Participation in High School Career Academies and the Challenges They Experience." *The High School Journal*, 96(1), 4–19. https://doi.org/10.1353/hsj.2012.0017

53. Flynn, D. (2014). "Baccalaureate Attainment of College Students at 4-Year Institutions as a Function of Student Engagement Behaviors: Social and Academic Student Engagement Behaviors Matter." *Research in Higher Education*, 55(5), 467–493. https://doi.org/10.1007/s11162-013-9321-8
54. Gan, S., Hanson, S., Hassell, D. G., Hii, C. L., Kabir, F., Lau, P. L. Wilson, T. (2012). "The introduction of an autumn and spring activity week into the first year of a chemical engineering undergraduate program in Malaysia." *Education for Chemical Engineers*, 7(3), e125–e132. https://doi.org/10.1016/j.ece.2012.05.002
55. Giannoula, F. (2014). "Female university staff in Greece and Turkey." *Procedia Economics and Finance*, 9(Ebeec 2013), 342–348. https://doi.org/10.1016/S2212-5671(14)00035-5
56. Gibson, A. M., & Slate, J. R. (2010). "Student Engagement at Two-Year Institutions: Age and Generational Status Differences." *Community College Journal of Research and Practice*, 34(5), 371–385. https://doi.org/10.1080/10668920802466384
57. Good, M., Willoughby, T., & Busseri, M. A. (2011). "Stability and change in adolescent spirituality/religiosity: a person-centered approach." *Developmental Psychology*, 47(2), 538.
58. Grayson, J. P. (1997). "First-Generation Students in a Canadian University." *Research in Higher Education*, 38(6), 659–676. https://doi.org/10.1023/A:1024955719648
59. Grigg, S. J., & Benson, L. C. (2012). "How does academic preparation influence how engineering students solve problems?" *In Proceedings - Frontiers in Education Conference, FIE* (pp. 1–6). https://doi.org/10.1109/FIE.2012.6462445
60. Grimoni, J. A. B., & Nakao, O. S. (2007). "Designing Indicators to Measure the Quality of Engineering Courses : The Case of Escola Politécnica da Universidade de São Paulo." *In international Conference on Engineering Education - ICEE* (pp. 1–8).
61. Grund, A., Schmid, S., & Fries, S. (2015). "Studying against your will: Motivational interference in action." *Contemporary Educational Psychology*, 41, 209-217.
62. Guiffrida, D. a, & Douthit, K. Z. (2010). "The Black Student Experience at Predominantly White Colleges : Implications for School and College Counselors." *Journal of Counseling & Development*, 88, 311–319. https://doi.org/10.1002/j.1556-6678.2010.tb00027.x
63. Henry, F., Choi, A., & Kobayashi, A. (2012). "The Representation of Racialized Faculty at Selected Canadian Universities." *Canadian Ethnic Studies*, 44(1), 1–12. https://doi.org/10.1353/ces.2012.0008
64. Hewitt, R. D. G. and B. N. (1975). "Adaptation-Level as an Explanation for Differential Standards in College Grading." *Journal of Educational Measurement*, 12(3), 149–161. Retrieved from http://www.jstor.org/stable/1433948
65. Hicks, T., & Prairie, J. W. (2014). "First-generation College Students and Non-First-generation College Students Enrolled in a Science , Technology , Engineering , and Mathematics (STEM) Discipline : A Comparison of their ..." *In international conferecne on urban education* (pp. 291–297).
66. Hughes, J. M. (2011). "Influence of discrimination awareness on the occupational interests of African American children." *Journal of Applied Developmental Psychology*, 32(6), 369–378. https://doi.org/10.1016/j.appdev.2011.08.003
67. Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2007). "Living–learning programs and first-generation college students' academic and social transition to college." *Research in Higher education*, 48(4), 403-434.
68. Jacobs, M., & Pretorius, E. (2016). "First Year Seminar intervention enhancing first year Mathematics performance." *In SANRC (South African National Resource Centre) - First Year Seminar intervention enhancing first year Mathematics performance* (pp. 1–16).
69. Jacobs, M., Williamson, J., & Pretorius, E. (2015). "The Relationship Between Selected Grade 12 subjects and academic achievement of First Year Life Science Education Students" (pp. 2–11). Retrieved from https://www.researchgate.net/publication/287958664
70. James, C. E. (2012). "Strategies of Engagement: How Racialized Faculty Negotiate the University System." *Canadian Ethnic Studies*, 44(1), 133–152. https://doi.org/10.1353/ces.2012.0007
71. Jelen, T. G., & Lockett, L. A. (2014). "Religion, partisanship, and attitudes toward science policy." *SAGE Open*, 4(1), 2158244013518932
72. Jeludar, S. S., Jeludar, Z. A., Shayan, N., & AhmadiGatab, T. (2012). "Factors Affecting the Academic Failure of Male Students." *Procedia - Social and Behavioral Sciences*, 46, 2575–2578. https://doi.org/10.1016/j.sbspro.2012.05.526
73. Jenkins, J. R., & Galloway, F. (2009). "The adjustment problems faced by international and overseas Chinese students studying in Taiwan universities: A comparison of student and faculty/staff perceptions." *Asia Pacific Education Review*, 10(2), 159–168. https://doi.org/10.1007/s12564-009-9020-5

74. Jin, Q., Purzer, S., & K., I. P. (2012). "Measuring first-year engineering students' knowledge and interest in materials science and engi- neering." *American Society for Engineering Education*, 1–9.
75. Johnson, J., & Galy, E. (2013). "The Use of E-Learning Tools for Improving Hispanic Students Academic Performance." *MERLOT Journal of Online Learning and Teaching*, 9(3), 328–341.
76. Ju, S., Zhang, D., & Pacha, J. (2012). "Employability Skills Valued by Employers as Important for Entry-Level Employees With and Without Disabilities." *Career Development for Exceptional Individuals*, 35(1), 29–38. https://doi.org/10.1177/0885728811419167
77. Kane, J. M., & Mertz, J. E. (2012). "Debunking Myths about Gender and Mathematics Performance." *Notices of the American Mathematical Society*, 59(1), 10–21. https://doi.org/10.1090/noti790
78. Karwowski, M., Gralewski, J., & Szumski, G. (2015). "Teachers' Effect on Students' Creative Self-Beliefs Is Moderated by Students' Gender. Learning and Individual Differences," 44(February 2016), 1–8. https://doi.org/10.1016/j.lindif.2015.10.001
79. Kaya, F., Stough, L. M., & Juntune, J. (2016). "The effect of poverty on the verbal scores of gifted students." *Educational Studies*, 42(1), 85–97. https://doi.org/10.1080/03055698.2016.1148585
80. Keller, U., & Tillman, K. H. (2008). "Post-secondary Educational Attainment of Immigrant and Native Youth." *Social Forces*, 87(1), 121–152. https://doi.org/10.1353/sof.0.0104
81. Kiang, L., Supple, A. J., Stein, G. L., & Gonzalez, L. M. (2012). "Gendered Academic Adjustment among Asian American Adolescents in an Emerging Immigrant Community." *Journal of Youth and Adolescence*, 41(3), 283–294. https://doi.org/10.1007/s10964-011-9697-8
82. Kim, J. (2012). "Exploring the Relationship between State Financial Aid Policy and Postsecondary Enrollment Choices: A Focus on Income and Race Differences." *Research in Higher Education*, 53(2), 123–151. https://doi.org/10.1007/s11162-011-9244-1
83. Kim, K. N. (2013). "Career trajectory in high school dropouts." *Social Science Journal*, 50(3), 306–312. https://doi.org/10.1016/j.soscij.2013.03.005
84. Kim, K., Fann, A., & Misa-Escalante, K. (2009). "Center for Embedded Network Sensing University of California Engaging women in computer science and engineering : Insights from a national study"
85. Kim, Y. K., & Sax, L. J. (2009). "Student-faculty interaction in research universities: Differences by student gender, race, social class, and first-generation status." *Research in Higher Education*, 50(5), 437–459. https://doi.org/10.1007/s11162-009-9127-x
86. Kim, Y. K., & Sax, L. J. (2014). "The Effects of Student–Faculty Interaction on Academic Self-Concept: Does Academic Major Matter?" *Research in Higher Education*, 55(8), 780–809. https://doi.org/10.1007/s11162-014-9335-x
87. Kioko, V. K., & Makoelle, T. M. (2014). "Inclusion in Higher Education: Learning Experiences of Disabled Students at Winchester University." *International Education Studies*, 7(6), 106–116. https://doi.org/10.5539/ies.v7n6p106
88. Knobbs, C. G., & Grayson, D. J. (2012). "An approach to developing independent learning and non-technical skills amongst final year mining engineering students." *European Journal of Engineering Education*, 37(3), 307–320. https://doi.org/10.1080/03043797.2012.684673
89. Lavasania, M. G., Weisani, M., & Shariati, F. (2014). "The role of Achievement Goals , Academic Motivation in Statistics Anxiety : Testing a causal model." *Procedia - Social and Behavioral Sciences*, 114, 933–938. https://doi.org/10.1016/j.sbspro.2013.12.810
90. Leandro, S., Adelina, M., Psicologia, A. De, Almeida, L. S., Guisande, M. A., & Paisana, J. (2012). "Extra-curricular involvement , academic adjustment and achievement in higher education : A study of Portuguese students Extra-curricular involvement , academic adjustment and achievement in higher education : A study of Portuguese students." *Anales de Psicologia*, 28(3), 860–865. https://doi.org/10.6018/analesps.28.3.156231
91. Lechuga, V. M. (2012). "Latino Faculty in STEM Disciplines: Motivation to Engage in Research Activities." *Journal of Latinos and Education*, 11(2), 107–123. https://doi.org/10.1080/15348431.2012.659564
92. Lee, J., Moon, S., & Hegar, R. L. (2011). "Mathematics skills in early childhood: Exploring gender and ethnic patterns." *Child Indicators Research*, 4(3), 353–368. https://doi.org/10.1007/s12187-010-9088-9
93. Lee, W. Y., Guyden, J. a, & Watkins, P. G. H. (2012). "Hoping for the unexpected: African American women as STEM educators." *Diversity in Higher Education* (Vol. 12). Emerald Group Publishing Ltd. https://doi.org/10.1108/S1479-3644(2012)0000012014
94. Lens, A. B. (2014). "Academic Performance of OBC Students in Universities." *Economic & Political Weekly*, 49(5), 55. Retrieved from http://www.epw.in/system/files/pdf/2014_49/5/A

cademic_Performance_of_OBC_Students_in_Universities.pdf

95. Leung, F., Ko, E., & Chow, T. (2012). "Helping First-Year Engineering Students in Transition: Promoting Transformative Learning in Student and Faculty Development." *In IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE) 2012* (pp. 6–10).
96. Lipshits-Braziler, Y., & Tatar, M. (2012). "Perceived career barriers and coping among youth in Israel: Ethnic and gender differences." *Journal of Vocational Behavior,* 80(2), 545–554. https://doi.org/10.1016/j.jvb.2011.08.010
97. Lombardi, A. R., & Murray, C. (2011). "Measuring university faculty attitudes toward disability: Willingness to accommodate and adopt Universal Design principles." *Journal of Vocational Rehabilitation,* 34(1), 43–56. https://doi.org/10.3233/JVR-2010-0533
98. Lowder, L., Khalid, A., Ferreira, D. R., Bohannon, J. L., Stutzmann, B., Atiqullah, M. M.,Colebeck, D. (2015). "Student and Faculty Perceptions of Attendance Policies at a Polytechnic University." *In 122nd ASEE Annual Conference & Exposition American Society for Engineering Education* (pp. 4–26).
99. Lundberg, C. a. (2012). "Predictors of Learning for Students from Five Different Racial/Ethnic Groups." *Journal of College Student Development,* 53(5), 636–655. https://doi.org/10.1353/csd.2012.0071
100. Malm, J., Bryngfors, L., & Mörner, L.-L. (2015). "The potential of Supplemental Instruction in engineering education – helping new students to adjust to and succeed in University studies." *European Journal of Engineering Education,* 40(4), 347–365. https://doi.org/10.1080/03043797.2014.967179
101. Marques, E., Neto, O., & Marques, R. (2013). "Digital Proficiency and Digital Inclusion" *In 2013 IEEE Global Engineering Education Conference (EDUCON)* (pp. 934–939).
102. Morina, A., Dolores Cortes-Vega, M., & Molina, V. M. (2015). "What if we could imagine the ideal faculty? Proposals for improvement by university students with disabilities." *Teaching and Teacher Education,* 52(September), 91–98. https://doi.org/10.1016/j.tate.2015.09.008
103. Mudavanhu, Y. (2016). "A study of the Year 10 students gender differences in attitudes, knowledge of chemistry and career choice." https://doi.org/10.13140/RG.2.1.1994.3443
104. Müller, C. M., Winkes, J., & Neugebauer, S. R. (2013). "Do students with specific types of reading / spelling disorders differ in their reported adjustment problems ?" *In Presentation held at the 2013 Biennial Meeting of the Society for Research in Child Development; Seattle, USA.* (pp. 12–15).
105. Murphy, M. J., Seneviratne, R. D., Cochrane, L., Davis, M. H., & Mires, G. J. (2013). "Impact of student choice on academic performance: cross-sectional and longitudinal observations of a student cohort." *BMC Medical Education,* 13, 26. https://doi.org/10.1186/1472-6920-13-26
106. Maican, C., Transilvania, U., Radu, L., & Transilvania, U. (2016). "Academic Motivation for Business Information Systems Students." *International Conference "risk in Contemporary Economy,"* (January, 2015), 60–64.
107. Malcolm, Z. T., & Mendoza, P. (2014). "Afro-Caribbean International Students' Ethnic Identity Development: Fluidity, Intersectionality, Agency, and Performativity." *Journal of College Student Development,* 55(6), 595–614. https://doi.org/10.1353/csd.2014.0053
108. Malcom, L. E., & Dowd, A. C. (2012). "The impact of undergraduate debt on the graduate school enrollment of STEM baccalaureates." *The Review of Higher Education,* 35(2), 265-305.
109. Mansor, N., & Khalid, N. S. (2012). "Spiritual well-being of INSTED, IIUM Students' and Its relationship with college adjustment." *Procedia-social and behavioral sciences,* 69, 1314-1323.
110. Martin-Hansen, L. M. (2008). "First-Year College Students' Conflict with Religion and Science." *Science & Education* 17(4), 317–357. http://doi.org/10.1007/s11191-006-9039-5
111. Mativo, J. M., Womble, M. N., & Jones, K. H. (2013). "Engineering and technology students' perceptions of courses." *International Journal of Technology and Design Education,* 23(1), 103–115. https://doi.org/10.1007/s10798-011-9167-3
112. Mayrl, D., & Oeur, F. (2009). "Religion and higher education: Current knowledge and directions for future research." *Journal for the Scientific Study of Religion,* 48(2), 260-275.
113. McKay, V. C., & Estrella, J. (2008). "First-generation student success: The role of faculty interaction in service learning courses." *Communication Education,* 57(3), 356–372. https://doi.org/10.1080/03634520801966123
114. Melguizo, T., & Wolniak, G. C. (2012). "The Earnings Benefits of Majoring in STEM Fields Among High Achieving Minority Students." *Research in Higher Education,* 53(4), 383–405. https://doi.org/10.1007/s11162-011-9238-z
115. Meurs, D., Puhani, P. A., & Von Haaren-Giebel, F. (2016). "Number of siblings and educational choices of immigrant children: evidence from first- and second-generation immigrants." *Review of Economics of the Household.* https://doi.org/10.1007/s11150-015-9320-y
116. Nadiri, H. (2006). "Strategic Issue in Higher Education Marketing: How University Students'

Perceive Higher Education Services." *Asian Journal on Quality*, 7(2), 125–140. https://doi.org/http://dx.doi.org/10.1108/1598268 8200600020

117. Navarra-Madsen, J., Bales, R. a., & Hynds, D. L. (2010). "Role of scholarships in improving success rates of undergraduate Science, Technology, Engineering and Mathematics (STEM) majors." *Procedia - Social and Behavioral Sciences*, 8, 458–464. https://doi.org/10.1016/j.sbspro.2010.12.063
118. Nesbitt, K. T., Baker-Ward, L., & Willoughby, M. T. (2013). "Executive function mediates socio-economic and racial differences in early academic achievement." *Early Childhood Research Quarterly*, 28(4), 774–783. https://doi.org/10.1016/j.ecresq.2013.07.005
119. Novo-Corti, I., Munoz-Cantero, J., Miguel, & Calvo-Nuria. (2015). "Future teachers and their attitude towards inclusion of people with disabilities. A gender perspective." *Anales de Psicologia*, 31(1), 155–171. https://doi.org/10.6018/analesps.31.1.163631
120. Nudelman, A. E. (1972). "Christian Science and Secular Science: Adaptation on the College Scene." *Journal for the Scientific Study of Religion*, 271-276.
121. Okorodudu, G. N. (2013). "Peer Pressure and Socioeconomic Status as Predictors of Student's Attitude to Examination Malpractice in Nigeria." *International Journal of Education*, 5(1), 36.
122. Oon, P.-T., & Subramaniam, R. (2013). "Factors Influencing Singapore Students' Choice of Physics as a Tertiary Field of Study: A Rasch analysis." *International Journal of Science Education*, 35(1), 86–118. https://doi.org/10.1080/09500693.2012.718098
123. Ostrove, J. M., Stewart, A. J., & Curtin, N. L. (2011). "Social Class and Belonging: Implications for Graduate Students' Career Aspirations." *The Journal of Higher Education*, 82(6), 748–774. https://doi.org/10.1353/jhe.2011.0039
124. Padgett, R. D., Johnson, M. P., & Pascarella, E. T. (2012). "FIrst-generation undergraduate students and the impacts of the first year of college: Additional evidence." *Journal of College Student Development*, 53(2), 243–266. https://doi.org/10.1353/csd.2012.0032
125. Paisey, C., & Paisey, N. J. (2004). "Student attendance in an accounting module – reasons for non-attendance and the effect on academic performance at a Scottish University." *Accounting Education: An International Journal*, 13(sup1), 39–53. https://doi.org/10.1080/0963928042000310788
126. Pasternak, R. (2005). "Choice of Institutions of Higher Education and Academic Expectations: The Impact of Cost-Benefit Factors." *Teaching in Higher Education*, 10(2), 189–201. https://doi.org/10.1080/1356251042000337945
127. Patel, E., & Meyer, C. (2009). "Engaging Religious Diversity on Campus: The Role of Interfaith Leadership." *Journal of College and Character*, 10(7), 1–9. http://doi.org/10.2202/1940-1639.1436
128. Peguero, A. A., Shekarkhar, Z., Popp, A. M., & Koo, D. J. (2015). "Punishing the Children of Immigrants: Race, Ethnicity, Generational Status, Student Misbehavior, and School Discipline." *Journal of Immigrant & Refugee Studies*, 13(2), 200–220. https://doi.org/10.1080/15562948.2014.951136
129. Pender, M., Marcotte, D. E., Domingo, M. R. S., & Maton, K. I. (2010). "The STEM Pipline: The Role of summer research experience in minority students PhD aspirations." *Education Policy Analysis Archives*.
130. Perdigones, A., Benedicto, S., Sánchez-Espinosa, E., Gallego, E., & García, J. L. (2014). "How many hours of instruction are needed for students to become competent in engineering subjects?" *European Journal of Engineering Education*, 39(3), 300–308. https://doi.org/10.1080/03043797.2013.861388
131. Petersen, I., Louw, J., & Dumont, K. (2009). "Adjustment to university and academic performance among disadvantaged students in South Africa." *Educational Psychology*, 29(1), 99–115. https://doi.org/10.1080/01443410802521066
132. Phang, F. A., Ali, M. B., Ghazali, N. M., Bakar, M. N., Zanzali, N. A. A., Puteh, M., … Mohtar, L. E. (2012). "Engineering Elements between First Year and Final Year Engineering Students in Malaysia." *Procedia - Social and Behavioral Sciences*, 56(February), 333–340. https://doi.org/10.1016/j.sbspro.2012.09.661
133. Philip, T. M. (2013). "Experience as College Student Activists: A Strength and Liability for Prospective Teachers of Color in Urban Schools." *Urban Education*, 48(1), 44–68. https://doi.org/10.1177/0042085912461509
134. Pike, G. R., & Kuh, G. D. (2005). "A typology of Student Engagement for American Colleges and Universities." *Research in Higher Education*, 46(2), 185–209. https://doi.org/10.1007/s 11162-004-1599-0
135. Pike, G. R., & Kuh, G. D. (2006). "Relationships among Structural Diversity, Informal Peer Interactions and Perceptions of the Campus Environment." *The Review of Higher Education*, 29(4), 425–450. https://doi.org/10.1353/rhe.2006.0037
136. Plata, M., & Pirtle, T. (2011). "Occupational Aspiration Change Patterns of Male and Female

High School Hispanics." *Journal of Border Educational Research*, 9(2010), 95–106.

137. Poon, O. (2014). "The Land of Opportunity Doesn't Apply to Everyone The Immigrant Experience, Race, and Asian American Career Choices." *Journal of College Student Development*, 55(6), 499–514. https://doi.org/10.1353/csd.2014.0056

138. Próspero, M., & Vohra-Gupta, S. (2007). "First Generation College Students: Motivation, Integration, and Academic Achievement." *Community College Journal of Research and Practice*, 31(12), 963–975. https://doi.org/10.1080/10668920600902051

139. Rahimabadi, R. K. (2014). "Assessment of male and female university students â€TM learning styles and academic performance." *Journal of Middle East Applied Science and Technology*, (September), 1–2.

140. Rahm, J., & Moore, J. C. (2016). "A case study of long-term engagement and identity-in-practice: Insights into the STEM pathways of four underrepresented youths." *Journal of Research in Science Teaching*, 53(5), 768–801. https://doi.org/10.1002/tea.21268

141. Rajab, A., Shaari, R., Yusoff, R., Yusof, M., & Mansor, N. S. (2014). "International Postgraduates Adaptation Experience." *Journal of Economics, Business and Management*, 2(4), 9–12. https://doi.org/10.7763/JOEBM.2014.V2.139

142. Rajandran, K., Hee, T. C., Kanawarthy, S., Soon, L. K., Kamaludin, H., & Khezrimotlagh, D. D. (2015). "Factors Affecting First Year Undergraduate Students Academic Performance." *Scholars Journal of Economics, Business and Management*, 2(1 A), 54–60.

143. Rajasenan, D. (2014). "Gender Bias and Caste Exclusion in Engineering Admission: Inferences from the Engineering Entrance Examination in Kerala." *Higher Education for the Future*, 1(1), 11–28. https://doi.org/10.1177/2347631113518275

144. Rana, R., & Mahmood, N. (2015). "The relationship between test anxiety and academic achievement." *Bulletin of Education and Research*, 32(2), 63–74. https://doi.org/10.13140/RG.2.1.3619.8569

145. Reshvanloo, F. T., & Hejazi, E. (2014). "Perceived parenting styles , academic achievement and academic motivation : A causal model." *International Journal of Education and Applied Sciences*, 1(2), 94–100.

146. Riegle-Crumb, C., & King, B. (2010). "Questioning a White Male Advantage in STEM: Examining Disparities in College Major by Gender and Race/Ethnicity." *Educational Researcher*, 39(9), 656–664. https://doi.org/10.3102/0013189X10391657

147. Riegle-Crumb, C., Moore, C., & Ramos-Wada, A. (2011). "Who wants to have a career in science or math? exploring adolescents' future aspirations by gender and race/ethnicity." *Science Education*, 95(3), 458–476. https://doi.org/10.1002/sce.20431

148. Rienties, B., Beausaert, S., Grohnert, T., Niemantsverdriet, S., & Kommers, P. (2012). "Understanding academic performance of international students: The role of ethnicity, academic and social integration." *Higher Education*, 63(6), 685–700. https://doi.org/10.1007/s10734-011-9468-1

149. Robinson, N. M. (1997). "The role of universities and colleges in educating gifted undergraduates." *Peabody Journal of Education*, 72(3–4), 217–236. https://doi.org/10.1207/s15327930pje7203&4_13

150. Roy, S., & Banerjee, P. (2012). "Understanding students' experience of transition from lecture mode to case-based teaching in a management school in India." *Journal of Educational Change*, 13(4), 487–509. https://doi.org/10.1007/s10833-012-9191-4

151. Salmain, D., Azar, N. N., & Salmani, A. (2014). "A Study of First-Year Student Adjustment to College in relation to Academic-Self efficacy, Academic Motivation and Satisfaction with college environment." *International Journal of Scientific Management and Development*, 2(5), 87–93.

152. Sam, R., Md Zain, A. N., Jamil, H. Bin, Souriyavongsa, T., & Quyen, L. T. Do. (2013). "Academic adjustment issues in a malaysian research university: The case of cambodian, laotian, burmese, and vietnamese postgraduate students' experiences." *International Education Studies*, 6(9), 13–22. https://doi.org/10.5539/ies.v6n9p13

153. Sangeeta, & Chirag. (2012). "A Study of Adjustment Problems of College Students in Relation To Gender , Socio-Economic Status & Academic Achievement." *International Journal of Behavioural Social and Movement Sciences*, 1(2), 90–98.

154. Sawyer, R. D. (2000). "Adapting Curriculum to Student Diversity : Patterns of Perceptions Among Alternate- Route and College-Based Teachers." *The Urban Review*, 32(4), 343–363.

155. Sheldon, K. M. (2008). "Assessing the sustainability of goal-based changes in adjustment over a four-year period." *Journal of Research in Personality*, 42(1), 223–229. https://doi.org/10.1016/j.jrp.2007.03.002

156. Silander, C., Haake, U., & Lindberg, L. (2013). "The different worlds of academia: a horizontal

analysis of gender equality in Swedish higher education." *Higher Education*, 66(2), 173–188. https://doi.org/10.1007/s10734-012-9597-1

157. Singh, S. K., & Rajoria, R. P. "Study of Loss of Attendance in Engineering Institutions due to Holidays and Conferences." 25 (1), 164 - 172

158. Soubhi, F. Z., Lima, L., Talbi, M., Knouzi, N., & Touri, B. (2015). "Learning difficulties related of health status of Moroccan students." *Procedia - Social and Behavioral Sciences*, 197(February 2016), 1507–1511. https://doi.org/10.13140/RG.2.1.4341.0645

159. Schmeiser, M., Stoddard, C., & Urban, C. (2015). "Does Salient Financial Information Affect Academic Performance and Borrowing Behavior among College Students?" *Finance and Economics Discussion Series*, 2015(75), 1–38. https://doi.org/10.17016/FEDS.2015.075

160. Schulte, D. P., Slate, J. R., & Onwuegbuzie, A. J. (2011). "Hispanic college students' views of effective middle-school teachers: A multi-stage mixed analysis." *Learning Environments Research*, 14(2), 135–153. https://doi.org/10.1007/s10984-011-9088-9

161. Shalini, S., Geap, O., Harveen, K., & Bakri, S. (2011). "Research Paper Prevalence of Depression and the Impact of Psychosocial Factors in Undergraduate Students at a Private University in Kedah, Malaysia." *International Journal of Pharmaceutical Sciences and Nanotechnology*, 4(1), 1338–1346. Retrieved from http://www.ijpsnonline.com/Issues/1338_full.pdf

162. Shell, D. F., & Soh, L. K. (2013). "Profiles of Motivated Self-Regulation in College Computer Science Courses: Differences in Major versus Required Non-Major Courses." *Journal of Science Education and Technology*, 22(6), 899–913. https://doi.org/10.1007/s10956-013-9437-9

163. Shumba, A., & Naong, M. (2012). "Factors Influencing Students' Career Choice and Aspirations in South Africa." *Journal of Social Sciences*, 33(2), 169–178.

164. Sinanan, A. N. (2012). "Still Here: African American Male Perceptions of Social and Academic Engagement at a 4-Year, Predominantly White Institution of Higher Learning in Southern New Jersey." *SAGE Open*, 2(2). https://doi.org/10.1177/2158244012445212

165. Slovacek, S., Whittinghill, J., Flenoury, L., & Wiseman, D. (2012). "Promoting minority success in the sciences: The minority opportunities in research programs at CSULA." *Journal of Research in Science Teaching*, 49(2), 199–217. https://doi.org/10.1002/tea.20451

166. Smith, M. K., Vinson, E. L., Smith, J. a., Lewin, J. D., & Stetzer, M. R. (2014). "A Campus-Wide Study of STEM Courses: New Perspectives on Teaching Practices and Perceptions." *Cell Biology Education*, 13(4), 624–635. https://doi.org/10.1187/cbe.14-06-0108

167. Stanton, K. C., & Siller, T. (2012). "A first look at student motivation resulting from a pass/fail program for first-semester engineering students." *In Proceedings - Frontiers in Education Conference, FIE* (pp. 1–6). https://doi.org/10.1109/FIE.2012.6462266

168. Stewart, D.-L. (2014). "Know your role: Black college students, racial identity, and performance." *International Journal of Qualitative Studies in Education*, (July), 1–21. https://doi.org/10.1080/09518398.2014.916000

169. Strayhorn, T. L., & Tillman-Kelly, D. L. (2013). "Queering Masculinity : Manhood and Black Gay Men in College." Spectrum: *A Journal on Black Men*, 1(2), 83–110. https://doi.org/10.2979/spectrum.1.2.83

170. Sučylaitė, J. (2013). "The Analysis of Factors Able to Strengthen Teachers' Anxiety Disorders and Symptoms of Depression, and the Benefit of Psychoeducation." *Sveikatos mokslai/Health Sciences*, 23(1 (86)), 70-73.

171. Suppaiah, K. (2003). "Religious services Attendance and College adjustment of diploma in computer science UTM students." *Jurnal Teknikaldankajjan Sosial*, 81–88.

172. Petersen, I., Louw, J., & Dumont, K. (2009). "Adjustment to university and academic performance among disadvantaged students in South Africa." *Educational Psychology*, 29(1), 99–115. https://doi.org/10.1080/01443410802521066

173. Taniguchi, K., Ohashi, K., & Hirakawa, Y. (2013). "Analysis of students 'mathematical achievement in grades 3 and 6 in Uganda : Factors affecting test scores and curriculum performance." *Procedia - Social and Behavioral Sciences*, 93, 2058–2062. https://doi.org/10.1016/j.sbspro.2013.10.165

174. Taratutin, B., Lobe, T., Stolk, J., Martello, R., Chen, K. C., & Herter, R. (2012). "Work in progress: How do first-year engineering students develop as self-directed learners?" *In Proceedings - Frontiers in Education Conference, FIE* (pp. 31–33). https://doi.org/10.1109/FIE.2012.6462378

175. Théroux, P. J. (2009). "Work in progress - Creating cross-generational Co-learning opportunities through inquiry-based curricula." *Proceedings - Frontiers in Education Conference, FIE*, 1–2. https://doi.org/10.1109/FIE.2009.5350824

176. Thomas, L., & Heath, J. (2014). "Institutional wide implementation of key advice for socially inclusive teaching in higher education. A Practice Report." *The International Journal of the First*

Year in Higher Education, 5(1), 125–133. https://doi.org/10.5204/intjfyhe.v5i1.206

177. Trammell, B., & Aldrich, R. (2016). "Undergraduate Students' Perspectives of Essential Instructor Qualities." *Journal of the Scholarship of Teaching and Learning*, 16(1), 15. https://doi.org/10.14434/josotl.v16i1.19178
178. Trenor, J. M. (2009). "Phenomenological Inquiry of the Major Choice" *Processes of an Overlooked Demographic* .Pdf, 1–6.
179. Trevino, N. N., & DeFreitas, S. C. (2014). "The relationship between intrinsic motivation and academic achievement for first generation Latino college students." *Social Psychology of Education*, 17(2), 293–306. https://doi.org/10.1007/s11218-013-9245-3
180. Ültay, N., & Dönmez Usta, N. (2016). "Investigating prospective teachers' ability to write context-based problems." *Journal of Education Faculty*, 18(1), 184-240.
181. Valeri-gold, M., Deming, M. P., Callahan, C., Mangram, M. T., & Errico, M. (1998). "An Investigation of Developmental Students' Adaptation to College." *Research in Teaching in Developmental Education*, 15(1), 35–46. https://doi.org/http://www.jstor.org/stable/42802497
182. Van Jaarsveldt, D. E., & Ndeya-Ndereya, C. N. (2015). "It's not my problem': exploring lecturers' distancing behaviour towards students with disabilities." *Disability & Society*, 30(2), 199–212. https://doi.org/10.1080/09687599.2014.994701
183. Varma, R. (2010). "Why so few women enroll in computing? Gender and ethnic differences in students perception?" *Computer Science Education*, 20(4), 301–316.
184. Victorino, C. a., Nylund-Gibson, K., & Conley, S. (2013). "Campus Racial Climate: A Litmus Test for Faculty Satisfaction at Four-Year Colleges and Universities." *The Journal of Higher Education*, 84(6), 769–805. https://doi.org/10.1353/jhe.2013.0037
185. Virnoche, M., & Eschenbach, E. a. (2010). "Race, gender and first generation status in computing science, engineering and math persistence." *Proceedings - Frontiers in Education Conference*, FIE, 1–6. https://doi.org/10.1109/FIE.2010.5673137
186. West, E. T. (2013). "A Phenomenological Case Study of the Experiences of African American High School Students." *SAGE Open*, 3(2). https://doi.org/10.1177/2158244013486788
187. Williams, P. E., & Hellman, C. M. (2004). Differences in Self Regulation For Online Learning Between First and Second Generation College Students. *Research in Higher Education*, 45(1), 71–82. https://doi.org/10.1023/B
188. Wolffa, K., & Lucke, K. (2013). "Integrating multidisciplinary engineering knowledge." *Teaching in Higher Education*, 18(1), 78–92. https://doi.org/10.1080/13562517.2012.694105
189. Wouters, S., Germeijs, V., Colpin, H., & Verschueren, K. (2011). "Academic self-concept in high school: Predictors and effects on adjustment in higher education." *Scandinavian Journal of Psychology*, 52(6), 586–594. https://doi.org/10.1111/j.1467-9450.2011.00905.x
190. Xie, Y., & Goyette, K. (2003). "Social mobility and the educational choices of Asian Americans." *Social Science Research* (Vol. 32). https://doi.org/10.1016/S0049-089X(03)00018-8
191. Yarnold, P. (2016). "Pairwise Comparisons using UniODA vs . Not Log-Linear Model : Ethnic Group and Schooling in the 1980 Census Pairwise Comparisons using UniODA vs . Not Log-Linear Model : Ethnic Group and Schooling in the 1980 Census." *Optimal Data Analysis*, 5(May), 19–23.
192. You, S. (2013). "Gender and ethnic differences in precollege mathematics coursework related to science, technology, engineering, and mathematics (STEM) pathways." *School Effectiveness and School Improvement*, 24(1), 64–86. http://doi.org/10.1080/09243453.2012.681384
193. Zang, A. Y. (2012). "Evidence on the tradeoff between real manipulation and accrual manipulation." *The Accounting Review*, 87(2), 675–703

JETIR

Journal of Emerging Technologies and Innovative Research

An International Open Access Journal

www.jetir.org | editor@jetir.org

Certificate of Publication

The Board of

Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)

Is hereby awarding this certificate to

RUDRAKUMAR M M

In recognition of the publication of the paper entitled

BANKING TRANFORMATION THROUGH GREEN BANKING IN INDIA , THEIR EFFECTS AND IMPLICATION OF KODAGU DISTRICT

Published In JETIR (www.JETIR.org) ISSN UGC Approved & 5.87 Impact Factor

Published in Volume 5 Issue 10 , October-2018

EDITOR IN CHIEF

Journal of Emerging Technologies and Innovative Research
ISSN
2349-5162

JETIRG006014

Research Paper Weblink http://www.jetir.org/view?paper=JETIRG006014

Registration ID : 189009

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

BANKING TRANFORMATION THROUGH GREEN BANKING IN INDIA , THEIR EFFECTS AND IMPLICATION OF KODAGU DISTRICT

RUDRAKUMAR M M
RESEARCH SCHOLAR
P G DEPARTMENT OF COMMERCE
MANGALORE UNIVERSITY

ABSTRACT

This paper suggests the banking transformation through green banking and how this transformation has a greater implication and effects in kodagu district. Today Indian banking has undergone a tremendously transformation moving forward from manual to technological leading position. Today a consumer can go to an ATM across locations, operate the bank account through web, call a customer service centers for queries and never need a visit to branch for banking transactions.On account of demonetization of 500 and 1000 rupee notes the banks and the customers were involved in acceptance and exchange of currencies. During this all the banks were overcrowded in kodagu district and now people are adopting themselves to the green banking technology. Even if the banking transactions become easy, people are not accepting the modern banking technology rather than using ATMs. This shows that even if there is Digitization people look back the disadvantages and the fraud which might occur due to green banking technology.

KEYWORDS: Banking, Demonetization, Technology, transformation, Digitization.

INTRODUCTION

Banking sector is considered as the key element for today's sustainable development and is environment friendly. Environmental impact of banks is not physically related to their banking activities but with the customer's activities. Today a larger transformational change is taking place in banking sector. Demonetization process has lead the people to use the technology for their banking transactions.

Although banks are considered environment friendly and do not impact the environment greatly through their own internal operations, the external impact on the environment through their customers activities is substantial. ''Green banking" refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance green technology and pollution reducing projects.

Digitization has brought a major change in the minds of people particularly in kodagu district. People are adopting themselves to the banking technologies but still there are some loopholes which may lead to the failure of digitization process. ATMs have been widely adopted but the level of adoption of other electronic banking means despite their potential are yet to pick in a big way.

REVIEW OF LITERATUTE

Green Banking aims at greener and a clean future. From the primary survey conducted we found that surprisingly even those people who are using online facilities provided by their banks nearly 60 percent of them are unaware of the term Green Banking. They find that among those who are aware of Green Banking

© 2018 JETIR October 2018, Volume 5, Issue 10 www.jetir.org (ISSN-2349-5162)

term consider it mainly related to online bill payment and cash deposit system. Other Green Banking aspects like Green CDs, solar powered ATM, bonds for environment protection are among few of which consumers are not aware of. The attempt to analyze the awareness of green initiatives by bank specially E-Statements, Net Banking and Green loans is also done. The major obstacle in Green Banking is the technical issues involved followed by lack of education.

OBJECTIVES OF THE STUDY

Following are the main objectives:

1. To know the green banking implications in Kodagu district.
2. To know the impact of demonetization.
3. To know the awareness and implication of banking technology.
4. To know how far the digitisation is implemented.
5. To provide some findings and suggestions based on the study.

RESEARCH METHODOLOGY

For the purpose of study both Primary data and secondary data has been collected. Primary data has obtained through distribution of questionnaires and secondary data which consist of books, journals, websites etc.

LIMITATIONS OF THE STUDY:

- Time limitation
- Study is limited to Kodagu district .
- Study confines only to 100 respondents.

STEPS IN GREEN BANKING

Following are green banking steps of Indian Banks:-

- **Mobile Banking:-**
  Mobile banking is tricky. On the one hand, it is great to have the ability to check balances, transfer funds or pay bills from you phone. One the other hand, it saves time and energy of the customers. It also helps in reducing use of energy and paper of the bank. Most of the Indian banks introduced this paper-less facility.
- **Power Saving Equipment:-**
  Banks can directly contribute to controlling climate change and as an initial step they intend to start a campaign to replace all fused GSL bulbs, in all owned premises offices and residential areas. Banks can also make a feasibility study to make rain water harvesting mandatory in all the Bank's owned premises. In December 2009 IndusInd Bank inaugurated Mumbai's first solar-powered ATM as part of its ''Green Office Project" campaign titled ''Hum aur Hariyali".
- **Going Online:-**
  Online banking is a new and fast-developing concept in young and corporate India. It helps in conservation of energy and natural resources.
  Online Banking incorporates:
  Paying bills online
  Remote deposit
  Online fund transfers

Online statements.

Online savings account and mobile banking is the easiest way to do your bit to bank green and help the environment. Online banking creates savings from less paper, less energy, and less expenditure of natural resources from banking activities. Customers can save money by avoiding late payments of fees and save time by avoiding standing to queues and paying the bill from home online. These are also highly effective ways to keep track of your finances and to avoid late payment fees. Paying bills online is something of a lifestyle change, but it can be done. Telephone bills, cable bills, utility bills, credit card payments and mortgage payments can all be paid electronically.

- **Using Green Checking Accounts:-**

Customers can check their accounts on ATM or special touch screens in the banks. This can be called as green checking of account. Using a green checking account helps the environment by utilizing more online banking services including online bill payment, debit cards, and online statements. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees etc.

- **Green Loans for Home Improvements:-**

The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to those customers interested in buying solar equipment. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank Green loan are perfect for energy-saving project around the house. For example, the new Green Home Loan Scheme from SBI will support environmentally-friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits –a 5 percent concession in margin, 0.25 percent concession in interest rate and processing fee waiver.

- **Saving Paper:-**

Bank should purchase recycled paper products with the highest post-consumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil based inks.

- **Green Credit Cards:-**

Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly non-profit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.

- **Use Of Solar And Wind Energy:-**

Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.

Online statements.

Online savings account and mobile banking is the easiest way to do your bit to bank green and help the environment. Online banking creates savings from less paper, less energy, and less expenditure of natural resources from banking activities. Customers can save money by avoiding late payments of fees and save time by avoiding standing to queues and paying the bill from home online. These are also highly effective ways to keep track of your finances and to avoid late payment fees. Paying bills online is something of a lifestyle change, but it can be done. Telephone bills, cable bills, utility bills, credit card payments and mortgage payments can all be paid electronically.

- **Using Green Checking Accounts:-**

  Customers can check their accounts on ATM or special touch screens in the banks. This can be called as green checking of account. Using a green checking account helps the environment by utilizing more online banking services including online bill payment, debit cards, and online statements. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees etc.

- **Green Loans for Home Improvements:-**

  The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to those customers interested in buying solar equipment. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank Green loan are perfect for energy-saving project around the house. For example, the new Green Home Loan Scheme from SBI will support environmentally-friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits –a 5 percent concession in margin, 0.25 percent concession in interest rate and processing fee waiver.

- **Saving Paper:-**

  Bank should purchase recycled paper products with the highest post-consumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil based inks.

- **Green Credit Cards:-**

  Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly non-profit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.

- **Use Of Solar And Wind Energy:-**

  Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.

DATA ANALYSIS :

The survey results are as follows:

1.0 Inclusion in Banking activities.

Table 1.0

Age	Frequency	Percentage
15-25	08	08
26-35	32	32
36-45	16	16
46-55	24	24
55 above	20	20
Total	**100**	**100**

Table 1.0 shows the inclusion of people in banking activities.

2.0 Qualification of the respondents.

Table 2.0

Particulars	Frequency	Percentage
SSLC	14	14
PUC	20	20
Degree	40	40
PG and above	26	26
Total	**100**	**100**

Table 2.0 reflects the qualification of respondents. Majority of the respondents are Degree holders

3.0 Type of bank account used

Table 3.0

Particulars	Frequency	Percentage
SB Account	58	58
Current Account	12	12
FD Account	19	19
Recurring Account	23	23
Total	**100**	**100**

Table 3.0 shows the bank account used by customers in different banks. Majority are S B a/c holders

4.0 Frequency of Transaction

Table 4.0

Particulars	Frequency	Percentage
Daily	21	21
Weekly	40	40
Monthly	17	17
Quarterly	10	10
Yearly	12	12

4. Online banking awareness has to be created so as to make each individual to be included in the banking activity.
5. Safety should be given priority while making the debit card transactions.
6. The fear of fraud taking place in the online transactions has to be minimised in order to increase the banking activities go green.

CONCLUSION

Banks provide a platform to perform our day to day activities. After the demonetization effect people are slowly moving to the world of digitization and yet in a world of transformation. Green banking concept is slowly achieving popularity and the day is near where there is a revolutionary change in banking transactions and a formation of paperless society.

References:

1. Ahuja Neyati. (2015), "Green Banking in India: A Review Of Literature", International Journal for research in management and pharmacy, Vol.4, January , pp.11-16.
2. Amin Ashitha (2016), "Green Banking In India And Global Perspective - A Review", International Journal of Management and Social Science Research Review, Vol.1,
3. Bahl Sarita. (2012),"Green Banking- The New Strategic Imperative", Journal Of Asian Research Consortium, Vol.2, Issue 2, February, pp.176-185.
4. Bhardwaj B. R and Malhotra A(2013), "Green Banking Strategies: Sustainability through Corporate Entrepreneurship", "Greener Journal of Business and Management Studies",Vol.4,pp.180-193.
5. Chaurasia Kumar Ashis(2014) "Green Banking Practices In Indian Banks", Blue Square Publishing House,Vol.1,February, pp.41-54.
6. Equator Principles (2011), About equator principles, available at http://www.equator principles.com/index.php/about-ep/aboutep.
7. http://greenbankreport.com
8. Mahesh.A.C, Nirosha.M and Pavithra .V(2016) "Reacent Trends In Indain Banking-Green Banking Intiative In India", International Journal Of Science Technology And Management , Vol.5,February,pp.369-374.
9. www.bucb.in
10. www.indianjournals.com
11. www.kanaradccbank.com
12. www.milagrescooperative.com
13. www.rbi.org.in
14. www.wikiepedia.com

Emerging Issues, Challenges and Suggestions of Higher Education in India

Rudrakumar.M.M[1]

Abstract

Education is one of the significant factors instrumental to the development of a country. It should be transformed to the needs of the time and changing scenario of the world. It provides an opportunity to critically reflect upon the social, economic, cultural, moral and spiritual issues facing humanity. India needs more efficient and educated people to drive our economy forward. There are many Indian around the corner who known for their capabilities and skills. To develop India as an education hub or to become a prosperous partner in global economy, India has to qualitatively strengthen education in general and higher education with research and development in particular. This paper is mainly focused on the overall performance of higher education system in India. We try to find out the initiatives taken by the government to raise level of education system. This paper aims to identify emerging issues and challenges in the field of Higher Education in India. Finally the paper concludes here is need of plans requires solutions that combine, employers and youth need of Expectations of from various stakeholders Students, Industry, Educational Institutions, Parents and Government.

KEY WORDS: Higher Education, Financing,challenges, Issues.

Introduction

Higher education is very important for a developing country like India and it is encouraging to increasing human development. Higher education in India has experienced phenomenal expansion since independence. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the world. Now it is one of the top ten countries in our industrial and technological capacity, because of the significant contribution of manpower and tools provided by higher education, especially, technical education. India has already entered into the era of knowledge explosion. It has proved its tremendous potential by its performance in nuclear and space domains. In the coming few decades will be heralded by space craft, satellites, interne offshoots of scientific enquires. Higher Education provides opportunities to the people to reflect on the critical social, cultural, moral, economic and spiritual issues facing humanity. Higher education provides specialized knowledge and skilled persons for national development. In next few decades, India will have world's largest set of young people. While the correlation between people and higher education is not up to the mark. The increasing youth population can be agreat asset if potential employability is brought to fruition. Conversely, if we fail to provide education and employment then it will open a downside gate for Indian economy. Education is an essential tool for achieving sustainability. The Education Commission 1964-66 described the role of education in social and economic transformation through a statement- the density of a nation is shaped in its class rooms. Education creates human capital which is the core of economic progress and assumes that the externalities generated by human capital are the source of self sustaining economic process. This paper aims to identify emerging issues and challenges in the field of Higher Education.

Objectives

1. To analyze the current scenario of higher education system in India
2. To study the total student and girls enrolment in Higher Education
3. To identify on the Emerging issues of higher education in India
4. To identify on the Emerging Challenges of higher education in India
5. Suggestions for improving quality of higher education and Conclusion

Higher Education Scenario in India reveals that there has been appreciable growth of higher education since 1951. Number of university level institutions and colleges has grown up from 28 to 677 and 578 to 3800 respectively from 1951 to 2014. As a result, the number of teachers as well as students has also increased significantly. The growth of students" enrolment is more than the growth of number of teachers over the period of time, may be due to the massive investment by government at school level in form of primary as well as secondary education. Rise in enrolments and institutions at school level, there is mushrooming growth in higher education institutions At the end of 2014 there were 677 Universities and 38000 colleges in India. But still we need more than 1500 universities to cater the demand. The table 1 shows that our education system is improving not only in number of colleges and universities but also in enrolment. [illegible] of these universities have affiliated colleges where undergraduate courses are

education. There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education.

Student-Centred Education and Dynamic Methods-

Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centred education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale. **Examination Reforms-** Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning must be implemented. **International Cooperation-** Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them. **To increase Quantity of Universities-** We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrolment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India. **Cross Culture Programmes-** After education, tour to every the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human [illegible]

Indian education system is more focused on theoretical knowledge rather than practical knowledge. In many jobs there is also a minimum requirement of percentage which is high. Traditional methods of teaching: Professors still stick to those older methods of teaching like board, marker. They don't like to make use of audio visual aids in teaching. Also they are not up to date with the information available and what global industry demands.

Privatization:

In the present scenario, privatization of higher education is apparently a fledgling but welcome trend and is essential to maintain creativity, adaptability and quality. The economic trail of liberalization and globalization demands it. In India both public and private institutions operate simultaneously. Approximately 50 per cent of the higher education in India is imparted through private institutions, mainly unaided involving high cost. However, the situation is not so simple. Private providers, in the interest of maximizing profit, have every incentive to 'minimize costs' by compromising on the quality of education provided in their institutions. Last but not least, quality of teaching staff is one of the considerable issues for higher education sector to sustain in the future. Earlier, they were committed to their students to their subjects and to their profession. Today, high salaries are available but the commitment is less. Thus, it is the need of the hour to free the higher education system from unnecessary constraints and political interference.

Infrastructure:

In India, many of the universities don't have adequate infrastructure or facilities to teach students. Even many private universities are running courses without classrooms. Internet and Wi-Fi facility is still out of reach of many students.

Quota System:

Bringing the reservation and quota system for different categories in education lost its quality. Even deserving candidates of general categories are ignored and on quota we have to select other person from reserved category even though he is not suitable. Emerging Challenges The system of Indian Higher education is the second largest in the world which fulfills the educational requirements of millions of students who come from different sections of the approved and taught. But still, if we compare this improving stat with increasing population, then we have to rethink, is it still improving. Growth of higher education level wise student enrolment boys and girls 2010-2011 has revealed in table -2.The study explores the fact that the women enrolments ratio is less when compare to male. The data evidently speaks the truth that the enrolment difference has found with19 percent in research and next come with17 percent in under graduation and next come with 13 percent in post graduate.

Emerging Issues

The role of higher education in the emerging scenario of knowledge economy is very crucial and multifaceted for any country in general and India in particular. There are many basic problems faced by higher education system in India. These include Lower level of teaching quality, Financing of higher education, More concentrated on theories and rather than practical knowledge, Traditional methods of teaching, Privatization, Inadequate facilities and infrastructure Quota system.

Level of teaching quality:

Our education system is torture by issues of quality in many of its institutions and Universities. Many of the issues like lack of faculty, poor quality teaching, Traditional teaching methods, outdated and rigid curricula and pedagogy, lack of accountability and quality assurance and separation of research and teaching are raise questions on Indian education system.

Higher EducationFinancial Constraints:

One of the most important things that have to be noticed is the issue of financial constraints regarding higher education before the government. Expenditure on education in common and on higher education in particular by the government, is one of the parameters to judge the quality in education for at all nation. The State Government have already been spending 20-30 per cent of its revenue budget on education. It cannot afford to spend more. In India, higher education has received less attention in terms of public spending than other levels. It is not feasible for India to makemassive state investments in research and development that produced research led universities in the west such as MIT, University of California, Berkeley in the US or University of Cambridge in Brita[illegible]d on theories and rather than practical knowledge:

[illegible] with [illegible] problem [illegible] appearance [illegible] moral and political values [illegible] problem. Challenges have emerged [illegible] how [illegible] have been [illegible] generating [illegible] real urban [illegible] educational institutions. Varieties of colleges [illegible] institutions have evolved and different types and [illegible]. Some of them are really imparting qualitative education [illegible] doing the dirtiest job. Thanks [illegible] for publishing the [illegible] and Institutions indulging in educational malpractice.

Political Interference:

Most of the Institutions imparting education (A.del.regarded) are owned by the dominant political leader [illegible] governing bodies of the Universities. They have established their own youth cells and encourage students organization on political basis. They exploit the students energy for their political purposes. The students forget their own objectives and begin to develop their career in politics.

Economic Difficulties:

It one of the most troublesome changes that the present higher education system has imposed on the communities. The numbers of students are coming from the ordinary classes, many of them are unable to provide the minimum necessities of life for themselves. Economic miseries have grown due to the increasing prices, habits of wasting money on luxuries, increasing population, scarcity of food supply, corruption, selfish etc. students hold part time jobs in order to pay for the their educational expenses and should divide their attention between a job and College/University education. Near about seventy five percent of the total students community today, have been facing the financial problems. Earn while learn scheme cannot adequately support student to face economic challenges. Lack of Moral values: Rapid growth of science and technology and subsequent industrialization has caused a great and danger to our old moral and values. The younger generation's dissatisfaction and revolt is the outcome of a decaying system of values. Suggestions for improving quality of higher

education. There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education.

Student-Centred Education and Dynamic Methods-

Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centred education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale. Examination Reforms- Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning must be implemented. International Cooperation- Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them. To increase Quantity of Universities- We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrolment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India. Cross Culture Programmes- After education, tour to every the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human [illegible]

December 2018

3

VOLUME 46
CODEN:JPCR DW
ISSN (PRINT) 0304-5242
ISSN (ONLINE) 2454-8480

JOURNAL OF PLANTATION CROPS

A multi disciplinary international journal devoted to tropical and subtropical plantation crops

CONTENTS

Research Articles

Continued on back cover

INDIAN SOCIETY FOR PLANTATION CROPS

http://indsocplantationcrops.in

doi.org/10.25081/jpc.2018.v46.i3.2056
Journal of Plantation Crops, 2018, 46(3): 218-220

Evaluation of selective cocoa (*Theobroma cacao* L.) clones from Central and South America in their initial years of growth

S. Elain Apshara and K.J. Krithika

ICAR - Central Plantation Crops Research Institute, Regional Station, Vittal-574 243, Karnataka, India

(Manuscript Received: 30-12-2017, Revised: 15-08-2018, Accepted: 01-11-2018)

Keywords: Cocoa, clones, dry bean yield, growth

Cocoa (*Theobroma cacao* L.) has originated from Amazon basin and other tropical areas of South and Central America. Genetic resources from these regions with their establishment potential, high yield, disease resistance and other desirable commercial qualities, have been utilised in breeding programs of Cocoa Research Institutes of Ghana, Nigeria, Trinidad and Fiji for development of superior varieties (Martin, 1987; Adu Ampomah, 1996). In India, initial introductions were made from Malaysia and Nigeria at ICAR-CPCRI, Regional Station, Vittal and subsequently collections were made from Central and South American region to widen the genetic base. Also, these collections have been assessed for their morphological, physiological and molecular characteristics in their initial years of establishment (Elain Apshara *et al.*, 2013). Results of evaluation trials in Indonesia have claimed that progress in breeding with new clones is 20-40 per cent over hybrids (Napitupulu, 1993). Genetic evaluation of germplasm collections for their diversity, quantitative and qualitative characteristics is very essential in selection of promising genotypes and further improvement in hybridization programs (Minimol *et al.*, 2015). Hence, the evaluation of newly collected 15 specific clones comprising of Bolivar (B), Pound (POU), Rio Branco (RB), Rosario Izupa Mexico (RIM), Santa Cruz (SCZ) and Trinitario Selected Hybrid (TSH) were carried out to assess their adaptability, precocity in bearing, variability in pod characteristics and yielding potential.

The clones were planted during 2007 with 2.7 m x 5.4 m distance under 2.7 m x 2.7 m spaced arecanut. Five trees from each clone were evaluated for their cropping efficiency in the arecanut based cropping system from fifth to ninth year of growth. Growth characters *viz.*, plant height (m), girth (cm), first branching height (m), number of branches and canopy area (m^2) were recorded. During the main harvest season in the month of June, five pods from each tree were observed for pod weight (g), husk thickness (cm) and beans number per pod. The husked fresh beans were fermented, dried and observed for single dry bean weight (g), shelling (%), nib recovery (%) from 50 beans. Fat (%) from powdered nibs were estimated by Soxhlet extraction method using petroleum ether as solvent. The data were analysed using SAS programme.

From the growth characters of nine year old trees, provided in Table 1, it was observed that only girth and canopy area of clones differed significantly. Vigour with respect to girth or trunk circumference and canopy size influences the yielding potential of the crop in all clonal evaluation trials (Efron *et al.*, 2000). Among the clones studied, girth of trees ranged from 25 to 32 cm and canopy

*Corresponding Author: elain_apshara@yahoo.co.in

Table 1. Morphological characters of Central and South American cocoa clones (9 years old)

Clones	Height (m)	Girth (cm)	HAFB (m)	Branches (No.)	Canopy area (m²)
B 5/3	3.20	30	1.08	3.0	13.10
B 7/14	2.60	30	0.84	4.8	9.43
POU 7/B	2.79	30	1.55	4.0	8.11
POU 16/A	2.90	28	0.82	3.3	10.90
POU 18/A	3.05	28	1.03	2.3	5.58
RB 33/3	3.15	31	1.23	7.4	11.40
RB 46	2.96	32	1.20	8.3	10.4
RB 49	2.93	28	1.21	3.6	8.76
RIM 41	3.11	28	1.31	5.8	9.96
RIM 189	3.15	28	0.94	6.0	12.60
SCZ 1	3.25	28	1.17	6.5	10.10
SCZ 4	2.85	29	1.16	5.0	8.30
SCZ 9	2.91	26	1.20	4.1	9.10
SCZ 20	3.03	27	1.06	4.9	10.30
TSH 516	2.84	29	0.90	3.5	10.00
SEd	NS	10	NS	NS	24
CD (5%)	-	5	-	-	11

HAFB: Height at first branching

area ranged from 8-15 m², which is maintained by annual structural pruning. Studies at French Guiana on family competition effects of trees showed that vegetative vigour explained 34 per cent of the potential and the use of the production: vigour ratio as the main selection criterion in cocoa breeding (Lachenaud and Montagnon, 2002). In our study, optimal trunk strength and canopy area contributed to the high yielding nature of clones and made them suitable in the arecanut based intercropping system.

Pod yield ranged from 7 to 31 in the 5th year of bearing (Table 2) and increased from 22 to 39 in the 9th year of bearing. Tree adaptability and yield stability have been used to screen agronomically superior cultivars for yield, bean quality and disease resistance in Brazil (Carvalho *et al.*, 2002; 2003). Among the clones studied, pod yield stabilised in 12 clones from 7th year onwards. Substantial variability was reported between cultivars for pods per tree, pod weight, fresh bean weight per fruit and bean size when several multivariate methods have been used in divergence analysis of populations (Dias and Kageyama, 1998; Fallo and Cilas, 1998). In our collections also, pod and bean characters varied among the clones with pod weight ranging from 218 to 555 g with husk thickness of 0.67 to 1.58 cm and number of beans per pod ranging from 31 to 45 with single dry bean weight of 0.62 to 1.06 g (Table 3). The dry bean yield is compiled here from ninth year

Table 2. Pod yield of Central and South American cocoa clones for five years (No. of pods tree⁻¹ year⁻¹)

Clones	2012	2013	2014	2015	2016
B 5/3	7.33	10.8	34.4	24.5	24.3
B 7/14	9.30	15.4	33.4	24.3	25.0
POU 7/B	12.7	26.2	31.3	34.0	21.6
POU 16/A	18.0	16.0	35.8	35.5	35.0
POU 18/A	11.0	25.6	12.8	25.0	27.8
RB 33/3	31.0	11.6	33.4	34.2	28.9
RB 46	12.3	9.20	24.6	25.0	25.0
RB 49	18.0	16.6	18.8	22.5	24.4
RIM 41	10.3	15.0	36.8	30.8	25.3
RIM 189	9.0	16.0	24.2	27.8	26.8
SCZ 1	14.0	17.8	37.8	37.3	37.6
SCZ 4	15.3	9.40	20.8	28.5	26.8
SCZ 9	12.0	12.0	34.4	34.3	29.9
SCZ 20	10.3	18.6	35.2	35.6	38.0
TSH 516	17.0	16.0	37.2	35.0	35.0
SEd	1.96	2.71	3.22	12.5	3.5
CD (5%)	3.18	5.76	6.94	27.1	7.0

pod yield, single dry bean weight and number of beans per pod, which ranged from 0.49-1.46 kg tree⁻¹ year⁻¹. The industrial value of clones was assessed and the shelling, nib recovery and fat percentages ranged from 10-25, 75-90 and 30-53 respectively (Table 3).

The clones, SCZ-1, SCZ-20, TSH-516 and POU-16A, with a vigour of around 28 cm and 10 m² canopy, yielded on an average 35 pods with >40 beans of 0.97-1.01 g weight recorded 1.37 to 1.46 kg

Table 3. Pod and bean characters of Central and South American cocoa clones

Clones	Pod wt. (g)	Husk (cm)	No. of beans pod^{-1}	SBW (g)	DBY (kg tree^{-1} yr^{-1})	Shell (%)	Nib recovery (%)	Fat (%)
B 5/3	550	1.58	31	0.65	0.49	25	75	35
B 7/14	555	1.58	40	0.68	0.68	23	79	36
POU 7/B	446	1.26	41	0.62	0.55	14	86	40
POU 16/A	350	0.90	45	0.97	1.43	10	90	50
POU 18/A	218	0.88	42	0.64	0.75	21	79	36
RB 33/3	284	1.30	39	0.71	0.80	14	86	42
RB 46	302	1.27	33	1.06	0.87	10	90	40
RB 49	334	1.14	41	0.83	0.83	12	88	38
RIM 41	278	0.95	38	0.90	0.87	17	83	37
RIM 189	268	0.67	37	0.96	0.95	18	82	30
SCZ 1	352	0.90	40	1.01	1.46	14	86	52
SCZ 4	242	0.91	34	0.62	0.56	13	88	40
SCZ 9	420	1.38	38	0.94	1.07	11	89	53
SCZ 20	352	1.00	42	1.00	1.45	14	86	50
TSH 516	360	0.94	43	0.98	1.37	13	88	50
SEd	12.9	0.09	3.96	0.05	0.04	1.45	2.46	6.93
CD (5%)	25.9	0.18	7.94	0.10	0.07	2.90	4.93	12.8

SBW: Single dry bean weight, DBY: Dry bean yield

dry bean yields with favourable industrial value. These clones, which showed high adaptability and bearing behaviour, are selected as potential clones and will be utilised in hybridization programs and multi location trials. However, the stability in performance will be assessed for further more years for the heritable characters like number of beans and bean size to explore their true potential.

References

Adu Ampomah, Y. 1996. The cocoa breeding programme in Ghana: Achievements and prospects for the future. *Cocoa Growers Bulletin* **50**: 17-21.

Carvalho, PMT, Almeida, C.M.V.C., Cruz, C.D. and Machado, P.F.R. 2002. Yield repeatability and evaluation period in hybrid cocoa assessment. *Crop Breeding and Applied Biotechnology* **2**: 149-156.

Carvalho, PMT, Almeida, C.M.V.C., Cruz, C.D. and Machado, P.F.R. 2003. Hybrid cocoa tree adaptability and temporal yield stability in Rondonio state Brazil. *Crop Breeding and Applied Biotechnology* **3**: 237-244.

Dias, L.A. dos S and Kageyama, P.Y. 1998. Comparison between multivariate methods applied for the evaluation of genetic divergence in cacao. *Brazilian Archives of Biology and Technology* **41**: 199-206.

Fallo, J. and Cilas, C. 1998. Genetic study of cocoa bean size in relation to agronomic traits. *Plantations Recherche Developpement* **5**: 195-200.

Efron, Y., N'Goran, J.A.K. and Lachenaud, P. 2000. Evaluation of vigour, yield, pod and bean traits. In: *Working procedure for cocoa germplasm evaluation and selection.* (Eds.) Eskes, A.B., Engels, J.M.M. and Lass, R.A.). IPGRI, Rome, Italy, pp. 76-82.

Elain Apshara, S., Rajesh, M.K. and Balasimha, D. 2013. Assessment of morphological, physiological and molecular characteristics of cocoa accessions from Central and South America in relation to drought tolerance. *Journal of Plantation Crops* **41**(3): 389- 397.

Lachenaud, P. and Montagnon, C. 2002. Competition effects in cocoa hybrid trials. *Euphytica* **128**: 97-104.

Martin, M.P.L.D. 1987. Performance of Amelonado and hybrid cocoa in Fiji. *Fiji Agriculture Journal* **49**: 17-24.

Minimol, J.S., Suma, B., Ummer, M. and Chithira, P.G. 2015. Genetic improvement of cocoa by developing superior hybrids. *Journal of Tropical Agriculture* **53**(2): 157-165.

Napitupulu, L.A. 1993. Progress of cocoa breeding and development prospect of high yielding planting material. *Bulletin of Oil Palm Research Centre* **1**: 55-61.

International Journal of Advance and Innovative Research
Volume 5, Issue 4 (XII): October - December, 2018
ISSN 2394 - 7780

CAMPUS ADAPTATIONS OF ENGINEERING UNDERGRADUATES ACROSS RELIGIONS

Dr. Vijayalakshmi N. S[1] and Dr. A. H. Sequeira[2]
Faculty[1], P. G. Department of Economics, University College Mangalore, Mangalore
Professor[2], School of Management, N. I. T. K Surathkal, Mangalore

ABSTRACT

Objective: The study aims to empirically test the relationship between types of campus adaptations across student religion at birth of engineering undergraduate B. Tech students pursuing a four-year study at Indian Institute of Technology (IIT's) and National Institute of Technology (NIT's) in India.

*Method: - The **Multivariate** Analysis of Variance (Manova) test was run with SPSS vs. 21 to compare the student's campus adaptations of IIT's and NIT's by religion. Multistage random sampling with n = 1420 students were selected accounting for Hindus (n = 1206), Muslims (n = 45), Christian's (n = 29). Students belonging to other minority communities were Christians (n = 29), Jains (n = 24), Sikh (n = 08) and Buddhist (n = 03). However, the student population who surprisingly did not want to associate themselves with any religion loomed large with associating themselves with being called Indian (n = 28), humanity (n = 15), Atheist (n = 35) and not applicable (n =26).*

Result and Conclusions: - There are significant differences across student religion on different forms of campus adaptations where much noticeably students who less associated themselves to any religion by being known on the survey as Indian, humanitarian, atheist and not applicable – all had positive institutional adaptation with negative academic, social and physical – psychological adaptation. In short, campus adaptations do vary across student's religion influencing student's experiences at university.

Keywords: Campus, adaptation, academic, social, physical, psychological and institution

INTRODUCTION

Religion on Campus impacts campus ethos (Proctor, 2002) with religious inclusion influencing higher education (Stevenson, 2014) resulting in college adjustment varying by student's religious background (Jackson, Mark Pancer, Pratt, & Hunsberger, 2001). It is often observed that when education and religiosity is taken into consideration, colleges do not dampen or damage student's religious commitment (Schmalzbauer, 2013). Religiosity impacts life of students (Abdel-Khalek & Lester, 2015). Of recent years there is a shift from religiosity to spirituality (Cragun, Henry, Mann, & Russell Krebs, 2014). Spirituality and religiosity are overlapping construct with one forming the subset of the other sharing some characteristics but also retaining nonshared features (Joshanloo, 2012). Exploring the essence of spirituality where spirituality is the human attempt to make meaning of the self in connection to and with the external world (Mayhew, 2004) proves vital to understand and assess spiritual health of student's (Fisher, 2009). Spirituality relates to each student's field of study influencing them in thier making of sound professionals especially in that of engineering (Halsmer et al., 2010) where spiritual wellbeing heavily influenced college adjustment (Mansor & Syahidah, 2012). Further campus climate experiences and perceptions differed by religious and spiritual views of students impacting diversity (Mayhew, Bowman, & Rockenbach, 2014). The campus spiritual climate affects student's diverse world views (A. B. Rockenbach & Mayhew, 2014) shaping student satisfaction (A. B. Rockenbach & Mayhew, 2014). Hence religion and spirituality impacts quality of life of college students (Hsien-Chuan Hsu, Krägeloh, Shepherd, & Billington, 2009). In Brief, religion impacts higher education (Mayrl & Oeur, 2009) where religious belief impacts college adjustment among college students (Edmondson & Park, 2009) and religiousness impacts college life (Moran, Roberts, Tobin, & Harvey, 2008) as it contributes to giving a meaning in life and general wellbeing (Z. H. Khan, Watson, Naqvi, Jahan, & Chen, 2015). In short, campus context, college encounters and religious spiritual struggle impact ecumenical world view development (Bryant, 2011) where religious coping depends on individual levels of religiosity and spirituality (Krägeloh, Chai, Shepherd, & Billington, 2012).

The student undergraduate B.Tech population of Institute of National Importance of IIT's and NIT's classified as per All India Survey Report on Higher Education (AISHE) from 2011 – 2016 on the basis of religion are as follows :-

Year	Total Student Across Religions		Muslim		Other Minorities	
	Male	Female	Male	Female	Male	Female
2011 - 12	56640	8099	190	22	305	92
2012 – 13	68296	10327	760	86	654	[illegible]

 ISSN 2394 - 7780

2013 - 14	71801	11332	1036	146	1041	267
2014 – 15	82281	13425	1114	187	949	249
2015 – 16	73566	12796	926	121	1534	412
Source :- AISHE Reports						

From the table above, it is evident that there has been a rise in the enrolment of Muslim and other minority community student population of 0.32% and 0.61% of year 2011 – 12 towards 1.21% and 2.25% of the year 2015 – 16. However much noticeably, the enrolment of female students continuing to be low compared to that of male students. Hence its vital to introspect the underrepresented minority student population adaptation at campus by religion.

The study seeks to analyse the relationship among student groups by their religious faith with the following research question and research objective: -

Research Question: - What makes campus adaptations of academic, social, physical - psychological and institutional attachment be unique across student religion?

Research Objective: - To examine existence of variance among campus adaptations of academic, social, physical psychological and institutional across student religion.

1. CAMPUS ADAPTATION

1.1 Academic Adaptation

Religious faith impacts performance (Aruguete, Goodboy, Jenkins, Mansson, & Mccutcheon, 2012) where spiritual wellbeing influenced good academic achievement (Mansor & Syahidah, 2012). Religion influenced students' academic major choice (Nudelman, 1972) which is supported of recent that religious variables are generally strong predictors of attitudes toward individual involving contested science issues like human evolution and other (Jelen & Lockett, 2014) as opposed to student's perceptions of conflict on dichotomy of religion and science (Martin-Hansen, 2008). The frequency of religious service attendance impacted college adjustment varying by gender and achievement (Suppaiah, 2003) revealing that students who had non-religious club involvement and non-religious attendance service had higher academic achievement (Good & Willoughby, 2011). Further it is observed that spirituality impacts learning (Sucylaite, 2013) and individuals who have a strong spiritual relationship with a higher power and are religious due to intrinsic motivation tend to be more confident in their ability to make career (Duffy & Blustein, 2005). Hence students who are spiritual are more motivated as students than non-spiritual students (Barmola, 2016) and college students who are more religiously engaged have a positive academic performance (Mayrl & Oeur, 2009).

1.2 Social Adaptation

Religious socialisation has positive implication on adjustment among youths (Jackson et al., 2001) where religion and region impacts women's autonomy (Jejeebhoy & Sathar, 2001) with vehemently noticed religious commitment higher in men than women (Schludermann et al., 2001). This was particularly observed in campus experience that varied by religious origin especially of minority religion like Muslims (Peek, 2003) who have been easily adhered to dress code impacting college adjustment (Rangoonwala, Sy, & Epinoza, 2011). More noticeably religion is an identity (Raman, 2003) and in particular racial identity attitude was predictive of religious orientation (Hwzhhq, Dqg, Phulfdq, Sanchez, & Carter, 2005) with an observed relationship between gender race and religion among university students (Arndt & Bruin, 2006). The generation next students, in the era of proposed secularisation on campus believed less in religion (Finnegan, 2007) as it was the vivid diversity that enhanced co-operation on campus (Patel, 2007). The effects of involvement in campus religious communities helped in establishing emotionally beneficial friendship networks making students delve more spiritually to be confident and committed at campuses (Bryant, 2007) with a positive relationship between the level of perceived discrimination and the percentage of campus friends who were of the same ethnicity but different religion (Shammas, 2009). Thus the role of interfaith leadership engaging religious diversity on campus and religious pluralism on college and university campuses (Patel & Meyer, 2009) influenced campus diversity in student's experiences belonging especially to that of religious minority (Darnell Cole & Shafiqa Ahmadi, 2010). Religiously diverse students, specifically Muslim veiled women, share some of the same adverse experience on campus as culturally and ethnically diverse students (Seggie & Sanford, 2010). In this regard, the greatest help can be faculites who serve as social supports for underrepresented minorities, in particular as mentors with socio cultural and spiritual resources (Strayhorn, 2010). Never the less, student religious organisations on campus preserve religious orthodoxy in secular campuses by excluding non-believers from their organisation (Thro & Russo, 2010), with the grave need of levelling the sense of social belonging by religion alone (Thorat, 2010).

International Journal of Advance and Innovative Research
Volume 5, Issue 4 (XII): October - December, 2018
ISSN 2394 - 7780

Spirituality and religion social indicators of university students (Yiengprugsawan, Seubsman, & Sleigh, 2012). Contradiction and conflict between 'leading identities' of becoming an engineer versus becoming a 'good Muslim woman are counter backed by religion (Black & Williams, 2013). Differentiation of self-impacted relationships between spiritual well-being and both social justice commitment has intercultural competence (Sandage & Jankowski, 2013) with religion influencing social relation and lifestyle of people (Baloch, Chhachhar, & Singutt, 2014) and spirituality enhancing nurturing and caring (Yilmaz & Gurler, 2014). Among college student's everyday theologies—personal religious beliefs that emerge through individuals' lived experiences and social interactions— had influence of attitudes than religion (Walls, Woodford, & Levy, 2014). Communication and interaction patterns impact student spiritual identity formation among students over four-year period in undergraduate community institutions (Forward, Moore, Richardson, & Shimansky, 2014) as some observe that religion hampers students entrance and progress in education with slow growth and low level of attainment (Rissler, Duncan, & Caruso, 2014) with an off late player of academic staff at campus also witnessing spiritual intelligence on job burn out at campus (Karampoor & Beig, 2015).

Further the primary influence on gender inequality in education is through culture and religion (Cooray & Potrafke, 2011) Religion's Impact on gender inequality in attitudes and outcomes persist as no single religion stands out as more gender inequitable than others transmitting stealth effects (Seguino, 2011). Spirituality is positive significant predictor of life satisfaction differing by gender (M. Khan, Shirazi, & Ahmed, 2011) contrarily with religiosity affecting sexuality diversifying by culture and race alone (Woo, Morshedian, Brotto, & Gorzalka, 2012). Therefore, ethno - centric niche persist as a thin line between cultural education and religious education (Fox, Buchanan, Eckes, & Basford, 2012).It is true that religion based stigma are experienced by students at campus (Mavhandu-mudzusi & Sandy, 2015) The inter faith co - curricular engagement impacts student's pluralism orientation at campus (A. N. Rockenbach, Mayhew, Morin, Crandall, & Selznick, 2015). Religious and non - religious activity engagement as an emotional regulation acts as assets in promoting social ties throughout university (Semplonius, Good, & Willoughby, 2015) especially where social life and identity of women on campus varied by religion (Pschaida, 2015). In short, spiritual quality of life and spiritual coping is impacted by spirituality, religiousness and personal beliefs module (Krägeloh, Billington, Henning, & Chai, 2015) with spirituality increasing and religiosity decreasing at college and it varied by culture of students of minority race (Nunez & Foubert, 2015) having a positive bearing on underrepresented students in higher education (Hicks, 2016)

1.3 Physical Adaptation

There is an inter relationship between spirituality religiosity and health (Tomasso, Beltrame, & Lucchetti, 2011) where spirituality was positively correlated with life satisfaction in india (M. Khan et al., 2011) and attachment to god impacts health risk-taking behaviour in college students (Horton, Ellison, Loukas, Downey, & Barrett, 2012). Spirituality impacts health of college students reducing health associated risk like alcohol and drugs (Nelms, Hutchins, Hutchins, & Pursley, 2007) while religious commitment and dispositional religious coping are protective against alcohol use (Menagi, Harrell, & June, 2008). Religious life on secular college campus today (Speers, 2008) are salience in shaping alcohol choices impacting student's health (Ellison, Bradshaw, Rote, & Storch, 2008) with levels of spirituality (Pillon, Santos, Gonçalves, Araújo, & Funai, 2010) religious beliefs (Moore & Starlyn, 2013) and religious coping (Harrell & Powell, 2014) resulting in reduced levels of alchohol consumptions. This is further supported as a negative relationship were found between a student's level of spirituality and their licit and illicit drug use (Jules et al., 2015) Spirituality and religion impacts health and well-being acting as virtual social indicators of university students (Yiengprugsawan et al., 2012). Spirituality impacts health (Gonçalves, Helena, Osório, & Oliveira, 2015) varying by gender (Shaikh, Kamal, & Naqvi, 2015). However, Religion influences sexual attitude and behaviour among students (Odimegwu, 2005) with noticeably sexual behaviours of student of race being influenced by sexual attitudes, religiousness, and spirituality (Luquis, Brelsford, & Pe, 2014). Hence spirituality impacts education on sexual tension in cross sexual relationships (George, Adalikwu-Obisike, Boyko, Johnson, & Boscanin, 2014) with religiosity vehemently impacting sexual attitude and behaviour among college students (Onyebuchukwu, Sholarin and Emerenwa, 2015). Apart from these, university micro environments impacted eating behaviours among undergraduate students, mediated by the role of religion (Tanton, Dodd, Woodfield, & Mabhala, 2015) and ratings of conscientiousness from physical appearance predict undergraduate academic performance (Di Domenico, Quitasol, & Fournier, 2015).

1.4 Psychological Adaptation

Religious faith positively impacted psychological wellbeing as it is strength of religious faith that impacts psychological functioning among university students (Plante, Yancey, Sherman, & Guertin, 2000). The fear of rejection was predictive of lower religious commitment and lower levels of adjustment to college by students

 ISSN 2394 - 7780

(Schludermann et al., 2001) while strength of religious faith had a no positive effect in coping stress adding less to physical and mental health (Plante, Saucedo, & Rice, 2001). However, it is though acknowledged that spirituality acts as a motivation (Hodge, 2003) as it is religion via spirituality that binds students on psychological sense of community (Bohus, Jr, Chan, Woods, & Chan, 2005); It is higher levels of religiousness and religious coping was associated with poorer levels of adjustment among college students (Edmondson & Park, 2009)

Spirituality impacts mental health of students (Bonab, Hakimirad, & Habibi, 2010) as it is forgiveness, spiritual instability, mental health symptoms that impacts wellbeing with mediator of self (Sandage & Jankowski, 2010). On the contrary, spirituality is also said to have a negative relationship with mental health where the spiritual dimensions of relation with god, finding meaning in life, spiritual actualization and activities (Bonab et al., 2010) with cultural differences in religious coping resulted in stress impacting quality of life of students (Pei, Chai, Krägeloh, & Billington, 2011) varying by gender(Yadav, Khanna, & Singh, 2016).Taking this further, generativity, relational spirituality, and gratitude impacts mental health (Sandage, Hill, & Vaubel, 2011) as it is religious fundamentalism that lead to system justifying thoughts (Dirilen-Gumus, 2011) even to that of forming religious belief by race. (Taylor & Merino, 2011). The relational spirituality observed thereon with differentiation of self and virtue predicts intercultural development (Sandage & Harden, 2011) as more often religious belief play a psychologically protective role for low Socio economic individuals who are independent of realistic economic concerns.(Brandt & Henry, 2012).Religiousness is found to be more positively intrinsic (Taunay et al., 2012) with most college students witnessing the spiritual struggle of powerful adverse impact on adjustment influencing loss of distress among them. (Wortmann, Park, & Edmondson, 2012) as it is noted that psychological distress increases religious involvement, which then increases purpose in life and social support that then lead to lower psychological distress (Wang, Koenig, Ma, & Shohaib, 2016). Spirituality also prepares undergraduate students to recognise spiritual cues and learn to assess and provide spiritual care (Cone & Giske, 2012) with spiritual dwelling influencing the wellbeing in distressed adults (Jankowski & Sandage, 2012). An extended view in this regard could be of the college student's religious affiliation that influences wellbeing in them (N. A. Bowman & Small, 2012). The psychosocial approach to religious fundamentalism among university students found psychosocial configurations organised around gender (Valladares, Carvajal, & García, 2013).

Delving towards spirituality reduces stress among students of Indian institute of technology Bombay (Yadav & Khanna, 2014) with parent's religious involvement influenced psychological health, family functioning and development of their children (Kong & Chan, 2014). The purpose in life is also said to mediate relationship between religiosity and happiness (Aghababaei & Błachnio, 2014). spirituality influenced quality of life of undergraduate students impacting cognitive and psychosocial development (Lau, Hui, Lam, Lau, & Cheung, 2015). Thus there is a relationship between religion and spirituality and students who are religious have better mental health (Ahmadi & Shahmohammadi, 2015) with observed positive psychosocial functioning in adolescents and young adults (Sanders et al., 2015).Spirituality among students helps to combat anxiety (ECL et al., 2015) and it tethered that student's resiliency can be predicted by spirituality (Mehrinejad, Tarsafi, & Rajabimoghadam, 2015) Religious belief aspects and customs with religiousness (Ahmadi & Shahmohammadi, 2015) enhances quality of life with religious awareness (Parniyan, Kazemiane, Jahromi, & Poorgholami, 2016) required especially among students of minority race, low socio economic status students at first academic year (Zhao et al., 2015). Of late, Prayers, the aspect mostly ignored by students at higher education at large could help in restoring the mental wellbeing (Shaikh et al., 2015). Religion also helps to combat depression and home sickness among college students (Longo & Kim-spoon, 2013) which is higher among first generation students than non first generation students (Ferrari, Drexler, & Skarr, 2015). In brief, spirituality undoubtedly impacts mental health (Karimipour & Md.Sawar, 2015) with its extended hand of attitude towards the external environment with nature at its green side (Nunn et al., 2016) and religiousness soaring high on psychological outcomes with subjective well being impacting life satisfaction(Aghababaei et al., 2016)

1.5 Institution

Student Spiritual Identity is formed at religious affiliated university to a greater extent (Forward et al., 2014) Persistence patterns of religious minority students are at a greater level of introspection in religious affiliated universities (Patten & Rice, 2008) as it is observed that attendance at religious services influences persistence and retention of students at four-year higher education institutions (Burks & Barrett, 2009). Further individual privileged religious experience impacts spiritual development of students within dynamics of institution (N. A. Bowman & Small, 2010) especially when religion performs a support factor function among women of race or colour impacting their persistence towards degree attainment (Ceglie, 2013). Moreover, attending an institution with an inclusive religious worldview climate is positively associated with participation in student engagement (N. a. Bowman, Rockenbach, & Mayhew, 2015).

International Journal of Advance and Innovative Research ISSN 2394 - 7780
Volume 5, Issue 4 (XII): October - December, 2018

The study proposes the following research hypothesis

H1: - Campus adaptations of academic, social, physical – psychological and institutional environments do not vary among undergraduate students by their religion.

H1a: - There is a significant difference among undergraduate students across religion in campus adaptations of academic, social, physical – psychological and institutional adaptations.

2. METHODS

2.1 Participant

The reference population were undergraduate 4-year B. tech students enrolled on a regular study mode at IIT's and NIT's. A total of 1460 students participated with 1420 of valid responses for an overall 97.26 percent participation rate after deducting the questionnaire that contained empty answers. Data was collected for 20 weeks across institutions of IIT's and NIT's. Of the 1420 undergraduate respondents, 84.9% were Hindus and 3.16% were Muslims, Students belonging to other minority communities were Christians with 2.04%, Jains with 1.69%, Sikh with 0.56%, Buddhist with 0.21%. However, the student population who surprisingly did not want to associate themselves with any religion loomed large with associating themselves with being called Indian – 1.97%, humanity – 1.05%, Atheist – 2.46% and not applicable – 1.83%.

2.2 Sampling

Probability sampling technique followed by cluster sampling in identification of institutes of IIT's and NIT's was adopted. This is followed up with stratified sampling in sample choice of undergraduate students' population and simple random in collecting data from the chosen student population stated above.

2.3 Instrument and Procedure

The survey was conducted using a structured online questionnaire with reference to student's campus and non - campus email accounts. At all times, the students were informed of the anonymous, confidential, and voluntary nature of their participation and any doubts that arose were clarified.

2.4 Measures

All the 21 items in the questionnaire were measured with rating on a five point Likert scale ranging from "1 = strongly disagree" to "5 = strongly Agree". Reliability and validity of the questionnaire was tested

3. DATA ANALYSIS

Multivariate analyses of variance (MANOVA) were conducted to asses' religious group differences in campus adaptation. This was followed by discriminant analysis to determine the nature of effect of campus adaptations by each religious group. There are several assumptions behind a MANOVA, including multivariate normality, linearity of relationships, low influence of univariate and multivariate outliers, homogeneity of variance–covariance matrices and an absence of multicollinearity. Each assumption was tested, and no serious violations were noted.

Table-1: Pearson Correlation

Campus Adaptation	1	2	3	4	M	SD
1.Academic Adaptation	1.00	.	.		2.60	0.702
2.Social Adaptation	0.580	1.00		.	2.72	0.755
3.Physical – Psychological Adaptation	0.523	0.575	1.00	.	2.28	0.771
4.Institutional Adaptation	0.575	0.614	0.789	1.00	2.14	0.784
Note :- n = 1420 .Correlations greater than 0.05 are statistically significant (p < 0.5)						

A Pearson product moment correlation analysis, that examined the relationship between campus adaptations revealed correlations greater than 0.05, hence statistically significant

Table-2: Distribution of difference in dimensions of campus adaptations

Religion	Campus Adaptation							
	Academic		Social		Physical - Psychological		Institutional	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Hinduism (n = 1206)	2.59	0.698	2.72	0.751	2.29	0.771	2.14	0.783
Islamism (n = 45)	2.82	0.719	2.81	0.752	2.51	0.850	2.32	0.839
Christianity (n = 29)	2.61	0.643	2.78	0.647	2.20	0.684	2.17	0.782
Jainism (n =24)	2.38	0.621	2.54	0.826	2.02	0.794	1.70	0.640
Sikhism (n = 8)	2.43	0.462	2.82	0.704	2.20	0.770	2.00	0.501

Buddhism (n = 3)	2.44	0.254	2.01	0.916	2.33	0.577	2.00	0.871
Indian (n = 28)	2.78	0.755	2.51	0.747	2.12	0.820	2.09	0.780
Humanity (n = 15)	2.73	0.720	2.81	0.860	2.32	0.679	2.24	0.764
Atheist (n = 35)	2.65	0.860	2.82	0.841	2.25	0.672	2.19	0.698
Not Applicable (n = 26)	2.57	0.761	2.83	0.794	2.28	0.841	2.18	0.997
Total (n =1420)	2.60	0.702	2.72	0.755	2.28	0.771	2.14	0.784

3.1 Descriptive statistics

The mean in the descriptive statistics indicate that among undergraduate B.Tech students, students enjoyed high level of social adaptation irrespective religion , with students following Hinduism (M = 2.72 , SD = 0.751), Christianity (M = 2.78 , SD = 0.647), Jainism (M = 2.54, SD = 0.826) Sikhism (M = 2.82, SD = 0.704) and students who did not like to associate themselves with religion by stating themselves as humanity also had high social adaptation (M = 2.81, SD = 0.860) atheist (M = 2.82, SD = 0.841) also not applicable (M = 2.83, SD = 0.794) however Muslim , Buddhism and students who stated themselves as Indians had high level of academic adaptation (M =2.82, SD = 0.719), (M = 2.44, SD = 0.254) and (M = 2.78, SD = 0.755)

However, across religions students had low level of institutional adaptation, with Hinduism (M = 2.14, SD = 0.783), Islamism (M = 2.32, SD = 0.839), Christianity (M = 2.17, SD = 0.782) Jainism (M = 1.70, SD = 0.640), Sikhism (M = 2.00, SD = 0.501) Buddhism (M = 2.01, SD = 0.871) Indian (M = 2.09, SD = 0.780) humanity (M =2.24, SD = 0.764) atheist (M = 2.19, SD = 0.698) not applicable (M = 2.18, SD = 0.997)

Further within Academic Adaptation, student who followed Islam religion had high level of impact on adaptation (M = 2.82, SD = 0.719) and Sikhism sect students had low level of adaptation (M = 2.43, SD = 0.462)

In Social Adaptation, not applicable students had high level of impact on adaptation (M = 2.83, SD = 0.794) and Buddhism sect impacted in low level of adaptation (M = 2.01, SD = 0.916)

In Physical - Psychological adaptation, Islamism students had high impact on level of adaptation (M = 2.51, SD = 0.850) and Jainism impacted in low level of adaptation (M = 2.02, SD = 0.770)

In Institutional adaptation, Islamism students had high impact on student's level of adaptation (M = 2.32, SD = 0.839) and Jainism impacted on student's low level of adaptation (M = 1.70, SD = 0.640)

Overall, across campus adaptations and fathers educational level groups, students had high level of social adaptation (M = 2.72, SD = 0.755) and low level of Institutional adaptation (M = 2.14, SD =0.784). However, within religious sect, religion as not applicable to them had high level of social adaptation (M = 2.83, SD = 0.794) and Jainism had low level of institutional adaptation (M = 1.70, SD = 0.640)

3.2 Inferential statistics

The Box's M value of 82.555 indicates test of assumption of equality of covariance matrices are roughly equal as assumed with p = 0.613 ($p \geq 0.001$).

Using Manova test statistic of Pillai's Trace, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional environments (V = 0.032, F (40, 5636) = 1.132 and p = 0.261) *(p > 0.05).

Using Manova test statistic of Wilk's Lambda, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional (Λ = 0.968, F (40,5333) = 1.132 and p = 0.262) *(p > 0.05).

Using Manova test statistic of Hotelling's trace, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional (T = 0.032, F (40, 5618) = 1.132 and p = 0.262) *(p > 0.05).

Using Manova test statistic of Roy's largest root, there was a significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional (Θ = 0.015, F (10, 1409) = 2.091 and p = 0.022) *(p > 0.05).

The univariate test statistic with levenes test of equality of variances for each of the dependent variable is non-significant with academic adaptation of 0.365, social adaptation of 0.557, physical – psychological adaptation of 0.871 and institutional adaptation of being close to 0.394 enabling the assumptions of homogeneity of variance being met.

ISSN 2394 - 7780

However separate univariate analysis or anova on the outcome with F (10, 1409) for Academic, social, Physical – Psychological and institutional adaptation revealed a non-significant effect with F value (1.018) (1.164) (1.055) (1.277) and p value (0.426) (0.311) (0.395) (0.238) greater than 0.05

Further the between – subjects SSCP matrix indicates that the sum of squares for the error SSCP matrix are substantially bigger than in the model (or religious level) SSCP matrix, whereas absolute values of cross products are fairly similar. This pattern of relationship indicates that the relationship between dependent variables is significant than individual dependent variables themselves. Thus to determine the nature of effect of religious entity among dependent variables Manova is followed with discriminant analysis

The first discriminant function explained 46 % of the variance with canonical R2 = 0.015; the second discriminant function explained 28.4 % of the variance with canonical R2 = 0.009; the third discriminant function explained 18.7 % of the variance with canonical R2 = 0.006; the fourth discriminant function explained 6.9 % of the variance with canonical R2 = 0.002 indicates that the variance in the canonical derived dependnant variable was associated for religious level

In combination these discriminant functions did not significantly discriminate among the religious groups. The first discriminant function $\Lambda = 0.968$, x2 (40) 45.255, $p = 0.262$ ($p > 0.05$) The second discriminant function $\Lambda = 0.983$, x2 (27) 24.464, $p = 0.604$ ($p > 0.05$). The third discriminant function $\Lambda = 0.992$, x2 (16) 11.621, $p = 0.770$ ($p > 0.05$) and the fourth discriminate function $\Lambda = 0.998$, x2 (7) 3.151, $p = 0.871$ ($p > 0.05$).

The correlations between outcomes and the discriminant functions revealed that institutional adaptation loaded highly on second function ($r = 0.984$) indicating it contributed more to the age group separation (Bragman, 1970) than the relatively fair high loading in positive relationship with first function ($r = 0.053$) and third function ($r = 0.161$) with negative relationship in fourth function ($r = - 0.047$);

Physical - Psychological adaptation loaded highly on second function ($r = 0.697$) indicating it contributed more to the religious group separation than the relatively high loading in positive relationship with first function ($r = 0.134$) third function ($r = 0.664$) and fourth function ($r = 0.235$);

Social adaptation loaded highly on second function with ($r = 0.642$) indicating it contributed more to the religious group separation than the than relatively fair high loading in the first function ($r = 0.499$) and fourth function ($r = 0.571$) with negative relationship from the third function ($r = -0.111$)

Lastly academic adaptation loaded highly on fourth function with ($r = 0.646$) indicating it contributed more to the religious group separation than the relatively fair high loading in positive relationship with second function ($r = 0.642$) with negative relationship in third function (-0.033)

4. FINDINGS

Hinduism as a religious sect had positive outcomes on academic (0.010) and Physical –Psychological (0.011) adaptation with negative outcomes on social (-0.003) and institutional (-0.010) adaptation

Students who practised Islamism faith had positive social (0.212) Physical – Psychological (0.189) and institutional (0.173) adaptation with negative outcome on academic adaptation (-0.180)

Christian students had positive outcomes in academic (0.048) and social (0.079) adaptation with negative outcomes in Physical – Psychological (-0.252) and institutional (-0.036) adaptation

Jain sect students had positive outcomes in academic (0.086) Physical – Psychological (0.022) and institutional (0.158) adaptation with negative outcomes in social (-0.580) adaptation.

Sikhism sect students had positive outcomes in academic (0.409) and institutional (0.082) adaptation with negative outcomes in Social (-0.196) and Physical – Psychological (-0.078) adaptation

Buddhism sect students had positive outcomes in Physical – Psychological (0.740) adaptations with negative outcomes in academic (- 0.787) social (- 0.293) and institutional (-0.519)

Students who stated themselves outside religious sect as Indian, humanity, atheist and not applicable – all of them had positive institutional adaptation (0.008) (0.086) (0.040) and (0.000). However, academic (-0.606) social (-0.004) Physical – Psychological (-0.201) adaptation had negative outcome among students who preferred to state themselves as Indians.

Students who referred to themselves as humanitarian had positive outcomes in social adaptation (0.146) with negative outcomes in academic (-0.073) and Physical – Psychological adaptation (-0.107)

Students who referred to themselves as atheist or non-believer in god or religious faith had positive academic (0.055) and social (0.092) adaptation with negative outcomes in Physical – psychological adaptation (-0.193)

 ISSN 2394 - 7780

Students who denied the applicability on religion on them had positive outcomes on academic (0.210) and social (0.055) adaptation with negative outcome on Physical – psychological (-0.107) adaptation.

In brief the alternate hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected at $p < 0.05$.

In short, campus adaptations vary across religion of engineering undergraduate students.

5. CONCLUSION

Religion being the most sensitive issue in a country like India is often hyper testified amidst secularist objective of promotion. The association through religious practises and coping be it to dietary practises or frequenting to religious shrine, student as a social being does carry the bandwagon of religious identity from young which cannot be unshouldered all of a sudden, though might be minimised in its eventual being at crowded campuses.

6. IMPLICATION

The identification of students apart from being associated to a religious sect is a promising scenario that campuses stand tall and fair in their being and individuality, irrespective to the multiple religious' sect to which a student belongs or less identifies with. Never the less, atheist students are less inclined than are their peers to perceive a positive campus climate for nonreligious students (A. N. Rockenbach, Mayhew, & Bowman, 2015)

Campuses are known for its vivid diversity and religion being a vital part of it is less agglomerated by the student population themselves showcasing that being part of campus as an individual student with its learning and socialising perspective is much more important than associating the identity of oneself with religion and coping of religious practises. This sensitive issue has been humanised by students at large who often dream to have 'one' unified society loomed large.

REFERENCES

1. Abdel-Khalek, A. M. ., & Lester, D. (2015). Self – Reported religiosity in kuwaiti and American college students, Psychological Reports: Sociocultural Issues in Psychology, 116(3), 986–989.
2. Aghababaei, N., & Błachnio, A. (2014). Purpose in life mediates the relationship between religiosity and happiness: evidence from Poland. Mental Health, Religion & Culture, 17(8), 827–831. http://doi.org/10.1080/13674676.2014.928850
3. Aghababaei, N., Sohrabi, F., Eskandari, H., Borjali, A., Farrokhi, N., & Chen, Z. J. (2016). Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators. Personality and Individual Differences, 90(FEBRUARY), 93–98. http://doi.org/10.1016/j.paid.2015.10.046
4. Ahmadi, A., & Shahmohammadi, N. (2015). Studying the Relationship between Mental Health, Spirituality and Religion in Female Students of Tehran Azad University: South Branch. Procedia - Social and Behavioral Sciences, 205(May), 236–241. http://doi.org/10.1016/j.sbspro.2015.09.065
5. Arndt, M., & Bruin, G. De. (2006). Attitudes toward Lesbians and Gay men relations with gender, race and religion among university students. Psychology in Society, 33, 16–30. Retrieved from http://www.pins.org.za/pins33/Arndt & de Bruin.pdf
6. Aruguete, M. S., Goodboy, A. K., Jenkins, W. J., Mansson, D. H., & Mccutcheon, L. E. (2012). Does Religious Faith Improve Test Performance? NORTH AMERICAN JOURNAL OF PSYCHOLOGY, 14(1), 185–196.
7. Baloch, G. M., Chhachhar, A. R., & Singutt, W. V. (2014). Influence of Religion on Life Style and Social Behavior in Christianity . Perspective of Malaysian Christian Students. Journal of Basic and Applied Scientific Research, 4(4), 300–307.
8. Barmola, K. (2016). Spirituality and Motivation of College Students. The International Journal of Indian Psychology, 3(2), 84–88.
9. Black, L., & Williams, J. (2013). Contradiction and conflict between "leading identities": becoming an engineer versus becoming a "good muslim" woman. Educational Studies in Mathematics, 84(1), 1–14. http://doi.org/10.1007/s10649-013-9481-7
10. Bohus, S., Jr, R. H. W., Chan, K. C., Woods, R. H., & Chan, K. C. (2005). Psychological Sense of Community Among Students on religious Collegiate campuses in the Christian Evangelical Tradition. Christian Higher Education, 4(1), 19–40. http://doi.org/10.1080/153637590507423

ISSN 2394 - 7780

11. Bonab, B. G., Hakimirad, & Habibi. (2010). Relation between mental health and spirituality in Tehran University student. Procedia - Social and Behavioral Sciences, 5(2), 887–891. http://doi.org/10.1016/j.sbspro.2010.07.204

12. Bowman, N. a., Rockenbach, A. N., & Mayhew, M. J. (2015). Campus Religious/Worldview Climate, Institutional Religious Affiliation, and Student Engagement. Journal of Student Affairs Research and Practice, 52(1), 24–37. http://doi.org/10.1080/19496591.2015.996045

13. Bowman, N. A., & Small, J. L. (2010). Do College Students Who Identify with a Privileged Religion Experience Greater Spiritual Development? Exploring Individual and Institutional Dynamics. Research in Higher Education, 51(7), 595–614. http://doi.org/10.1007/s11162-010-9175-2

14. Bowman, N. A., & Small, J. L. (2012). Exploring a Hidden Form of Minority Status: College Students' Religious Affiliation and Well-Being. Journal of College Student Development, 53(4), 491–509. http://doi.org/10.1353/csd.2012.0050

15. Brandt, M. J., & Henry, P. J. (2012). Psychological Defensiveness as a Mechanism Explaining the Relationship Between Low Socioeconomic Status and Religiosity. The International Journal for the Psychology of Religion, 22(4), 321–322. http://doi.org/10.1080/10508619.2011.646565

16. Bryant, A. N. (2007). The Effects of Involvement in Campus Religious Communities on College Student Adjustment and Development. Journal of College and Character, 8(3), 1–26. http://doi.org/10.2202/1940-1639.1178

17. Bryant, A. N. (2011). The Impact of Campus Context, College Encounters, and Religious/Spiritual Struggle on Ecumenical Worldview Development. Research in Higher Education, 52(5), 441–459. http://doi.org/10.1007/s11162-010-9205-0

18. Burks, S. A., & Barrett, T. G. (2009). Student Characteristics and Activity Choices of College Freshmen and their Intent to Persist in Religiously Affiliated Institutions. Christian Higher Education, 8(5), 351–392. http://doi.org/10.1080/15363750902917276

19. Ceglie, R. (2013). Religion as a Support Factor for Women of Color Pursuing Science Degrees : Implications for Science Teacher Educators. Journal of Science Teacher Education, 24, 37–65. http://doi.org/10.1007/s10972-012-9286-z

20. Cone, P. M. H., & Giske, T. (2012). Teaching spiritual care : A grounded theory study among undergraduate nursing educators. Journal of Clinical Nursing, (April), 1–11. http://doi.org/10.1111/j.1365-2702.2012.04203.x

21. Cooray, A., & Potrafke, N. (2011). Gender inequality in education : Political institutions or culture and religion ? European Journal of Political Economy, 27(2), 268–280. http://doi.org/10.1016/j.ejpoleco.2010.08.004

22. Cragun, R. T., Henry, P., Mann, M., & Russell Krebs, S. (2014). Chapel Use on College and University Campuses. Journal of College and Character, 15(2), 103–118. http://doi.org/10.1515/jcc-2014-0014

23. Darnell Cole, & Shafiqa Ahmadi. (2010). Reconsidering Campus Diversity: An Examination of Muslim Students' Experiences. The Journal of Higher Education, 81(2), 121–139. http://doi.org/10.1353/jhe.0.0089

24. Di Domenico, S. I., Quitasol, M. N., & Fournier, M. A. (2015). Ratings of Conscientiousness from Physical Appearance Predict Undergraduate Academic Performance. Journal of Nonverbal Behavior, 39(4), 339–353. http://doi.org/10.1007/s10919-015-0213-9

25. Dirilen-Gumus, O. (2011). Differences in system justification with respect to gender, political conservatism, socio-economic status and religious fundamentalism. Procedia - Social and Behavioral Sciences, 30, 2607–2611. http://doi.org/10.1016/j.sbspro.2011.10.510

26. Duffy, R. D., & Blustein, D. L. (2005). The relationship between spirituality , religiousness , and career adaptability. Journal of Vocational Behavior, 67, 429–440. http://doi.org/10.1016/j.jvb.2004.09.003

27. ECL, C., DH, I., CC, M., LC, C., AM, S., & EC, C. (2015). Anxiety and spirituality in university students : a cross-sectional study. REVISTA BRASILEIRA DE ENFERMAGEM, 68(3), 444–449. http://doi.org/10.1590/0034-7167.2015680318i

 ISSN 2394 - 7780

28. Edmondson, D., & Park, C. (2009). Shifting foundations: religious belief change and adjustment in college students. Mental Health, Religion & Culture, 12(3), 289–302. http://doi.org/10.1080/13674670802627339

29. Ellison, C. G., Bradshaw, M., Rote, S., & Storch, J. (2008). Religion and Alcohol Use among College Students: Exploring the Role of Domain-Specific Religious Salience. Journal of Drug Issues, 38, 821–846. http://doi.org/10.1177/002204260803800308

30. Ferrari, J. R., Drexler, T., & Skarr, J. (2015). Finding a spiritual home: A pilot study on the effects of a spirituality retreat and loneliness among urban homeless adults. Psychology, 6(3), 210–216. http://doi.org/10.4236/psych.2015.63020

31. Finnegan, D. E. (2007). The College "Y": Student Religion in the Era of Secularization (review). The Review of Higher Education, 31(2), 243–244. http://doi.org/10.1353/rhe.2007.0068

32. Fisher, J. W. (2009). Understanding and Assessing Spiritual Health. In International handbook of education for spirituality, care and well-being. (pp. 1–34). http://doi.org/10.1007/978

33. Forward, G. L., Moore, J., Richardson, M., & Shimansky, M. (2014). "Children of a Lesser God:" The Effects of Communication and Interaction Patterns on Student Spiritual Identity at a Church-Related University. Studies in Media and Communication, 2(1). http://doi.org/10.11114/smc.v2i1.326

34. Fox, R. A., Buchanan, N. K., Eckes, S. E., & Basford, L. E. (2012). The Line Between Cultural Education and Religious Education: Do Ethnocentric Niche Charter Schools Have a Prayer? Review of Research in Education, 36, 282–305. http://doi.org/10.3102/0091732X11420808

35. George, D., Adalikwu-Obisike, J., Boyko, J., Johnson, J., & Boscanin, A. (2014). Harry and Sally Revisited: The Influence of Spirituality and Education on Sexual Tension in Cross-Sex Friendships in Secular and Christian Universities. Journal of Research on Christian Education, 23(1), 70–94. http://doi.org/10.1080/10656219.2014.882721

36. Gonçalves, L. M., Helena, I., Osório, S., & Oliveira, L. L. (2015). Learning from Listening: Helping Healthcare Students to Understand Spiritual Assessment in Clinical Practice. Journal of Religion and Health, (March 2016), 1–17. http://doi.org/10.1007/s10943-015-0146-y

37. Good, M., & Willoughby, T. (2011). Evaluating the Direction of Effects in the Relationship Between Religious Versus Non-Religious Activities , Academic Success , and Substance Use. Journal of Youth and Adolescence, 40, 680–693. http://doi.org/10.1007/s10964-010-9581-y

38. Halsmer, D., Butay, E., Hase, B., McDonough, S., Tryon, T., & Weed, J. (2010). Exploring connections between engineering and human spirituality. In ASEE Annual Conference and Exposition, Conference Proceedings.

39. Harrell, Z. A. T., & Powell, K. (2014). The Relationship Between Parent and Student Religious Coping and College Alcohol Use. Journal of Religion and Health, 53, 895–903. http://doi.org/10.1007/s10943-013-9683-4

40. Hicks, T. (2016). Spirituality Research Studies in Higher Education University Press of America , Inc . Spiritualty Research Studies in Higher Education. http://doi.org/10.13140/2.1.3984.8005

41. Hodge, D. R. (2003). The Intrinsic Spirituality Scale : A New Six-Item Instrument for Assessing the Salience of Spirituality as a Motivational Construct. Journal of Social Service Research, 30(1), 41–61. http://doi.org/10.1300/J079v30n01

42. Horton, K. D., Ellison, C. G., Loukas, A., Downey, D. L., & Barrett, J. B. (2012). Examining Attachment to God and Health Risk-Taking Behaviors in College Students. Journal of Religion and Health, 51(2), 552–566. http://doi.org/10.1007/s10943-010-9380-5

43. Hsien-Chuan Hsu, P., Krägeloh, C. U., Shepherd, D., & Billington, R. (2009). Religion/spirituality and quality of life of international tertiary students in New Zealand: an exploratory study. Mental Health, Religion & Culture, 12(4), 385–399. http://doi.org/10.1080/13674670902752920

44. Hwzhhq, S. W. K. H., Dqg, G., Phulfdq, P. I., Sanchez, D., & Carter, R. T. (2005). Exploring the Relationship Between Racial Identity and Religious Orientation Among. Journal of College Student Development, 46(3), 280–295. http://doi.org/10.1353/csd.2005.0031

45. Jackson, L., Mark Pancer, S., Pratt, M. W., & Hunsberger, B. E. (2001). Great Expectations: The Relation Between Expectancies and Adjustment During the Transition to University'. Journal of Applied Social Psychology, 30(10), 2100–2125. http://doi.org/10.1111/j.1559-1816.2000.tb02427.x

46. Jankowski, P. J., & Sandage, S. J. (2012). Spiritual dwelling and well-being: the mediating role of differentiation of self in a sample of distressed adults. Mental Health, Religion & Culture, 15(4), 417–434. http://doi.org/10.1080/13674676.2011.579592

47. Jejeebhoy, shireen j, & Sathar, zeba A. (2001). Women ' s Autonomy in India and Pakistan : The Influence of religion and region. Population and Development Review, 27(December), 687–712.

48. Jelen, T. G., & Lockett, L. A. (2014). Religion, Partisanship, and Attitudes Toward Science Policy. SAGE Open, 4, 1–8. http://doi.org/10.1177/2158244013518932

49. Joshanloo, M. (2012). Investigation of the factor structure of spirituality and religiosity in Iranian Shiite university students. International Journal of Psychology, 47(3), 211–221. http://doi.org/10.1080/00207594.2011.617372

50. Jules, M. A., Noh, S., Hamilton, H., Brands, B., Gastaldo, D., Wright, M. G. M., ... Khenti, A. (2015). Spirituality, gender, and drug use among students from one University in Barbados . Texto E Contexto Enfermagem, 24(April), 117–124. http://doi.org/10.1590/0104-07072015001140014

51. Karampoor, H., & Beig, S. R. (2015). Studying the relationship between spiritual intelligence and job burnout of Payame Noor University staff. International Journal of Review in Life Sciences, 5(6), 1072–1078.

52. Karimipour, M., & Md.Sawar, S. S. (2015). Scrutinizing the Effect of Spirituality on Huffaz students Mental Health In Itqan Institute. Research Journal of Social Science and Management, 5(7), 92–96.

53. Khan, M., Shirazi, M., & Ahmed, M. (2011). Spirituality and life satisfaction among Adolescents in India . Journal of Subcontinent Researches, 3(7), 71–84.

54. Khan, Z. H., Watson, P. J., Naqvi, A. Z., Jahan, K., & Chen, Z. J. (2015). Muslim Experiential Religiousness in Pakistan : Meaning in Life , General Well-Being and gender differences. Mental Health Religion and Culture, 1–12. http://doi.org/http://dx.doi.org/10.1080/13674676.2015.1079602

55. Kong, H., & Chan, J. W. K. Y. Y. (2014). Parents ' Religious Involvement , Family Socialization and Development of Their Children in a Chinese Sample. Social Indicators Research, 117, 987–1010. http://doi.org/10.1007/s11205-013-0371-2

56. Krägeloh, C. U., Billington, D., Henning, M. A., & Chai, P. (2015). Spiritual quality of life and spiritual coping: evidence for a two-factor structure of the WHOQOL spirituality, religiousness, and personal beliefs module. Health and Quality of Life Outcomes, 13(1), 26. http://doi.org/10.1186/s12955-015-0212-x

57. Krägeloh, C. U., Chai, P. P. M., Shepherd, D., & Billington, R. (2012). How Religious Coping is Used Relative to Other Coping Strategies Depends on the Individual's Level of Religiosity and Spirituality. Journal of Religion and Health, 51(4), 1137–1151. http://doi.org/10.1007/s10943-010-9416-x

58. Lau, W. W. F., Hui, C. H., Lam, J., Lau, E. Y. Y., & Cheung, S.-F. (2015). The relationship between spirituality and quality of life among university students: An autoregressive cross-lagged panel analysis. Higher Education, 69(6), 977–990. http://doi.org/10.1007/s10734-014-9817-y

59. Longo, G. S., & Kim-spoon, J. (2013). Homesickness in college students : the role of religion in combating depression. Mental Health, Religion & Culture, 16(5), 489–500. http://doi.org/10.1080/13674676.2012.696600

60. Luquis, R. R., Brelsford, G. M., & Pe, M. A. (2014). Exploring Latino College Students ' Sexual Behaviors in Relation to Their Sexual Attitudes , Religiousness , and Spirituality. Journal of Religion and Health, 1–13. http://doi.org/10.1007/s10943-014-9929-9

61. Mansor, N., & Syahidah, N. (2012). Spiritual well-being of INSTED , IIUM Students and its Relationship with College Adjustment. Procedia - Social and Behavioral Sciences, 69(Iceepsy), 1314–1323. http://doi.org/10.1016/j.sbspro.2012.12.068

62. Martin-Hansen, L. M. (2008). First-Year College Students' Conflict with Religion and Science. Science & Education, 17(4), 317–357. http://doi.org/10.1007/s11191-006-9039-5

 ISSN 2394 - 7780

63. Mavhandu-mudzusi, A. H., & Sandy, P. T. (2015). Religion-related stigma and discrimination experienced by lesbian , gay , bisexual and transgender students at a South African rural-based university university. Culture Health & Sexuality, (April 2016), 1–11. http://doi.org/10.1080/13691058.2015.1015614

64. Mayhew, M. J. (2004). Exploring the essence of spirituality: A phenomenological study of eight students with eight different worldvews. NASPA Journal, 41(3), 647–674. http://doi.org/10.2202/1949-6605.1392

65. Mayhew, M. J., Bowman, N. A., & Rockenbach, A. B. (2014). Silencing Whom ? Linking Campus Climates for Religious , Spiritual , and Worldview Diversity to Student Worldviews. The Journal of Higher Education, 85(2), 219–245. http://doi.org/10.1353/jhe.2014.0005

66. Mayrl, D., & Oeur, F. (2009). Religion and Higher Education: Current Knowledge and Directions for Future Research. Journal for the Scientific Study of Religion, 48(2), 260–275. http://doi.org/10.1111/j.1468-5906.2009.01446.x

67. Mehrinejad, S. A., Tarsafi, M., & Rajabimoghadam, S. (2015). Predictability of Students' Resiliency by Their Spirituality. Procedia - Social and Behavioral Sciences, 205(May), 396–400. http://doi.org/10.1016/j.sbspro.2015.09.024

68. Menagi, F. S., Harrell, Z. A. T., & June, L. N. (2008). Religiousness and College Student Alcohol Use : Examining the Role of Social Support. Journal of Religion and Health, 47, 217–226. http://doi.org/10.1007/s10943-008-9164-3

69. Moore, E. W., & Starlyn, J. Y. B. (2013). Religiosity , Alcohol Use , and Sex Behaviors Among. Journal of Religion and Health, 52, 930–940. http://doi.org/10.1007/s10943-011-9543-z

70. MORAN, C. D., ROBERTS, C., Tobin, J. A., & Harvey, L. M. (2008). Religious Expression Among Residents and Resident Assistants in Residence Halls at Public Colleges and Universities : Freedoms and Constraints Religious Expression Among Residents and Resident Assistants in Residence Halls at Public Colleges and Universit. The Journal of college and University Student Housing, 35(2), 48–61.

71. Nelms, L. W., Hutchins, E., Hutchins, D., & Pursley, R. J. (2007). Spirituality and the Health of College Students. Journal of Religion and Health, 46(2), 249–265. http://doi.org/10.1007/s10943-006-9075-0

72. Nudelman, A. E. (1972). Christian Science and Secular Science: Adaptation on the College Scene. Journal for the Scientific Study of Religion, 11(3), 271–276. Retrieved from http://www.jstor.org/stable/1384551

73. Nunez, R., & Foubert, J. (2015). Understanding the Meaning Making Process of Hispanic College Students in Their Spiritual and Religious Development. Religion & Education, (April), 1–39. http://doi.org/10.1080/15507394.2015.1093880

74. Nunn, P. D., Mulgrew, K., Scott-Parker, B., Hine, D. W., Marks, A. D. G., Mahar, D., & Maebuta, J. (2016). Spirituality and attitudes towards Nature in the Pacific Islands: insights for enabling climate-change adaptation. Climatic Change, 1–17. http://doi.org/10.1007/s10584-016-1646-9

75. Odimegwu, C. (2005). Influence of religion on adolescent sexual attitudes and behaviour among Nigerian university students: affiliation or commitment? African Journal of Reproductive Health, 9(2), 125–140. http://doi.org/10.2307/3583469

76. ONYEBUCHUKWU, I. J., SHOLARIN, M. A., & EMERENWA, A. B. (2015). Age , Gender , Religiousity and Family Factors on Sexual Attitude and Behaviour of University of Ibadan Undergraduate Students. Research on Humanities and Social Sciences, 5(6), 130–140.

77. Parniyan, R., Kazemiane, A., Jahromi, M. K., & Poorgholami, F. (2016). A Study of the Correlation between Religious Attitudes and Quality Of Life in Students at Jahrom University of Medical Sciences in 2014. Global Journal of Health Science, 8(10), 43–49. http://doi.org/10.5539/gjhs.v8n10p43

78. Patel, E. (2007). Religious Diversity and Cooperation on Campus. Journal of College and Character, 9(2), 37–41. http://doi.org/10.2202/1940-1639.1120

79. Patel, E., & Meyer, C. (2009). Engaging Religious Diversity on Campus : The Role of Interfaith Leadership. Journal of College and Character, 10(7), 1–9. http://doi.org/10.2202/1940-1639.1436

80. Patten, T. A., & Rice, N. D. (2008). Religious Minorities and Persistence at a Systemic Religiously-Affiliated University. Christian Higher Education, 8(1), 42–53. http://doi.org/10.1080/15363750802349323

81. Peek, L. a. (2003). Reactions and response: Muslim students' experiences on New York city campuses post 9/11. Journal of Muslim Minority Affairs, 23(2), 271–283. http://doi.org/10.1080/1360200032000139910

82. Pei, P., Chai, M., Krägeloh, C. U., & Billington, R. (2011). Stress and quality of life in international and domestic university students : cultural differences in the use of religious coping. Mental Health Religion and Culture, (November 2011), 37–41. http://doi.org/10.1080/13674676.2011.571665

83. Pillon, S. C., Santos, M. A. dos, Gonçalves, A. M. de S., Araújo, K. M. de, & Funai, A. (2010). : 493 - 513 Risk Factors, Levels of Spirituality and Aclchohol use in Students of Two Nursing Courses, Rev. Eletrônica Saúde Mental Alcohol Drug., 6, 493–513.

84. Plante, T. G., Saucedo, B., & Rice, C. (2001). The Association Between Strength of Religious Faith and Coping with Daily Stress. Pastoral Psychology, 49(4), 291–300. http://doi.org/10.1023/A

85. Plante, T. G., Yancey, S., Sherman, A., & Guertin, M. (2000). The Association Between Strength of Religious Faith and Psychological Functioning. Pastoral Psychology, 48(5), 405–412. http://doi.org/10.1023/A

86. Proctor, A. (2002). Religion on Campus. Journal of College and Character, 3(4). http://doi.org/10.2202/1940-1639.1321

87. Pschaida, D. A. (2015). Muslim American Women on Campus: Undergraduate Social Life and Identity. Journal of Muslim Minority Affairs, 35(1), 158–160. http://doi.org/10.1080/13602004.2015.1021106

88. Raman, R. (2003). Book Reviews : Anshu Malhotra, Gender, Caste, and Religious Identities. New Delhi: Oxford University Press. 2002. 232 pages. Indian Journal of Gender Studies, 10(3), 477–481. http://doi.org/10.1177/097152150301000305

89. Rangoonwala, F. I., Sy, S. R., & Epinoza, R. K. E. (2011). Muslim Identity, Dress Code Adherence and College Adjustment among American Muslim Women. Journal of Muslim Minority Affairs, 31(2), 231–241. http://doi.org/10.1080/13602004.2011.583517

90. Rissler, L. J., Duncan, S. I., & Caruso, N. M. (2014). The relative importance of religion and education on university students' views of evolution in the Deep South and state science standards across the United States. Evolution: Education and Outreach, 7(1), 24. http://doi.org/10.1186/s12052-014-0024-1

91. Rockenbach, A. B., & Mayhew, M. J. (2014). The Campus Spiritual Climate: Predictors of Satisfaction Among Students With Diverse Worldviews. Journal of College Student Development, 55(1), 41–62. http://doi.org/10.1353/csd.2014.0002

92. Rockenbach, A. N., Mayhew, M. J., & Bowman, N. a. (2015). Perceptions of the Campus Climate for Nonreligious Students. Journal of College Student Development, 56(2), 181–186. http://doi.org/10.1353/csd.2015.0021

93. Rockenbach, A. N., Mayhew, M. J., Morin, S., Crandall, R. E., & Selznick, B. (2015). Fostering the Pluralism Orientation of College Students through Interfaith Co-curricular Engagement. The Review of Higher Education, 39(1), 25–58. http://doi.org/10.1353/rhe.2015.0040

94. Sandage, S. J., & Harden, M. G. (2011). Relational spirituality, differentiation of self, and virtue as predictors of intercultural development. Mental Health, Religion & Culture, 14(8), 819–838. http://doi.org/10.1080/13674676.2010.527932

95. Sandage, S. J., Hill, P. C., & Vaubel, D. C. (2011). Generativity, Relational Spirituality, Gratitude, and Mental Health: Relationships and Pathways. International Journal for the Psychology of Religion, 21(1), 1–16. http://doi.org/10.1080/10508619.2011.532439

96. Sandage, S. J., & Jankowski, P. J. (2010). Forgiveness, spiritual instability, mental health symptoms, and well-being: Mediator effects of differentiation of self. Psychology of Religion and Spirituality, 2(3), 168–180. http://doi.org/10.1037/a0019124

97. Sandage, S. J., & Jankowski, P. J. (2013). Spirituality, social justice, and intercultural competence: Mediator effects for differentiation of self. International Journal of Intercultural Relations, 37(3), 366–374. http://doi.org/10.1016/j.ijintrel.2012.11.003

98. Sanders, P. W., Allen, G. E. K., Fischer, L., Richards, P. S., Morgan, D. T., & Potts, R. W. (2015). Intrinsic Religiousness and Spirituality as Predictors of Mental Health and Positive Psychological Functioning in

 ISSN 2394 - 7780

Latter-Day Saint Adolescents and Young Adults. Journal of Religion and Health, 54(3), 871–887. http://doi.org/10.1007/s10943-015-0043-4

99. Schludermann, E. H., Schludermann, S. M., Mulenga, M., Schludermann, S. M., Needham, D., & Reformed, A. A. (2001). Fear of Rejection versus Religious Commitment as Predictors of Adjustment Among Reformed and Evangelical College Students in Canada. Journal of Beliefs & Values : Studies in Religion & Education, 22(2), 209–224. http://doi.org/10.1080/13617670120092438

100. Schmalzbauer, J. (2013). Campus Religious Life in America: Revitalization and Renewal. Society, 50(2), 115–131. http://doi.org/10.1007/s12115-013-9640-6

101. Seggie, F. N., & Sanford, G. (2010). Perceptions of female Muslim students who veil: campus religious climate. Race Ethnicity and Education, 13(1), 59–82. http://doi.org/10.1080/13613320903549701

102. Seguino, S. (2011). Help or Hindrance? Religion ' s Impact on Gender Inequality in Attitudes and Outcomes. World Development, 39(8), 1308–1321. http://doi.org/10.1016/j.worlddev.2010.12.004

103. Semplonius, T., Good, M., & Willoughby, T. (2015). Religious and Non-religious Activity Engagement as Assets in Promoting Social Ties Throughout University: The Role of Emotion Regulation. Journal of Youth and Adolescence, 44(8), 1592–1606. http://doi.org/10.1007/s10964-014-0200-1

104. Shaikh, M. A., Kamal, A., & Naqvi, I. (2015). Gender association of prayer for health - perspective from university students in Islamabad and Rawalpindi. JPMA. The Journal of the Pakistan Medical Association, 65(10), 1116–8. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/26440845

105. Shammas, D. S. (2009). Post-9 / 11 Arab and Muslim American Community College Students : Ethno-religious Enclaves and Perceived Discrimination. Community College Journal of Research and Practice, 33, 283–308. http://doi.org/10.1080/10668920802580507

106. Speers, S. (2015). The Secular Thesis Revisited: Religious Life on the Secular College Campus Today. Journal of College and Character, 10(1), 0–11. http://doi.org/10.2202/1940-1639.1056

107. Stevenson, J. (2014). Internationalisation and religious inclusion in United Kingdom higher education. Higher Education Quarterly, 68(1), 46–64. http://doi.org/10.1111/hequ.12033

108. Strayhorn, T. L. (2010). Work in progress — Social barriers and supports to underrepresented minorities' success in STEM fields. In 2010 IEEE Frontiers in Education Conference (FIE) (p. S1H–1–S1H–5). IEEE. http://doi.org/10.1109/FIE.2010.5673227

109. Sucylaite, J. (2013). Nurses' Spiritual Learning at University. Procedia - Social and Behavioral Sciences, 89(April), 199–204. http://doi.org/10.1016/j.sbspro.2013.08.834

110. Suppaiah, K. (2003). Religious services Attendance and College adjustment of diploma in computer science UTM students. Jurnal Teknikaldankajjan Sosial, 81–88.

111. Tanton, J., Dodd, L. J., Woodfield, L., & Mabhala, M. (2015). Eating Behaviours of British University Students: A Cluster Analysis on a Neglected Issue. Advances in Preventive Medicine, 2015(April 2016), 1–8. http://doi.org/10.1155/2015/639239

112. Taunay, T. C., Cristino, E. D., Machado, M. O., Rola, F. H., Lima, J. W. O., Macêdo, D. S., … Carvalho, A. F. (2012). Development and validation of the Intrinsic Religiousness Inventory (IRI). Revista Brasileira de Psiquiatria, 34(1), 76–81. http://doi.org/10.1590/S1516-44462012000100014

113. Taylor, M. C., & Merino, S. M. (2011). Race, Religion, and Beliefs about Racial Inequality. The ANNALS of the American Academy of Political and Social Science, 634(1), 60–77. http://doi.org/10.1177/0002716210389537

114. Thorat, A. (2010). Ethnicity, Caste and Religion: Implications for Poverty Outcomes. Economic & Political Weekly, 51(december 18), 47–53.

115. Thro, W. E., & Russo, C. (2010). Preserving Orthodoxy on Secular Campuses : The Right of Student Religious Organizations to Exclude Non-Believers. Educational Law Reporter, (April), 497–516.

116. Tomasso, C. D. S., Beltrame, I. L., & Lucchetti, G. (2011). Knowledge and attitudes of nursing professors and students concerning the interface between spirituality, religiosity and health. Revista Latino-Americana de Enfermagem, 19(5), 1205–1213. http://doi.org/10.1590/S0104-11692011000500019

 ISSN 2394 - 7780

117. Valladares, J. T., Carvajal, M. R., & García, M. V. (2013). Religious fundamentalism among Costa Rican university students : Political conservatism and spirituality without religion. Rev. Ciencias Sociales, 139(1), 115–135.

118. Walls, N. E., Woodford, M. R., & Levy, D. L. (2014). Religious Tradition, Religiosity, or Everyday Theologies? Unpacking Religion's Relationship to Support for Legalizing Same-Sex Marriage Among a College Student Sample. Review of Religious Research, 56(2), 219–243. http://doi.org/10.1007/s13644-013-0140-3

119. Wang, Z., Koenig, H. G., Ma, H., & Shohaib, S. Al. (2016). Religion, Purpose in Life, Social Support, and Psychological Distress in Chinese University Students. Journal of Religion and Health, 55(3), 1055–1064. http://doi.org/10.1007/s10943-016-0184-0

120. Woo, J. S. T., Morshedian, N., Brotto, L. A., & Gorzalka, B. B. (2012). Sex Guilt Mediates the Relationship Between Religiosity and Sexual Desire in East Asian and Euro-Canadian College-Aged Women. Archives of Sexual Behavior, 41(6), 1485–1495. http://doi.org/10.1007/s10508-012-9918-6

121. Wortmann, J. H., Park, C. L., & Edmondson, D. (2012). The Spiritual Struggle and Adjustment to Loss in College Students : Moderation by Denomination. The International Journal for the Psychology of Religion, 22(4), 303–320. http://doi.org/10.1080/10508619.2011.638605

122. Yadav, R., & Khanna, A. (2014). Impact of Spirituality on Stress: With the Special Reference of Engineering Students of Indian Institute of Technology. Research on Humanities and Social Sciences, 4(25), 29–35.

123. Yadav, R., Khanna, A., & Singh, D. (2016). Exploration of Relationship Between Stress and Spirituality Characteristics of Male and Female Engineering Students: A Comprehensive Study. Journal of Religion and Health, (JANUARY), 1–12. http://doi.org/10.1007/s10943-015-0174-7

124. Yiengprugsawan, V., Seubsman, S., & Sleigh, A. C. (2012). Health, Well-being, and Social Indicators Among Monks, Prisoners, and Other Adult Members of an Open University Cohort in Thailand. Journal of Religion and Health, 51(3), 925–933. http://doi.org/10.1007/s10943-010-9410-3

125. Yilmaz, M., & Gurler, H. (2014). The efficacy of integrating spirituality into undergraduate nursing curricula. Nursing Ethics, 21(8), 929–945. http://doi.org/10.1177/0969733014521096

126. Zhao, M., Lu, W., Bian, Q., Song, Y., Ren, J., & Xu, X. (2015). Prevalence and related risk factors of anxiety and depression among Chinese college freshmen. Journal of Huazhong University of Science and Technology, 35(6), 815–822. http://doi.org/10.1007/s11596-015-1512-4

International Journal of Research in Social Sciences
Vol. 9 Issue 6, June 2019,
ISSN: 2249-2496 Impact Factor: 7.081
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

THE ACCEPTANCE OF DEBIT CARDS AS MODERN-DAY BANKING PRACTISES AMONG RURAL POOR – A CASE STUDY OF BANTWAL RURAL

Dr.Vijayalakshmi N.S*

Mr.Suresh**

Abstract

Objective: - The perception on modern day banking practices in terms of acceptance of debit cards among rural poor people of bantwal rural is undertaken in the study

Methodology: - A case study approach with descriptive research and deductive reasoning is followed with mixed method sampling is adopted for the study. Stratified sampling helps to identify bantwalrural as the largest densely populated rural area among rural taluks of Dakshin kannada. Further under probability sampling, simple random technique is used to identify respondents who had bank accounts at nationalized commercial banks followed with non-probability sampling technique of convenience sampling was chosen to collect data from respondents using structured questionnaire.

Findings and Conclusions: - The findings indicate that though there is significant effect in debit card acceptance of modern-day banking practice with male having upper hand. This leads us to future research on what makes women less accept a debit card as part of the modern-day banking practices with few women confirming on a fragile note that though they had bank accounts with basic minimum cash whose transactions laid at hands of their better half or their husband; the male head of the family contouring them only as symbolic representative of bank accounts.

Key Words: -Debit cards, Modern day banking practices, rural, male and female

* **Faculty,Post Graduate Department of Economics,University College Mangalore, hampankatta**

** **Assistant Professor,Post Graduate Department of Economics,University College Mangalore, hampankatta**

Introduction: - In an economy there is a need to classify and specify who uses debit cards (Porter, Swerdlow, & Staples, 1979).Banking Institutions play a central role in the financial system (Cousin, 2011) with traditional banking practices effecting modern banking practices (Mittal & Agrawal, 2016). Further despite the growing importance of the debit card in most developed countries, there are relatively few academic studies that analyze the impact of such evolution on the demand for cash with use of debit cards. Beyond data availability, this research is complicated by the fact that the debit card provides two services for consumers - cash withdrawal and payment - that have contrasting effects on cash holdings and cash usage.

Research Question: - What are the determinants of rural customer perception on acceptance of debit cards for banking transactions?

Research Objective: - To examine rural customer perception of acceptance of debit card for banking transactions.

Literature Review: -

Safety of cash holdings: -

Banks safety nets have information issues (Ponce, 2006). Regulating bank safety ensures enhanced performance and the postmodern bank safety net differs from premodern bank safety nets(Calomiris, 1997).ThusBanks usher to act as a safety net ensuring prompt resolution against financial crisis that touches the central nerve of the economy untethering financial instability(Cousin, 2011). However this could vehemently impact Consumers' payment preferences which are strongly influenced by their views on the safety of payment instruments (Wironen, 2013). Further the current migration of banking systems to software defined networks has made consumers all sceptical of their acceptance of modern banking practises especially among rural areas(Yuan, Huang, Ma, & Zhang, 2017).

Adopting Banking Instruments: -

Debit card is the key to online banking (Jones, 2005). Electronic banking instruments have an impact on monetary policy efficiency (Tuaneh & Ewubare, 2016)where ICT is an instrument for enhanced banking system(Ekwonwune, Egwuonwu, Elebri, & Uka, 2017). Thus financial

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

instruments are key in promoting banking (Núñez Ferrer, 2018) with money acting as a specific good with maximum Liquidity level (Barasheva, 2018). Hence debit cards via E-banking has an impact on quality of banking services in public commercial banks (Aboujdiryha, 2019)

Acceptance of Debit Cards: -

There is a need for update on trends in debit cards (Cheney, 2007)because the banking system has observed that use of debit cards has the enhanced risk of frauds (Worthington, 2009) therefore knowledge about debit card policy and procedures could be of help (Salzman & Ruble, 2010). People should accept debit cards as a means of payment(Kim & Lee, 2010) aspayment methods are the determinants of debit cards acceptance(Ismail, Bakri, Zulkepli, Adnan, & Azizi, 2014). Further the use of debit cards has a direct relationship with demand for cash (David, Abel, & Patrick, 2016) because there is a positive relationship between cost of cash and the need for debit cards (Abele & Schaefer, 2016).

The above literature review leads to the following formation of Conceptual Framework: -

The Study perpetuates the following research hypothesis: -

H_1: .Acceptance of debit cards as modern-day banking practice does not vary by gender among rural poor of bantwal rural

H_{1a}: . Acceptance of debit cards as modern-day banking practice does vary by gender among rural poor of bantwal rural

Methodology: -

A case study approach with descriptive research and deductive reasoning is followed with mixed method sampling is adopted for the study. Stratified sampling helps to identify bantwal rural as the largest densely populated rural area among rural taluks of Dakshin kannada. Further under probability sampling, simple random technique is used to identify respondents who had bank accounts at nationalized commercial banks followed with non-probability sampling technique of convenience sampling was chosen to collect data from respondents using structured questionnaire with one item measured as "Do you accept debit card as essential part of modern day banking practice " with nominal categorical scale of 'yes' and 'no' between male and female.

Data Analysis, Findings and Conclusions: -

The independent t – test was used to analyse the data n = 96 where on average male accepted debit card as part of modern day baking practice with (M = 5, SE = 0.48) than female accepting debit card as part of modern day banking practice with (M = 4.28 , SE = 0.78). The difference - 2.25, BCa 95%, CI [-2.706, 0.125] was significant t (24) = -2.31, p = 0.03 with medium sized effect of d = 0.56.

The findings indicate that though there is significant effect in debit card acceptance of modern-day banking practice with male having upper hand. This leads us to future research on what makes women less accept a debit card as part of the modern-day banking practices with few women confirming on a fragile note that though they had bank accounts with basic minimum cash whose transactions laid at hands of their better half or their husband; the male head of the family contouring them only as symbolic representative of bank accounts.

Limitations: - It is a cross sectional study for a limited period of 15 days used to collect data from respondents. The respondents were limited to the commercial bank set up at bantwal rural only.

References: -

1. Abele, H., & Schaefer, G. (2016). The cost of cash and debit cards in Austria. *The Journal of Financial Market Infrastructures*, *4*(4), 1–16. https://doi.org/10.21314/JFMI.2016.061
2. Aboujdiryha, A. (2019). ةيفيطنتا و ةحبلا مهلعا ةكجه E-banking and its impact on quality of banking services in Libya : a case of public commercial banks service in Sebha city : يـ ف ايـ بـ يل .ةي راجت ةلماعلا قد يدمب اهبس ة لودأ لا ر قة ري يـ نورة كللإا ةرثأو ه ا د لع ةدهج لاة امدخ ةي فررملا *Journal of Pure and Applied Science*, *17*(2), 255–271.
3. Barasheva, E. V. (2018). Liquidity Of Cash And Non-Cash Money. *International Conference on Research Paradigms Transformation in Social Sciences CAPITAL AND*

COMPETENCES FORMED WITHIN, 113–119. https://doi.org/10.15405/epsbs.2018.12.15

4. Calomiris, C. (1997). The Postmodern Bank Safety Net: Lessons from Developed and Developing Economies. In *AEI Press*.

5. Cheney, J. S. (2007). An Update on Trends in the Debit Card Market. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1007276

6. Cousin, V. (2011). The State and the Banking Safety Net. In *Banking in China* (pp. 42–49). https://doi.org/10.1057/9780230306967_3

7. David, B., Abel, F., & Patrick, W. (2016). Debit card and demand for cash. *Journal of Banking and Finance*, *73*, 55–66. https://doi.org/10.1016/j.jbankfin.2016.08.009

8. Ekwonwune, E. N., Egwuonwu, D. U., Elebri, L. C., & Uka, K. K. (2017). ICT as an Instrument of Enhanced Banking System. *Journal of Computer and Communications*, *05*(01), 53–60. https://doi.org/10.4236/jcc.2017.51005

9. Ismail, S., Bakri, M. H., Zulkepli, J., Adnan, A., & Azizi, A. (2014). Determinants of debit cards acceptance: An empirical investigation. *AIP Conference Proceedings*, *1635*(Icoqsia), 113–117. https://doi.org/10.1063/1.4903571

10. Jones, D. (2005). The debit card is the key to on-line banking. *Card Technology Today*, *17*(2), 16. https://doi.org/10.1016/S0965-2590(05)00250-1

11. Kim, Y. S., & Lee, M. (2010). A model of debit card as a means of payment. *Journal of Economic Dynamics and Control*, *34*(8), 1359–1368. https://doi.org/10.1016/j.jedc.2010.03.003

12. Mittal, D., & Agrawal, S. R. (2016). The effects of traditional practices on modern banking system. *International Journal of Bank Marketing*, *34*(4), 476–500. https://doi.org/10.1108/IJBM-01-2015-0008

13. Núñez Ferrer, J. (2018). Financial Instruments and Promotional Banking in the EU are Growing — But is this Justified? *Intereconomics*, *53*(6), 326–331. https://doi.org/10.1007/s10272-018-0777-9

14. Ponce, J. (2006). Banking Safety Nets : Information Issues. *Mémoire Presented at the Université de Toulouse in June, 2006.*, (2000), 1–16.

15. Porter, T. C., Swerdlow, R. A., & Staples, W. A. (1979). Who uses bank debit cards? *Business Horizons*, *22*(1), 75–83. https://doi.org/10.1016/0007-6813(79)90111-3

16. Salzman, T., & Ruble, W. (2010). Debit Card Policy and Procedure Questionnaire. *Edpacs*, *24*(2), 8–18. https://doi.org/10.1080/07366989609452263

17. Tuaneh, G. L., & Ewubare, D. B. (2016). Impact of electronic banking instruments on monetary policy efficiency in nigeria. *International Journal of Business and Applied Social Science*, *2*(2), 92–99.

18. Wironen, J. (2013). The safety of cash and debit cards: A study on the perception and behavior of dutch consumers. *International Journal of Central Banking*, *9*(4), 77–98.

19. Worthington, S. (2009). Debit cards and fraud. *International Journal of Bank Marketing*, *27*(5), 400–402. https://doi.org/10.1108/02652320910979906

20. Yuan, T., Huang, X., Ma, M., & Zhang, P. (2017). Migration to software-defined networks: The customers' view. *China Communications*, *14*(10), 1–11. https://doi.org/10.1109/CC.2017.8107628

Print-ISSN-2320-5504
Online-E-ISSN-2347-4793

Asia Pacific Journal of Research

A Peer Reviewed International Journal

Dr. G. Shankar Government Women's First Grade College & P.G. Study Centre, Ajjarkadu, Udupi- 576101

National Conference

On

"CONTEMPORARY ISSUES IN COMMERCE AND MANAGEMENT"

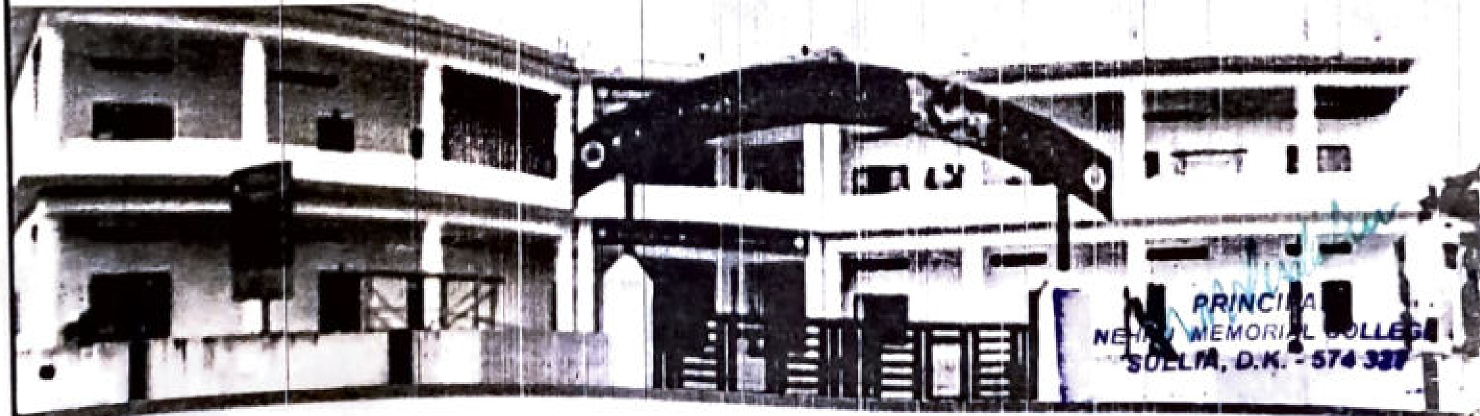
Date: 31st January, 2020

Organized by

DEPARTMENT OF COMMERCE & MANAGEMENT

Dr. G. Shankar Government Women's First Grade College &
P.G. Study Centre, Ajjarkadu, Udupi- 576101

Vol: I. Special Issue XII, January 2020



ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

APJR Asia Pacific Journal of Research
A peer reviewed international Journal

IMPACT FACTOR : 6.58
Print -ISSN -2320 - 5504
Online-E-ISSN - 2347 - 4793

A SURVEY ON IMPACT OF PLASTIC BAN IN SULLIA CITY

Miss. Leena Y N

Lecturer, Dept. of Business Administration

Nehru Memorial College, Sullia, D.K

Email add: leenaym20@gmail.com

&

Mrs. Anantha lakshmi

Lecturer and Head, Dept. of Business Administration

Nehru Memorial College, Sullia, D.K

Email add: anantha_sbhat@yahoo.in

ABSTRACT

Plastic bags have been introduced in 1970's decade and it gained a huge popularity amongst consumers and retailers. India's population is increasing along with plastic users also increasing drastically day by day. Many plastic factories are producing the tons of plastic bags. Which are very popularly used by people for shopping purposes, because of cheapness and convenience to use. But it creates a negative impact. Many countries have been banned plastic bags due to public concern over the negative impact on environment and agriculture especially in agricultural countries such as India, Bangladesh, Pakistan South Africa, etc. We have conducted the survey to know the usage of plastic bags in Sullia city before and after the plastic ban by Indian Government. We are recorded the respondents response regarding the impact of plastic ban in Sullia city. It revealed that, still people are continuing the use of plastic bags for their daily purposes. So, Government should take strict action to control and dispose of plastic bags to create a healthy environment.

Keywords: *Plastic bags, cheapness, respondents, population*

INTRODUCTION

Plastic bags have been introduced in 1970's (Williamson, 2003) and gained an increasing popularity amongst consumers are varieties across the world. It is estimated that around 500 billion plastic bags are used every year worldwide. This widespread utilization is attributed to their cheapness and convenience to use. The vast majority of these bags are discarded as wastes usually after a single use. The reason, these plastic bags are very thin and non recyclable materials.

Different reports showed that plastic bags are still causing severe environmental pollutions and also human and animal health damages in urban and rural areas of the country and especially for agriculture countries. Because these plastics are decompose with soil. It will reduce the fertility of the soil. Some of the basic reasons could be poor waste management and perhaps lack of awareness about the negative impacts of plastic bags. This is the main reason to increasing of plastic bags usage in India.

OBJECTIVES

The objectives of the study

- To know the impact of plastic bag ban regulation on consumers and retailers before and after
- To know the consumer opinion regarding plastic ban and alternatives can adopt instead of plastic bags

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574327

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

RELEVANCE OF THE STUDY

'A Survey on Plastic ban in Sullia city' is relevant to study because; consumer and retailers are using more plastic bags for their convenience purpose. It creates negative impact on environment. But, after the plastic ban how they are changed their life style without plastic is the question arising in mind. To find the answer this study is relevant.

IMPACT OF PLASTIC BAGS

Impact of plastic bag usage on environment and cattle health indicated that plastic bag wastes were dumped near roadsides, open plots, riversides, in drains and public places. Consequently, over flowing of water was reported to be a common problem during rainy seasons as a result of blockage of drains. If plastic bags get access to agricultural fields, they reduce percolation of water and proper aeration in soil. This results in reduction of productivities of such fields. If we burn the plastic, it infuse the air with toxic fumes. And sometimes cows eat plastic bags, which become indigestive food to animal and cause the health issues.

PRECAUTIONS

Several precautions are being employed to reduce the negative impacts of plastic bags.

- A tote bag can be used. It makes a good substitute for holding the shopping.
- We can keep the bag with the cahier, and then put our purchases into it instead of the usual plastic bag.
- Reduce plastic usage in our schools and colleges.
- Avoid buying items which is packaged in plastics.
- We can use cloth shopping bags
- Pack lunches in unbleached wax paper and reusable container made of stainless steel or glass.

PLASTIC BAG REGULATION IN INDIA

The plastic manufacture, **Sale and Usage Rules, 1999,** as amended in 2003 under the **Environment Protection Act of 1986,** regulates plastic bag use in India. The Rules prohibit the manufacture, stocking, distribution or sale of carry bags made of virgin or recycled plastic less than 20×30 centimeters in size and 20 microns in thickness.

The Rules also disallow the use of recycled plastic bags and containers for storing, carrying, dispensing or packaging of food items. Further the Rules require units manufacturing plastic bags to register with the respective **State Pollution Control Board (SPCB) or Pollution Control Committee (PCC)** prior to the commencement of production.

The **Plastic Waste (Management and Handling) Rules, 2011,** which would replace the earlier **Recycled plastic manufacturer and usage rules, 2003,** is the latest drives both by the government of India to limit plastic waste in the country. The new rules raised the minimum thickness of plastic bags to 40 microns and require recycled carry bags made from compostable plastics to conform to specific BIS (Bureau of Indian standards).

PLASTIC BAN IN SULLIA

Sullia is a small city of Dakshina Kannada District. In this city plastic usage was more before the plastic ban. People are using below 40 micron plastic for carrying each item. But some reputed shops were using above 40 micron plastic. It causes for the environmental effect on human health and animals.

After the plastic ban, many of the residents and shop keepers stop their usage. But some of them, did not stop the usage of plastic bag below 40micron. Some shop keepers providing cloth bag instead of plastic bag.

According to survey, people opinion is manufacturer has to stop the production of plastic bags to decrease the usage of plastic bags. And people should use the paper bags and cloth bags for their conveniences. It will definitely reduce the usage of plastic bag and it will save the environment also.

LITERATURE REVIEW

1. A study on **'The Impact of Plastic Bags on the Environment: A field Survey of the City Of Sana'a And The Surrounding Areas, Yemen'** by Riyad. Moharam and Maher Ali. Al. Maqtari (October-December,2014)

   Plastic bags were there in the streets , roads, the trees, the power cords, most markets and vegetables, where the prevalence of the plastic bags and waste plastic materials cause serious environment problems, so the waste materials removed by using the microorganism that associated with plastic bags. This method was cheap and effective, so that it can be used widely for the treatment of Plastic bags.

2. A study on ' **Ban on Plastic Bags And The Emergence Of New Varieties: A Study Of Awareness on Shopping Bags And The Possibility Of Behavior Change Towards Eco-Friendly Consumption** ' by Ishrat Jahan Synthia and Shafquat Kabir(2014)

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

The level of consumer awareness regarding the harmful effects of the new varieties of shopping bags were determined through in-depth interview of consumers, wholesalers and industry experts, followed by a home audit among consumers. This study found that level of awareness did not vary with demographic characteristics like age, income or occupation, suggesting that this is a common phenomenon across all segments of the society.

3. A study on **'Usage of plastic carry bags and impact on Environment, in Mumbai' by Dr. Tanusree chaudhuri(2016)**
This study says, people know the adverse impact of plastic on environment. While talking to them it is understood that many of them in favor of banning plastic carry bags. Respondent they want plastic free city and that's why many respondents carry their own bag during the time of shopping. Therefore, the Government in collaboration with NGO's, educational institution and the city youth should encourage people to use environmental friendly alternative material such as paper bag, cloth bag etc to protect the city from environmental damages.

HYPOTHESIS

Null hypothesis: People are completely stopped plastic bag usage in Sullia city.

Alternative hypothesis: People are still be continuing plastic bag usage in Sullia city.

This study proved that, people are still be using plastic bags for their day to activities even after banning of plastic bag in sullia city. So, null hypothesis rejected and alternative hypothesis is accepted.

RESEARCH METHODOLOGY

Here we adopted exploratory research method. For the data collection, we used primary data and secondary data. Under primary data, sources are collected through questionnaires and personal opinion. Under secondary data, sources are collected through internet, library, newspapers, and neighbors.

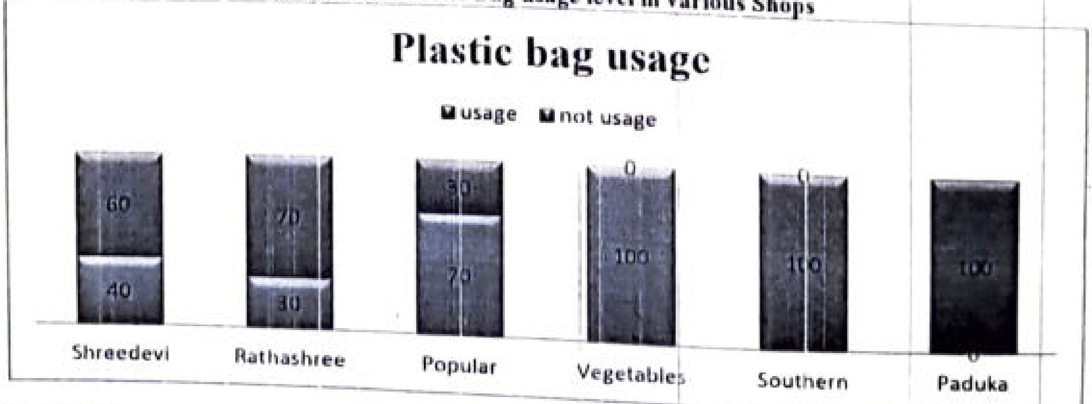
RESULTS AND DISCUSSION

The survey results indicated that, majority of the city residents widely used plastic bags in their daily life activities. Some of the main reasons attributed to the widespread usage were low price, easy availability, easy to carry and light weight. Among 16 respondents, 6 respondents are shop keepers and 10 are residents. We found two respondents (shopkeepers) are using plastic bags in high frequency (i.e. 100% in vegetable shop and hotel). These results also indicated that usage of plastic bags is high in Sullia city.

Table no:1 Survey of plastic ban in shops

Shop Name	Usage	Not Usage
Shreedevi book stall	40%	60%
Rathashree fancy	30%	70%
Popular bakery	70%	30%
Vegetable shop	100%	0
Southern restaurant	100%	0
Paduka collection	0	100%

Chart No:1 Plastic Bag usage level in various Shops



Source: Primary data

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

Table no:2 Respondent profile

Variables	Categories	RESIDENTS		SHOPS	
		Numbers	%	Number	%
Sex	Male	3	30	6	100
	Female	7	70	0	0
Age	<20 years	2	20	0	0
	20-29	2	20	1	17
	30-39	4	40	3	50
	>40	2	20	2	33
Education	Illiterate	0	0	1	17
	High School	2	20	1	17
	PUC	4	40	2	33
	Higher Education	4	40	2	33
Occupation	Students	2	20	0	0
	Govt employees	1	10	0	0
	Pvt business	3	30	6	100
	Home-maker	4	40	0	0

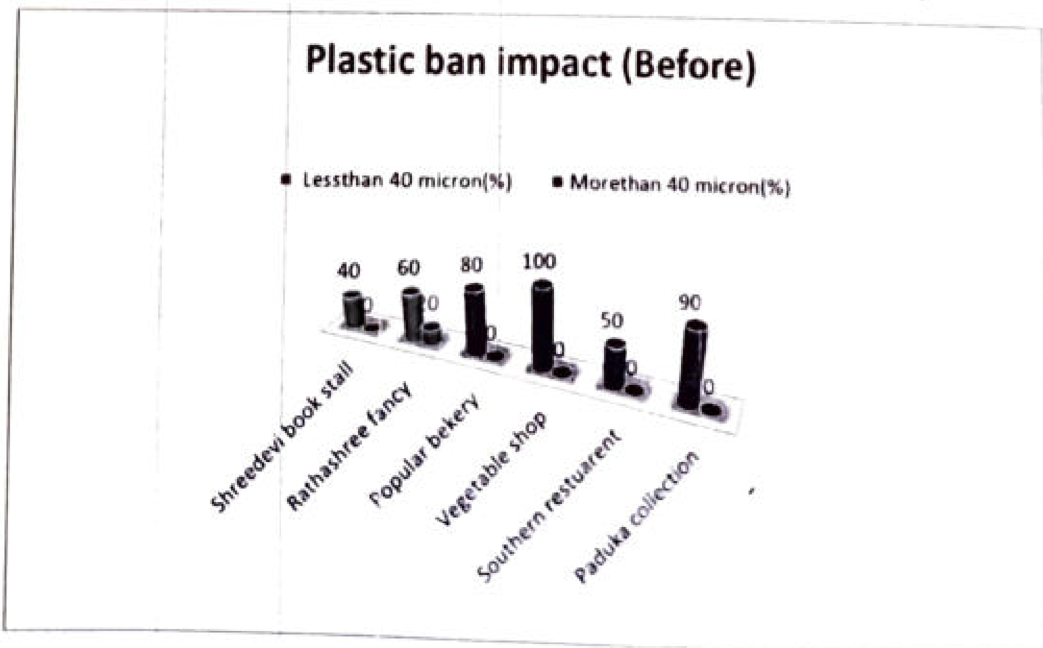
Source: Primary data

The survey results indicated that regardless of sex, educational level, age group and occupation, majority of the city residents widely use plastic bags in their daily life activities. Some of the main reasons attributed to the widespread usage were low price, light weight and easy availability. During the course of our survey, we also observed that most of the shopkeepers distributing plastic bags free of charge to their customers for carrying sold items and also to keep the customer relationship for a longer period. But this is the main reason for increasing the plastic usage by residents.

Table no:3 Plastic ban impact on shop keepers in Sullia (Before)

Shops names	Less than 40 micron (%)	More than 40 micron (%)
Shreedevi book stall	40	0
Rathshree fancy	60	20
Popular bakery	80	0
Vegetable shop	100	0
Southern restaurant	50	0
Paduka collection	90	0

Chart No:2 Plastic ban impact on shop keepers in Sullia (Before)



Source: Primary data

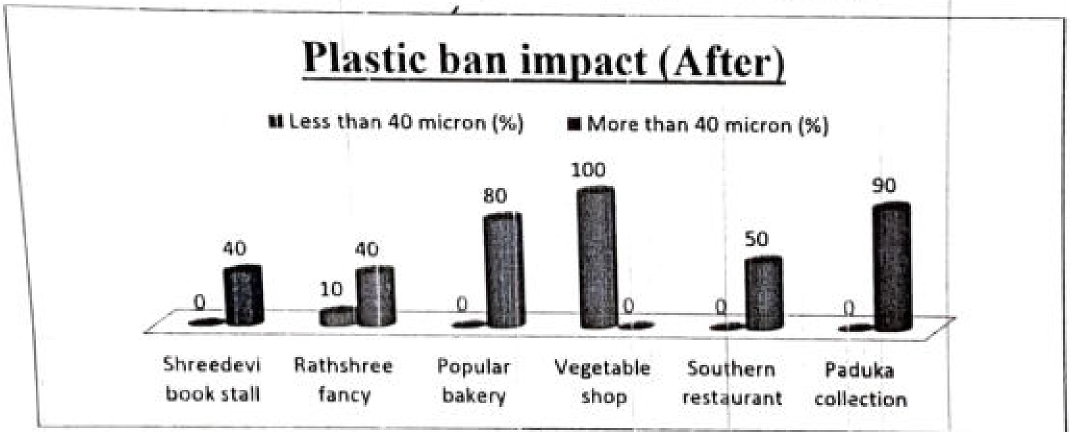
Interpretation: The above chart shows that, before the plastic ban in sullia all shops were using plastic bags below 40 micron. And Rathashree fancy using 20%, above 40 micron plastic bags also.

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

Table no:4 Plastic ban impact on shop keepers in Sullia(After)

Shops names	Less than 40 micron (%)	More than 40 micron (%)
Shreedevi book stall	0	40
Rathshree fancy	10	40
Popular bakery	0	80
Vegetable shop	100	0
Southern restaurant	0	50
Paduka collection	0	90

Chart no:3 Plastic ban impact on shop keepers in Sullia(After)



Source: Primary data

Interpretation: The above chart shows that, after the plastic ban except Rathashree fancy and vegetable shop, others were stopped below 40 micron plastic bag usage. Vegetable shop still be providing plastic bags to the customer below 40 micron. And Rathashree fancy reduced their plastic providing percentage but did not stopped completely. Other shops started using above 40micron plastics in their shops.

CONCLUSION

The results of our survey indicated that, most of respondents are in favor of banning of plastic bags. They know very well about plastic bag usage is very harmful to environment and it creates thousands of negative impacts also. But, still it was widely used by the community. Stopping of plastic bags are highly necessary for the community. So, plastic bag waste materials can remove by using the paper and cloth bags. This method will effective and healthy. So people have to create awareness about the negative impact of plastic bag usage and realize the alternatives in people mind. It will create a good environment in Sullia.

Table no:5 Respondent's responses

SHOPE NAMES	Using cloth bags	Burning of plastic	Affect to Environment	Need plastic	Plastic not necessary	Stop production	Above 40 micron plastic usage
Shreedevi book stall	NO	YES	YES	YES	NO	YES	YES
Rathashree fancy	NO	NO	YES	YES	NO	NO	YES
Popular bakery	NO	NO	YES	YES	NO	NO	YES
Vegetable shop	NO	YES	YES	YES	NO	NO	NO
Southern restaurant	NO	YES	YES	YES	NO	NO	YES
Paduka footwears	YES	NO	YES	NO	YES	YES	NO
Residences	YES	YES	YES	YES	NO	NO	YES

Source: Primary data

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

REFERENCE

1. International jounal of engineering research and review ISSN 2348-697X(online) Vol:2, Issue 4, PP⊗61-69), Month: October-December, 2014
2. Abhinav International Monthly Refereed journal of Research in Management and Technology- Volume 5, Issue 3 (March 2016) Online ISSN-2320-0073
3. Plastic lifecycle management: An insight into a plast-less economy by Vikesh Mehta-October 2019
4. https://en.wikipedia.org/wiki/Plastic_bag
5. https://www.environment.act.gov.au/waste/plastic-bag-ban/information-for-retailers
6. https://pib.gov.in/newsite/PrintRelease.aspx?relid=74888
7. https://www.google.com/search?rlz=1C1PRFI_enIN831N831&q=plastic++images

3.3

Our Heritage

ISSN: 0474-9030

Vol-68-Issue-30-February-2020

A Conceptual Framework on Sustenance of Business Models towards Business Continuity

Dr.Vijayalakshmi N.S
Assistant Professor
Department of Economics
Nehru Memorial College, Sullia – 574327
email: nandalikc17@gmail.com

Rudrakumar M.M
Assistant professor
Department of commerce
Nehru Memorial college, Sullia– 574327
email: rudra.kumar33@gmail.com

Abstract

Business remains dynamic in business environment. The sustenance of business through applied business models in dynamic business environment vary according to the nature and functioning of every organisation. Further the duration of sustenance of business model among business diverge among economies and organisations. This research paper is thus an attempt to focus on the nature and level of sustenance of emerging versus existing business models across economic stride with consecutive development in technology towards business continuity.

Key words:- business model, business continuity, Sustenance

Introduction:-

Worldwide markets have been suffering in the recent years from significant and sudden changes due to different processes like globalization, European integration, ICT development, and global economic crisis. All the above elements pose global competition thereby insisting companies to change their business strategies and business models in order to fight against the challenges. This change becomes even more necessary when small and medium business enterprises are exposed to the loss of competitiveness coming from market changes. Hence business continuity is threatened and challenged.

It is therefore vital to find sustenance of business models towards business continuity.

Business models have always existed and the concept of the business model itself is more recent (DaSilva & Trkman, 2014; Zott, Amit, & Massa, 2011). Business models have severely threatened business continuity (Eggers & Park, 2017). Business models have a central role in companies' business strategies and in ensuring the continuity of revenue streams (e.g. Amit &

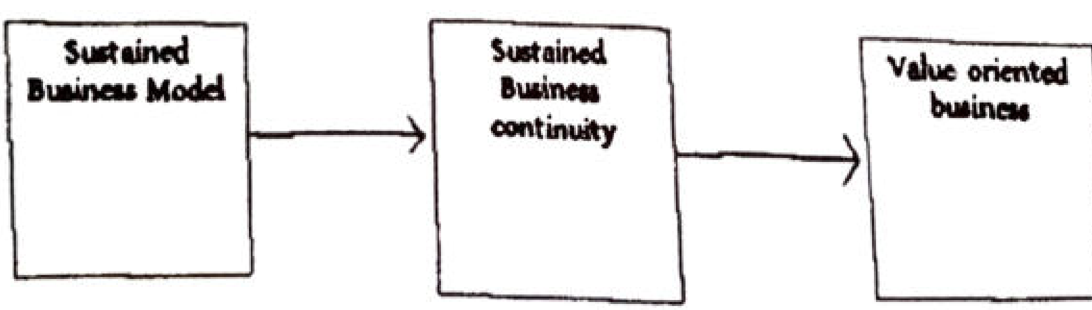
ISSN: 0474-9030

Vol-68-Issue-30-February-2020

Zott, 2001; Bouwman et al., 2008; Chesbrough & Rosenbloom, 2002; Chesbrough, 2010). Business models focus on the mechanisms through which technologies are transformed to value, as technologies do not have any inherent value outside of their use potential (Baden-Fuller & Haefliger, 2013). DaSilva and Trkman argue (2014) that a business model has a shorter temporal perspective than a strategy, which views business on a long-term basis. Business models need to adapt in response to the external contingencies (Demil & Lecocq, 2010) engendered by technology-driven innovations. Thus Business models are strategic assets for organisations and define the logic through which they transform the produced goods and services into profit (Foss & Saebi, 2017). In short businesses must consider what makes them valuable to the market in the first place and how to best position that understanding in the current operating environment, adjusting that view as needed to changing circumstances and customer demands. All this call for accurate industry perception and decision making in business continuity solutions.

Business continuity broadly refers to a company's socio-technical ability to withstand and restore from intra- and extra-organisational contingencies (Niemimaa, 2015a). Business continuity market remains unexplored with unique complexity of technology, consultancy, training, marketing etc delving into multitudinous nature of functioning. Business continuity has increasingly become a focus of emergency response and coordination, as awareness heightens about the precarious circumstances of businesses, and especially small enterprises, in the post-hazard event context, and how disruptions might impact the surrounding community. There is good reason for business continuity planning as a capacity that should be encouraged by predictive business models. This calls for sustenance check of business models in terms of longevity in business arena.

Conceptual Framework:



The above conceptual framework determines that after the identified new business model is described, it can be juxtaposed with the company's existing business model in order to intrigue the company's sustenance on the basis of applicability of models towards value oriented business continuity. This derivation is counter to the statement that successful business continuity is ensuring that the business model is resilient against environmental contingencies (Bouwman et al., 2015; Haaker et al., 2017). Thereby responding to contingencies requires not just incremental

ISSN: 0474-9030

Vol-68-Issue-30-February-2020

hanges but reconsidering as a whole what is it that the company is actually doing and rethinking in what business does it actually operate.

To conclude persistence is the eventual dilemma every business face. The level of sustained persistence companies should have already identified those business models that they deem to have the most potential for disrupting their own business. By systematically going through the different components of the business model, the company will get a clear picture of the threat that the identified business model poses towards sustenance.

References

•Amit, R., & Zott, C. 2001. "Value creation in e-business," *Strategic Management Journal* 22(6–7), 493–520

•Baden-Fuller, C. & Haefliger, S. 2013. "Business Models and Technological Innovation," *Long Range Planning*, 46(6), 419-426.

•Bouwman, H., Faber, E., Haaker, T., Kijl, B., & Reuver, M. D. 2008. Conceptualizing the STOF Model. In *Mobile Service Innovation and Business Models* (pp. 31–70). Springer, Berlin, Heidelberg.

•Chesbrough, H. 2010. "Business model innovation: opportunities and barriers," *Long range planning* (43:2), pp. 354-363.

•Chesbrough, H., & Rosenbloom, R. S. 2002 "The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies," *Industrial and Corporate Change* (11:3), 529–555.

•DaSilva, C. M., & Trkman, P. 2014 "Business Model: What It Is and What It Is Not," *Long Range Planning* (47:6), 379–389.

•Demil, B. and Lecocq, X. (2010). "Business Model Evolution: In Search of Dynamic Consistency". Business Models (43:2–3), pp. 227–246.

•Eggers, J. & Park, K. 2017. "Incumbent Adaptation to Technological Change: The Past, Present, and Future of Research on Heterogeneous Incumbent Response," *Academy of Management Annals* (11:2), pp. 1-83.

•Foss, N. J., & Saebi T. 2017 "Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?," *Journal of Management* (43:1), 200-227

•Niemimaa, M. 2015a. "Interdisciplinary Review of Business Continuity from an Information Systems Perspective: Toward an Integrative Framework," *Communications of the Association for Information Systems* (37:4), pp. 69-102.

•Zott, C., Amit, R., & Massa, L. 2011 "The Business Model: Recent Developments and Future Research," *Journal of Management* (37:4), 1019–1042.

ISBN: 978-93-84734-06-2

E-BANKING SERVICES IN INDIA

Rudrakumar.M.M
Assistant Professor, Nehru Memorial College, Sullia, DakshinaKannada, Karnataka

ABSTRACT

The tremendous advancement in information technology and communication is a rapid change in banking sector. E-banking has come up with various banking services which allowed customer to transact their account from anywhere and anytime using internet. The objective of the study is to observe the trend and growth of the E- banking services in India. The study is based on the secondary data which is being collected from annual report of RBI and represented in tabulation form. From the study the research a found that there is a tremendous growth in modern banking services.

Key words: Technology, E-banking, modern banking.

Introduction:

The information technology has become one of the vital features in the banking sector. With the proliferation in information technology and communication there is a rapid change in the banking sector. Innovation in the banking sector has changed the whole financial system in the economy. Now a day's banks are pushed to develop new and innovative techniques and customer oriented service to maintain competition against competitor. E-banking is defined as automatic delivery of banking product and services which includes traditional and modern banking services through internet. Internet banking allows customer to transact their account from anywhere and anytime using internet and it also avoids waiting in queue for banking services as time factor is very important for the customers, so modern banking services offered by banks in an effective way that satisfies customer. E-banking is less expensive and reduces transaction cost. Modern banking delivery channels includes ATM, Debit card, Credit card, POS, NEFT, RTGS, ECS, Mobile banking etc. the study " E-BANKING SERVICES IN INDIA" is undertaken to know the growth in modern banking servers in India

Electronic channels:

Automated Teller Machine (ATM):

The Automated Teller Machine (ATM) is a machine which facilitates basic banking activities viz, withdrawal of money, depositing money and checking of ones own balances etc. ATM does most of the functions of cashier in the bank. ATM is operated by plastic card issued by the bank which is called as ATM Card, with it special features. This plastic ATM Card is replacing cheque, personal attendance of the customer, banking hours and bank holidays restriction and paper based verification.

Debit card:

Debit card is also known as plastic card which is used for making payment while making purchase, money comes directly from the user's account when transaction is made. Debit cards usually also allow for instant withdrawal of cash, acting as an ATM card for withdrawing cash.

Credit card:

A credit card is a payment card issued to users (cardholders) to enable the cardholder to pay a merchant for goods and services based on the cardholder's promise to the card issuer to pay them for the amounts so paid plus the other agreed charges.

Point of sale (pos):

The point of sale (POS) or point of purchase (POP) is the time and place where a retail transaction is completed. At the point of sale, the merchant calculates the amount owed by the customer, indicates that amount, may prepare an invoice for the customer (which may be a cash register printout), and indicates the options for the customer to make payment. It is also the point at which a customer makes a payment to the merchant in exchange for goods or after provision of a service. After receiving payment, the merchant may issue a receipt for the transaction, which is usually printed but is increasingly being dispensed with or sent electronically.

Electronic Clearing Service (ECS):

ECS is an electronic mode of payment / receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment of amounts towards distribution of dividend, interest, salary, pension, etc., or for bulk collection of amounts towards telephone / electricity / water dues, cess / tax collections, loan instalment repayments, periodic investments in mutual funds, insurance premium etc. Essentially, ECS facilitates bulk transfer of monies from one bank account to many bank accounts or vice versa. ECS includes transactions processed under National Automated Clearing House (NACH) operated by National Payments Corporation of India (NPCI).

National electronic funds transfer (neft):
NEFT is a facility enabling bank customers in India to transfer funds between any two complete details such as receiver name, bank account number, account type, city, branch name etc. should be furnished to the bank at the time of requesting such transfer so that the amount reaches beneficiary account.

Real-time gross settlement (rtgs):
Real-time gross settlement are specialist funds transfer systems where the transfer of money or securities takes place from one bank to another on a "real time" and on a "gross" basis. Settlement in "real time" means a payment transaction is not subjected to any waiting period, with transactions being settled as soon as they are processed. "Gross settlement" means the transaction is settled on one-toone basis without bundling or netting with any other transaction. "Settlement" means that once processed, payments are final and irrevocable.

Mobile banking:
Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions ely using a mobile device such as a Smartphone or tablet. Unlike the related internet banking it uses software, usually called an app, provided by the financial institution for the purpose. Mobile banking is usually available on a 24-hour basis. Some financial institutions have restrictions on which accounts may be accessed through mobile banking, as well as a limit on the amount that can be transacted.

Objective of the study:
- To discuss E-banking services in India.
- To observe trends in banking services.
- To measure the growth of services provided in banking sector in India.

Research methodology:
This study is undertaken by researcher using the secondary data. The data used are published in annual report of RBI and various books and websites and the same has been presented in table and graphs.

Various Electronic Banking Channels

Electronic Channels	Year 2017-18	2018-19	Growth (%)
No. of ATM deployed	22,34,364	23,74,749	6.2%
No. of POS deployed	19,45,879	22,46,388	11.54 %

Annual Report of RBI

Electronic Channels	Year 2017-18 2018-19 (Millions) (Millions)	Growth (%)
RTGS	108.7 112.9	3.86%
ECS DR	8.8 7.9	-9.7%
ECS CR	10.1 8.3	-8.2%
NEFT	1622.2 1842.5	13.58%
Credit cards	1097.1 1967.6	79.34%
Debit cards	2352.8 4658.9	98.01%
Mobile Banking	12854.6 18634.8	44.9%

Findings:
- From the study we can inferred that there is increase in the number of ATM's deployed and increase in the number of POS deployed in the year 2016-17 when compared to 2015-16.
- Numbers of POS deployed are more than the number of ATM's deployed.
- There is also increase of value and volume of transaction in RTGS and NEFT.
- There is tremendous increase in the volume and value of transaction of debit card, credit card and mobile banking in the year 2018-19when compared to 2017-18, which shows that usage of e-banking has increased in recent trends of banking sector.
- The study reveals that the banking sector has introduced various electronic channels which make transactions easier and same has been accepting by the customers.

Suggestions:
As per the study, we can say that the banking sector is introducing various electronics channels which also increase the size of customer base so for banking industry serving mass market

ISBN: 978-93-84734-86-2

of India is the biggest challenge. The better we understand our customer the better we will be successful in fulfilling the needs of the customers. Now a day's customers need internet banking, mobile banking so consumer awareness should be created significantly higher as compared to previous years and also banks must cut their cost of their services.

Conclusion:

In the present scenario banking industry is re-defined and re-engineering with the use of information technology and it is sure that the future of banking will offer more services to the customers with the continuous innovation in the product and services. Thus there is a paradigm shift from the seller's market to the buyer's market in the industry and finally it affected at the bankers level to change their approach from conventional banking to convenience banking and mass banking to class banking. The shift has also increased the degree of accessibility of [illegible] man.

References:

- A Mahalingam "Customer preference [illegible] modern banking services of SBI in [illegible] district": ManonmaniamSundaranar [illegible] 2016.
- M.Amutha "Customers attitude on the [illegible] technological services of banking [illegible] dindigul district: A study with special reference to net banking": Madurai Kamaraj University, 2015.
- Dr.S.Sudalai Muthu "Acceptance of mobile banking services: Antecedents and Consequences": Pondicherry University, 2015.
- M.SadiqSohail "E-banking and customer preference in Malaysia: An empirical investigation": DOI: 10.1016/S0024-0255(02)0s0378-X.Source: DBLP, 2003.

Advances in Intelligent Systems and Computing 1146

Zheng Xu
Reza M. Parizi
Mohammad Hammoudeh
Octavio Loyola-González *Editors*

Cyber Security Intelligence and Analytics

Proceedings of the 2020 International Conference on Cyber Security Intelligence and Analytics (CSIA 2020), Volume 1

Springer

Zheng Xu · Reza M. Parizi ·
Mohammad Hammoudeh ·
Octavio Loyola-González
Editors

Cyber Security Intelligence and Analytics

Proceedings of the 2020 International Conference on Cyber Security Intelligence and Analytics (CSIA 2020), Volume 1

Springer

The Construction of Off-School Practice Teaching Base for Investment Major Based on Big Data

Yanli Wang[(✉)]

Jilin Engineering Normal University, Changchun 130052, Jilin, China
181963510@qq.com

Abstract. Aiming at the problems in securities investment practice teaching, such as the large gap between school practice teaching and industry demand, the core business connection in off-campus practice teaching is difficult, exploring the construction of off-campus practice bases, and reducing the gap between on-campus practice teaching and industry demand. Based on the construction of traditional off-campus practice teaching bases, this paper proposes an off-campus practice teaching base combining big data technology. The off-campus practice teaching base based on big data technology is an important part of campus construction. It not only meets the needs of "Internet +" vocational education development, but also meets the requirements for training enterprise talents. Based on the system structure of the practice base under big data, combined with the characteristics of 5 V of big data, it comprehensively analyzed the management strategies of the personnel, equipment and teaching process of the base. Through the use cases of the practice base outside the school, in the context of the era of big data, it effectively implemented the "education for the fittest is the best education" modern education concept. In this paper, a questionnaire survey is conducted on the satisfaction of students in a practical teaching base outside the school, and the teaching effect is evaluated. Experimental simulation results show that students have a good response to the experimental base. After training, the temperament and business quality of students have been improved, and teamwork awareness has been enhanced. It can be seen that the construction of a practical teaching base based on the background of big data will greatly integrate the base resources and provide timely feedback and countermeasures to the problems that arise at the base. The questionnaire survey shows that the proportion of students who are satisfied with the management of the practice base is 64%, the basic satisfaction rate is 28%, and the dissatisfied rate is 8%, which indicates that the students are mostly agreeable with the management of the practice base and are basically satisfied. The dissatisfaction accounted for 36% of the total, indicating that there is a certain deviation in the management of the practice base. Based on the big data background, the construction of an off-campus practice base for investment majors has certain research value. Big data technology can be used to improve traditional practice base some flaws.

Keywords: Investment science · Teaching base · Big data · Off-campus practice

Z. Xu et al. (Eds.): CSIA 2020, AISC 1146, pp. 522–530, 2020.
[illegible]

1 Introduction

With the rapid development of IT technology, people's work, study and lifestyle are undergoing tremendous changes, efficiency has been greatly improved, and information resources are shared to the greatest extent. At present, the biggest difficulty encountered by investment majors when they go out for internships is the lack of practical ability and practical project experience. According to a survey of counterparts in professional companies related to network and cloud computing and big data, the main reason for students' lack of practical experience is that investment is a very practical, practical and comprehensive specialty, and the application of investment science in enterprises is also Comprehensive and complex.

Every graduation time, tens of thousands of students flock to the market. A large number of graduates cannot meet the job requirements of employers. They need retraining before they can take up jobs, but it is always difficult for companies to recruit suitable employees [1, 2]. In view of the difficulty of finding employment for college students and the difficulty of recruiting ideal new employees, it is proposed that school-enterprise cooperation should be strengthened and the employment capacity of students should be improved through the research on the construction of big data extracurricular training and practice bases [3, 4].

The emergence of a distributed stream big data analysis platform solves the constantly generated data stream. In streaming big data analysis, the data processing workflow is abstracted into a directed graph called topology. Data is read from memory and processed tuple-by-tuple, and the results of these processes are dynamically updated. The performance of a topology is evaluated by its throughput. Aiming at the heterogeneous flow big data analysis cluster shared by multiple topologies, Jiang proposed an efficient resource allocation scheme to achieve the maximum and minimum fairness of the throughput utilization of each topology. The simulation results show that the resource allocation scheme proposed by Jiang significantly improves the maximum and minimum fairness in the practicability of the topology throughput, and the calculation complexity is low [5, 6]. Through a four-year qualitative study of four large Scandinavian companies, Caesarius was able to develop typologies in how emerging companies deal with exploration and resistance to big data technologies [7, 8]. The maturity of the information society is characterized by mass production of data that provides insight into human behavior. Analytics (as in big data analytics) is a practice of understanding data trajectories through interactions with network devices, platforms, and organizations. Mittelstadt explores the ethical significance of special groups in analytics and believes that the privacy interests of algorithmic groups with inviolable personality must be recognized along with individual privacy rights. Individuals grouped algorithmically have collective interest in creating information about the group and the actions taken on behalf of the group. In assessing the ethical acceptability of the analytics platform, group privacy was proposed as a third benefit, balancing personal privacy and social, business, and cognitive interests [9, 10]. Due to the high complexity of today's data centers, a lot of research attempts to understand data center workloads and resource utilization. However, there is little work to explore unsuccessful jobs and task executions. Rosa researched and predicted three types of developing students. Objective requirements for development. Although there are hidden dangers such as data integrity, authenticity, science, and security in the application process, with the operation and continuous updating of the system, the investment professional training base will be increasingly perfected to better adapt to the construction of modern vocational education, Effectively serving the needs of corporate talent training, more in line with the inevitable trend of "Internet +" vocational education development.

Acknowledgement. This work was supported by the research achievement of Jilin Province higher education reform research project "research and practice of collaborative construction of local applied undergraduate investment professional" inside and outside "practice teaching base" [Higher Education Department of Jilin Province (2017) No. 71].

References

1. Cashin, A.: The transition from university completion to employment for students with autism spectrum disorder. Issues Mental Health Nurs. **39**(2), 1–4 (2018)
2. Vijayalakshmi, N.S., Sequeira, A.H.: The nature of mother's employment on nurturing campus persistence among undergraduate students. Asian Soc. Sci. **13**(6), 36–45 (2017)
3. Hassani, H., Huang, X., Ghodsi, M.: Big data and causality. Ann. Data Sci. **4**, 1–24 (2017)
4. Mikalef, P., Pappas, I.O., Krogstie, J., et al.: Big data analytics capabilities: a systematic literature review and research agenda. IseB **2**, 1–32 (2017)
5. Jiang, Y., Huang, Z., Tsang, D.H.K.: Towards max-min fair resource allocation for stream big data analytics in shared clouds. IEEE Trans. Big Data **4**(1), 130–137 (2018)
6. Cai, H., Xu, B., Jiang, L., et al.: IoT-based big data storage systems in cloud computing: perspectives and challenges. IEEE Internet of Things J. **4**(1), 75–87 (2017)
7. Caesarius, L.M., Hohenthal, J.: Searching for big data: how incumbents explore a possible adoption of big data technologies. Scand. J. Manage. **34**(2), 129–140 (2018)
8. Mittelstadt, B.: From individual to group privacy in big data analytics. Philos. Technol. **30**(4), 475–494 (2017)
9. Liu, X., Wang, X., Zhang, W., et al.: Parallel data: from big data to data intelligence. Moshi Shibie yu Rengong Zhineng/Pattern Recognit. Artif. Intell. **30**(8), 673–681 (2017)
10. Rosa, A., Chen, L.Y., Binder, W.: Failure analysis and prediction for big-data systems. IEEE Trans. Serv. Comput. **10**(6), 984–988 (2017)
11. Khan, S., Liu, X., Shakil, K.A., et al.: A survey on scholarly data: from big data perspective. Inf. Process. Manage. **53**(4), 923–944 (2017)

3.2.1 Scopus, UGC care listed-2

An Empirical Study on Adaptability of Mobile Banking Services in India -A Quantitative Investigation

Article in Xi'an Shiyou Xueyuan Xuebao/Journal of Xi'an Petroleum Institute (Natural Science Edition) · November 2021

2 authors, including:

Vijayalakshmi N S
Nehru Memorial College Sullia

An Empirical Study on Adaptability of Mobile Banking Services in India – A Quantitative Investigation

Dr.Vijayalakshmi N.S [1]

Asssistant Professor & Head of Department of Economics

Nehru Memorial College, Kurunjibag, Sullia , Karnataka - 574327

Dr.Jayavanth Nayak [2]

Associate Professor

Department of P.G Studies in Economics

University College Mangalore, Mangalore, Karnataka - 575001

Abstract

Objective: - To make mobile banking system adaptable with easy hands on access to its beneficial features among Indian banking customers with high end access to digital payment system.

Methodology: - An empirical study comprised a sample of 170 respondents were data was collected based on convenience sampling through a structured questionnaire created on five-point likert scale.

Data Analysis: - Mean and t-test was applied to identify the results.

Conclusion: - Banks must take collective efforts to organize campaigns to make customers aware about the benefits of mobile banking in order to make them adopt the technology as the future of Indian banking relies on technology-based devices.

Keywords: Mobile banking; Adoption intention; customer adaptability, features of M-banking

Introduction

With time, banking has risen beyond its conventional model of customers waiting in line while banks rendered their services, to now making their services available to customers round the clock. For businesses all around the globe, technology has proved to bring about intense development. The banking industry has continually explored the chance for innovation to give its customers a much improved and convenient experience with its services. In this regard, technology has served two great purposes for the industry – one which has brought about direct connectivity between a bank and its customers, and the second is ease of process of functioning. The invention of the Mobile phone has been one of technology's greatest and most innovative moves to serve the purpose of bringing customers closer to their banking needs. Before the year 2017 came to a close, the number of mobile subscriptions was nearly 7 billion **(ITU, 2017)**. Also, the Telecom Authority of India **(TRAI, 2015)**, in its report suggested that by February of 2017, Internet and wireless subscribers in India reached 18 million and 961 million respectively.

Innovation in technology has changed the whole functioning landscape of banks in India and administration of financial services. With the development of ICT, huge propagation of mobile phones and wireless networking and its technology, there is no more a need for customers to be physically present at a bank in order to fulfil their banking needs. Instead, they can complete banking transactions at their own convenient time and place. The 1980s saw the computerization of the Indian banking sector, as per a report by the Rangarajan Committee. Another report in 1988 formulated a thorough arrangement to extend innovative technological models to different areas of banking, like funds transfer, withdrawals, etc. Between the latter part of the 1990s and all through the early 2000s, many benefits of IT started materialising and showing its effects on the Indian banking sector with ATMs, CBS, computerization of banks' branches and the monopolization of tasks. In 1996, RBI set up IDRBT for upgrading the examination and appropriation of innovation in banks.

Technology has played a critical role in the development of the Indian banking industry. Through technology, banks have found a solution to numerous customer problems and the unmet needs. It has put an end to customers toiling it out with lots of stress in the waiting lines, to withdraw and deposit cash. The future of banking industry is smart mobile phones, but still not most of the customers have realized this truth. Mobile banking has provided banks with the capability to maintain their technologically advanced client base and delivering them the creative and value added services **Burra (2021)**. With limited working hours and banking infrastructure, the banking system required to be decongested. The technological interventions adopted by banks all over have allowed customers to conveniently complete their banking needs irrespective of time or place. The banks adopted technology-based service processes not only to lower the cost and improve efficiency but also to reach the unreached customers living across the country. The technology enabled processes have helped the banks to set up electronic based strategies and services channels that include the customer segments to access the normal banking features and facilities **(Jaiswal & Kama, 2019).**

Both bankers as well as the customers faced challenges to operate with the limited operation mode. Opening up of the Indian market for the multinational companies sparked the development of banking industry through technology and innovative processes that brought in new service channels. These banking channels came into existence over the period of time in the most recent decade. The Indian financial industry moved from traditional branch banking channel towards the technology-based channels like ATM, E-banking and Mobile Banking. The initial addition to banking channel was the phone-based banking that functioned through call centre system. Electronic banking has become very successful in India as it offers an effective platform that not only allows the customers to access their account using computers but also helps in accessing bank account through Mobile phones, by courtesy the new technology phones that are easier to access and use. The latest technology phone with applications have made the jobs of the banks easier as they offer the full range of services with the application platform that can be downloaded and installed into the customers' smart phones. Mobile baking in present time has become an important and evolving instrument to execute banking related transactions. In a developing country like India, mobile banking has a huge potential **Kumar et al. (2020).**

Literature Review

Yadav *et al.* (2015) has looked into the suitability and iniquitousness that was established in consumers who favored mobile strategies, which are responsible to make stick from their customary practice to the latest technology in mobile banking. In connection to this, it was notice that the impact of this had on mobile battery, which become comparatively short. It became the reason that was regarded as main limitations for obligated them not follow the practice of mobile banking for their customer.

Timothy & McDowell (1984) scrutinized the association between the choice to take on innovative technology and its determining factor by which the banks that fluctuate significantly in connection with the challenging environments where they function. As it was noticed that mostly the superior banks and banks functioning in further focused local banking markets list in a sophisticated provisional in which the possibility of accepting fresh technology, altogether another equivalent.

Karjaluoto, Mattila & Pento (2002) focused on to discover the outcome of not the same aspects affecting attitude establishment headed for Internet banking in Finland. Another area they have determined those relevant elements that stimulus the materialization that are concerning with banking via Internet. Taking into consideration the service of banking via internet with the customer. Online banking behaviour is one such practice that demographic factors have effect deeply upon rendering to the study. Particularly, another point to be noted is the employment and household returns were noteworthy variables. Basically, the four different factors that are responsible are specifically prior computer involvement, previous technology practice, banking for personal purpose familiarity, that are orientation that influence the group have a great impact on usages and online banking facility.

Gerrard & Cunningham (2003 noted that there are eight features that have inclined the frequency of implementation of services Internet banking among their Singapore consumers respectively. The study, which shows that Internet banking according to people perceive service to be further appropriate, less intricate, well-suited to them and fit to those who are good at PC management. Here, the people who adhere to banking through internet which considered as a additional economically advanced. According to the perceptions about the adopters and non-adopters had were considered to be commonly appealing, confidentiality, approachable and also had economic welfares were not diverse.

Akinci, Aksoy & Atilgan (2004) identified that during banking through Internet, in which the user are attached to technology who are individuals in the direction of convenience-minded. On the other hand, comparatively the non-adopters are considered to be additional old-fashioned channel oriented, they are doubtful consumers, requiring banking system through internet, in which the service area comparatively these facilities are provided in the branches. According to the study's findings, one can say that safekeeping, consistency and confidentiality concerns such as business deal speed; download and the concern with user-friendly web site, remained amongst the utmost notable reasons of the behavior for the selection of bank selection.

Kolodinsky, Hogarth & Hilgert (2004) discovered the reasons that are been responsible for the adoption or purpose to accept three e-banking technologies and vicissitudes in these influences to overtime in the USA. According to the study, which revealed relative advantage, complexity/simplicity, compatibility, observability, risk tolerance, and product participation are connected with the acceptance. The various factors such as assets, income, education, gender and marital status, and age etc. of consumers likewise affect acceptance. The study exhibits the acceptance altered over time, but the influences of other features on adoption did not change.

Kim & Prabhakar (2004) study showed the established on theory that are related to social network and belief theory, contributing factor of belief in the electronic channel like propensity-to-trust, word-of-mouth, structural assurances. Study investigates of self-determining variables designated that propensity-to-trust, essential declarations, and interpersonal content of WOM were substantial judges of initial trust in the electronic channel.

Brown & Molla (2005) recognized the aspects which are responsible for Cell Phone banking and Internet practiced in South Africa. In study, which compares dissimilarities that are the influencing factors that are taken as cell phone banking Internet banking. According to the study, the reason responsible for the inspiration of attitudinal aspects in which taking into consideration, highlighting the several elements such as virtual benefit, compatibility, trialability, intricacy, threat, personal rules (social factors) and supposed behavioural controller factors that accept Internet and banking over cell phone users respectively.

Eriksson, Kerem& Nilsson (2005) focused on the acceptance of technology in the field of internet banking in Estonia. An elegant and user-friendly approach, in which it presents that internet banking is not useful highlighted in the reading. By doing so it serves as constructive measures to promote customer to use the observed that banking through internet is usefulness.

Awamleh & Fernandes (2005) discloses the features that are responsible for customer satisfaction for the influence of the internet banking service. The study highlighted suitability and safekeeping of internet banking transactions that have a substantial impression on fulfilment. Internet safety measures banking transactions was important for the users those who use internet banking for more than two years, while not for others.

Arvidsson (2013) initiated an examination to identify consumer's behavior on acceptance of mobile settlement method. The outcome of research shows that the most essential element describing if users are preferring to practice mobile payment services is ease of use or not. Additionally, related benefit, high trust, low insecurity, higher age and low income were accompanied with positive view on accepting the service. The outcome of the study shows that the study of invention in the payment industry cannot depend on technology adoption models and innovation diffusion theory all alone.

Objectives

1. To identify the features of mobile banking services in India.
2. To know the adaptability of mobile banking services by customers.

Methodology

The study is empirical in nature. 170 respondents participated in the study. The data was collected from them through a structured questionnaire. Mean and t-test application was done to identify the results. The method of sampling was convenience sampling.

Finding of the study

Table 1 displays the gender, where male respondent is 58.23%, and female respondent is 41.77%. Looking at the age, respondents who are at the age of 22 and 28 years are 40.59%, those between the Ages of 28 to 35 years are 25.29%, and one who are 35 years & above are 34.12%. With reference to the Occupation of the respondents, Business are 27.65%, Service are 45.29%, and others are 27.06%. Location of the respondents, respondents in Rural location are 42.94%, and Urban are 57.06%.

Table1 Respondent's Basic details

Variables	Number of respondent	%age
Gender		
Male	99	58.23%
Female	71	41.77%
Total	**170**	**100%**
Age		
22 to 28 years	69	40.59%
28 to 35 years	43	25.29%

ISSN : 1673-064X

35 years & above	58	34.12%
Total	**170**	**100%**
Occupation		
Business	47	27.65%
Service	77	45.29%
Others	46	27.06%
Total	**170**	**100%**
Location		
Rural	73	42.94%
Urban	97	57.06%
Total	**170**	**100%**

Source: Survey Data

Table2 Features & Adaptability of Mobile Banking Services in India

Sr. No.	Statements	Mean Score	t-Value	Sig.
1.	Bank's website enables customer to complete the transaction quickly	4.02	14.46	0.000
2.	Website of the bank is simple to use	4.13	13.28	0.000
3.	Customers are finding the process of money transfer easy	4.11	14.73	0.000
4.	Bank's website is truthful about their services & offerings	4.21	15.29	0.000
5.	Mobile banking help customers save their time and efforts	4.33	15.20	0.000
6.	Customer service representatives are always available online, whenever needed	4.10	15.59	0.000
7.	Mobile banking is a free service to customer	3.45	5.29	0.000

8.	Banks do not share customer's personal information with other banks or websites	3.69	9.15	0.000
9.	Various different banking services are offered by mobile banking system	4.31	16.55	0.000
10.	Mobile banking provides services more efficiently and quickly	4.17	13.37	0.000

Source: Survey Data

Table 2 shows the Mean values for statement with reference to the "Features & adaptability of Mobile banking services in India," the statement with highest mean value is "Mobile banking help customers save their time and efforts" with the mean score of 4.33. Second highest mean score is 4.31 for statement "Various different banking services are offered by mobile banking system." Third highest mean value is 4.21 for statement "Bank's website is truthful about their services & offerings." Statement "Mobile banking provides services more efficiently and quickly" has the mean score of 4.17; mean score of 4.13 is for statement "Website of the bank is simple to use." Statement "Customers are finding the process of money transfer easy" scores the means value of 4.11, "Customer service representatives are always available online, whenever needed" has the mean value of 4.10, "Bank's website enables customer to complete the transaction quickly" has the mean score of 4.02. Banks do not share customer's personal information with other banks or websites" and "Mobile banking is a free service to customer" the mean scores are 3.69 and 3.45 respectively. T-value of all statements in context of Features & adaptability of Mobile banking services in India are significant, because t-value statements are found to be positive and significance value also less than 0.05.

Conclusion

Mobile banking has represented a breakthrough for financial institutions and banks in terms of remote banking services. However, many customers are still hesitant to adopt mobile banking system because of security reasons. Mobile banking system and introduction of ICT has made the bond between customers and banks more strong. Banks and financial institutions are offering their customers with the possibility of connecting their account with their mobile phone numbers and with the help of that can access their account and various other banking services through their smart mobile phones. Banks must take efforts and organize campaigns to make customers aware about the benefits of mobile banking in order to make them adopt the technology. The customer must understand the easiness and convenience of mobile banking as it is beneficial for customers as well as banks.

References

1. Burra, B. (2021). Use And Adoption Of Mobile Banking In Rural Areas Of India: A Descriptive Study On Emergence Of E-Banking, *Journal of Xi'an University of Architecture & Technology*. 13(2), 175-184.
2. Jaiswal, B. & Kamal, Y. (2019). Study of Customer Adaptability for Electronic Banking Services in India, *Kaav International Journal of Economics, Commerce & Business Management*, 6(2), 48-55.
3. Kumar, A., Dhingra, S., Batra, V., and Purohit, H. (2020). A Framework of Mobile Banking Adoption in India, *Journal of Open Innovation: Technology, Market and Complexity*, 6(40), 1-17.
4. Yadav, M., Joshi, Y., & Rahman, (2015). Mobile social media: The new hybrid element of digital marketing communications, *Procedia - Social and Behavioral Sciences*, 189, 335 – 343.
5. Timothy, H., & John M. (1984). The Impact of Technology Adoption on Market Structure, *the Review of Economics and Statistics*, 72(1), 164-168.
6. Karjaluoto, H., Mattila, M., &Pento, T. (2002). Electronic banking in Finland: Consumer beliefs and reactions to a new delivery channel, *Journal of Financial Services Marketing*, 6, 346–361.
7. Gerrard, P. & Cunningham, B. (2003). The diffusion of Internet Banking among Singapore Consumers, *Journal of Bank Marketing*, 21(1), 16-28.
8. Akinci S., Aksoy S. & Atilgan E. (2004). Adoption of Internet banking among sophisticated consumer segments in an advanced developing country, *The International Journal of Bank Marketing*, 22(3), 212-232.

9. Kolodinsky, J.M., Hogarth, J.M., & Hilgert, M.A. (2004). The adoption of electronic banking technologies by US consumers, *The International Journal of Bank Marketing*, 22(4), 238-259.

10. Kim, K.K., & Prabhakar, B. (2004). Initial trust and the adoption of B2C e-commerce, DOI:10.1145/1007965.1007970, 35(2):50-64.

11. Brown, I., & Molla, A. (2005). Determinants of Internet and Cell Phone Banking Adoption in South Africa, *Journal of Internet Banking and Commerce*, 10(1).

12. Eriksson, K., Kerem, K., & Nilsson, D. (2005). Customer Acceptance of Internet Banking in Estonia, *International Journal of Bank Marketing*, DOI: 10.1108/02652320510584412, 1-32.

13. Awamleh, R., & Fernandes, C. (2005). Internet Banking: An empirical investigation into the extent of adoption by banks and the determinants of customer satisfaction in the United Arab Emirates, *Journal of Internet Banking and Commerce*, 10(1).

14. Arvidsson, N. (2013). Consumer attitudes on mobile payment services - results from a proof of concept test, *International Journal of Bank Marketing*, DOI:10.1108/IJBM-05-2013-0048, 32(2).

15. Maditinos, D., Chatzoudes, D., & Sarigiannidis, L. (2013). An examination of the critical factors affecting consumer acceptance of online banking: A focus on the dimensions of risk, Journal of Systems and Information Technology 15(1), 97-116.

3.2.1 Scopus & ABDC indexed + UGC care listed 2

Role of Market Microstructure in Maintaining Economic Development

Article in The Empirical Economics Letters · December 2021

5 authors, including:

Vijayalakshmi N.S
Nehru Memorial College Sullia

Sumit Kumar
Indian Institute of Management, Kozhikode

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

Empirical Economics Letters, 20 (Special Issue 2) (September 2021) ISSN 1681 8997

Role of Market Microstructure in Maintaining Economic Development

Dr.Mohammad Salameh Almahirah
Business Administration Department
IRS University Amman Jordan
Email: mohammad.almahirah@iu.edu.jo
Dr. Vijayalakshmi N.S.
Assistant Professor and Head of Department of Economics
Nehru Memorial College Sullia, Dakshin Kannada, Karnataka 574327
Email: drvijayalakshmins@gmail.com
Dr. Misbah Jahan
Lecturer, University of Kashmir.
Mohalla Qadria, Model town A Sopore. J&k. 193201
Email: misbah.jahan@gmail.com
Dr. Sonam Sharma
Assistant Professor, Chandigarh Business School of Administration
Chandigarh group of colleges, Landran
Email: Sonam.sharma138b@gmail.com
Sumit Kumar
Research Scholar, Indian Institute of Management Kozhikode, Kerala , India
Email: sumit01phdpt@iimk.ac.in

Abstract: The study aims to explore the brief idea of market microstructure and its effects on the trade market and the price discovery process. The findings will be further discussed and the effect of market microstructure in the financial market will also be discussed. Microstructure components and their effects in various business markets have become an important challenge that will be solved through the identification of them. A systematic review will be chosen for conducting the study as the topic is surveyed before. Therefore, the data collection method will help the study in finding reliable data and information that makes a study valuable. The problem in the market structure such as price volatility as well as changes in the equilibrium price rate of the market is vital. This has been related with the relevant nature of the stock market changes, which took into, account the trading problems as well as price volatility. This has also been part of the financial market problems and the relevant change in the market decisions due to non-trading barriers.
Keywords: Microstructure, Market microstructure, financial growth, Equilibrium price, Economy.

1. Introduction

The microstructure is regarded as the study based on the financial market and the operation. The primary focus of microstructure is to analyse market exchange and the venues for trading. The microstructure of the market is very important in analysing the economic structure of the market as it helps in discovering the price process and determines the spreads and quotes. Hence, understanding the growing impacts of market microstructure needs to be understood for implementing better strategies in the market. The microstructure is becoming one of the growing topics of financial research as it is important for the growth and development of the algorithm and for electronic trading. As a result, rapid financial evolution is noticed in the market. The primary focus of market microstructure is to explore the range of exchange structure, trading venue, the process of price discovery, trading behaviour on intraday stock, and cost for the transaction.

The report will explore the role of market microstructure for maintaining economic development as well as the growing impact it has on the market. The impact of microstructure in exchange and its evolution will be made along with the identification of its role in the financial market. Microstructure in the currency market will also be discussed in the report. The report will further demonstrate the methodology used for constructing the paper which will show that it is made with proper ethical consideration. Moreover, some SMART recommendations will be made so that the financial organizations can implement the suggestions for their growth and development.

Empirical Economics Letters, 20 (Special Issue 2) (September 2021) ISSN 1681 8997

Aim of the study
The aim of the study is "To understand the role of microstructure in the economic development and its maintenance".

Objectives of the study
The study will fulfil some objectives that will help the study to achieve its goal. The first objective of the study is to examine the impacts of microstructure in exchange and its evolution. The second objective is to identify the role of microstructure in the financial market. The third objective of this paper is to recognize the impact of microstructure in the currency market. Finally, the fourth objective is to understand the impacts of the microstructure in trading.

Background
Market microstructure is regarded as the purest form in financial intermediation. According to Kasach et al. (2021), the trading market works between investors to investors where they deal with financial assets. The market microstructure is the field for study in the financial section where the subject makes an exploration cost trading securities and trading costs' impact on the financial market. The cost of the trading is dependable on the relatable measurements and deals with commissions. However, as argued by Biswas et al. (2021), the focus of microstructure and its working area is on the measurable rather than the commissions. As viewed by Rengarajan & Geng (2020), the components of the microstructure are introduced to the investors in the financial market so that they can understand and examine the trading process.
The economic structure of the financial industry is based on the analysis of the microstructure components as it holds a piece of empirical evidence in the character of trading costs. The sources of the spread are not independent as trading costs draw an inference on the importance of these sources. Microstructure literature has three themes that are a) the original transaction process in the stock market, b) the impacts cast upon the transaction process by market structure as well as trading rules, c) the implication of the transaction process in economic decisions that are compulsory. A chronological development can also be seen due to the application of market microstructure in these divisions.Keeping all these things in mind, it can be stated that the use of market microstructure has become a fundamental thing in the financial industry. The microstructure is important in the market as it assures the economic valuation of the financial organizations.

2. Literature review

Examination of the impacts and its evolution of microstructure in exchange
Market microstructure is based on the study of organizational trading and its development in the financial market. As opined by Dębska et al. (2021), the investor needs to find a buyer and a seller who are willing to make the investment for buying instruments in the financial market. The seller is also required to look for the buyers who are interested in buying based on the market value of the instrument. Making a buying and selling process in the financial market is typically limited to the participants of the exchange system. However, the exchange system can mitigate the issues arising between the buyer and the seller during bargaining. On the contrary, as suggested by Natrayan et al. (2021), dealers make contracts directly with the client where they negotiate terms within themselves.

Identifying the role of microstructure in the financial market
The microstructure plays a big role in the market liquidity spiral where the liquidity of the stock market is linked to it. The nature of the market liquidity spiral has many dimensions based on the informational events, stock market and its nature, and risk management. As explained by Setiani et al. (2021), the time period between the negotiation of the final seller and buyer is very crucial as it holds risk management issues. The margin of trade is destabilized due to the crisis in the market that can be normalized and balanced with the help of market microstructure.

Impact of microstructure in the currency market
The currency market is influenced by the microstructure of the market that helps the market in currency stabilization. According to Pu et al. (2021), the currency is structured and balanced by the foreign exchange that is examined with spot exchange. Trading is not necessarily controlled by the exchange and trading where trading is regarded as a basic requirement of the market. The impact of microstructure is important in the currency market as the market needs to find equilibrium between the trading market and currency. A link can also be found between currency trading and the condition of microeconomic. As per the view of Aneke et al. (2021), micro-based research has been made recently that can justify the existing link and the micro foundation can be found for the dynamics.

Understanding the impacts of the microstructure in trading

The trading style and its approaches are determined by the microstructure as the practice of microstructure in the financial industry is constantly growing. Trading is influenced by the characteristics of the seller, buyer, and investors. As mentioned by Ivanova et al. (2020), the microstructure is a dominant factor in the understanding trading market as the subject matter and its different perspectives.

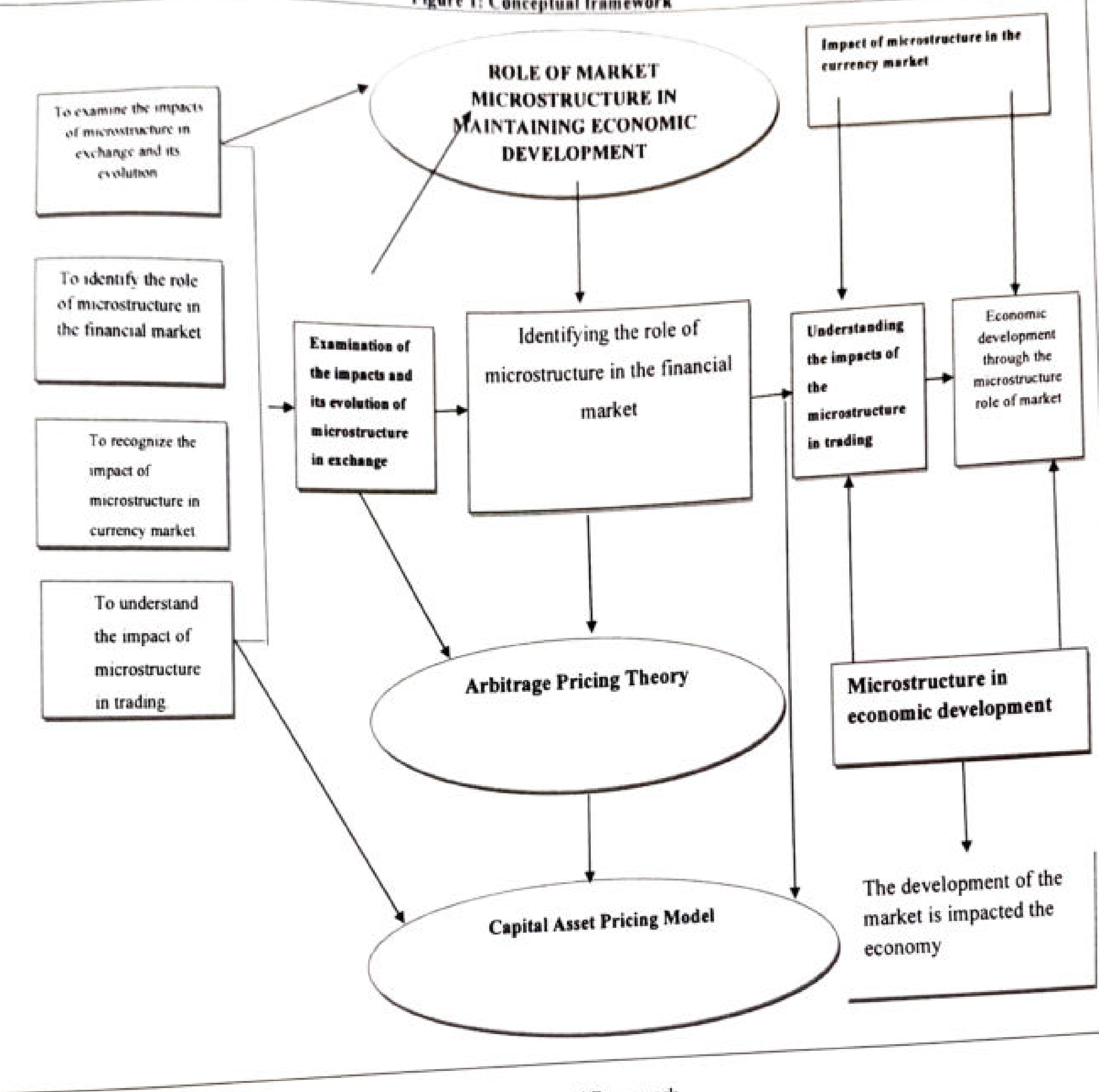
Theories

The ***Arbitrage Pricing Theory*** is effective in understanding the financial scenarios as the theory explains how the capital market is becoming competitive day by day. The microstructure is an important field to be discovered as it explores the distribution of trading facilities among the traders; as a result, it helps to understand the impact of microstructure in the financial market.As discussed by Nanomaterials (2021), the prediction can be made about the return from the assets on the basis of a linear relationship. The relationship is based on the asset return and microeconomic variables. The currency market is suffering due to the massive changes in market microstructure and the trading section is especially seen to be affected by it. Therefore, the implementation of this theory explains the components of market microstructure that can predict the return of the assets in the currency market and protect it from further provocation.

Another effective model that can be used in outlining the concept of microstructure in the development of the economy is the ***Capital Asset Pricing Model***. As suggested by Whitaker et al. (2020), this model demonstrates that liquidity behaviour and spirals also depend on the traders as they play a major role in the financial market.The risk in market premium is a vital element of the theory that helps in understanding the effect of market microstructure in the financial market. Market premium and its effect on the money value will point out that is essential for evaluating the risks in the financial market. As illustrated by Peter Tsung-Wen Yen et al. (2021),the impacts of microstructure are huge in the exchange and the identification of such components assist in building the required measurements in the microstructure that will help in rectifying them. The security of various markets can be enhanced with the aid of the components of the theory and their impacts on market microstructure.

Conceptual framework

Figure 1: Conceptual framework



Source: Conceptual Framework

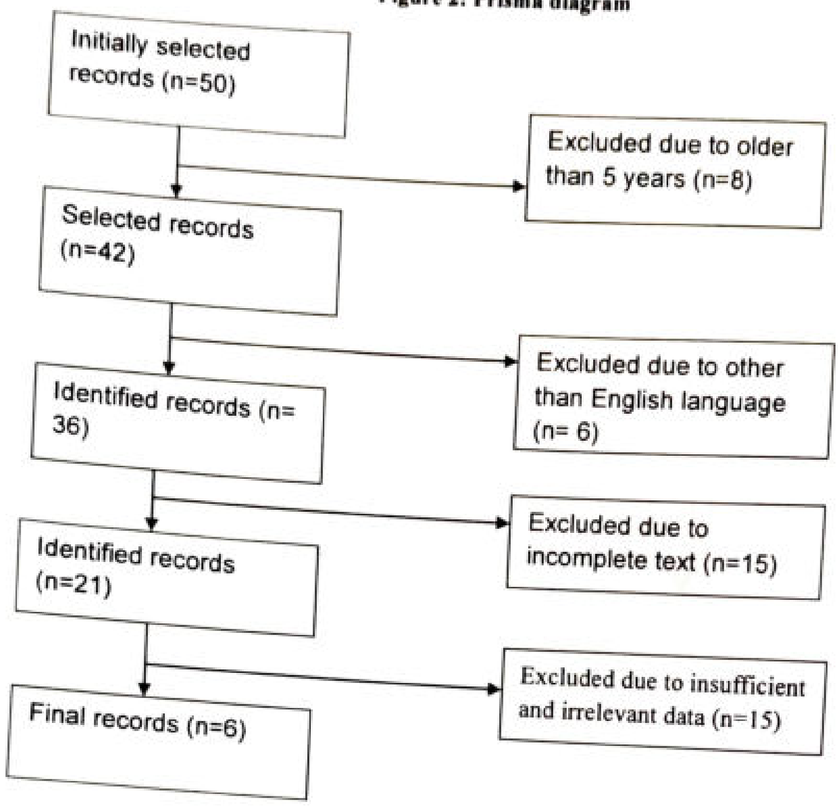
A conceptual framework has been made that demonstrates the rising issues of the microstructure in the development of economic growth of a country. The framework shows how the theories have been used to generate the issues into a problem-solving approach. The factors regarding microstructure and its growing impact on the economy have been briefly shown in the framework. In this case, ***Arbitrage Pricing Theory*** and ***Capital Asset Pricing Model*** demonstrated how the impacts of microstructure can be mitigated.

 ISSN 1681 8997

3. Methodology

PRISMA diagram

Figure 2: Prisma diagram



The above-mentioned Prisma diagram has shown how many records have been taken initially and how many were excluded due to the past 5 years record. After that, the excluded reports were due to the English language from the selected records. Then, there is the number of incomplete text records and their exclusion from the selected ones. Finally, the number is insufficient and irrelevant data to make a final record.

Table for research papers

Table 1: Analysis of research paper

Author	**Year**	**Research paper**	**Sample research method**	**Relevance**
Bajto et al.	2021	*"Pilot Scale Production of Precast Concrete Elements with Wood Biomass Ash"*	Secondary	It is relevant as the paper is selected based on the topic, also the paper has various data and graph
Butt	2021	*"Exploring the Interrelationship between Additive Manufacturing and Industry"*	Secondary	It is relevant as the paper has relevance to the topic
Nikolova et al.	2020	*"A Novel Methodology to Calculate the Probability of Volatility Clusters in Financial Series: An Application to Cryptocurrency Markets"*	Secondary	It is relevant as the paper holds statistical references related to the topic.
Peter Tsung-Wen et al.	2021	*"Understanding Changes in the Topology and Geometry of Financial Market Correlations during a Market Crash"*	Secondary	It is relevant as the paper holds important information about the topic.
Sharma et al.	2020	*"Sailing through the COVID-19 Crisis by Using AI for Financial Market Predictions."*	Secondary	It is relevant as the paper holds informative knowledge relevant to the topic.
Wang et al.	2021	*"The Stock Market Model with Delayed Information Impact from a Socioeconomic View"*	Secondary	It is relevant as the paper provides data and resources about the financial outcomes.

Source: 6 different sources collected for research

Data collection

The secondary research method has been chosen as the data collection method for this paper as it helps in gathering data and information based on previous researches on the same field. As stated by Pu et al. (2021), a systematic review provides the research with valued and authentic data that is peer-reviewed. ***[Refer to appendix 1]*** Therefore, the data and information provided in the report are reliable and can be used for further research in this field. The data have been collected from peer-reviewed journals derived from ProQuest as well as scholarly journals and articles. Hence, this systematic review has helped the study to reach the desired goal. ***[Refer to appendix 2]***

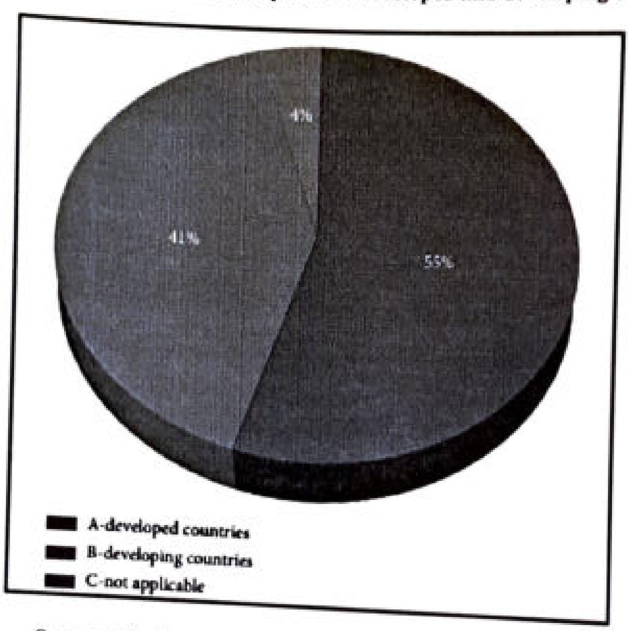
Data analysis

The data and information have been analysed through a thematic analysis that has assisted the project to make an elaborate description of issues raised by microstructure in the financial market. According to Setiani et al. (2021), thematic analysis helps a project to make a descriptive and productive analysis that the topic needs. The data have been extracted from ProQuest using some filters as the project needed current information regarding the financial market and its values.

4. Findings

The market structure has been facing an unprecedented situation due to COVID, which has been needing advancement through artificial neural networks in handling financial market development. The nature of the market has also been linked with the effectiveness in the economic development through proper economic decisions, which improves equilibrium price level in the market.

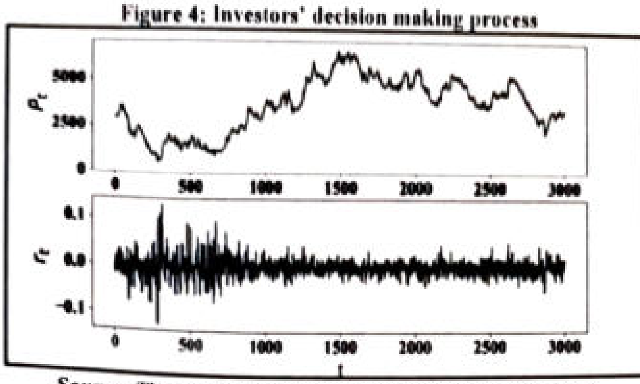
Figure 3: Economic development in developed and developing countries



Source: Based on the influence of stock market and its development

From the above graph, it has been seen that market micro structuring has made a huge development in developed countries by almost 55% and an impact of 41% in developing countries. Sharma et al. (2020) argued that potentiality in various computing technologies has made a relative impact in the financial sector through probabilistic reasoning and neural network theory.

Figure 4: Investors' decision making process

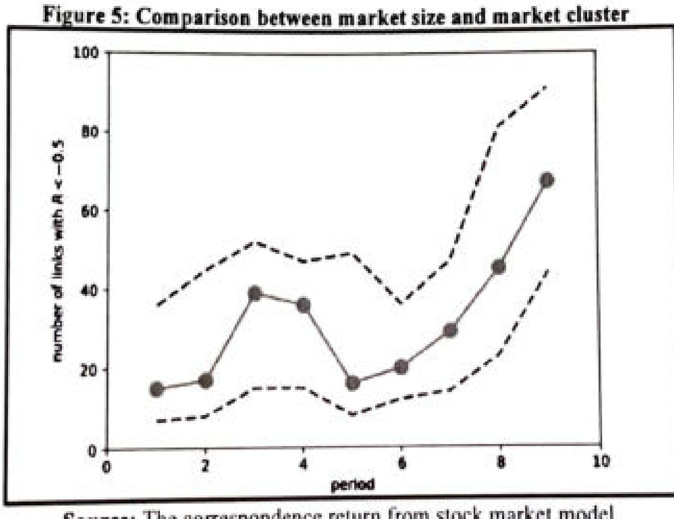


Source: The correspondence return from stock market model

From the above graph, the stock price model has illustrated the changes in the market structure where it has arguably put forth a clustering, which has been volatile in nature. It has displayed a decision-making process of investors which depicted a collective behavior of stock price to promote economic development. As opined by Sharma et al. (2020), the asset portfolio has higher risks as a part of volatility in stock markets. The market has been variable and has a large number of stochastic events, which makes a change in the performance of the investors. On the contrary, Wang et al. (2021), macro level changes on the market have been part of demand and supply changes, which evaluates stock price.

The use of Ollivier-Ricci curvature has been important to determine the correlation between topological change in an economy and changes in market crash. Wang et al. (2021) commented that this type of change has been part of the economical-problems arising from higher price prediction dealing with sudden market crash. It has also been related with the changes in price structure resulting in the volatile nature of the market.

Figure 5: Comparison between market size and market cluster

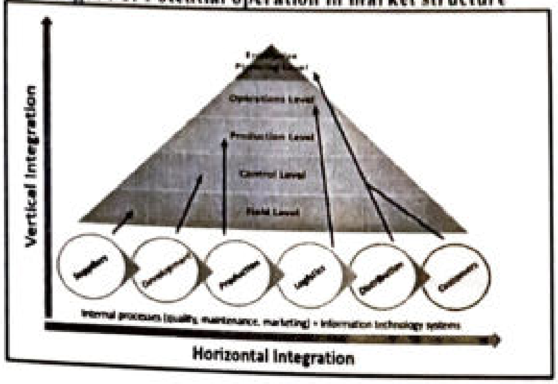


Source: The correspondence return from stock market model

It has been justified from the above figure that changes in ORC have been occurring through a specified periodic concept. Peter Tsung-Wen Yen et al. (2021) justified that the necessary changes involve a period from 2019 to 2020 where it quarterly depicted ups and downs in ORC. Furthermore, it also states a change in the required market capitalization process, which also considers a comparison of market size with the market cluster. This has also stated a cluster change in the network of stocks where cross correlation has been part of the positive and negative ORCs as per the rise and fall in the price value. As opined by Peter Tsung-Wen Yen et al. (2021), the changes have been dealt through by positive as well as negative changes in the stock market structure. The orange line has been significant in describing the negativity of ORC due to higher rise in price; blue line showed a price adjustment which improved economic stability while green line showed a period of unchanged price conditions.

The changes have been analysed through a required micro structural impact of the nature of production, which improves market conditions. This has been described through the nature of technical requirements, which further analysed large-scale change in the work requirements. The improvement in the economy has been part of the effective rise as well as fall in the technical feasible factors where the effectiveness lies in changing various conditions. This includes various factors such as improved market conditions, activity rate as well as consistent change in the industrial production.

Figure 6: Potential operation in market structure

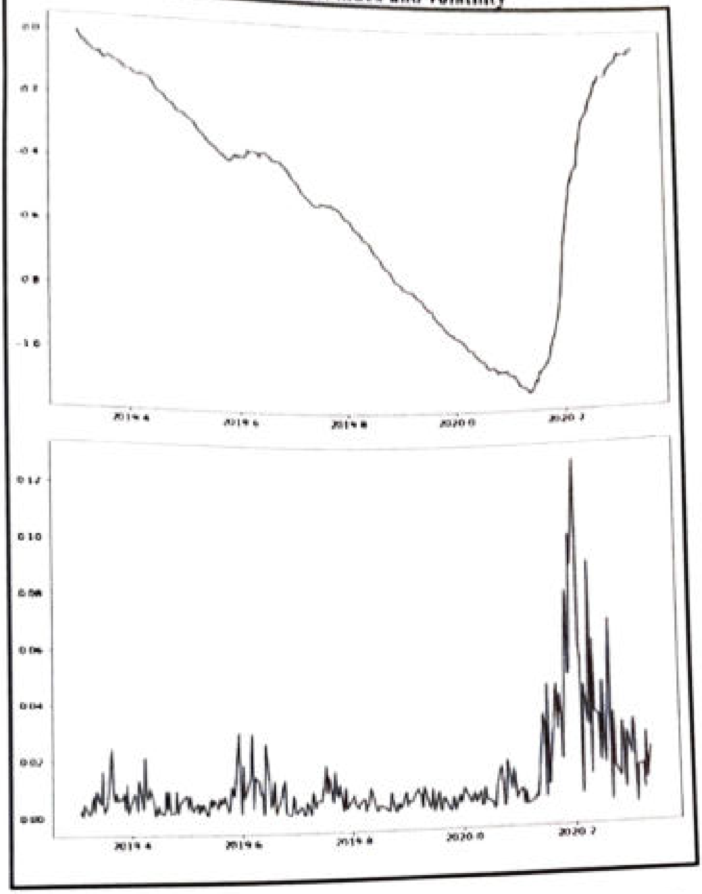


Source: The integrated models in economic market structure

From the above figure, it has been analysed that the potential operations have been part of the relevant structuring of the market as per the steps of integration. Considering the two models of integrations, this has been beneficial to deal with required changes in the products manufactured to meet changes in supply as well as demand for economic development. Nikolova et al. (2020) stated that vertical integration took into account field level operations, control factors, production, operations as well as planning level to develop a productive market chain. On the other hand, the integrated model, which shows horizontal process, has been related with the internal process of manufacturing and production namely productive quality, maintenance and marketing showed a level of employee engagement process. Nikolova et al. (2020) opined that the required form of structural impact takes into account various forms of relationship between the market chain structures. This has been related with the various forms of production where the changes have been meant for the creation of a customer value through a logistic improvement in technical process. This has also been improvising various other methods, which depicts the cost-effective materials production and an adaptable transformation into improved goods.

The use of the integrated technology has been analysing the changes in the economy through a large-scale supply and an accelerated improvement in the quality of the products. It has also taken into account an illustrated benefit of the standardized digital operations in the 4.0 industries. Nikolova et al. (2020), argued that this technologically advanced industry has been providing a large-scale employment, which further led to the further improvement in the digital operations. This has also been intensifying growth as well as capability in the research process, which took into account the generation of the data, protection of crucial information as well as high market operations. As counter argued by Butt (2020), the simulating business operations have formed a market trend, which has made changes in the microstructure framework to improve the nature of the market.

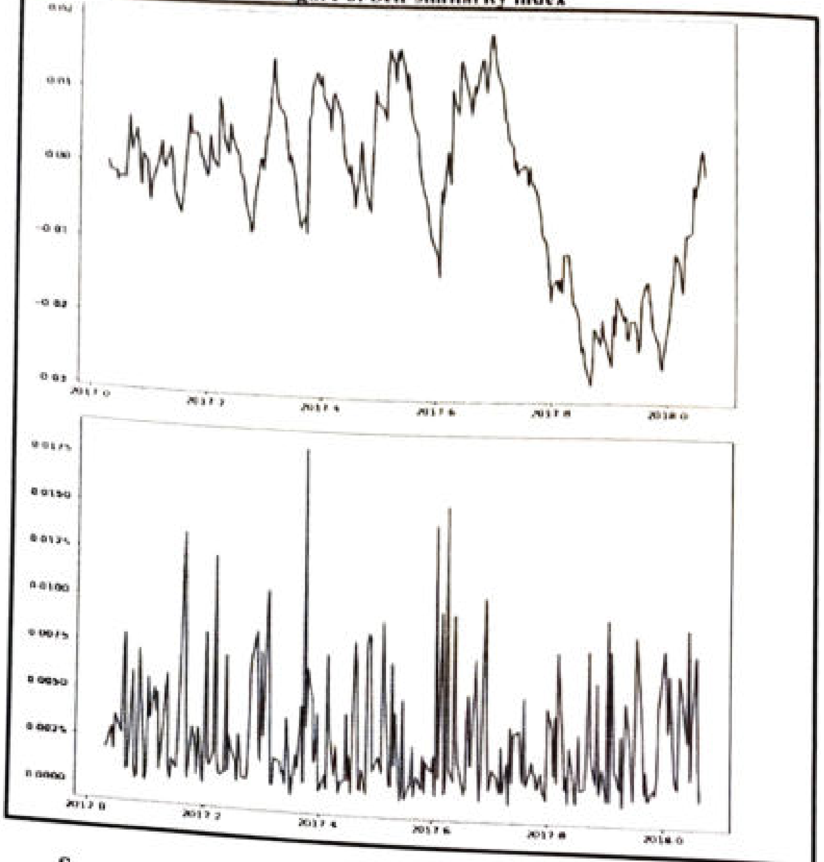
Figure 7: Market index and volatility



Source: Based on the change in market structure in respect to market volatility

From the above figure, it has been seen that the required existence of market volatility has been linked with the economic development, which has been measured through a market index. Baton et al. (2021) opined that the market index, namely self-similarity index led towards a change in the market from the period of 2018 to 2020. Here, the justified change in the market has been part of the benchmark, which described the price change, as well as volume of supply in the relevant form of the market function. In addition, Bajto et al. (2021) argued that the required change has been mentioned through the address to key issues, which took into account transparency, trading cost, and design of market as well as price formation.

Figure 8: Self-similarity index



Source: Based on further volatility in the market as per self-similarity index

From the above figure, it has been analysed that the corresponding volatility in the financial market has been linked with the volatility of a Hurst exponent. As per the views of Bajto et al. (2021), this exponent has been linked with the traditional change in the market volatility where price change not only considers change in assets but also the change in the electronic market. By electronic market, it has been taking into account-required analysis of assets such as crypto currencies and an incident with the price structure resulting in market instability.

5. Discussion

The authors in the research paper did not wholly agree with the nature of the market condition. As opposed to Mironescu et al. (2021), they mostly argued that the market has been facing large-scale price volatility that led to market crash and fall in the investment. This has also been leading to a differentiated price structure as well as fall in the optimal trading strategy where the entire nature of the investment has been facing price volatility. Mironescu et al. (2021) had opined that it has analysed that the nature of the productive operations has been following a horizontal as well as vertical marketing approach where the pricing mechanism faces a no optimal market condition.
Here, the changes have also been justified through a change in the traded asset class as well as in the asymmetrical information collected from fair value asset prices. On the contrary, Godina et al. (2020) argued that the nature of the market has been facing a change in the trading algorithm as well as in the market research condition. This has been part of the entire form of the augmented neural network as well as in the effectiveness present in the management of stock prices. It has also illustrated that the nature of the market has been part of the temporary changes in the estimation of stocks as well as adaptive approaches in AI based functioning. As justified by Ching et al. (2021), this has also analysed the required form of the actions where price volatility has been seen in financial markets. It has

also taken into account the various forms of the investor's decision-making process as well as in the required changes in the structure for price evolution.
Furthermore, the conventional mechanism has been linked with the AI as well as neural network theory, which analyse the required changes in the trading mechanism. As per the views of Ching et al. (2021), this has also illustrated the change in the empirical analysis where the investment decisions in the financial market have made an impact on the optimal pricing strategy. This has been part of the insecure marketing decisions as well as in the phenomenal variables, which hampers the correlation. Chen et al. (2021) had opined that the justified changes have been linked with the required form of the investment options, which analyse stock market options, and the required form of the casual challenges in the investment options.
The microstructure has improved changes in the stock exchange as well as its required impact in the currency market. As per the views of Chen et al. (2021), considering the changes, it has analyzed the ups and downs in the financial market as well as in the digital market especially crypto currencies. This has also taken into account trading impact on the investment performance, which further led to the fall in the profit structure for the investors. Hence, it analysed the ineffectiveness in the market conditions, which in turn also hampered the investment making decisions of the investors.

6. Recommendation

The non-trading barrier and price mechanism during imports and exports needs to consider significant change in the equilibrium price rate. As per the views of Chen et al. (2021), this must take into account asymmetrical change in the price as well as creation of a monopolistic competition rather than forming a monopoly. It also takes into account market crashes where price volatility plays an important factor. This has been recommended through an adoption of a horizontal or vertical market integration process. Suriani et al. (2021) argued that the structure of the market must also be recommended through a significant relationship between the trading price and the fair asset value of the firm.
This has also been part of the maintenance of liquidity in the market, which took into account the recommended nature of information availability as per price transitions. Here, the nature of the economic development must also be recommended with a stepwise process of market determination, which includes market fragmentation, algorithmic process of trading in multi assets and a relevant high trading frequency. Suriani et al. (2021) opined that the nature of the era of market structure must have been incorporating a transaction cost selection for market portfolios and selection of stocks.

7. Limitation

The research limitation has been the adoption of a secondary research method instead of adopting a primary research method. This has been part of the problems in the manipulated findings and a general systematic opinion evaluated from the collected journal articles. On the other hand, the primary research method would have presented a practical view on the scenario collected through interview or survey method. The primary research method has been based on the current findings, which has lesser means of manipulation. Here, the ethical issues include breach of information as well as non-maintenance of confidentiality of the collected journal articles and required consent.

Reference List

Aneke, F. I., Bankole, O. A., Mostafa, M. M. H., & Okorafor, C. (2021). Durability Assessment and Microstructure of High-Strength Performance Bricks Produced from PET Waste and Foundry Sand. Materials, 14(19), 5635. http://dx.doi.org/10.3390/ma14195635

Biswas, P., Ghosh, S., Sarkar, A., & NG, R. (2021). Investigation of deep cryogenic treatment of Steels for medical tooling applications. Journal of Physics: Conference Series, 1797(1)http://dx.doi.org/10.1088/1742-6596/1797/1/012057

Dębska, B., & Guilherme Jorge, B. S. (2021). Mechanical Properties and Microstructure of Epoxy Mortars Made with Polyethylene and Poly(Ethylene Terephthalate) Waste. Materials, 14(9), 2203. http://dx.doi.org/10.3390/ma14092203

Grain Boundary Control of Organic Semiconductors via Solvent Vapor Annealing for High-Sensitivity NO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Detection. (2021). Sensors, 21(1), 226. http://dx.doi.org/10.3390/s21010226

Ivanova, M., Dorina-Maria Buda, & Burrai, E. (2020). Creative and disruptive methodologies in tourism studies. Tourism Geographies, https://www.proquest.com/scholarly-journals/creative-disruptive-methodologies-tourism-studies/docview/2417812675/se-2

Kasach, A. A., Kharytonau, D. S., Paspelau, A. V., Ryl, J., Sergievich, D. S., Zharskii, I. M., & Kurilo, I. I. (2021). Effect of TiO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Concentration on Microstructure and Properties of Composite Cu–Sn–TiO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Coatings Obtained by Electrodeposition. Materials, 14(20), 6179. http://dx.doi.org/10.3390/ma14206179

Natrayan, L., Ravichandran, M., Veeman, D., Sureshkumar, P., Jagadeesha, T., Suryanarayanan, R., & Mammo, W. D. (2021). Enhancement of Mechanical Properties on Novel Friction Stir Welded Al-Mg-Zn Alloy Joints Reinforced with Nano-SiC Particles. Journal of Nanomaterials, 2021 http://dx.doi.org/10.1155/2021/2555525

Pu, Y., Li, Y., & Wang, Y. (2021). Structure Characteristics and Influencing Factors of Cross-Border Electricity Trade: A Complex Network Perspective. Sustainability, 13(11), 5797. http://dx.doi.org/10.3390/su13115797
Rengarajan, V., & Geng, J. (2020). Fabrication of Tapered 3D Microstructure Arrays Using Dual-Exposure Lithography (DEL). Micromachines, 11(10), 903. http://dx.doi.org/10.3390/mi11100903

Setiani, B. E., Dwiloka, B., Pramono, Y. B., Arroyan, T. N., Mardhika, H., & Puspitoasih, A. D. (2021). Physicochemical properties of steak made of post laying hen breast meat thawed using various methods. IOP Conference Series.Earth and Environmental Science, 803(1)http://dx.doi.org/10.1088/1755-1315/803/1/012033

Whitaker, B. I., Walderhaug, M., Hinkins, S., Steele, W. R., Custer, B., Kessler, D., Leparc, G., Gottschall, J. L., Bialkowski, W., Stramer, S. L., Dodd, R. Y., Crowder, L., Vahidnia, F., Shaz, B. H., Kamel, H., Rebosa, M., Stern,

M., & Anderson, S. A. (2020). Use of a rapid electronic survey methodology to estimate blood donors' potential exposure to emerging infectious diseases: Application of a statistically representative sampling methodology to assess risk in US blood centers. Transfusion, http://dx.doi.org/10.1111/trf.15941

Bajto, J. Š., Štirmer, N., Cerković, S., Carević, I., & Jurić, K. K. (2021). Pilot Scale Production of Precast Concrete Elements with Wood Biomass Ash. Materials, 14(21), 6578.http://dx.doi.org/10.3390/ma14216578
Butt, J. (2020). Exploring the Interrelationship between Additive Manufacturing and Industry 4.0. Designs, 4(2), 13. http://dx.doi.org/10.3390/designs4020013

Chen, T., Peng, L., Yang, J., Cong, G., & Li, G. (2021). Evolutionary game of multi-subjects in live streaming and governance strategies based on social preference theory during the COVID-19 pandemic. Mathematics, 9(21), 2743. doi:http://dx.doi.org/10.3390/math9212743

Ching, H. L., Khalina, A., N, M. N., Norli, A., Harussani, M. M., Rafiqah, S. A., Aisyah, H. A., & Ramli, N. (2021). The Challenges and Future Perspective of Woven Kenaf Reinforcement in Thermoset Polymer Composites in Malaysia: A Review. Polymers, 13(9), 1390.http://dx.doi.org/10.3390/polym13091390

Godina, R., Ribeiro, I., Matos, F., Ferreira, B. T., Carvalho, H., & Peças, P. (2020). Impact Assessment of Additive Manufacturing on Sustainable Business Models in Industry 4.0 Context. Sustainability, 12(17), 7066. http://dx.doi.org/10.3390/su12177066

Mironescu, M., Andrada Lazea-Stoyanova, Barbinta-Patrascu, M., Lidia-Ioana Virchea, Rexhepi, D., Mathe, E., & Georgescu, C. (2021). Green Design of Novel Starch-Based Packaging Materials Sustaining Human and Environmental Health. Polymers, 13(8), 1190.http://dx.doi.org/10.3390/polym13081190

Nikolova, V., Trinidad Segovia, J.E., Fernández-Martínez, M., & Sánchez-Granero, M. A. (2020). A Novel Methodology to Calculate the Probability of Volatility Clusters in Financial Series: An Application to Cryptocurrency Markets. Mathematics, 8(8), 1216. http://dx.doi.org/10.3390/math8081216

Peter Tsung-Wen Yen, Xia, K., & Cheong, S. A. (2021). Understanding Changes in the Topology and Geometry of Financial Market Correlations during a Market Crash. Entropy, 23(9), 1211. http://dx.doi.org/10.3390/e23091211

Sharma, G. D., Erkut, B., Jain, M., Kaya, T., Mahendru, M., Srivastava, M., Raminder, S. U., & Singh, S. (2020). Sailing through the COVID-19 Crisis by Using AI for Financial Market Predictions. Mathematical Problems in Engineering, 2020http://dx.doi.org/10.1155/2020/1479507

Suriani, M. J., Ilyas, R. A., Zuhri, M. Y. M., Khalina, A., Sultan, M. T. H., Sapuan, S. M., Ruzaidi, C. M., F, N. W., Zulkifli, F., Harussani, M. M., Azman, M. A., Radzi, F. S. M., & Sharma, S. (2021). Critical Review of Natural Fiber Reinforced Hybrid Composites: Processing, Properties, Applications and Cost. Polymers, 13(20), 3514.http://dx.doi.org/10.3390/polym13203514

Wang, Z., Shi, G., Shang, M., & Zhang, Y. (2021). The Stock Market Model with Delayed Information Impact from a Socioeconomic View. Entropy, 23(7), 893.http://dx.doi.org/10.3390/e23070893

3.2.1

UGC care listed

ISSN No. 0974-035X
An indexed refereed & peer-reviewed journal of higher education
Towards Excellence
UGC-HUMAN RESOURCE DEVELOPMENT CENTRE
Gujarat University, Ahmedabad-380009, Gujarat, India

A STUDY ON THE IMPACT OF COVID 19 ON INDIAN ELECTRONIC RETAIL INDUSTRY

Dr. Vijayalakshmi N.S

Abstract

Before COVID-19, the modest rate of growth in electronics industry was seen globally. Post this pandemic, the electronics industry globally has witnessed a double impact. Production facilities of electronic parts have also been halted because of a slowdown in logistics along with an unavailability of workforce throughout the world. On the contrary, different E-commerce giants throughout the world have discontinued delivery of the non-essential goods including maximum electronics goods which might affect electronics industry.

Studies have been done for understanding the electronics industry in India and abroad based on application, type of products, geography, etc. On the basis of type of products, market can be classified into SSD, DRAM, Image sensor, MCP, etc. On the basis of application, market is assessed based on communication equipment, automotive, industrial, enterprise systems, personal electronic goods, etc. Personal electronics industry is being expected to be affected the most because of coronavirus pandemic.

Geographically, market is assessed into Asia, Europe, North America, etc.

Keywords: COVID-19, Indian electronic industry, impact of COVID on retail sector

Introduction

Mitigation measures aim at slowing COVID-19 taken in the past couple of months have impacted the demand, supply as well as daily operations of retail sector. This includes the resale activities of used as well as new electronic goods mainly to general population for household and personal consumption and use.

The impact of the retailing sector is large mainly because of various factors. The electronics retails sector is considered to be economic heavyweight. On an average, in India approximately 1 out of 12 workers is employed in the electronic retail sector and this sector accounts for about 5% of the total GDP. Also, it serves the final demand and therefore occupies a significant position in the value chain both as the household and the provider and as outlet for the upstream sector. It even compliments the activities in the hard hit segments like tourism. Additionally, the electronics retail sector in India is quite labour intensive. So any kind of disruptions have disproportionate rate of employment consequences. This sector mainly depends on part time and low wages, gig workers and part time workers which aren't covered by the conventional measures of social protection which strengthens social consequences of crisis being witnessed in this particular sector(**Bhatti*et. al.*, 2020**).

Also, the effect of the pandemic on electronic sector is mainly heterogeneous and it depends mainly on combined impact of the 3 characteristics. Firstly, the impact of measures of social distancing on the individual retail business depends mainly on whether they're essential or not. On one hand, most of the non-essential electronic retail activities are shut, the essential electronic retail businesses on the contrary, often work in tough conditions. This includes shortages in labour supply, major disruptions in the supply chain and working conditions, many a times huge spike in demand for some particular items.

Also, COVID 19 disrupts the major electronic retail brands. China is one of the largest exporters and producers of different electronic input supplies which are used essentially for producing finished electronic items. The current halt in production has compelled the electronic manufacturers for holding production of finished goods temporarily. Some of the major electronic giants to be affected by COVID are Canon Inc., Apple Inc., Hitachi Ltd, etc. The biggest market players have been taking all necessary steps for reducing adverse effect of the crisis (**Tran, et. *al.*, 2020**),

Literature Review

This pandemic has triggered a number of short term and midterm disruptions of different action forms. Studies have been done which aim at understanding the reaction that the workers have given to this pandemic in the electronic retail segment. The electronic retail segment has taken several measures for protecting the workers' health. The retail segment aims at adapting the technological developments for making things easier for both the consumers. Studies have proved that the wellbeing of the employees and the policies of the government positively and significantly impact the performance of the retail electronics sector while protection of the brand and the customers, technology use and supply chains have a significant effect on the performance of the retailers(**Hasana*et. al.*, 2020**). Considering the reality of the electronic retailers from different old standards, time isn't wasted for taking bold actions.

India still continues to flourish in electronic retail sector following national manufacture policy of 2011. It had a vision of being independent in domestic electronics goods supply chain and competing in global exports market. At present, India is facing difficulties for competing with the economies in the different segments of the electronic manufacturing at different stages of value chain. It is a fact that the domestic electronics manufacturing has also gone up in the past few years substantially(**Liu*et. al.*, 2020**). The production of hardware in India has also increased exponentially. Domestic value addition is still quite low because of lack of an efficient ecosystem in different segments of the electronic manufacturing industry i.e. display manufacturing, electronic components and semi-conductors. Major growth of the domestic electronic manufacturing industry today is because of assemble of the finished goods from the imported electronics components, parts and sub-assemblies. It caters mainly to domestic market in India. In the situation that India is in today, it needs higher domestic value addition(**Pantelimon*et.al.*2020**). The NPE of 2019 states the vision of India for becoming global hub for the electronic systems designing and manufacturing. For achieving this goal, driving efficiencies need to be developed to make core components like the chipsets and for creating competing environments for the industrial sector in India. The semi-conductors and the electronic components are changes constantly because of the technological advancements. Therefore the electronic manufacturing industry should be capital intensive. The electronic components segment constitutes the electronic products, thus playing an important value on billing of the material. Thus, the spirited electronics manufacturing eco-system has to achieve the net balance in payments **(Salem, and nor,2020)**. The main obstacle in attracting investment in manufacturing of the electronic components or the semi-conductors is including import at the "Nil" customs duty. Most of the semi-conductors or the electronic components come under information technologies agreement. Thus, high cost capital is needed for competing at the global scale. More resistance offered to inadequate infra, lack of good quality, poor power and water supplies at the competing rate, lack of the supply chains, high cost of logistics, local environment problems, lack of proper technology, skilful human resource, etc.**(Kunchaparthi,2020).**

Last scheme that was introduced for fighting these lacunae has been the modified special package scheme which was designed for providing the financial incentives for offsetting disabilities as well as high cost in manufacturing of the electronic goods. The scheme was on till 2018, sec, 31st for the new projects and expansion projects. It offered subsidies to investment in the capital expenditure in order to set up the electronic manufacturing facilities. It also played a significant role for promoting investments in this regard. Although in past 4 years the electronic manufacturing industry in India depicted a growth of about 25% CAGR, because of the efforts made by GoI. This potential and actual growth is still under the constraints like the huge capital investments as well as the high paced technological advancements. Government is still making a lot of efforts for creating a conducive business environment for manufacturing electronic goods in India. It aims at getting alarge investments in the manufacturing hub**(Nakhate,2020)**.

One of the major suppliers of electronics in India is China. The electronic goods industry in India might face a lot of disruptions in terms of supply, production, impact of reduction on the prices of products because of heavy dependent on the electronic components supply directly and indirectly as well as local manufacturing. China exports about 50% of electronic goods in India. The imports of electronic goods has already reduced to 40% because of the pandemic and the subsequent foreclosure. The countermeasure of this was that India promoted an indigenous production. It aims at reducing the dependence on the single market. Further, China is the 3rd largest esports partner of India for exporting raw material like mineral fuel, organic chemicals, cotton, etc. **(Mirza and Gupta, (2020).**

The impact depends on scope of activities that are happening with China. The shutdown that has happened in China has completely banned import of different electronic components which affect the Indian automakers as well as auto components segment.

However the current level of inventory seems to be sufficient for Indian industry. In case the shutdown persists in China, it will cause a contraction of about 8 to 10% in India in the car manufacturing sector**(Zarembaet.al. 2020).**

Talking about E-commerce industry, the online stores are benefitting a lot from this switch of customer behaviour to shopping online. Now, they have been positioned quite well for serving the rising demand for electronic commodities. However, their challenges have to be met. Ecommerce isn't magical and there are certain issues in terms of its adoption especially amongst the low income consumers. This has had a dampening impact against the uplift in terms of sales. The supply chain as well as products delivery also has certain issues. However, the companies are now resolving them through innovative practices(**Saha,Barman,andChouhan, 2020**).

Another limiting factor is their readiness for ecommerce offering. In case the online platforms aren't capable enough to offer competitive experience to the users, it would fail to impress, entice, and retain the customers. Making sure that the e-commerce websites are optimised and free rom any glitches is crucial for success of the online electronic businesses. Additionally, the competitiveness of the business in a competitive landscape helps in determining the outcome of the business(**Debnath, 2020**). According to Fortune magazine, companies which have robust offerings on ecommerce have better chances of surviving the present day turmoil. Analysts have agreed to the fact that the retailers still have a lot of catch up to be done on e-commerce. Such stark warnings have asserted that the businesses have to make sure that therewebsites aren't just good, but outstanding. They should be able to deliver best of ecommerce experience. Firstly, the ecommerce websites should be discoverable through search engines when the customers want to buy goods. Secondly, once the customers reach the website, the e-commerce platform should be responsive and should be able to exceed the expectations of the customers. Some of the major alterations in the search behaviour of the consumers have been seen in this sector. If we look at the fashion brands, they generally receive a prominent proportion of traffic by branded search(**Zaremba and Kizys, 2020**).

The behaviour of the users is changing the behaviour of online consumers significantly. As the pandemic continues to cause havoc on population of the world and as consumers are adapting to it, the companies which have effective ecommerce offerings can assure presence when the consumers require them. With changes in the consumer behaviour and with growing online community, the market becomes even more competitor with companies seeking to capitalise with such trend(**Ayittey *et. al.*, 2020**). When the website of a company isn't available on the search engine for the relevant search or if the website is not responsive as compared to the competitors' website, the ability of the business to compete is diminished severely. In today's difficult economic situation, this kind of deficiency might prove to be quite harmful(**Nader and Saleh, 2020**).

Objectives of the Study:

1. To find the reasons for impact of COVID-19 on electronics retail industry
2. To ascertain the significance of the reasons for impact of COVID-19 on electronics retail industry

Research Methodology

The present study is descriptive in nature in which the reasons for impact of COVID-19 on electronics retail industry have been studied. The sample size of the study is 140. The data were collected with the help of a structured questionnaire on a five-point scale and analysed with the help of the mean values and t test.

Table1. Demographic profile of the respondents

Variables	Number of respondents	% age
Gender		
Male	75	54%
Female	65	46%
Total	**140**	**100%**
Electronic goods Manufacturer/ Retailer/ Wholesaler		
Manufacturer	28	20%
Retailer	86	61%
Wholesaler	26	19%
Total	**140**	**100%**
Deals in		
Electronic parts	67	48%
Finished goods	73	52%
Total	**140**	**100%**

Table 1 presents demographic profile of the respondents. There are 54% males and 46% females in the study. Among the respondents 20% are manufacturers, 61% are retailers, and 19% are wholesalers. The percentage of respondents who deal in electronic parts are 48% and who deal in finished good are 52%.

Table 2. Mean Value of the impact of COVID on Indian electronic retail industry

Sr. No.	Impact of COVID on Indian electronic retail industry	Mean Score
1.	Before COVID, the electronics industry was growing significantly globally	4.12
2.	Electronics retail sector in India is labor intensive	4.32
3.	Employee well-being and government policies significantly and positively impact retailer performance	4.41
4.	The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty	4.44

5	India has made a lot of efforts for expanding its electronic goods industry globally	4.42
6	Major supplier of electronic goods in India is China	4.46
7	India would be able to cope with supply deficit of electronic goods from China	3.95
8	The electronic e-commerce industry has benefitted from the pandemic	4.48
9.	Competitiveness of the business in a competitive landscape helps in determining the outcome of the business	4.45
10.	With the currents scenario, it is important for businesses to have extremely strong website	4.39

Source:- Survey Data

Table 2 shows the opinion of respondents on impact of COVID on Indian electronic retail industry. It is observed that the electronic e-commerce industry has benefitted from the pandemicis the most important impact of COVID on Indian electronic retail industry with the mean value of 4.48. It is followed by Major supplier of electronic goods in India is China (4.46), Competitiveness of the business in a competitive landscape helps in determining the outcome of the business (4.45). The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty (4.44), India has made a lot of efforts for expanding its electronic goods industry globally (4.42) and Employee well-being and government policies significantly and positively impact retailer performance (4.41). Further, With the currents scenario, it is important for businesses to have extremely strong website (4.39),Electronics retail sector in India is labour intensive (4.32), Before COVID, the electronics industry was growing significantly globally (4.12) and India would be able to cope with supply deficit of electronic goods from China (3.95) were also considered important.

Table 3

Sr. No.	Impact of COVID on Indian electronic retail industry	Mean Score	t-Value	Sig
1.	Before COVID, the electronics industry was growing significantly globally	4.12	7.675	0.000
2.	Electronics retail sector in India is labor intensive	4.32	9.547	0.000
3.	Employee well-being and government policies significantly and positively impact retailer performance	4.41	10.333	0.000
4.	The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty	4.44	9.116	0.000
5.	India has made a lot of efforts for expanding its electronic goods industry globally	4.42	9.363	0.000
6.	Major supplier of electronic goods in India is China	4.46	11.019	0.000

7.	India would be able to cope with supply deficit of electronic goods from China	3.95	5.366	0.000
8.	The electronic e-commerce industry has benefitted from the pandemic	4.48	12.926	0.000
9.	Competitiveness of the business in a competitive landscape helps in determining the outcome of the business	4.45	11.388	0.000
10.	With the currents scenario, it is important for businesses to have extremely strong website	4.39	10.737	0.000

Source: - Survey Data

Table 3 shows the results of t-test. It is found from the table that the significance value for all the statements is below 0.05, hence all the statements regarding the impact of COVID on Indian electronic retail industry are significant.

Conclusion

The key points to be noted here is that recession in retail oriented impacts the spending habits of the consumers and these are expected to remain forever. A long standing recession will have a major impact on buying behaviour of the consumers. It takes a lot of time for the consumers to stop buying and even for rehabilitation and sales. It means that the retailers have to consider the fact that such habits can't be reversed and thus businesses need to plan for a prominentshift in the model of business. Further, this shift in the behaviour of consumers is less lasting since the issues can be handled very easily and the customers may restart while going shopping offline.

References

1. Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B., (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449-1452
2. Tran, L. T. T., (2020). Managing the effectiveness of e-commerce platforms in a pandemic. *Journal of Retailing and Consumer Services*, 58, 102287
3. Hasanat, M. W., Hoque, A., Shikha, F. A., Anwar, M., Hamid, A. B. A., and Tat, H. H., (2020), theImpact of Coronavirus (Covid-19) on E-Business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), 85-90
4. Liu, H., Manzoor, A., Wang, C., Zhang, L., & Manzoor, Z., (2020),the COVID-19 Outbreak and Affected Countries Stock Markets Response. *International Journal of Environmental Research and Public Health*, 17(8), 1-19
5. Pantelimon, F. V., Georgescu, T. M., and Posedaru, B. Ş., (2020), The Impact of Mobile e-Commerce on GDP: A Comparative Analysis between Romania and Germany and how Covid-19 Influences the e-Commerce Activity Worldwide. Informatica Economica, 24(2), 27-41
6. Salem, M. A., and nor, K. M., (2020), The Effect Of COVID-19 On Consumer Behavior In Saudi Arabia: Switching From Brick And Mortar Stores To E-Commerce. *International Journal of Scientific & Technology Research*, 9(07), 15-28
7. Kunchaparthi S., (2020), Impact of COVID 19 on E-Commercevol. 12(9), 1161- 1165
8. Nakhate, S.B., (2020), the effect of coronavirus on E-commerce. Studies in Indian place Names, 40(68), 516- 518
9. Mirza A. and Gupta A., (2020), The impact of COVID- 19 on organised retailing in India, 10(39), 1-4
10. A.Zaremba, R. Kizys,D.YAharon,andE.Demir, InfectedMarkets:NovelCoronavirus,GovernmentInterventions,andStoc (2020), k Return VolatilityaroundtheGlobe,Financ.Res.Lett., 35, 101597
11. J.Saha, B. Barman,andPChouhan, (2020), Lockdownor COVID-19anditsimpactoncommunity mobilityinIndia:AnanalysisoftheCOVID-19 CommunityMobility Reports, 2020,Child. YouthServ.Rev.,116, 105160
12. Debnath S.,(2020), Impact of COVID-19 on Consumer Purchase Behaviour in Retail Sector - Study Based in Kolkata Area, 31(56), 103-114
13. Zaremba, A., Kizys, R., (2020), Infected Markets: Novel Coronavirus, Government Interventions, and Stock Return Volatility around the Globe. Finance Research Letters. 35, 101597
14. Foster K. Ayittey, Matthew K. Ayittey, Nyasha B. Chiwero, Japhet S. Kamasah, Christian Dzuvor, (2020), Economic impacts of Wuhan 2019-nCoV on China and the world, 92(5), 473- 475
15. Nader A. and Saleh A.,(2020), The Impact of Covid-19 Spread on Stock Markets: The Case of the GCC Countries International Business Research, 13(11), 16-23

Dr.Vijayalakshmi N.S
Assistant Professor and Head of Department of Economics
Nehru Memorial College, Sullia, D.K, Karnataka - 574327
Email:- drvijayalakshmins@gmail.com

Scopus + UGC care listed 2

3.2.1

Role of Internet of Things (IOT) to improve Overall Recruitment and Manpower management system of an organization

Article · January 2022

6 authors, including:

Vijayalakshmi N S
Nehru Memorial College Sullia

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

ISSN: 0974-5823

Vol. 7 No. 1 January, 2022

International Journal of Mechanical Engineering

Role of Internet of Things (IOT) to improve Overall Recruitment and Manpower management system of an organization

Dr. Vijayalakshmi N.S.
Assistant Professor and Head of Department of Economics,
Nehru Memorial College Sullia, Dakshin Kannada, Karnataka 574327

Melanie Elizabeth Lourens
Deputy Dean: Faculty of Management Sciences
Durban University of Technology

Isaac Tweneboah AGYEI
PhD Candidate
Graduate School of Business & Leadership
University of Kwazulu-Natal
Durban, South Africa.

Juan Carlos Cotrina-Aliaga
University: Cesar Vallejo
Av. Alfredo Mendiola 6232, Los Olivos -15314
Lima, Peru

Zakariya Chabani, Faculty of Management, Canadian University Dubai.
Al Safa Street – Al Wasl
City Walk Mall
Dubai - United Arab Emirates

Dr Arif Hasan
Assistant Professor
Amity University, Gwalior

Abstract

With technological advancement, organizations are evolving and building a novel-tech culture by the implementation of IoT-based devices including big data, cloud computing, and Google glasses. Organization can predict their future events across all functional areas including marketing, human resource management, finance, and operations with the digitalization of both structured and unstructured data present in the organization. Organizations are rapidly shifting towards the IoT for improving the overall recruitment process as well as the manpower management system of the organization. The decision-making ability of the organizations is highly affected by the implementation of IoT-based devices. The article will highlight the role of IoT in an organization and how it impacts overall recruitment and manpower management. Recruitment is one of the most critical factors for the growth of the organization. IoT-based applications such as Google glasses allow capturing the interviews for analyzing the behavior and attitude of the candidate. IoT helps to capture the information that enhances the decision-making ability of the organization as well as helps in choosing the well-deserved employees for the organization. Hire bue is an AI-based application used by the organization for improving the recruitment process.

Keywords: **IoT, recruitment process, manpower management, Google glasses, and Hire Bue**

Introduction

In this article, the role of IoT in improving the overall recruitment and manpower management system of the organization has been studied. Due to the rapid development of economic globalization and the advent of information technology, various organizations have shown changes under the influence of the technologies therefore organizations have focused on the manpower management of the organization and turn them into their competitive advantages. The recruitment process is the most critical aspect of the manpower management system of the organization as it plays an important role in the success of the organization. The organization needs to develop strategies to use the IoT-based application for the overall recruitment process and manpower management system of the organization. Numerous devices are connected to the internet with the development of computer and network communication technology[1]. The introduction of IoT has blurred the differences between the real world and the virtual world. HR managers of the organizations use IoT to search the details of the candidates as IoT stores the various details such as objects, people, and web pages that are important for the manpower management and overall recruitment of an organization.

The growth of Big Data and 5G technology has played an important role in the growth of IoT business data. Using IoT-based technology such as cloud computing and big data helps the organization to store their big volume of data that enhances the task efficiency of the organization. Construction of the HRM information technology gets improved with the IoT-based applications and reduces the expenditure of management costs. Labor costing, recruitment monitoring, payroll accounting, automatic attendance, and tacking compensation are some of the major advantages of using IoT-based applications in the organization[2]. IoT helps an organization to gain competitive advantages and provides opportunities for research on strategic information. Using IoT-based applications by the company helps them to develop and implement new systems.

Based on the information technology and competitive strategy, the strategic significance of HR information technology has been discussed. The organization uses IoT-based applications to understand the needs of the employees as well as easily achieve the goals of maximizing economic benefits[3]. It helps to develop an appropriate route for organizational development by reducing the human resources challenges in the organizations. Increasingly fierce competition in the market has forced the organization to adopt the IoT based applications in their organizations for enhancing the manpower management of the organization[4]. The changes in the market environment are easily adapted to the HR management system as it helps in promoting the reform process. The system helps to enhance the efficiency of personnel management and the development of various tasks that happen due to favorable conditions.

2. *Literature review*

2.1 overview of the chapter

IoT and digitalization have a long-term effect on the success of the organization such as changes in the employment forms, the transformation of job profiles and occupation, and provide a huge platform for economic development for the organizations. In the literature review, the effect of IoT on the recruitment process of the organization as well as the manpower management system of the organization. The chapter will discuss the process of e-recruitment, digitalization, and the impact of IoT on the productivity of the organization. The manpower management system of the organization can be defined as the planning of human resources available in the organization. The manpower management system is one of the most important factors for the success of the organization. In the chapter, the role of IoT in the manpower management system of the organization can be discussed.

2.2 IoT Design for Manpower management system of an organization

IoT systems have become one of the most important tools for generating spatial-temporal data in organizations. The IoT system has been used by the organization to solve the problem of storing large volumes of data in the organization. The user terminal

[1]Gaur, Bhawna, Vinod Kumar Shukla, and Amit Verma. "Strengthening people analytics through wearable IOT device for real-time data collection." *2019 international conference on automation, computational, and technology management (ICACTM)*. IEEE, 2019.

[2]Margherita, Emanuele Gabriel, and Ilenia Bua. "The role of human resource practices for the development of Operator 4.0 in Industry 4.0 organisations: a literature review and a research agenda." *Businesses* 1.1 (2021): 18-

[3]Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

[4]Zhou, Zhiping, et al. "Effects of resource occupation and decision authority decentralisation on performance of the IoT-based virtual enterprise in central China." *International Journal of Production Research* (2020): 1-17.

(UE) and sensing terminal (SE) is used by cloud computing to upload IoT data on the cloud, and from the cloud data are fed back after the successful execution of the task. Network congestion is created due to the huge test for the bandwidth that affects the experience of users while using the IoT applications. These problems in the manpower management system can be reduced by the introduction of edge computing architectures. Manpower management of the organization is positively influenced by the IoT based application. Smart technology based on IoT is used by the employees in the organization to enhance the efficiency of the workforce and productivity of the organization[5].

The Decision-making ability of the employees increased with the presence of huge amounts of data due to IoT search. IoT generates a lot of data associated with the employees and their related processes. These data are used for enhancing the decision-making process of the organization. Experiences of the employees improve with the IoT as it allows the employees and the HR managers to get connected through Internet-enabled mobile devices. It allows the managers to book meeting rooms, exchange ideas, and communicate easily with the team members. IoT technology plays an important role in providing a flexible work environment to employees as it allows them to manage the flex and provide flexibility to work with the mobile from remote areas[6]. Employees are the most important asset of any organization and IoT based applications allow to monitor the wellness of the employees

2.2 Importance of IoT in the recruitment process of organization

Recruitment is the fundamental part of the growth of any origination. Recruitment is the way for choosing the right employees for the organization who can enhance the productivity of the organization. The recruitment process of an organization is a critical thing as a selection of the appropriate candidate is a must for the growth and success of the organization. Choosing the correct employees during the recruitment process is the sensitive thing that puts various challenges to the HR management of the organization[7]. The introduction of IoT has highly influenced the recruitment process of the organization and provides an effective way for choosing the right employees for the organization. The recruitment process varies with the size of the organization. In the normal recruitment process, organizations have hiring managers who hire the employees; however, in a large and giant company, it is difficult for a single hiring manager to choose the appropriate employees. Selection becomes complicated in the giant company through the traditional method of hiring as they require a team for the selection of the appropriate employees that is much more expensive. Internal, external, and e-sources are the various sources used in the organization for the recruitment of employees.

Internal sources for the recruitment process involve the transfer of employees intra-organization and promotion. It is cost-effective and economically beneficial for the organization. External sources for the recruitment process involve choosing the fresher candidates from the schools, colleges, and universities and providing them training about the work. The external source recruitment process involves getting inexperienced and fresh candidates who need proper training and guidance about the work. E-sources are the most popular way for the recruitment of employees. This process of recruitment invokes websites posted on the agency as well as digital advertisements for hiring candidates from different backgrounds. All these sources are used for the hiring of the employees in the organization, however; all these sources have certain limitations such as hiring cost, expenses and have a higher probability of wrong selection of the employees.

Recruitment in an organization is a dynamic process that caters to the employees as well as the organization. Recruitment in the organization has several benefits and is considered an important parameter of the human resource management of the company. Some of the major benefits of the recruitment process are explained below.

The recruitment process provides a potential chance for the candidates to get aware of the organization and get employment.. Recruiters provide various options for the candidates to choose from to cater to the needs of the organization.

The Success Rate of Selection: The success rate of the selection enhances during the recruitment process as it allows choosing the more qualified candidates over the under-qualified candidates[8].

Meeting Obligations: The recruitment process allows to choose the right candidates that help in maintaining the legal obligations of the organization and the workforce composition.

---

[5]Braccini, Alessio Maria, and Emanuele Gabriel Margherita. "Exploring organizational sustainability of industry 4.0 under the triple bottom line: The case of a manufacturing company." *Sustainability* 11.1 (2019): 36.

[6]Cantoni, Franca, and Gianluigi Mangia, eds. *Human resource management and digitalization*. Routledge, 2018

[7]Nasar, N., Ray, S., Umer, S. and Mohan Pandey, H., 2020. Design and data analytics of electronic human resource management activities through Internet of Things in an organization. *Software: Practice and Experience*

[8]Ghosh, Swapan, et al. "Corporate Digital Entrepreneurship: Leveraging Industrial Internet of Things and Emerging Technologies." *Digital Entrepreneurship* (2021): 183.

candidates. Streamlining the sourcing part of the recruitment process is the best use of the Iot in the recruitment process. Selection of candidates based on the Iot is less time-consuming as well as cost-effective for the company. Offer rejection can be rescued as well as turnover rates get reduced with the use of IoT in the recruitment process.

IoT allows the data and processes to be automated. Networks of objects are involved in the IoT that is controlled by the sensors, transducers, and software. IoT helps the HR recruiters to access information regarding the information of the possible candidates[15].

IoT helps in building an effective and intelligent workforce without involving time-consuming processes[16]. Thousands of resumes support from the AI-guided ATS. Based on the interest, traits, qualification and social media posts.

ATS refine the resume and help the recruiters as well as the candidates to choose the right job. AI algorithm is used for classifying the candidates based on their interests and qualifications submitted on their various social media platforms[17]. This helps the hiring agencies to select the most relevant and best-qualified candidates. Turnaround time and productivity of the organization gets positively impacted by the IoT-based recruitment process. Google Glasses is the revolutionary IoT-based technology that is used by the HRM of the organization. Google glasses are used for recording the interviews that help in the decision-making process of the recruitment[18]. It allows the recruiters to rewind the video of the interview and choose the appropriate candidates. This allows the HR management group to match the behavior and ethics of the candidates with the job role. Huge databases of the candidates are available to the candidates that help to malaise the behavior and approach of the candidate during the interviews. Cloud technology is also used by the company during the recruitment process to back up their data in cloud computing infrastructure[19].

Cloud computing allows access to the candidate data from anywhere that reduces the chance of disk failures and theft. IoT and AI-based technology are the initial interviews process as most of the HR companies are using AI-based video platforms to capture the interviews of the candidate[20]. These interviews are later analyzed which helps in the decision-making of choosing the appropriate candidate. Biometric and psychometric analyses of the candidates are done through the captured data. The pandemic period has increased the demand for IoT and AI-based technology for the recruitment process of the organization. Most of the company has shifted to AI-based platform for the recruitment process. The basic screening of the candidates has been removed through AI-driven recruitment. Hire Bue is an AL-based hiring platform used by most organizations to select the candidate with the help of prediction of the AI-led. It allows us to take the interviews consistently and reduce the biases of the recruitment process.

3. Materials and methods

Materials

To provide an overview of the research on the role of the IoT on the recruitment and manpower management of the organization's various IoT-based applications. Systematic Reviews and Meta-Analysis has been used in the study to determine the effect of the Iot on the recruitment process and manpower management of the organization. The Systematic Literature Reviews (SLR) method has been used to evaluate, identify and analyze the current need of IoT in the recruitment process as well as manpower management of the organization.[21] This technique involves the restrictive collection, localization methodological analysis,

[15]Labib, Nader S., et al. "Trustworthiness in iot–a standards gap analysis on security, data protection and privacy." *2019 IEEE Conference on Standards for Communications and Networking (CSCN)*. IEEE, 2019.

[16]El-Aziz, RashaAbd, Sarah El-Gamal, and Miran Ismail. "Mediating and Moderating Factors Affecting Readiness to IoT Applications: The Banking Sector Context." *International Journal of Managing Information Technology (IJMIT) Vol* 12 (2020).

[17]Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

[18]Kebande, Victor R., et al. "Holistic digital forensic readiness framework for IoT-enabled organizations." *Forensic Science International: Reports* 2 (2020): 100117.

[19]de Vass, Tharaka, Himanshu Shee, and Shah J. Miah. "Iot in supply chain management: a narrative on retail sector sustainability." *International Journal of Logistics Research and Applications* (2020): 1-20.

[20]] Singh, Anupam, and Satyasundara Mahapatra. "Network-based applications of multimedia big data computing in iot environment." *Multimedia Big Data Computing for IoT Applications*. Springer, Singapore, 2020. 435-452.

[21]Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

Transparency: The recruitment process involves organizational transparency and it is an effective way to maintain the transparency of the organization. Transparency is not only important for the organization, however, but it is also important for the selection of the employees. HR managers, clients, field recruiters should have a complete awareness of the process of the organization and there should be transparent procedures to ensure the candidates regarding the job profile and job status of their job applications[9]

Confidence: Transparency of the recruitment process enhances the confidence of the organization. The awareness among the recruiters, clients, and managers regarding the entire recruitment process creates confidence among them and brings satisfaction among the HR manager and the candidates[10].

In the recruitment process, there is less chance of discrimination among the candidates based on their race, color, caste, and personal connection.

Job Description: Job description plays an important role in choosing the candidates during the recruitment process. Framing a proper job description is a detrimental factor during the recruitment process. Recruitment helps in curating an effective job description that includes primary, secondary, and tertiary aspects of the job role[11].

Consistency: Consistent system of recruitment is needed for choosing the right candidate who provides standardized results. The recruitment process should be consistent to ensure fair judgment as well as the selection of the right job. The organization has shifted its focus from increased production to increased productivity through the uses of IoT.

2.3 Effect of IoT on the future HRM of the organization

Advancement in technology has a tremendous effect on the development of human society. HRM of the organization has been positively influenced by technological progress and inventions. Information and Communications Technologies (ICT) have highly influenced the recruitment process of the organization.The importance of IoT has been released by the HR managers and recruiters and they tried to recruit the employees digitally. The old way of recruitment has been changed by the introduction of Iot in the field of the recruitment process of HRM. Using Iot for the recruitment process has several positive advantages and helps to select the right candidates for the job profile[12]. The traditional method of recruitment process unimpressed the candidates hover, using Iot for choosing the candidates can bring the attraction of the candidate nearer to the organization. An HR manager uses Iot to gather various information regarding the most qualified candidate who uses the Smartphone. IoT helps the recruiters to easily find the most suitable candidates for the job role without being physically present at every place.The vast amount of data allows the recruiters to analyze the data and choose the right one[13].

In the traditional recruitment process hiring managers have to be physically present to select the candidates; however, Iot allows to get notification of the employees who are interested in the job and can virtually be selected. Iot helps to reduce the recruitment cost of the organization as well as provide a more qualified selection of the employed as compared to the traditional way of the recruitment process. IoT allows the HR manager to get information about the right candidate's through smart phones, the candidate who visited the profile of the company as well as several times the page visited by the candidates gets saved through the IoT. It helps the HR manager to know the job-seekers and can easily choose the best candidates among them. The recruiter prepares the data from the information gathered by the IoT[14].

Recruiters can easily acquire the skills and hardware needed to process the data. This allows the recruiters to make the appropriate selection based on the IoT gathered information. The recruitment process gets easier with the adoption of IoT as preparing for IoT allows to hire the right people who know software and applications that enhance the opportunity to engage more and more employees. Organizations use social media platforms to recruit the right and well deserving candidates as Iot helps and the

[9]Solanki, Vijender Kumar, Vicente García Díaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

[10]Barrozo, Edgar N. "Strategic Management System For Competitive Business Performance: A Literature Review."

[11]Sherif, K. and Al-Hitmi, M., 2017. The moderating role of competition and paradoxical leadership on perceptions of fairness towards IoT monitoring.

[12]Moyeenudin, H. M., and R. Anandan. "IoT Implementation at Global Enterprises for Progressive Human Resource Practices." *Proceedings of First International Conference on Mathematical Modeling and Computational Science: ICMMCS 2020*. Springer Nature.

[13]J. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

[14]Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

prous scientific and elimination of the subjective element[22]. SLR has been used to build an overview and provide an effective mmary of the literature that resulted in the effect of the study[23]. In social distancing, research SLR is becoming more important. is possible to determine the theme or domain of the study, based on the function of the SLR method. Snyder's approach has een used to conduct the literature review regarding the role of IoT in the recruitment process and manpower management of the organization. Four processes were involved in conducting this study that includes designing the review, conducting the review, analysis and writing up the review[24].

3.1 Information Source Search Strategy, and Identification

For using the Web of Science database a proper and effective strategy was developed. A search was made on the various IoT-based applications such as Google Glass, AI-based applications such as Hire Bue. Due to the ability of the broad coverage, a web of science database has been selected[25]. Open access sources have been selected due to budgetary constraints. The initial search has been shown in figure 1. In the systematic literature review of the effects of IoT in the recruitment process and manpower management system, only journal articles were chosen. High-quality studies have been ensured by the review process of the study[26]. In the study, non-journal articles, another language than English, studies not focus on the recruitment process as well as a manpower management process, no open-access paper, and conceptual Achilles which haven't any evidence that involves IoT based technology has been excluded.

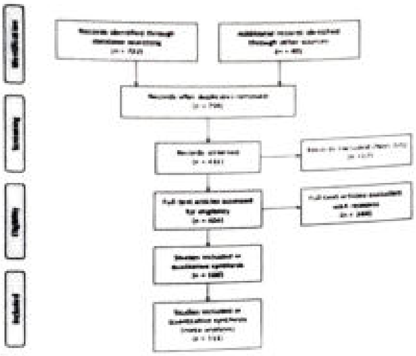


Figure 1: Flowchart of selection criteria[27]

(Source: Authors own design based on PRISMA)

3.2 Inclusion and Exclusion Criteria

Figure 1 show the inclusion and exclusion criteria. According to the time present in the PRISMA flow diagram, the inclusion and exclusion process was prepared. Abstracts were first screened in the qualitative analysis and 20 records were excluded as they were not provided information regarding the relation with IoT and recruitment process of the organization as well as the way

[22]Mathur, Geetika, Harshit Sharma, and Rishabh Pandey. "A Study on Self-Driving Car an Application of IoT." *International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)* 9 (2019): 25-34.

[23]. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4. 0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

[24]Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26

[25]Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

[26]Main, A., and N. A. Zakaria. "IPv6 Readiness towards Future Internet of Things (IoT)." *International Journal of Human and Technology Interaction (IJHaTI)* 2.2 (2018): 1-8.

[27]Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

through which IoT impacts the manpower management of the organization[28].

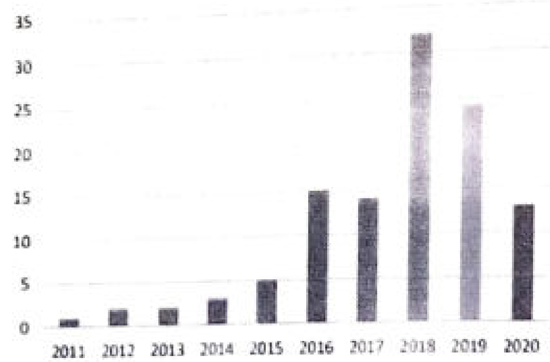
Various other methodologies have been used in the study to identify the impact of IoT on the recruitment process of the organization and the manpower management of the organization. Mythologies help to select the appropriate tools and techniques for the systematic completion of the study. It allows one to choose the appropriate approach, philosophy, design, and data collection method for the collection of the data that helps in the completion of the study[29].

Research philosophy allows us to collect the data in a way that enhances the authenticity of the study. Positivism, paramitism and intervism are the four types of research philosophy used in the various studies according to the nature of the study. Positivism philosophy has been used in this study, as it follows the easy structure for collecting the data. The deductive research approach has been used in the study as it is an existing study therefore deductive approach helps to collect the data easily[30]. Descriptive research design has been used in the study for collecting the data as it provides information regarding the Iot and its impact on the recruitment process and manpower management of the organization[31].

Primary and secondary are the two types of data collection methods used in the study. In this study, a secondary way of data collection has been used. Journal and articles have been chosen for collecting the data and helps in maintaining the authenticity of the study[32].

4. Results

More than 50 articles were used for analyzing the role of IoT in the recruitment process and manpower management of an organization. After exclusion criteria and duplicate removal, 30 articles and abstracts were chosen. 15 full articles were analyzed in detail and helped in analyzing the role of IoT-based applications in the recruitment process and manpower management of the organization[33]. The number of selected published articles used in the study has been shown in figure 2. The number of publications regarding the role of IoT in the recruitment process and manpower management has increased linearly. The findings suggest that using IoT-based applications has increased the recruitment process of the organization in the pandemic period[34].



[28] MOHANTY, Sasmita, and Padma Charan MISHRA. "Framework for understanding Internet of Things in human resource management." *Revista ESPACIOS* 41.12 (2020).

[29] Sahidon, AtirahBinti, et al. "Integration of Shari'ah Governance Framework in Human Resource Management Practice in Malaysia."

[30] Dhanpat, Nelesh, et al. "Industry 4.0: The role of human resource professionals." *SA Journal of Human Resource Management* 18.1 (2020): 1-11.

[31] Orakcioglu, Selim, DenizHoruz, and MuhammedPaksoy. "The influence of effective human resource management on the success of SMEs in Gaziantep and its environment in 2" *Research Papers in Economics and Finance* 4.4 (2020): 15-30.

[32] Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

[33] Piwowar-Sulej, Katarzyna. "Human resource management in the context of Industry 4.0." *OrganizacjaiZarządzanie: kwartalniknaukowy* 1.49 (2020).

[34] Rafique, Maryam, Muhammad Asim, and Salman Manzoor. "Human Resource Management in Industrial Revolution 4. O." (2021).

Figure 2; Increment in the recruitment process through the use of IoT

(Source: Created by author)

Table 1: Mean and Standard deviation of the function

HR Functions	un-weighted		Weighted	
	Mean	Standard Deviation	Mean	Standard Deviation
Recruitment and Selection	3.00	1.0	3.01	1.10
Performance Management	2.98	0.81	3.00	0.80
Training and Development	3.43	0.91	3.45	0.86
HR Information and Analytics	3.27	0.76	3.62	0.78
Compensation Management	2.900	0.88	3.00	0.9

Various IoT-based applications such as Google Glasses, ATS and Hire blu are rapidly accepted by the HR managers for the adoption of IoT for the recruitment process and the improvement of the Manpower management process. IoT has become an integral part of the HRM of the organization as it allows users to interact with software and devices[35]. IoT-based technology such as Voices and Gestures and Speeches are the most important thing of communication used as an HRM technology in the organization[36]. Technology enables HR to take the organization to the core competency level. Manpower management of the organization gets integrated with the IoT's smart functions that make the system more powerful and allow ease to the HR leaders[37]. Recruitment is one of the most important domains that is used in the human resource of the company. IoT guides the HR recruiters to gauge the candidates during the interviews. Less subsequent attrition is present that enhances the efficiency of the recruitment process.

Table 2: Optimization of the manpower management system in the organization based on Internet of Things

Primary node	Secondary node	Introduction to functional design	Values
Basic settings	1	Basic crotch case	12.518
Basic settings	2	Salary period	3.154
Basic settings	3	Salary standard category	45.257
Basic settings	4	Salary standard table	14.879
Basic settings	5	Salary standard setting	46.578

Comparative analysis between the role of Iot in overall recruitment and manpower management of an organization

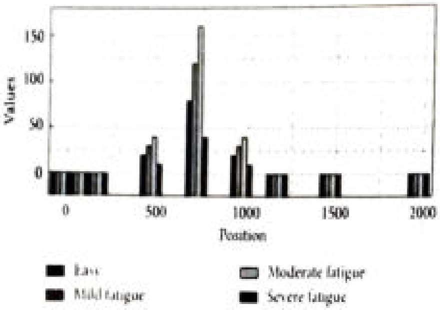
[35]Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

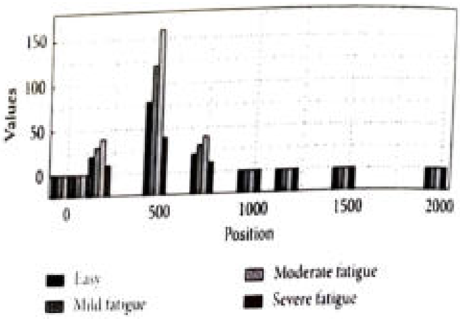
[36]Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

[37]Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

IoT has been rapidly adopted by various organizations for the overall recruitment process and manpower management of the organization. Advancement in information and communication technology changes the human resource management of the organization by modifying the way the organization produces and markets its products. Figure 1 shows the shifting on IoT by the organizations in the various years[38]. The figure has shown the growth of adoption of IoT trends by organizations. From the year 2015 to 2020, the rise in the use of IoT-based applications has been shown. Global human capital trends have been shown in figure 2, which shows the HR recruitment process based on the IoT. Sourcing outreach, screening, applications, assessment, offer generation, selection, candidate closing are some of the parameters used in the recruitment process of the candidates based on the IoT. Figure 3 has shown the adoption of IoT by various organizations[39].

The departmental file of the organization plays an important role in the management of the human resource and helps in sharing the data related to the management[40]. The construction of comprehensive departmental information helps in reducing the basic input volume of human resource management[41]. To maintain the personnel information, personnel information maintenance is used. Personal information, job information, and subset information are the various information covered in the personal information. Personnel cards, add users and personnel rosters are the various information that is used for managing the ability matching function to view the employee's works in the organization and workability qualities[42]. For the analysis of the employee's personal information including transferred employees, current employees, terminated employees, and retired employees statistical analysis is used. Results of the statistical analysis can be done with the help of flexible statistical analysis[43]. A variety of graphics is used for displaying the statistical analysis. Based on positions and posts to the performance of the employee's salary system is built and it also considered the fairness and efficiency of the designed systemThe establishment of the multi payroll category scheme allows the configuration of the salary rule table[44]. Salary period, salary item setting, substitute bank, tax rate table, and statistical report are the various attributes of payroll items. In the given figure 4 count taxi items have been shown after the configuration of the items in the payroll system[45].





[38] Yadav, Sanjeev, Sunil Luthra, and Dixit Garg. "Internet of things (IoT) based coordination system in Agri-food supply chain: development of an efficient framework using DEMATEL-ISM." *Operations Management Research* (2020): 1-27.

[39]Esangbedo, Moses Olabhele, et al. "Evaluation of human resource information systems using grey ordinal pairwise comparison MCDM methods." *Expert Systems with Applications* 182 (2021): 115151.

[40]. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

[41]de Vass, Tharaka, Himanshu Shee, and Shah Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

[42]. Laosirihongthong, Tritos, et al. "Logistics 4.0: implementation of Internet of Things (IOT)." *Proceedings of the 24th Asia-Pacific Decision Science Institute International Conference (APDSI): Technology Supporting People and Decision Making, July 15-18, 2019, Mercure Hotel, Brisbane, Australia.* 2019.

[43]Guerrero, PhD César D. "Technology readiness for IoT adoption in Colombian SMEs."

[44]Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

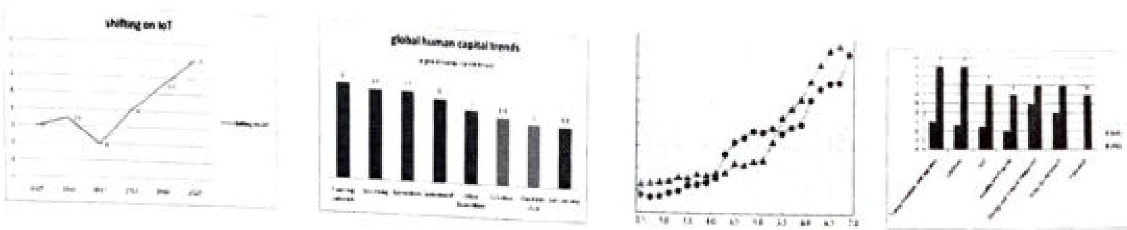
[45]Dlamini, Nomusa Nomhle, and Kevin Johnston. "Exploring the Barriers and Challenges That Limit the Uptake of the Internet of Things (IoT) in South African Retail Businesses." *MESSAGE FROM CONFERENCE CHAIR: DR ALBERT VAN JAARSVELD (UKZN).*

Figure 3: Payroll statistics[46]

To generate the natural monthly payroll period, the payroll period can be set up and refer to as the accounting period. Business management systems are involved while using the information technology systems for the overall recruitment and manpower management of the system. Information system allows us to consider the way of optimizing the business management quality through the information system[47]. It is important to consider the management and facilities of the organization for the employees

Year	Area	Outcomes
2015	IoT and Human	Provided two-way interaction between humans and opportunistic IoT
2016	IoT in retail business	Motivations of the customers for the shop have a major influence on the customers for the acceptance of IoT.

as well as for the customers.



Spending on IoT by the various organizations in 2015 and 2020[48]

Figure 4: Scaling factor[49]

Table 3: IoT in Business and HR of the organization

[46]Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

[47]Wei, Jaimy. *Where are the employees?!: The expansion of an integral IoT model*. MS thesis. University of Twente, 2020.

[48]Carlén, Niclas, et al. "IoT Enabled Process Innovation: Exploring Sensor-Based Digital Service Design Through an Information Requirements Framework." *IFIP International Internet of Things Conference*. Springer, Cham, 2018.

[49]. Singh, G., L. Gaur, and R. Ramakrishnan. "Internet of Things—Technology adoption model in India." *Pertanika J. Sci. Technol* 25.3 (2017): 835-846.

2017	High-resolution management to develop business models	Efficient, security, transparency gets enhanced with the IoT
2018	BcRMS and BcHRM in factor management	Application of Blockchain technology helps in achieving efficient, secure, smart, transparent, and effective HRM
2019	Smart things and HRM	Modifications in HR activities, change task and qualification of hR actors
2020	Information technology and HRM variables	For measuring the strategic organizational variables need to develop a comprehensive model for information technology

Conclusion

From the study, it has been concluded that IoT plays an important role in the recruitment process and man power management of the organisation. IoT gathers all the essential data of the candidate that helps the recruiters during the hiring process. The availability of a huge amount of data regarding the candidate allows the recruiter to choose the bests among the best. Various possibilities are present for HR during the selection process and Iot based information is sufficient for the recruiters to choose the appropriate candidates. HR gets an appropriate chance to shortlist the right and desirable candidates among the various options present through the IoT. As compared to the traditional way of the recruitment process HR managers have more options to gather information regarding the candidates. Initial screening processes are automated for the basic task and intense. The process becomes cognitive with smart applications through the IoT. One of the most time-consuming tasks during the traditional recruitment process is sourcing candidates; however, IoT technology allows to shortlist the candidates who have digitally applied for the job.

References

1. Gaur, Bhawna, Vinod Kumar Shukla, and Amit Verma. "Strengthening people analytics through wearable IOT device for real-time data collection." *2019 international conference on automation, computational, and technology management (ICACTM)*. IEEE, 2019.

2. Margherita, Emanuele Gabriel, and Ilenia Bua. "The role of human resource practices for the development of Operator 4.0 in Industry 4.0 organisations: a literature review and a research agenda." *Businesses* 1.1 (2021): 18-33.

3. Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

4. Zhou, Zhiping, et al. "Effects of resource occupation and decision authority decentralisation on performance of the IoT-based virtual enterprise in central China." *International Journal of Production Research* (2020): 1-17.

5. Braccini, Alessio Maria, and Emanuele Gabriel Margherita. "Exploring organizational sustainability of industry 4.0 under the triple bottom line: The case of a manufacturing company." *Sustainability* 11.1 (2019): 36.

6. Cantoni, Franca, and Gianluigi Mangia, eds. *Human resource management and digitalization*. Routledge, 2018.

7. Nasar, N., Ray, S., Umer, S. and Mohan Pandey, H., 2020. Design and data analytics of electronic human resource management activities through Internet of Things in an organization. *Software: Practice and Experience.*

8. Ghosh, Swapan, et al. "Corporate Digital Entrepreneurship: Leveraging Industrial Internet of Things and Emerging Technologies." *Digital Entrepreneurship* (2021): 183.

9. Barrozo, Edgar N. "Strategic Management System For Competitive Business Performance: A Literature Review."

10. Sherif, K. and Al-Hitmi, M., 2017. The moderating role of competition and paradoxical leadership on perceptions of fairness towards IoT monitoring.

11. Moyeenudin, H. M., and R. Anandan. "IoT Implementation at Global Enterprises for Progressive Human Resource Practices." *Proceedings of First International Conference on Mathematical Modeling and Computational Science: ICMMCS 2020.* Springer Nature.

[Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

12. Labib, Nader S., et al. "Trustworthiness in iot–a standards gap analysis on security, data protection and privacy." *2019 IEEE Conference on Standards for Communications and Networking (CSCN)*. IEEE, 2019.

13. El-Aziz, RashaAbd, Sarah El-Gamal, and Miran Ismail. "Mediating and Moderating Factors Affecting Readiness to IoT Applications: The Banking Sector Context." *International Journal of Managing Information Technology (IJMIT) Vol* 12 (2020).

14. Kebande, Victor R., et al. "Holistic digital forensic readiness framework for IoT-enabled organizations." *Forensic Science International: Reports* 2 (2020): 100117.

15. de Vass, Tharaka, Himanshu Shee, and Shah J. Miah. "Iot in supply chain management: a narrative on retail sector sustainability." *International Journal of Logistics Research and Applications* (2020): 1-20.

16. Singh, Anupam, and Satyasundara Mahapatra. "Network-based applications of multimedia big data computing in iot environment." *Multimedia Big Data Computing for IoT Applications*. Springer, Singapore, 2020. 435-452.

17. Mathur, Geetika, Harshit Sharma, and Rishabh Pandey. "A Study on Self-Driving Car an Application of IoT." *International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)* 9 (2019): 25-34.

18. Main, A., and N. A. Zakaria. "IPv6 Readiness towards Future Internet of Things (IoT)." *International Journal of Human and Technology Interaction (IJHaTI)* 2.2 (2018): 1-8.

19. MOHANTY, Sasmita, and Padma Charan MISHRA. "Framework for understanding Internet of Things in human resource management." *Revista ESPACIOS* 41.12 (2020).

20. Sahidon, AtirahBinti, et al. "Integration of Shari'ah Governance Framework in Human Resource Management Practice, Malaysia."

21. [Orakcioglu, Selim, DenizHoruz, and MuhammedPaksoy. "The influence of effective human resource management on the success of SMEs in Gaziantep and its environment in 2" *Research Papers in Economics and Finance* 4.4 (2020): 11-30.

22. Piwowar-Sulej, Katarzyna. "Human resource management in the context of Industry 4.0." *OrganizacjaiZarządzanie: kwartalniknaukowy* 1.49 (2020).

23. Dhanpat, Nelesh, et al. "Industry 4.0: The role of human resource professionals." *SA Journal of Human Resource Management* 18.1 (2020): 1-11.

24. Rafique, Maryam, Muhammad Asim, and Salman Manzoor. "Human Resource Management in Industrial Revolution 4. O." (2021).

25. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

26. Esangbedo, Moses Olabhele, et al. "Evaluation of human resource information systems using grey ordinal pairwise comparison MCDM methods." *Expert Systems with Applications* 182 (2021): 115151.

27. Laosirihongthong, Tritos, et al. "Logistics 4.0: implementation of Internet of Things (IOT)." *Proceedings of the 24th Asia-Pacific Decision Science Institute International Conference (APDSI): Technology Supporting People and Decision Making, July 15-18, 2019, Mercure Hotel, Brisbane, Australia*. 2019.

28. Akpinar, Sinem, Moritz Hofmann, and Erik Månsson. "Adoption of IoT Platforms: In Swedish municipalities for smart city initiatives." (2020).

29. Dlamini, Nomusa Nomhle, and Kevin Johnston. "Exploring the Barriers and Challenges That Limit the Uptake of the Internet of Things (IoT) in South African Retail Businesses." *MESSAGE FROM CONFERENCE CHAIR: DR ALBERT VAN JAARSVELD (UKZN)*.

30. Wei, Jaimy. *Where are the employees?!: The expansion of an integral IoT model*. MS thesis. University of Twente, 2020.

31. Carlén, Niclas, et al. "IoT Enabled Process Innovation: Exploring Sensor-Based Digital Service Design Through an Information Requirements Framework." *IFIP International Internet of Things Conference*. Springer, Cham, 2018.

32. Venkatraman, Sitalakshmi, and Anthony Overmars. "New method of prime factorisation-based attacks on RSA Authentication in IoT." *Cryptography* 3.3 (2019): 20.

33. Singh, G., L. Gaur, and R. Ramakrishnan. "Internet of Things—Technology adoption model in India." *Pertanika J. Sci. Technol* 25.3 (2017): 835-846.

34. de Vass, Tharaka, Himanshu Shee, and Shah Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

35. Guerrero, PhD César D. "Technology readiness for IoT adoption in Colombian SMEs."

36. [36]. Yadav, Sanjeev, Sunil Luthra, and Dixit Garg. "Internet of things (IoT) based coordination system in Agri-food supply chain: development of an efficient framework using DEMATEL-ISM." *Operations Management Research* (2020): 1-27.

37. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

38. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

39. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

40. Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

41. Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

42. Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

43. Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

44. Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

45. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4. 0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

46. Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26.

47. Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

48. Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

49. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

50. Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

51. Solanki, Vijender Kumar, Vicente Garcia Diaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

38. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

39. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

40. Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

41. Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

42. Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

43. Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

44. Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

45. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4.0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

46. Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26.

47. Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

48. Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

49. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

50. Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

51. Solanki, Vijender Kumar, Vicente García Díaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

3.2.1

Scopus

Journal of Positive School Psychology

Q2 Education

best quartile

SJR 2020

0.54

powered by scimagojr.com

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

Journal of Positive School Psychology
2022, Vol. 6, No. 3, 3134-3139

Scopus & UGC care listed 2

http://journalppw.com
ISSN 2717-7564

Role of Art Conservation Science in the Study of Tangible Cultural Heritage

Dr. Indrajit Patra[1], Dr Upasana Reddy[2], Dr. Vijayalakshmi N.S[3], Dr. Laxmi Kirana Pallathadka[4]

[1]Researcher, [2]Lecturer, [3] Assistant professor and head of department of economics
[1]NIT Durgapur, [2]A.B.shetty memorial institute of dental sciences, [3] Nehru memorial college sullia, [4]Manipur International University
[1,2,3,4] India
[1]ipmagnetron0@gmail.com, [3]drvijayalakshmins@gmail.com, [4]laxmikirana@miu.edu.in

Abstract

Global benchmarks for assessing tangible cultural heritage are particularly maintained by the rules and regulations on cultural property in particular countries. This paper examines the validity of conversation science for cultural heritage, and what its role is to increase human knowledge. The evolving capacity of conversation science is changing over time differing from the conventional method of conversation. It significantly considers the long-term learning procedures constrained with specific methods. Over years it is evolving and new capacities are included in it. The unique concept of "tangible cultural heritage" is a living idea, and currently, in broader terms, it is illustrating the legacy of the manmade creation. Conservation science consists of a diverse practical side which expects to be understood in the theoretical constructions. Moreover, implicitly the complex parity of the cultural heritage involves multiple sets of new values and depicts the field of visual arts. The major purpose of this study is to depict the important factors of conversation science. Furthermore, this article examines the value of the conservation process maintaining the tangible heritages. Specifically, the article gives the details of the government approach in India to maintain its cultural heritage over time. It has given the value functions in understanding the current benefits of art conservation along with the value determination for the future generation. In attributing the sustainable goal of the conservation, this article had made unique approaches increasing the maximum potential vitality. In broader terms, the greatest importance of this study affirms the understanding of the role of conservation methods for cultural heritage.

Keywords— Tangible, Cultural Ministry of India, Economical value, socio-economic value, tangible cultural heritage, conservation science

INTRODUCTION

The multi-faceted world cultural heritage is similar to the essence of the core of humanity, though its definition overpowers enlightenment. However, it is naturally expressed in different cultures over time when it indicates natural patrimony, valuation, and the legacy of the generations. The innovative philosophy of cultural heritage is classified into two groups- the tangible heritage, and the intangible components of the cultural heritage, whereas the intangible heritage is the cultural norms such as the regional language, performing art of a particular community. The tangible heritage of a country needs to be organized and managed properly in terms of the sociological, economical, political, and emotional value of the people. Conservation science is related here to manage those tangible cultural heritages of a country. Here, in this article, the significant described along with its value to manage the tangible heritage of the country. The article also emulates the fund by the government of India over time to give a better understanding of the conservation norms.

Concept of Conservation Science

Conservation science is the experienced concept of specific nuances which comprise the achievement of the inside organization. Conservation science includes scientific analysis in the study of the ***"tangible cultural heritage"***. It improves the knowledge of deterioration, interceptive treatment, identification, and preventive conservation of various cultural materials. This type of work is immensely interdisciplinary, and it typically involves the unique collaborations of the conservators, collection managers, and curators (Atalan, 2018). Various aspects like building rapport and continuing a conversation consistent between the prospective client, and the opposition are key pieces of equipment that determine the role of conversation science. Conservation science is crucially implemented to characterize the biological, chemical, and significant physical properties of different cultural materials. It also empowers the deterioration procedures of objects offering a better understanding of it. Moreover, the conventional or the contemporary treatment, technique, and materials are significantly through the equipment of the conservation science. Developing new analytical tools are the components of conservation science to examine the validity and relevance of all the physical objects of the "tangible cultural heritage". Measuring, and interpreting the different constituents such as the light exposures, quality, or deterioration also falls under the criteria of the conservation science.

The specific activities can identify those treatments, authenticity, provenance, and the fabrication process of different objects. It also allows one to gain a better understanding of the current treatments, and its effects. This knowledge is important and effective for the conservators, collections managers, or those curators who have ascribed the responsibilities.

significant procedure, and the preserv strategies of the tangible heritages of a coun

Education, pieces of training, potencies of the conservation science

No set path exists there to acquire knowled and norms of conservation science as it evolve with time. It exhibits several wide backgrounds each of them requires a concise view to be managed properly. Therefore the range of the tangible heritage along with the intangible heritage of a country is different. It varies in different countries representing the history, geography, and cultural norms of that specific country.

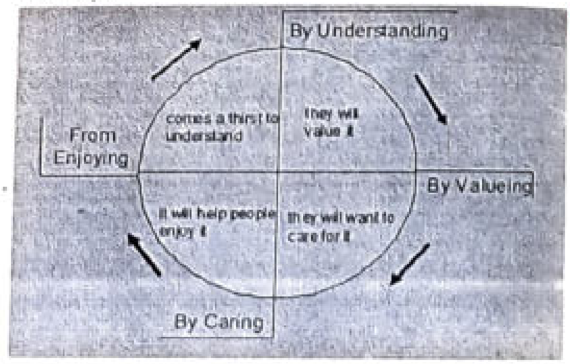


Figure 1: Cycle of conservation science (Source: Inspired by Kulkarni, 2021)

Role of Conservation Science for tangible cultural heritage

"Tangible Cultural Heritage" indicates the physical artifacts originated, organized, and transmitted intergenerationally within a society. It takes into account the artistic creation, maintaining heritages such as monuments, buildings, and other tangible human creation that has cultural importance in a nation. Degrees are ascribed to the scholars who research in a particular area such as, biology, physics, geology, and others. The most important thing in conservation science is the desire to gain knowledge about art history, studio art, archeological features, and anthropologies (Kulkarni, 2021). It needs to undergo a wide range of research and training to acquire sufficient knowledge about conservation science. Several general interpretations can be given from the current material of conservation sciences. Technologies and new instruments have arrived there in the technological development for the investigation of tangible heritage artifacts stimulated by accelerating the progress is providing a huge range of innovative facilities. On the other hand, it becomes easier to foresee the development.

Two major outlines can be identified here-

1. Development of portable instruments to enable non-invasive investigation	2. Easier access to huge international facilities
Development of easy-to-use equipment enabling non-invasive inquiries of different artifacts, often resides directly on site of the museums, especially without requirements of transport or the sampling which are destructive. It often depends on the spectroscopic techniques. The workshops provided multitude examples of those methods. Similarly, a different line of development here is the construction of equipment for the remote sensing such as the ground-penetrating radar, and the laser technology of remote sensing.	ESRF Grenoble, MAX Lund, SSRL Stanford are several examples of synchrotrons which provide easier access to huge scale international facilities. New sources such as ESS ("European Spallation Sources") are also included in it. The carbon dating system is almost similar to such notions- Drendo Chronology, and the Carbon dating helps in determining the period of the Indus Valley Civilization (2500 BC- 1750 BC) applying it to the investigations of the destruction of monuments of those civilizations (Nocca, 2017).

Table 1: Key components conservation science
(Source: Self-developed)

Values of Cultural Heritage

In the contemporary world a huge diversity can be noted as the societies are multi-faceted with their individual unique cultural properties. It is important to understand the implementing solutions to accelerate the role of tangible heritage as the feature of cohesion within diversified communities. Presently, digital revolution, communication, and information technology, mass transportation, tourism are empowering rapid societal changes unprecedentedly. Specialists are becoming more aware concerning the responsibilities, and difficulties from the historical point of view in the evolution process of conservation science. This awareness is the outcome of different attitudes of cultural heritage embedding in different civilizations. Conservation theory is presently preoccupied with group or personal identity. More than other sides of conservation history ***Voluntary association, the government's fund allocations, and initiates*** all incorporate the conservation of cultural heritage significance. The value is highly determined by those (Nocca, 2017).

Methods and techniques

This article has been developed based on the ***secondary dataset*** in giving the important analysis about the role of art conservation. The ***qualitative and the quantitative analysis*** of the secondary dataset have examined the various notions and efforts of the tangible heritage conservation of the country. Significant data on the topic has drawn significant description here. The benefit can be seen in analyzing the different factors of art conservation. Quantitative analysis of the secondary data provides the information of the government allocation that is significant to draw a concise illustration about the topic. Leveraging the findings it has helped to p[...]ficially.

Discussion

Contribution of the Indian Government to preserve the tangible cultural heritage

The Ministry of Culture of India has allocated a notable fund in order to preserve all the cultural heritages of the country. India is full of tangible heritage, such as Victoria *Memorial, Taj Mahal, India Gate, Museum,* and many more which are the greatest attractions for the tourists from foreign (Thomas, 2021). These tangible cultural products of the country have the greatest contribution in the economic growth of the country. During the time period between the 2011 and 2016 cultural ministry has been allocated notable funds increasingly. In figure 1, it can be noted that during 2011-12, it was 1300 crore, which increased to 2600 crore during 2016-17 (Thomas, 2021).

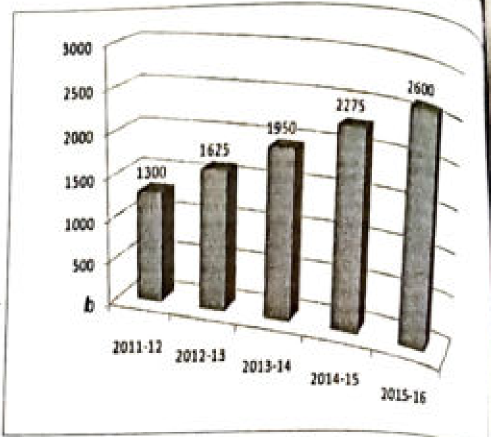


Figure 2: Fund allocation by Cultural Ministry of India

(Sources: Inspired by Thomas, 2021)

Cultural-historical value and the socio economic value of the conservation of tangible heritage

The effect of the conservation procedures is long-term indeed and consists both from the sociological, economical aspect. Valuation is highly intellectual in terms of the historical values too. The cultural-historical aspects, and the present socio-economic aspects are described in the below table.

Cultural historical value	Socio-economic value
Relative artistic validation	Educational value (it can't be ignored that ho the art and culture of one country defines history, the other can't define it with such gre significance. From all the features of the a conservation the education value the highest)
The aesthetic visual appeal of the people	Economic value (the art and tangible heritage a country is the greatest asset of tourism whi takes a notable part in the economy of a countr Tangible heritage this considered as the greate source of the economic growth of the nation)
Age value	Functional value (it is the evidence of the hum activities over time)
Memorial value in terms of the historical paradox (denotes the historical importance of the conservation procedures)	Social access (It is reflective depicting the sto of a society)
Identity value (Importance of cultural heritage providing unique identity of a society, both regional, and global)	Regional value, political value

Scientific value (innovative with important creative thought, impactful on the discoveries of relevant new theories about the conservation)	Operational value It records the chronolo[illegible] taking the creators of various tangible cultur[illegible] products which ultimately determines t[illegible] importance of a community (McCandlish a[illegible] McPherson, 2021)
Rarity functions (all the tangible heritage consists unique features, the importance can be found in providing the rarity function upon each)	Newness value
Authenticity value (the conservation procedure indicates the authentic process providing authenticity into it)	Situational value
Emotional value (It is greatly impactful as the emotions of particular communities are connected with its culture. Conservation gives the accommodation in preserving the emotional value of the communities illustrating the history, geography of a society)	Financial value
Integrating value (Conservation science of the cultural products is integrates the capacity of a particular society, and determines the innovative participation of all the communities within a specific zone of a country (Salomon *et al.* 2018)	Potential future exploitation (Determining t[illegible] entire historical time period of creation identifies the potentiality of the future creation)
Symbolic value, and association (The art conservation is the symbol of the integration of all the zone of a country such as the political place, education, tourism, science and technologies)	Cognizance (practices according is the greate[illegible] notions of human behavior depending upon th[illegible] the pillar of cognizance develops)

Table 2: Value of conservation science for maintaining tangible cultural heritage (Source: Self-developed)

Conclusion

Observing and examining the entire study, the role of conservation science to maintain the cultural heritage can be clearly understood. Turning the broader horizon the natural consequences opens exploring the importance in historical, and cultural value. The value of the conservation sciences is highly implicative as culture is directly related to the cognitive and emotional advancement of a particular community. Illustrating the history of the creator the chronology can be finely depicted. The discussion in this article is highly effective explaining details about conservation science, and the way it is related to the cultural heritage of a country. Furthermore, the brief discussion in this study determines the importance of national efforts to preserve the essence of culture. Having so many tangible heritages India stands in notable places in the globe. ***"Unification in the Diversity"*** which is the representative line of India, can be understood by the cultural heritage of the country. Visual art of the country is highly influential connecting the past, present, and future in one single thread. This study is important in giving suitable relevant knowledge to the readers, and the peer researchers.

Reference

1. Thomas, M., 2021. *A fading Taj and shabby museums: India spends less than 1% of its annual budget on culture and it shows.* [online] Quartz. Available at: <https://qz.com/india/897228/a-fading-taj-and-shabby-museums-india-spends-less-than-1-of-its-annual-budget-on-culture-and-it-shows/> [Accessed 20 August 2021].
2. Kulkarni, A., 2021. *Intangible aspects of cultural heritage - RTF | Rethinking The Future.* [online] RTF | Rethinking The Future. Available at: <https://www.re-thinkingthefuture.com/rtf-fresh-perspectives/a2874-intangible-aspects-of-cultural-heritage/#729d9f90aaec9859afe58db9e3ae0d83d2fffdd1#193779> [Accessed 19 August 2021].
3. Salomon, A.K., Lertzman, K., Brown, K., Wilson, K.I.B., Secord, D. and McKechnie, I., 2018. Democratizing conservation science and practice. *Ecology and Society*, *23*(1).
4. Atalan, Ö., 2018. Importance of cultural heritage and conservation concept in the "architectural education". *Journal of Human Sciences*, *15*(3), pp.1700-1710.
5. FLORESCU, O., SANDU, I.C.A., SPIRIDON-URSU, P. and SANDU, I., 2020. INTEGRATIVE PARTICIPATORY CONSERVATION OF MUSEUM ARTEFACTS. THEORETICAL AND PRACTICAL ASPECTS. *International Journal of Conservation Science*, *11*(1).
6. Nocca, F., 2017. The role of cultural heritage in sustainable development: Multidimensional indicators as decision-making tools. *Sustainability*, *9*(10), p.1882.
7. Liritzis, I. and Korka, E., 2019. Archaeometry's role in cultural heritage sustainability and development. *Sustainability*, *11*(7), p.1972.
8. Hirsenberger, H., Ranogajec, J., Vucetic, S., Lalic, B. and Gracanin, D., 2019. Collaborative projects in cultural heritage conservation–management challenges and risks. *Journal of Cultural Heritage*, *37*,
9. Nocca, F., 2017. The role of cultural heritage in sustainable development: Multidimensional indicators as decision-making tools. *Sustainability*, *9*(10), p.1882.
10. McCandlish, A. and McPherson, G., 2021. Promoting tangible and intangible hidden cultural heritage: local communities influencing civic decision-making and international cultural policy. *International journal of cultural policy*, *27*(5), pp.683-698.

3.2.1

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

INTEGRATING THE PRINCIPLES OF STRATEGIC HUMAN CAPITAL AND STRATEGIC HUMAN RESOURCE MANAGEMENT TO IMPROVE ORGANISATIONAL PERFORMANCE

Prof. Dr. Manju Shree Raman
Department of Management, Faculty of Business & Economics Debre Tabor University, Ethiopia
manjushreesha@gmail.com

Dr. Vijayalakshmi N.S
Assistant professor and head of department of economics, Nehru Memorial College Sullia, dakshin Kannada, Karnataka 574327, drvijayalakshmins@gmail.com

Shagun Sood
Research scholar, Central University of Himachal Pradesh Dharamshala, India,
shagun.sood4@gmail.com

Mohammad Chand Jamali
Assistant Professor, Department of Health and Medical Sciences Khawarizmi International College, 25669, Al Ain, Abu Dhabi, United Arab Emirates,
mjamali68@gmail.com

Mohammed Abu Shohada
Assistant Professor/ Program Leader- Health Management, Department of Health and Medical Sciences Khawarizmi International College, 25669, Abu Dhabi, United Arab Emirates,
mohammed.abushohada@khawarizmi.com

ABSTRACT

Strategic HRM policies are essential in improvement of performances of organisations. The aim of this study is to integrate the principles of SHC and SHRM that have enough potential in improving the performance of an organisation. Different objectives and research questions along with support of other articles are mentioned to support the importance of SHRM. The importance includes improvement of workplace environment, leadership and the strategy of business functions. Data indicates almost 47% of licensed large-sized companies globally use an effective SHRM strategy. Systematic review of six articles based on primary analysis of data regarding SHRM is selected along with Prisma Boolean selection strategy. Three themes are presented based on the outcome of articles to support the importance of green HRM and innovation for performance development. Limitations include non-availability of more data as well as absence of primary data in this research. Future aspect indicates use of this study as a good secondary source for future research.

Keywords: *Strategic HRM, strategic human capital, innovation, Organizational performances, Green HRM, employee motivation, Competitive advantages*

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

INTRODUCTION

Strategic human resource management (SHRM) indicates the strategy of formulation and execution of human resources by modification of policies and practices for improving employee competencies and behaviour. SHRM is an important aspect in any organisation that supports the improvement of the performances of employees and organisation. This study will provide complete details about the concept of SHRM and strategic human capital (SHC) for the improvement of performance of a company. A systematic review of articles and discussion of the articles regarding SHRM, limitations and future scope will be discussed properly to identify the strategic process of HRM in organisations.

RESEARCH OBJECTIVES

The aim of this research is "***To integrate the principles of SHC and SHRM that have enough potential in improving the performance of an organisation***".

Objectives

RO 1: To determine the principles of SHC and SHRM for improvement of organisational performances

RO2: To identify advantages for the implementation of principles of SHC and SHRM for improvement of organisational performances

RO3: To analyse the issues regarding the implementation of principles of SHC and SHRM for improvement of organisational performances

RO4: To recommend solutions to the issues regarding implementation of principles of SHC and SHRM for improvement of organisational performances

Research questions

RQ 1: What are the principles of SHC and SHRM for improvement of organisational performances?

RQ 2: What are the advantages of the implementation of principles of SHC and SHRM for the improvement of organisational performances?

RQ 3: What are the issues regarding implementation of principles of SHC and SHRM for improvement of organisational performances?

RQ 4: What are the recommended solutions to the issues regarding implementation of principles of SHC and SHRM for the improvement of organisational performances?

BACKGROUND

SHRM is an important aspect in any organisation that supports performance improvement with effective implementation of strategic planning by the HRM department in an organisation. Recent statistical data mentioned in the below graph suggest that almost 47% of licensed large-sized companies globally use an effective SHRM strategy for improvement of performance to maintain competitive advantage (Statista, 2022a).

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

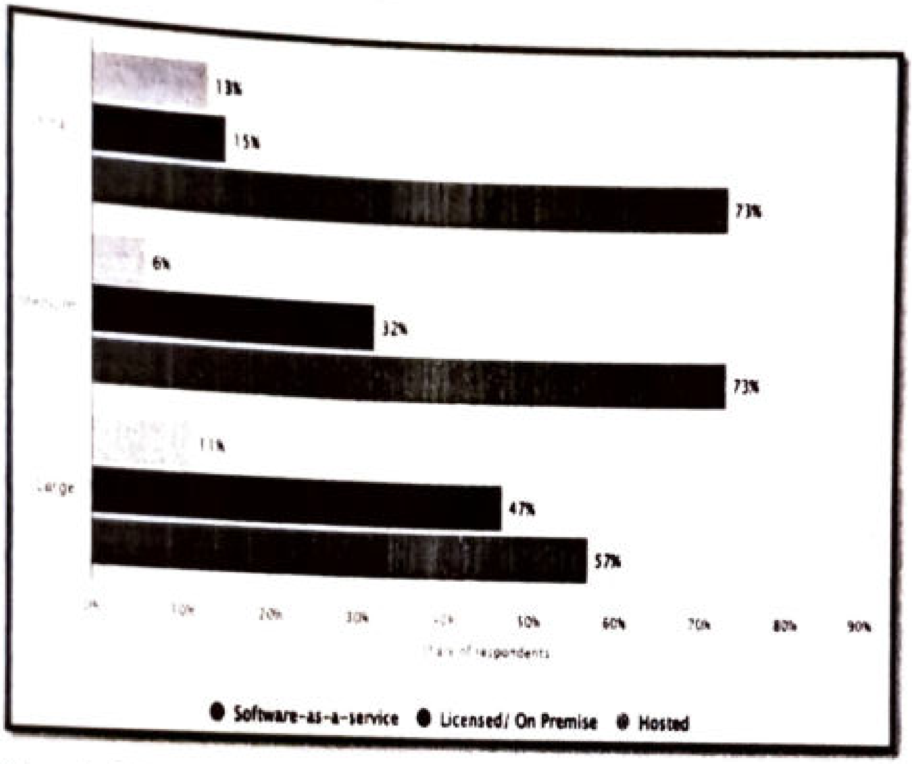


Figure 1: SHRM practices in companies

(Source: Statista, 2022a)

HRM is effective in bridging the corresponding gap between the strategic objectives of a company with the performance of employees. Innovation management is important in organisations as SHRM supports this open innovation process (Engelsberger et al. 2022). Therefore, SHRM and SHC are two essential aspects that support organisational competitiveness position development with the help of innovation and unique strategy.

LITERATURE REVIEW

Principles of SHC and SHRM

SHRM has different principles using which performance of an organisation can be possible. According to Nocker&Sena (2019), analytics of talent of staff can be termed as an important aspect and part of principle in SHRM management. Other principles of SHRM understand the goals of companies, evaluating HRM, forecasting, planning implementation, building a capable workforce and review of peace to determine the position in markets. In contrast, Shrouf et al. (2020) have opined that HRM people are those who map the job planning to improve performance.

Advantages and strategies of implementation of SHC and SHRM

Advantages that are mainly associated with SHRM and SJHC are management of exceptional culture in an organisation, increases productivity, improves the loyalty of its customers and focuses mainly on corporate goals. According to Elsbach&Stigliani (2018), Organisational culture in an organisation includes different aspects such as norms, values, and different assumptions. Proper strategy implementation by the HRM department helps in building true leaders for an organisation that supports performance improvement and employee motivation in organisations.

Issues regarding SHC and SHRM implementation and effective strategies for organisational performance improvement

Strategic issues that are associated with the SHRM are management of quality of leadership, management of change business, an improper strategy of workforce and lack of innovation due to improper HRM policies. According to Sha& Khan (2019), effective HRM practices include planning for rewards, performance management and even training arrangement for staff. Lack of technology-based strategy management in HRM is termed as an issue in modern day business. Therefore, planning is important through which identification of weaknesses in HRM strategies can easily be identified. Leadership style is beneficial to improve the HRM strategies in any organisation for performance improvement.

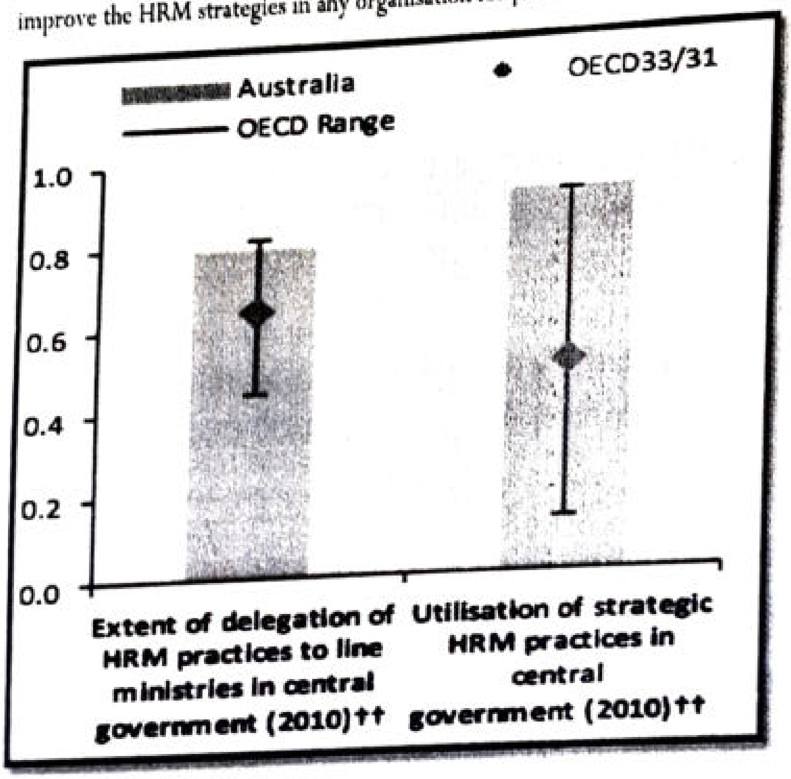


Figure 2: HRM performances of OECD and Australia

(Source: Oecd, 2020)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

METHODS

Descriptive design is followed here for an analysis of data effectively regarding SHRM and SCH for improvement of performance. Descriptive designs are beneficial in providing a comprehensive summary of the events in a research study (Roberts et al. 2019). Therefore, the presence of flexibility in research and effective strategic tool usage advantages in using this design has helped in the identification of the importance of SHRM and SHC for performance development of organisations.

Secondary collection of data has been performed based on systematic literature selection as per the mentioned topic. Total of 6 articles related to the SHRM and SCH are chosen for analysis of the content to determine the importance of the SHTM and SHC for the improvement of the receptive performance of an organisation. Data is collected using a Boolean table by considering keywords along with a selection of articles based on Prisma calculations. Secondary data is collected generally from published articles, datasheets, different government websites and others to collect a mass of information (Ngozwana, 2018). These secondary data are analysed using the thematic analysis model based on the theme codes that are generated from the article analysis. However, ethical aspects are properly maintained here for the safety of data as well as information for any misuse for commercial purposes.

Boolean table

KEYWORDS	OPERATOR	KEYWORDS	OPERATOR	KEYWORDS
Human resources	AND	Performance development	AND	HRM strategy improvement
Strategic management	OR	Competitive advantage	AND	Strategic competitive performance
Staff motivation	AND	Productivity improvement	AND	Staff performance development

Table 1: Boolean table

(Source: Learner)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Prisma diagram

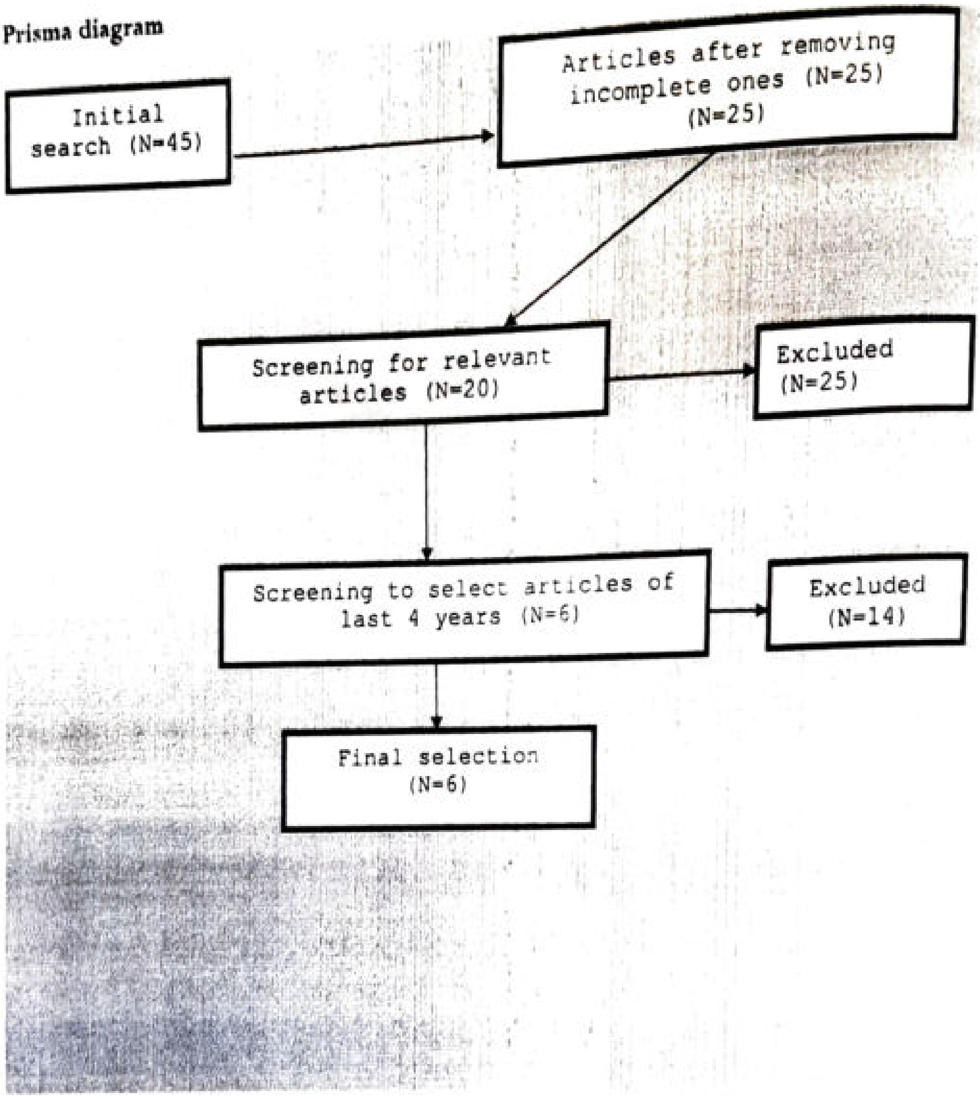


Figure 3: Prisma diagram

(Source: Learner)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

RESULT AND ANALYSIS

Quality review

Authors	Study design	Number of resources or samples	Measured outcomes	Results	Quality review
Jiang &Messersmith (2018)	Cross-sectional, time-lagged and longitudinal	183 empirical studies of the primary database of EBSCO and Web of Science	Multilevel approach to employee performance improvement	Better employee performance using effective SHRM strategy and performance improvement	This article provides the details of the importance of SHRM and SHC for improving the performance of employees
Herd et al. (2018)	AI-based design is selected for survey and primary data collection	Primary data of SHRD alignment index with management if 93 factors analysis and 12 practitioner subject-matter experts	Initial development of employee performances and improvisation in SHRM strategies	The result indicates the initial exploratory strategy of scaling in determining the effectiveness of SHRM in organisational performance improvement	SHRD implementation for the determination of employee perspective to analyse the influence of SHRM on performance improvement

Singh et al. (2020)	Eco-designing strategy is utilised in this article for the analysis of data	669 manufacturing sectors in UAE are taken for collection of primary data regarding SHME and green innovation for competitive performances	A concept about green innovation for maintaining a competitive position in business using effective SHRM strategies	Understanding the concept of GTFL and GHRM practices for maintaining innovative business	A detailed perforce evaluation of companies in UAE indicates the importance of effective SHRM strategies for implementing a green strategy for business innovation
Yong et al. (2019)	Correlational design is used here to determine the green intellectual strategy of HRM	Sample size for this research is 661 large firms that are manufacturers based in Malaysia with 649 total questionnaire	An effective strategy of HRM to maintain a competitive position in a competitive market such as Malaysia	A 15 item scale and use of 7 points Likert scale are used for the analysis of data of the HRM strategies in those companies in Malaysia	This article has provided the strategy of HRM through which a better performance improvement for maintaining a competitive development organisation can be achieved as mentioned

Yin et al. (2019)	A longitudinal design is used in this research for determining the causal relationship	HR managers of different companies in China are chosen for this primary survey that includes 343 questionnaires among which 112 are returned and 99 are considered usable survey	Employer employment as well as strategy and improvement of performance using attractive HRM strategies	Result indicates the task-independent strategy of employee empowerment using HRM strategies in organisations	The use of HRM strategies in organisations helps in the improvement of employee power that increases productivity to super performance development in companies
Aburumman et al. (2020)	A quantitative style of design is granted here for research progress	Total number sample includes 21090 employees in 25 Jordanian banks for maintaining survey	Employee performances are dependent on the workplace environment for which HTM practice is dependent	The result indicates that improper HRM practices decrease the level of motivation of employees in those banks	Employee satisfaction is an important aspect that supports the growth of performance for an organisation

Table 2: Quality review

(Source: Learner)

Data extraction

Author name	Publication year	Study design	Data extraction process
Jiang &Messersmith (2018)	2018	Cross-sectional, time-lagged and longitudinal	The details regarding the empirical studies are presented properly to use in the current study
Herd et al. (2018)	2018	AI-based design	The information related to AI are well organised

Singh et al. (2020)	2020	Eco-designing strategy	It has information related to the manufacturing sectors in UAE
Yong et al. (2019)	2019	Correlational design strategy	This article was helpful to know the 661 large firms in Malaysia
Yin et al. (2019)	2019	Longitudinal design strategy	The strategies of HR managers in China are explained properly to collect the data related to the study
Aburumman et al. (2020)	2020	Quantitative design strategy	The details of the design strategy have been explained properly by referring to the Jordanian banks

Table 3: Data extraction

(Source: Learner)

Thematic coding

Author	Code	Theme
Jiang &Messersmith (2018)	***Human resource, meta-review, firm performance, Sustainable competitive advantage***	*Theme 1: Effective HRM practices in organisations help in the improvement of firm performance and competitive position*
Herd et al. (2018)	***Strategic goals, economic uncertainty, employee development organisation level approach***	
Singh et al. (2020)	***Structural modelling of the equation, green HRM policies, leadership, innovation***	*Theme 2: Green environmental performances can be an important aspect of business for which an effective SHRM strategy is necessary*

Yong et al. (2019)	*Green intellectual capital, Employee motivation, cleaner production, environmental responsibility*	
Yin et al. (2019)	***Employee empowerment, organisational behaviour, human asset, employee productivity***	*Theme 3: Effective SHRM strategy is important to improve employee productivity, reduction of turnover and teamwork within an organisation*
Aburumman et al. (2020)	***Employee turnover, career satisfaction, teamwork, employment security***	

Table 4: Thematic coding

(Source: Learner)

THEMATIC ANALYSIS

Theme 1: Effective HRM practices in organisations help in improvement of firm performance and competitive position

Effective practice of HRM is necessary to improve the performance of a firm which helps in improving the competitive position. HRM studies are based on research designs that are performed a long time ago to determine their importance of it in organisational performance improvement. AI-based technology usage for planning in HRM strategy can be helpful to improve the performance level of organisations.

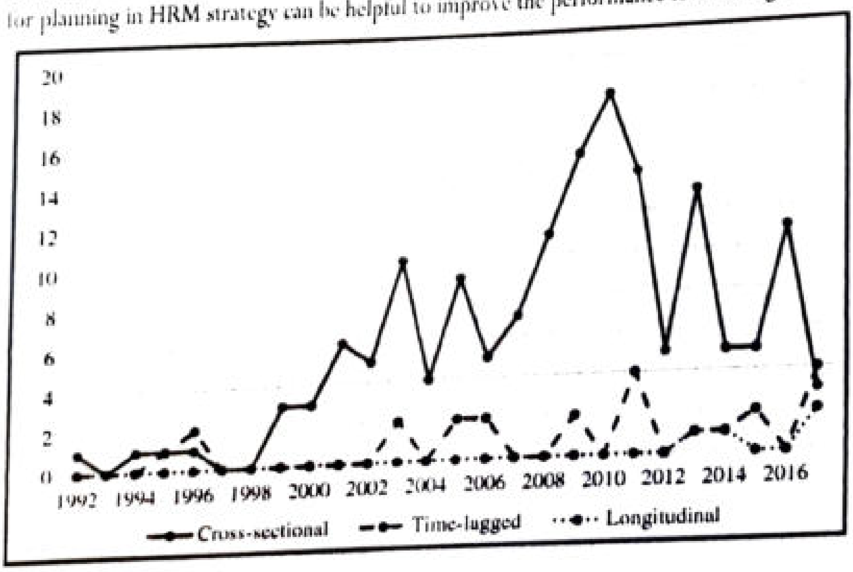


Figure 4: SHRM performance

(Source: Jiang &Messersmith, 2018)

Strategic HRM performance mentioned in the above graph supports the innovative idea generation from leaders using which performances can easily be improved. Strategic HRM practice has a direct relationship with the development of human capital that supports the increase of sustainability in performance (Hamadamin&Atan, 2019). Therefore, it can be determined that this theme is an essential one to understand the importance of SHRM and SHC to improve organisational performance along with management of competitive position.

Theme 2: Green environmental performances can be an important aspect of business for which an effective SHRM strategy is necessary

Green environmental performances are essential for the development of the business as it helps in improving the CSR ranking. Green HRM practices play an important role in maintaining linkages between transformational leadership and innovative environmental performances (Yong et al. 2019). Research model-based HRM strategy understanding and its application are important in modern days.

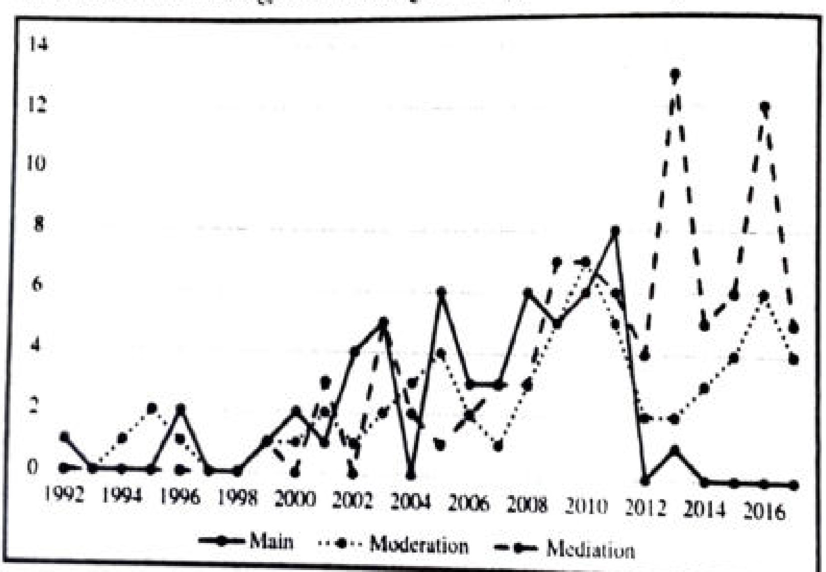


Figure 5: SHRM model-based study

(Source: Jiang &Messersmith, 2018)

Strategic HRM model-based planning mentioned in the above graph supports the management of green performance by improving business functions. Strategic HRM practices generally focus on the relationship between system and individual which is handled by HR (Thudaa et al. 2019). Therefore, green HRM practices can be helpful to eliminate barriers to organisational performance development in any organisation.

Theme 3: Effective SHRM strategy is important to improve employee productivity, reduction of turnover and teamwork within an organisation

An effective strategy of SHRM is beneficial to empower the employees to support employee productivity as well as reduce the turnover rate of employees in an organisation. The data indicates that task independence empowerment practices for increasing employee performance indicate high task interdependence is higher

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

than low task interdependence (Yin et al. 2019).

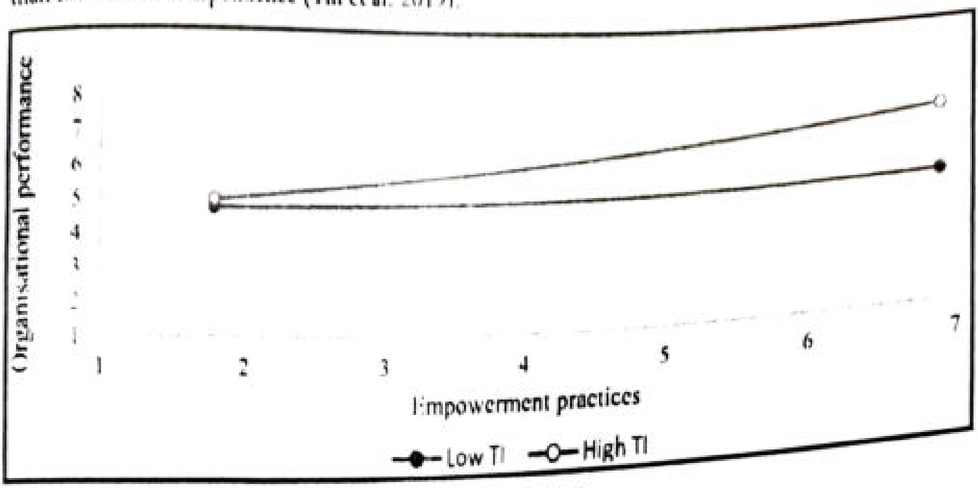


Figure 6: High and low task interdependence in SHRM

(Source: Yin et al. 2019)

A high rate of employee turnover can be termed as an important aspect through which organisations lose their capital (De Winne et al. 2019). Therefore, it is obvious that strategic HRM performances can be beneficial for attracting skilled employees to remain intact within an existing organisation for a longer time. This theme is sufficient enough in answering the effectiveness of the engagement of a skilled workforce to manage teamwork and performance within an organisation.

DISCUSSION

The first theme is based on the effective strategy in HRM practices in firms to improve the performance for maintaining competitive positions. People associated with the SHRM and SHC practices improve their planning innovatively to increase productivity. Recent data indicates that almost 88% of companies in UK have applied time and the respective attendance workforce management as a plan of SHRM (Statista, 2022b).

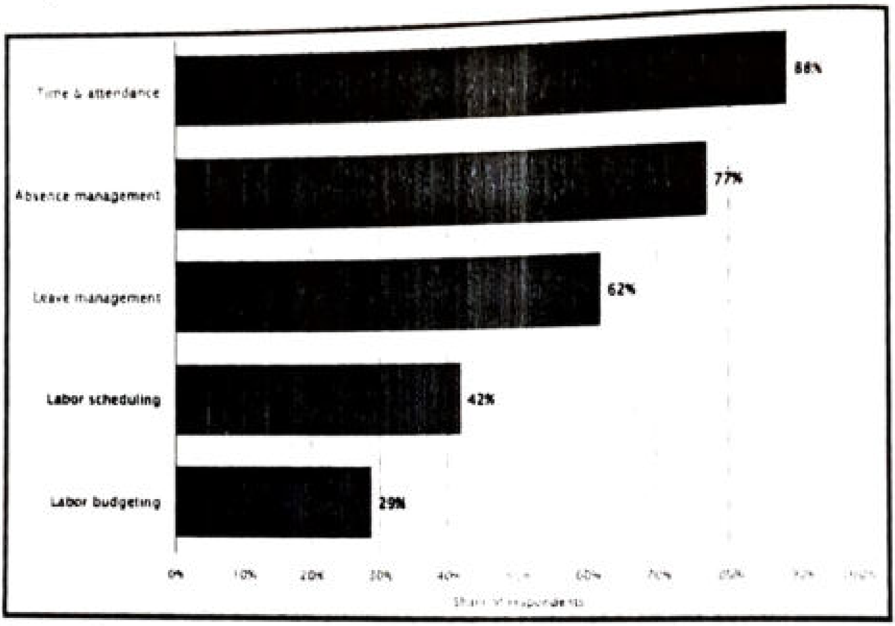


Figure 7: Workforce management in SHRM

(Source: Statista, 2022b)

The second theme is based on the green HRM strategy that indicates skilled employee management and engagement of them with organisations are effective to maintain sustainable performance in HRM practice. Sustainable or green HRM policies help in the determination of employee performance to understand the influence of HRM policies (Manzoor et al. 2019).

The theme there is dependent on employee performance development and innovation strategy of HRM. Recent data suggest that a survey is conducted to determine the challenges of SHRM that shows that new employees and good monitoring are the challenges (Statista, 2022c). Effective planning needs to be accurate enough for improvement of the HRM strategies in organisations for performance improvement.

CONCLUSION

A complete analysis of the SHRM and SHC is provided in this study to determine the importance of HRM strategies in organisational performance development. Employee motivation and performance development are the essential aspects of HRM policies that help in the improvement of productivity. A systematic collection of data and a Prisma Boolean process of systematic review strategies are selected here. Discussion is made based on articles that have used primary data for research to maintain accuracy. The thematic analysis supports the proper analysis of the objectives of this study. Based on the analysis, limitations and future scope are provided in this study.

LIMITATION

Since primary data is not collected in this study, authenticity management is a limitation in this study. Further, only six articles are selected, which causes the limitation of information collection as more articles can be utilised for wider knowledge. Amberg&McGaughey (2019) have opined that SHRM helps in providing emphasis on capital development as well as increases the firm's capabilities in terms of human capital. Therefore, detailed management is necessary, which is a serious limitation in this study due to the lack of vast data collection.

FUTURE SCOPE

All data are collected from articles that use primary data as the source. SHRM is beneficial in maintaining green business functions that support competitive advantages (Elsbach&Stigliani, 2018). Therefore, this study can be used as an authentic source in future for research conduction on this topic. Further, this study can be used as a secondary source for the collection of important concepts of SHRM and SHC to improve organisational performance.

REFERENCE LIST

Journals

- Amberg, J. J., &McGaughey, S. L. (2019).Strategic human resource management and inertia in the corporate entrepreneurship of a multinational enterprise. *The International Journal of Human Resource Management*, *30*(5), 759-793. https://doi.org/10.1080/09585192.2016.1192051
- De Winne, S., Marescaux, E., Sels, L., Van Beveren, I., &Vanormelingen, S. (2019). The impact of employee turnover and turnover volatility on labor productivity: a flexible non-linear approach. *The International Journal of Human Resource Management*, *30*(21), 3049-3079. https://doi.org/10.1080/09585192.2018.1449129
- Elsbach, K. D., &Stigliani, I. (2018). Design thinking and organizational culture: A review and framework for future research. *Journal of Management*, *44*(6), 2274-2306.https://doi.org/10.1177/0149206317744252
- Engelsberger, A., Halvorsen, B., Cavanagh, J., & Bartram, T. (2022). Human resources management and open innovation: the role of open innovation mindset. *Asia Pacific Journal of Human Resources*, *60*(1), 194-215.https://doi.org/10.1111/1744-7941.12281
- Hamadamin, H. H., &Atan, T. (2019). The impact of strategic human resource management practices on competitive advantage sustainability: The mediation of human capital development and employee commitment. *Sustainability*, *11*(20), 5782.https://doi.org/10.3390/su11205782
- Manzoor, F., Wei, L., Bányai, T., Nurunnabi, M., &Subhan, Q. A. (2019). An examination of sustainable HRM practices on job performance: An application of training as a moderator. *Sustainability*, *11*(8), 2263.https://doi.org/10.3390/su11082263
- Ngozwana, N. (2018). Ethical dilemmas in qualitative research methodology: Researcher's reflections. *International Journal of Educational Methodology*, *4*(1), 19-28.https://doi.org/10.12973/ijem.4.1.19
- Nocker, M., &Sena, V. (2019). Big data and human resources management: The rise of talent analytics. *Social Sciences*, *8*(10), 273.https://doi.org/10.3390/socsci8100273
- Roberts, K., Dowell, A., &Nie, J. B. (2019).Attempting rigour and replicability in thematic analysis of qualitative research data; a case study of codebook development. *BMC medical research methodology*, *19*(1), 1-8. https://doi.org/10.1186/s12874-019-0707-y
- Shah, A. U., & Khan, M. I. (2019). HRM-Performance Perspectives: An overview of Theoratical Challenges and Prospects. *Engineering Economics*, *30*(3), 382-393.https://doi.org/10.5755/j01.ee.30.3.9550
- Shrouf, H., Al-Qudah, S., Khawaldeh, K., Obeidat, A., &Rawashdeh, A. (2020). A study on

relationship between human resources and strategic performance: The mediating role of productivity. *Management Science Letters, 10*(13), 3189-3196. 10.5267/j.msl.2020.5.002

- Thudaa, A., Sarib, J., &Maharanie, A. (2019).Employees Perception of Human Capital Practices, Employee's Productivity, and Company Performance. *Integrated Journal of Business and Economics, 13*, 240-250. 10.33019/ijbe.v3i3.188

Websites

- Oecd, (2020). *OECD Human Resources*. https://www.oecd.org/gov/pem/OECD%20HRM%20Profile%20-%20Australia.pdf
- Statista, (2022a).*Human Resource Management Systems (HRMS) distribution worldwide in 2019, by organizational size*, https://www.statista.com/statistics/1085422/hrms-distribution-organizational-size-worldwide/
- Statista, (2022b).*Share of organizations using workforce management applications worldwide in 2019, by type*. https://www.statista.com/statistics/1085485/workforce-management-applications-type-worldwide/
- Statista (2022c).*Leading challenges with onboarding according to HR worldwide in 2018*, https://www.statista.com/statistics/950216/onboarding-challenges-hr-worldwide/

Thematic coding

- Jiang, K., &Messersmith, J. (2018). On the shoulders of giants: A meta-review of strategic human resource management. *The International Journal of Human Resource Management, 29*(1), 6-33.https://doi.org/10.1080/09585192.2017.1384930
- Herd, A. M., Shuck, B. M., &Githens, R. P. (2018). Strategic human resource development alignment from the employee's perspective: Initial development and proposition testing of a measure. *Performance Improvement Quarterly, 31*(3), 269-291.https://doi.org/10.1002/piq.21266
- Singh, S. K., Del Giudice, M., Chierici, R., &Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change, 150*, 119762. https://doi.org/10.1016/j.techfore.2019.119762
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., &Fawehinmi, O. (2019).Nexus between green intellectual capital and green human resource management. *Journal of cleaner production, 215*, 364-374. https://doi.org/10.1016/j.jclepro.2018.12.306
- Yin, Y., Wang, Y., & Lu, Y. (2019). Antecedents and outcomes of employee empowerment practices: A theoretical extension with empirical evidence. *Human Resource Management Journal, 29*(4), 564-584.https://doi.org/10.1111/1748-8583.12243
- Aburumman, O., Salleh, A., Omar, K., &Abadi, M. (2020).The impact of human resource management practices and career satisfaction on employee's turnover intention. *Management Science Letters, 10*(3), 641

Scopus Indexed

3.2.1

ECS Transactions

The Electrochemical Society
Advancing solid state & electrochemical science & technology

ISSN 1938-5862

Impact of Social Media Marketing on Organizational Performance: A Case Study of Amazon India

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

ECS Transactions, 107 (1) 12749-12764 (2022)
10.1149/10701.12749ecst ©The Electrochemical Society

Impact of Social Media Marketing on Organizational Performance- A Case Study of Amazon India

V. S. Prasad Kandi [a], B. Sakthimala [b], G. Sivakumar [c], Vijayalakshmi N.S [d]

[a] KL Business School, Koneru Lakshmaiah Education Foundation, Andhra Pradesh, kandi.vsp@gmail.com
[b] Department of Business Administration, Marudhar Kesari Jain College for Women, Vaniyambadi, sakthi.lbk@gmail.com
[c] Department of management, Sri Ramakrishna college of arts and science, Coimbatore, sivakumarparks@gmail.com
[d] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com

With the intention of identifying how social media marketing can improve organizational performance, this research has focused on Amazon India. Through secondary data, different social media marketing strategies of Amazon are hereby identified at first. Then primary data is collected by sharing a survey questionnaire with one hundred random consumers of Amazon. From their responses, it was found that Amazon is using different tactics in different social media channels such as following different topical festivals of India and creating emotional ads. These social media ads are helping the organization to engage with the consumers and draw them to their e-commerce site and almost ninety consumers stated that they buy something whenever they are re-directed to Amazon's site through a social media ad.

Keywords: social media marketing, amazon strategy, negative impacts.

Introduction

In The world of marketing, social media marketing has acquired a special position due to its effectiveness and capability to cultivate better results (1). Several companies are there are investing heavily in social media marketing while some companies are still not sure whether they should cut investment from traditional marketing to boost social media marketing or not. Now, existing research works show that social media marketing can help an organization to engage with its consumers in a better manner however, traditional media can do the same (2). Therefore, the question is why companies should follow social media marketing instead of traditional marketing or any other digital marketing such as SEO.

On the other hand, very research works have focused on a particular company to find out how social media marketing is improving the performance of that company by improving its financial performance (3). If there is no concrete evidence that social media marketing can improve organizational performance then it is obvious that small companies, even large companies will not invest in it heavily (4). Based on this research gap this particular research work is developed. This research work has focused on Amazon, the leading online retailer around the world. Amazon is one of those companies that focus more on social media marketing than any other marketing tactic. Initially, the social media marketing tactics of Amazon are identified and it is analyzed how Amazon is engaging with its customers through social media marketing by collecting secondary data. Later primary data is collected from one hundred random Amazon consumers.

Everything is done based on some research objectives that are hereby mentioned below.

- RQ1: To find out the social media marketing strategies of Amazon India
- RQ2: To identify which social media site of Amazon India is mostly followed by its consumers
- RQ3: To analyze what consumers like about Amazon India's promotions
- RQ4: To identify how social media marketing is aiding Amazon India's organizational performance

Concept of Social Media Marketing

The concept of social media marketing means using social media platforms and social networks to promote an organization's products and/or services (5). The concept of social media marketing allows business organizations to engage with their existing and potential consumers regardless of their gender, culture, religion, nationality and physical condition.

Facebook, Instagram, Twitter, Pinterest, LinkedIn and Snapchat are some major social media platforms that business organizations use to connect with their existing and potential consumers. However, some companies are also investing heavily in YouTube by creating short ads that are shown before any mainstream video on YouTube (6).

Benefits of social media marketing:

The biggest benefit of social media marketing is the reach that it provides to the consumers (7). In 2020, there were over 3bn social media users, which means an organization, can engage with these many people instantly. In India, there are 518mn Facebook users as per data showed in 2020. It means, Amazon actually can engage with these many Indians with one post on Facebook or Instagram or Twitter, or any other social media platform.

Disadvantages of social media marketing:

As social media posts created by an organization can see people from different nations, religions and cultures, it can also quickly create customer backlash (8). For example, in 2018 Amazon faced serious customer backlash from Indian consumers for displaying a distorted map of Jammu and Kashmir. This became viral in India and Amazon's brand image was hampered severely. Later Amazon spokesman apologized for this. Therefore, a simple mistake on social media platforms can become viral in minutes and can destroy the brand reputation of an organization.

Social Media Marketing of Amazon India

Amazon on Facebook India:

Amazon openly shares sales days on Facebook India including Freedom sales, BookBazaar Salem Apni Dukak Sale, Wardrobe Refresh Sale and others. Amazon's 10million Indian followers on Facebook see this information and react according to it (9).

Amazon mainly uses Facebook to share exciting offers and discounts to attract Indian Facebook users to its website. Freedom Sales and Amazon's Wardrobe Refresh Sale in India happed this year and relevant information was shared with the Indian Facebook users through Amazon India's Facebook platform (9).

Through Facebook India, Amazon also celebrates topical promotions such as Doctors Day, Mothers Day, Fathers Day, Raksha Bandhan, Holi, Diwali and many more (9). Amazon shares these festivals with simple messages that help the organization to engage with the consumers.

Amazon does not directly promote its products through these promotions however, seeing these promotions automatically motivates Indian consumers to go to the Amazon site and to look for what new products Amazon has added during these festivals. It increases website traffic (9).

Figure 1: Fathers Day Promotion by Amazon in India (1)

Through Amazon Facebook, the organization also encourages and assists those who run small businesses and have become inspiring entrepreneurs. For example, the image below displays Monika Agarwal who owns Swara Creation and Amazon are telling her story (9). Through Amazon, Monika sells modern fashion accessories.

It not only inspires other business owners to sell their products on Amazon but also encourages buyers to go to Amazon to check their products thus increasing website traffic (9). This is another social media strategy of Amazon, through which it engages with its existing and potential Indian consumers.

Figure 2: Amazon Stories from Indian Small Businesses (2)

Amazon on Instagram India:

Amazon has used Instagram India mainly for interviews conducted with different famous Indian artists from different backgrounds. With 2.8m followers on Instagram India, Amazon's strategy here is almost similar to Facebook India; except for company news and updates (9). For example, recently Amazon promoted two activities on Instagram India such as Prime Day Promotion and Amazon HandMade.

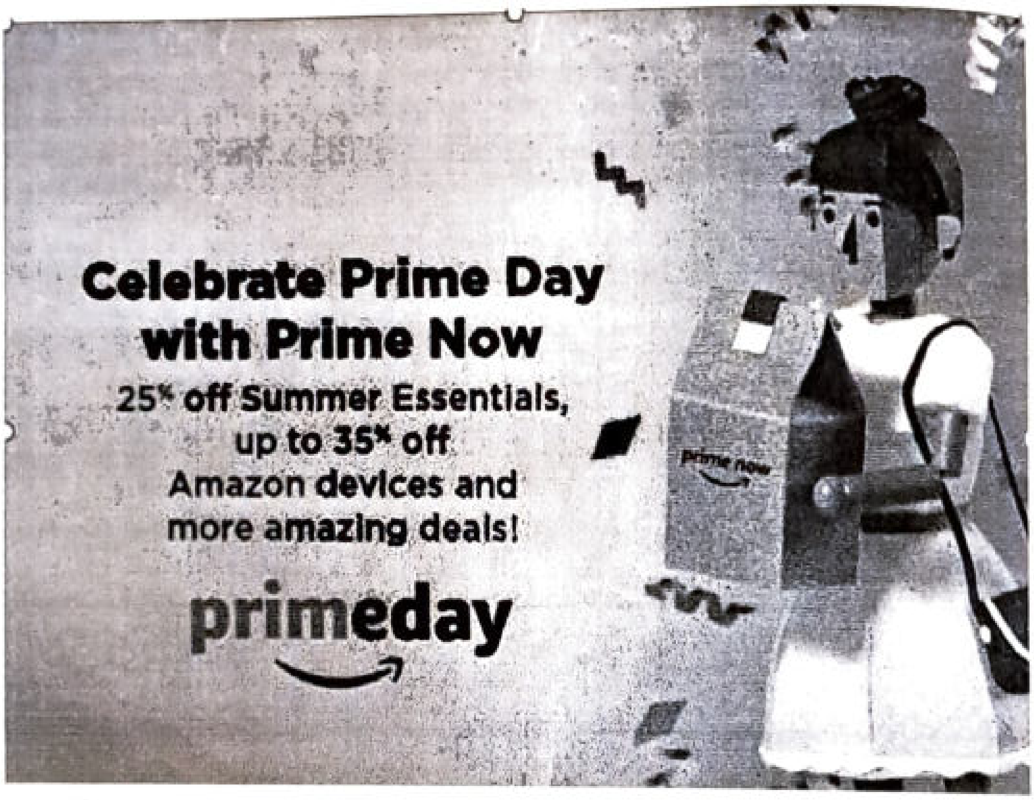


Figure 3: Amazon Prime Day Promotion (3)

Figure 4: Amazon HandMade (4)

Amazon India recently collaborated with 14 stand-up comedians to promote their sales day (figure 3). The caption was "your 10-minute breather is here. Enjoy your #AmazonPrimeDay shopping with 14 comedians keeping your company every hour. #Discoverjoy, this seemed to be interesting and it attracted a lot of Indian consumers to the Amazon India website. Through @AmazonHandMade Instagram profile Amazon celebrated businesses that are owned by women in India. The goal was to encourage other women of India to open their own businesses. It actually motivated a lot of Indian women to open their own businesses and sell their products on Amazon. Therefore, through Instagram, Amazon is attracting individual buyers (B2C) and existing and new business owners (B2B).

Amazon on Twitter India:

Amazon India's Twitter approach is completely different compared to its approach on Facebook and Instagram. It ensures that over 2mn Indian Twitter followers remain engaged and for that the organization users different types of content (9). It also uses customer-acquiring contests, users several accounts and participants in different trends. Some of Amazon's Twitter activities through which it engages with consumers are hereby shown below.

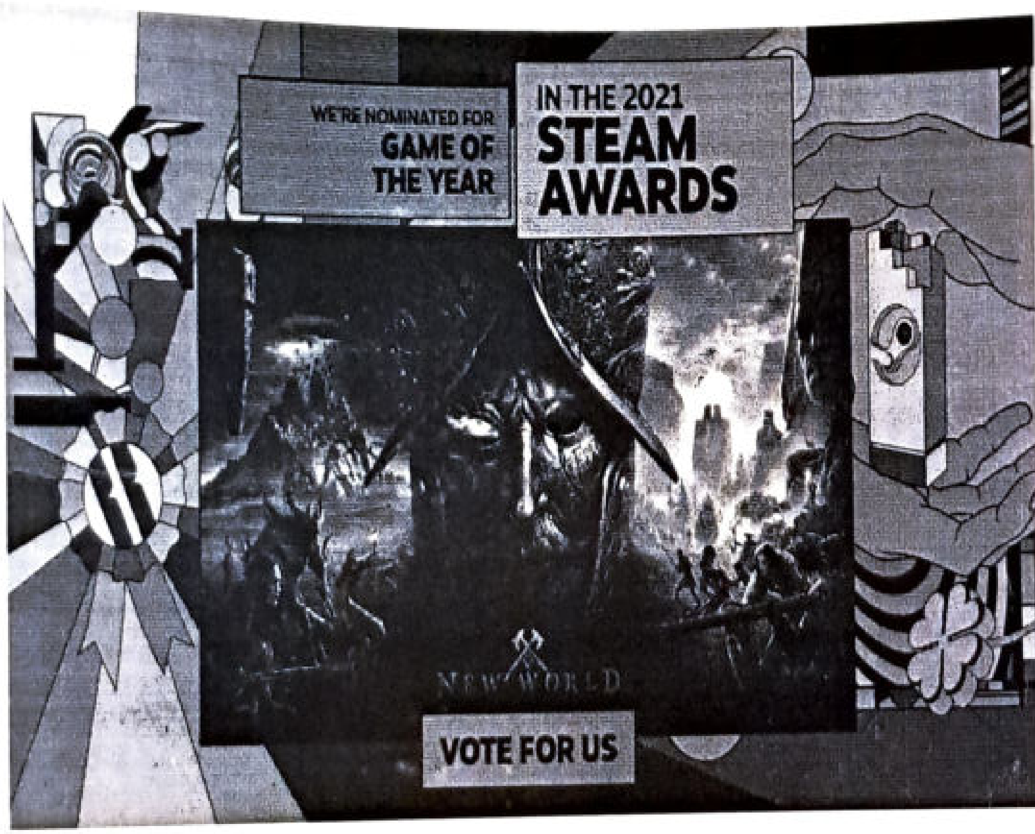


Figure 5: Amazon's Twitter Activities (5)

Amazon on YouTube India:

Amazon India's approach to YouTube India is to hook people immediately. For example, its recent campaign #MomBeAGirlAgain revolves around a mother-son relation. These campaigns are very attractive and redirect users or viewers to Amazon India's website (9). These emotional ads then motivate consumers to buy something for their sons or mothers.

Figure 6: #MomBeAGirlAgain Campaign of Amazon in India (6)

Amazon on Pinterest India:

On Pinterest India, Amazon directly promotes its products by creating a collage of its best and most popular products in several thematic lifestyle buckers such as for wedding planning, for home, for office, for kitchen, etc. These interesting and attractive promotions encourage people to visit Amazon India's e-commerce website.

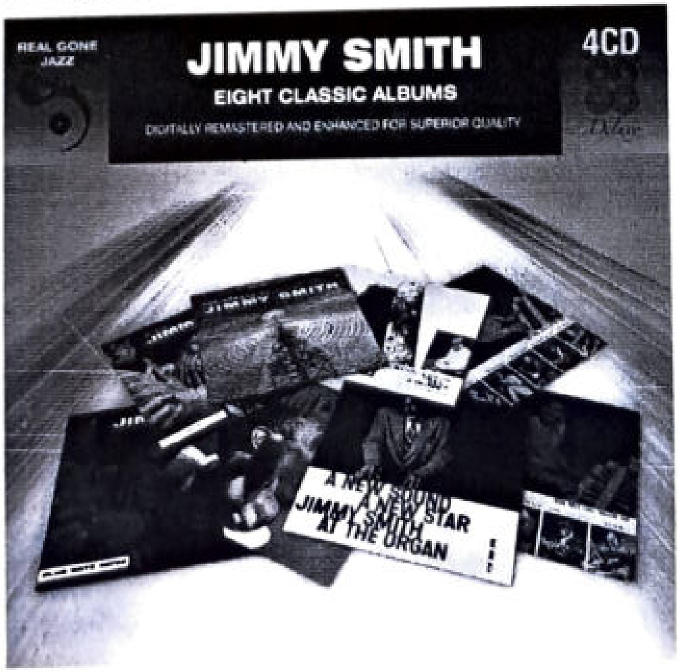


Figure 7: Amazon on Pinterest India (7)

Search Engine Marketing:

In the year of 2017, Amazon spent over $10bn for its digital marketing activities. Now, Amazon spends $451million on search engine marketing. Amazon spends so much attention on social media marketing however, still 31% of its website traffic comes from paid search, which means, social media marketing is responsible for Amazon's almost 70% website traffic (9). It shows, how much Amazon depends on its social media marketing.

From the above analysis, research objective 1 is fulfilled as from the above analysis it is found how Amazon is using social media for marketing its brand, product and services.

Research Methodology

In order to identify which research methods would be followed in this research, the concept of research onion is followed here. Following the research onion, this research has followed positivism research philosophy, deductive approach, quantitative strategy, mono-method, cross-sectional time-horizon and primary data collection method.

While collecting primary data, the probability-sampling method is followed here. Normally, in research two types of sampling methods can be used such as probability sampling and non-probability sampling. In probability sampling, every individual from a particular population has the chance of being selected in a research work. On the other hand, in non-probability sampling, research picks individuals who are then questioned to acquire relevant data. This research has followed a stratified probability sampling method. First of all, the population is divided into two areas; people who are Amazon consumers and people who are not Amazon consumers. From the population who buy from Amazon, randomly one hundred individuals are selected.

As this research has followed the primary data collection method, ethics played a very important role in it. To maintain ethics, this research has followed The Data Protection Act 2018. Following this act, it is ensured that names, contact details and other personal information of the participants are kept classified and will not be shared with any third-party organization in any condition.

The participants were selected randomly and they were given full liberty to quit their participation at any point in time. They were not forced to take part in the research. Research questions did not include any personal questions and it was tried that questions are related to Amazon's social media marketing strategy. Some personal questions are asked such as income level however, participants were given full liberty to skip the question if they wanted to do so.

Fortunately, all the participants took their time and completed the questionnaire. As a result, this research got one hundred completed responses from the participants. This research work will only be used for academic purposes. Before publishing the research, consent will be acquired from all the participants who took part here.

How Social Media Marketing increasing sales of Amazon India'

TABLE I. Demographic Information

Demographic Information			
Gender	Male	45	100
	Female	55	100
Age	18-25 years	39	100
	26-30 years	20	100
	31-35 years	30	100
	Over 35 years	11	100
Income Rate (Monthly)	Below INR 10,000	14	100
	10,000-25,000	35	100
	25,000-50,000	40	100
	Over 50,000	11	100

From the table-1 above, it can be seen that most of the participants (55) are male while 45 are female. On the other hand, the highest numbers (39) of participants are young Indians; aged 18-25, and the next higher numbers of participants are from the age group of 31-35 years old. Only 11 participants are from the age group of 35+ where the rest of the 20 are from the age group of 26-30. In terms of income rate, most of the participants (40) are from the income rate INR25, 000-50,000. Next higher numbers of participants are from the income rate of 10,000-25,000. Only 11 are from the income rate of over 50,000 and only 14 are from income rate of Below INR 10,000. It shows, quite a diverse group of participants took part in this research. It is good for the research as a diverse group of participants means a diverse type of response, which would help this research to reach to a proper and expected solution. Graphical representation of the demographic data is shown in Appendix 1, 2 and 3.

TABLE II. Amazon's Social Media Marketing and Relevant Response from Participants

Amazon's Social Media Marketing and Relevant Response from Participants			
How long you are shopping from Amazon.	Less than one year	12	100
	1-2 Years	24	100
	2-5 years	48	100
	Over 5 years	16	100
What motivates you to buy from Amazon?	Social media	68	100
	Traditional media	12	100
	Word of Mouth	5	100
	SEO	5	100
	Others	10	100
Which social media of Amazon do you	Facebook	18	100
	Instagram	22	100

follow the most.	Twitter	32	100
	Pinterest	18	100
	YouTube	5	100
	Others	5	100
What do you like the most in Amazon's social media promotions/campaigns	Sale Day Promotions	12	100
	Topical Promotions	18	100
	Highlighting Amazon Stories	10	100
	Prime Day Promotion	15	100
	Women Empowerment (Amazon HandMade)	20	100
	Engaging with followers through contests by using different accounts	20	100
	Emotional content such as #MomBeAGirlAgain	15	100
Do you believe that the different social media activities of Amazon motivate you to visit the site and buy something every time you visit it; compared to other marketing channels?	Strongly Agree	56	100
	Agree	34	100
	Disagree	2	100
	Strongly disagree	8	100

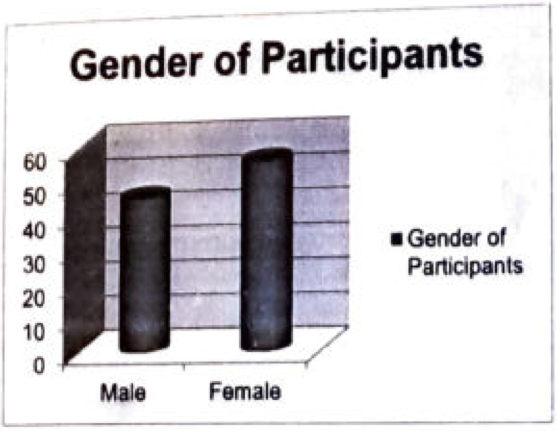


Figure 8: Gender of participants

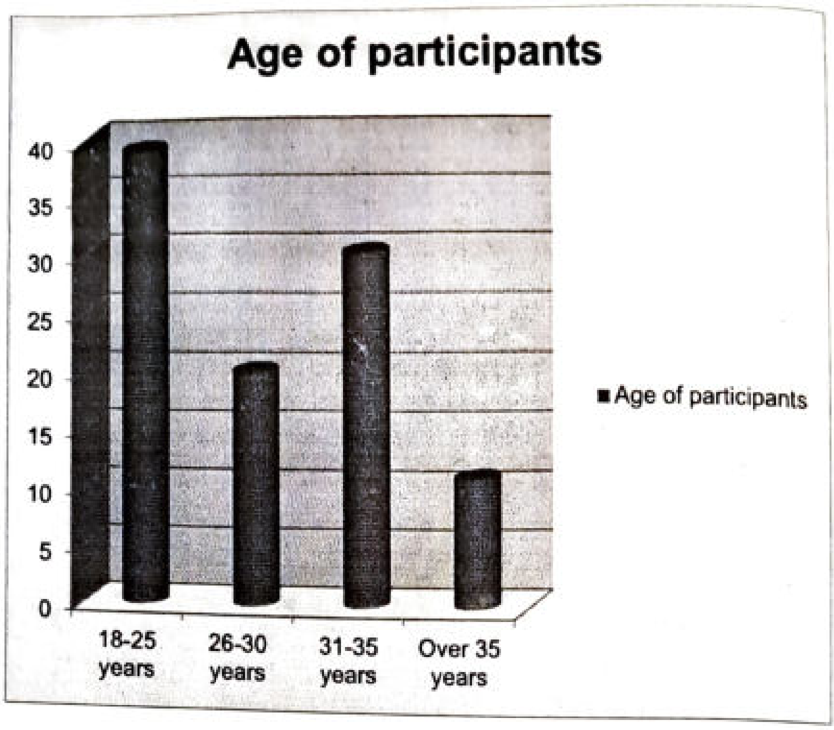


Figure 9: Age of participants

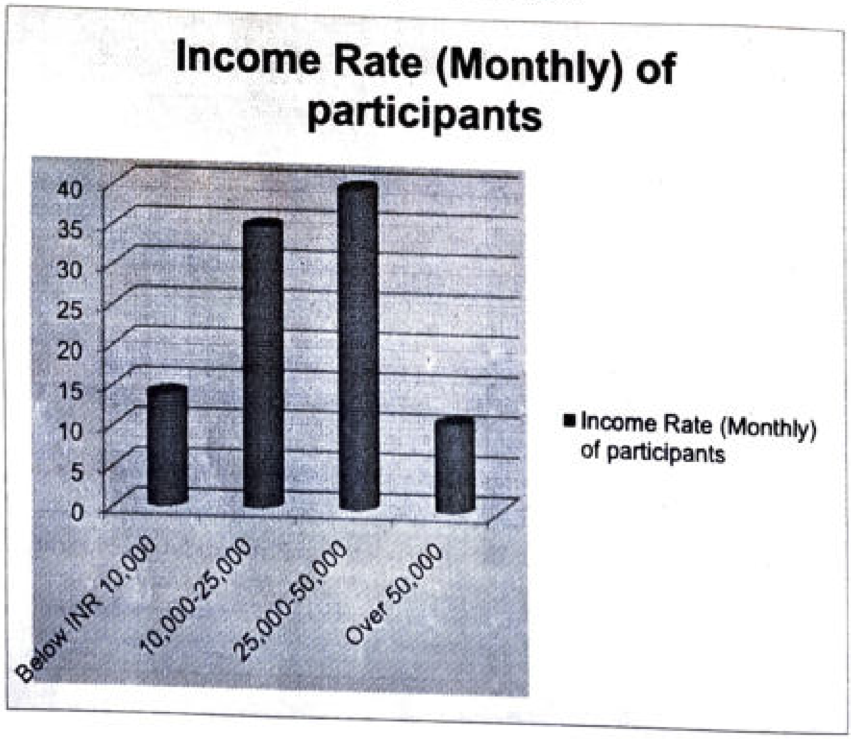


Figure 10: Income Rate (Monthly) of participants

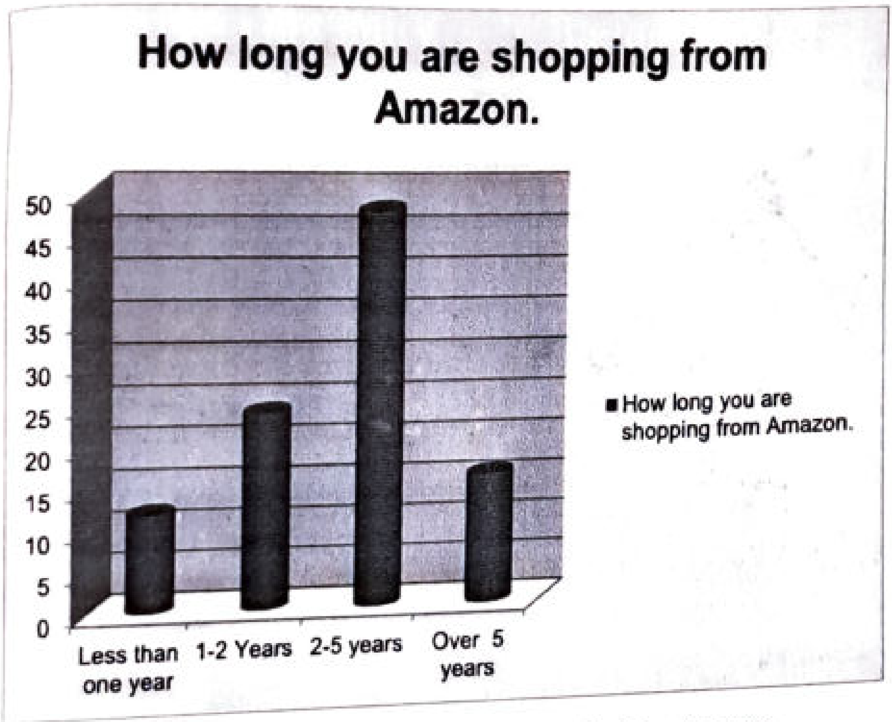


Figure 11: How long you are shopping from Amazon.

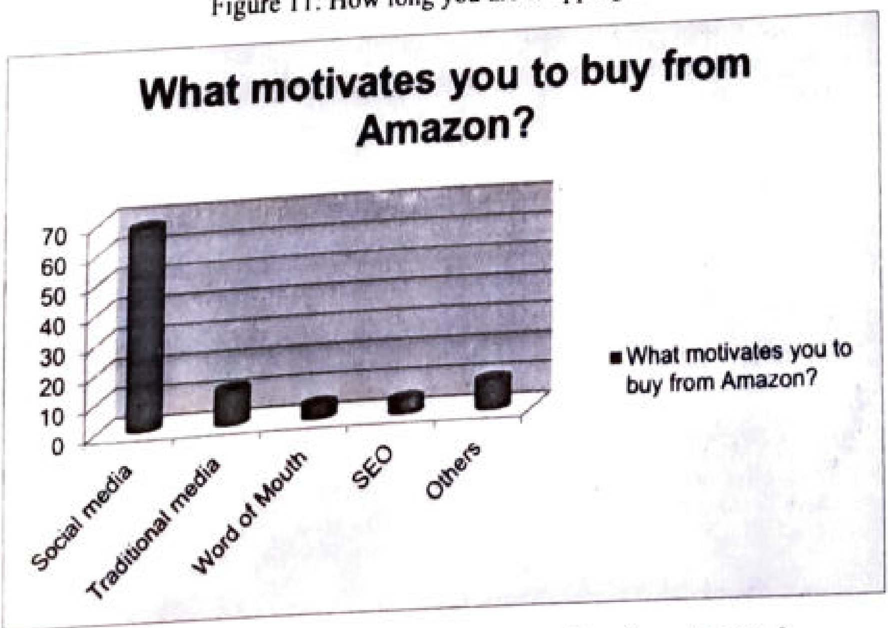


Figure 12: What motivates you to buy from Amazon?

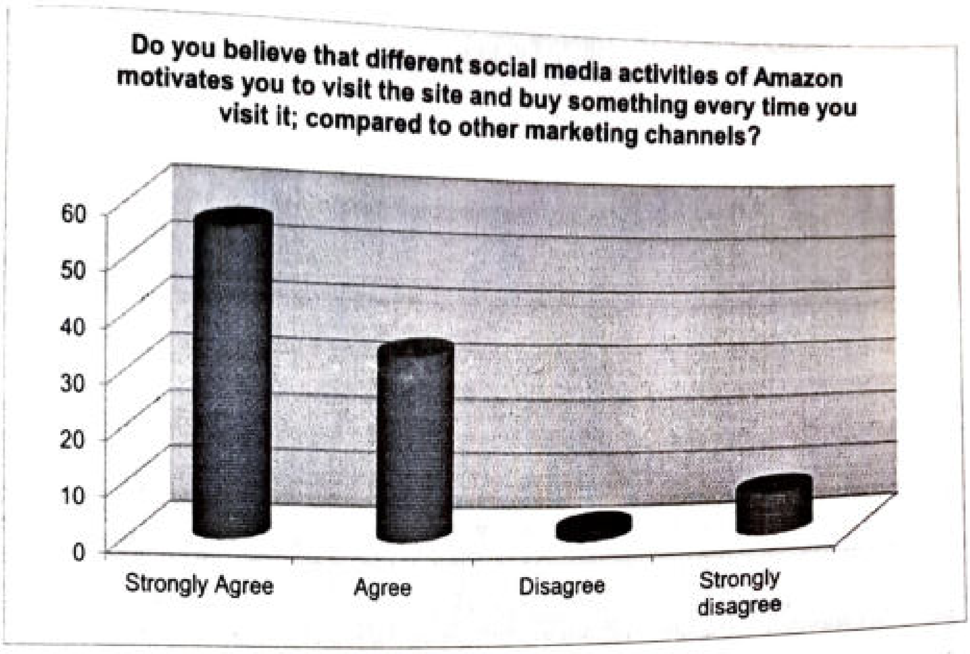


Figure 15: Different social media activities of Amazon motivate you to visit the site and buy something every time you visit it; compared to other marketing channels.

It is quite satisfying to find that most of the participants (48) are buying from Amazon for 2-5 years, as they along with 16 participants (buying from Amazon for over 5 years) will be able to provide in-depth information about how social media strategy of Amazon has encouraged this long time to buy from it. While answering what motivated participants to buy from Amazon, it was not surprising to see that 68 participants stated that social media sites have motivated them to buy from Amazon. Traditional media got only 12 votes while SEO and word of mouth got 5 votes. From this data, it is clear why Amazon invests heavily in social media marketing. Now, most importantly, it is found that 18 participants follow Amazon on Facebook, 22 follow Amazon on Instagram, 32 follow it on Twitter (Fulfills research objective 2) and 1 follow it on Pinterest. Only 5 follow it on YouTube and 5 follow it on other platforms; maybe Snapchat. Almost equal numbers of participants among 100 are following Amazon in any one of the most popular social media platforms, which makes it easier for the organization to engage with them through different contents and information. Now, when asked what they like about Amazon's social media promotions most of them talked about women empowerment and engaging with followers (Fulfills research objective 3). Women empowerment has suddenly become a major concept in different industries in India as the Indian Government through different policies is also promoting women empowerment. Therefore, according to 20 participants, whenever they see content shared by Amazon that includes something related to women empowerment, they visit the organization. On the other hand, today, most of the Indian online consumers are millennials or Gen Z. These people love to buy from companies that communicate with them frequently and hear their voices, demands, complaints and suggestions. As a result, 20 participants stated that they buy from Amazon as the organization engages with them frequently, which is Amazon's Twitter activity. On the other hand, 15 participants talked about Prime Day Promotion and 15 talked about emotional content. Besides, 18 participants talked about topical promotions as during those periods they get to buy customized and different products from Amazon. Only 12 talked about sale day promotion and 10 talked about highlighting Amazon stories. Now, the answers to the last question clearly show that 90 participants either strongly agreed or just agreed that compared to traditional media they are redirected to Amazon's site more by social media campaigns and these campaigns also motivate them to buy something from the organization. Therefore, it is clear that social media marketing is increasing website traffic to Amazon and its motivating consumers to buy from the organization, which is increasing its profits that in turn increasing its organizational performance. Graphical representations of these questions are displayed in Appendix.

Analysis

Overall, from the above table, it is found that participants are closely following social media posts and promotions of Amazon India on different social media channels. The participants also agreed that some of the particular social media promotions and activities encourage them to buy from the organization. It definitely increases the sales and revenue of the organization. Therefore, it is proved that the social media platforms of Amazon India are attracting consumers to its website and are encouraging them to buy from the organization. Therefore, social media marketing is having a positive impact on the organizational performance of Amazon, which is financial growth/profitability.

Conclusion

In the end, it can be concluded that participants, who are the consumers of Amazon are directly connected with the organization through different social media platforms such as Facebook, Instagram, Twitter and others. Now, Amazon uses these social media platforms for different reasons such as for engaging with consumers, promote products and campaigns, empowering women and sharing special discount offers. As the consumers of Amazon are deeply connected with the organization through these social media platforms, they see those promotions and go to the Amazon e-commerce. It automatically increases the website traffic of the organization and when website traffic increases chances of sales are also increased (Fulfills objective 4). Therefore, through the social media channels of Amazon, the organization is indirectly increasing sales and revenue which is increasing its organizational performance in India.

Future Scope of the Research

The biggest limitation of the research is to follow quantitative data only. The chances are high that the data was biased and information provided by the participants are influenced by their friends or family members. To eliminate this, it was required to conduct interviews with some managers of Amazon or it was required to conduct the research with more participants such as five hundred or thousand. Besides, due to lack of word count, it was also not possible to analyze the data in a detailed manner. In the future, all these research limitations can be eliminated by collecting data from more participants and conducting interviews with managers of the organization.

References

1. Κασσινού, O.X., Social media marketing and organizational performance, (2019).
2. Parveen, F., Jaafar, N.I. and Ainin, S., Social media usage and organizational performance: Re()flections of Malaysian social media managers. *Telematics and informatics*, *32*, 67(2015).
3. Parveen, F., Jaafar, N.I. and Ainin, S., *Management Decision*, 5, 20(2016).
4. Jue, A.L., Marr, J.A. and Kassotakis, M.E., *Social media at work: How networking tools propel organizational performance*. John Wiley & Sons, p. 20, London(2009).
5. Garcia-Morales, V.J., Martin-Rojas, R. and Lardón-López, M.E., *Baltic Journal of Management*, 10, 52(2018).
6. Icha, O., *J Internet Bank Commer*, 2, 2(2015).
7. Aral, S., Dellarocas, C. and Godes, D., *Information systems research*, *24*, 3(2013).
8. Ahmad, S.Z., Bakar, A.R.A. and Ahmad, N., *International Journal of Entrepreneurial Behavior & Research*, 8, 65(2019).
9. Shastri, A., *Marketing Strategy of Amazon - A Case, 9, 20*(2021). https://iide.co/case-studies/amazon-marketing-strategy/.

Scopus Indexed

3.2.1

ECS Transactions

The Electrochemical Society

ISSN - 1938-5862

Impact of Transformational Leadership on Organizational Performance Through Employee Motivation

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA. D.K. - 574 327

ECS Transactions, 107 (1) 12873-12886 (2022)
10.1149/10701.12873ecst ©The Electrochemical Society

Impact of Transformational Leadership on Organizational Performance Through Employee Motivation

Korakod Tongkachok [a], Shaifali Garg [b], B.Sakthimala [c], Vijayalakshmi N.S [d]

[a] Faculty of Law, Thaksin University, Thailand, tokorakod@tsu.ac.th
[b] Institute of business management, GLA University, shefali.garg@gla.ac.in
[c] Department of Business Administration, Marudhar Kesari Jain College for Women, Vaniyambadi, sakthi.lbk@gmail.com
[d] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com

In order to find out how transformational leadership can increase organizational performance through employee motivation, this research focused on one of the well-renowned transformational leaders called as Jeff Bezos. From secondary data, it was found that Jeff Bezos is responsible for implementation of several programs AWS Grow Our Own Talent, Surge2IT, UXDR Apprenticeship Program and Amazon Technical Academy. These programs are the reasons that employees are motivated and are performing beyond expectation. From primary data it was found that employees love the way Jezz allows them to take part in decision making program and to follow innovation ways of working. After than when the financial performance of the organization for past 5 years is analyzed, only growth is found. It means, these programs are motivating employees, motivating employees are performing better and it is increasing organizational performance.
Keywords: Transformational leader, employees, organizational performance.

Introduction

There is no doubt that leaders play a major in success or failure of an organization (1). For example, where leaders like Steve Jobs or Mark Zuckerberg ensured success of Apple and Facebook, leaders like Martin Winterkorn caused failure of Volkswagen through the famous "Cheating Emission" Scandal. It shows good leadership can trigger success where poor leadership can affect organizational success. However, a debate is there always that raises questions regarding which is the best leadership style for organizational success (2). There are different types of leadership styles such as autocratic leadership, democratic leadership, transformational leadership, laissez-faire leadership, transactional leadership, and participative leadership style (4). Time to time different authors have supported and vouched for different leadership styles for improved organizational performance. For example, it is stated that autocratic leadership is useful in small companies. On the other hand, democratic leadership is considered as useful as it can collect valuable insights from employees at the time of decision-making (5). Transactional leadership is proved useful in creating a fair and highly productive workplace. However, the purpose of this research is to focus on transformational leadership. Similar to other leadership styles, there are research works that have focused on transformational leadership and how it improves organizational performance.

However, a major catalyst or variable is ignored that is employee motivation. Almost none of the research works focused on how these leadership styles including transformational leadership improves employee motivation while enhancing organizational performance. In today's business world where consumer preferences and buying behavior and changing frequently, business organizations are also required to change accordingly and transformational leadership is the only leadership style that supports and motivates change (6). Now, the question is how while motivating changes transformational leaders motivate employees that further improve employee performance and organizational performance. Due to lack of answer to this question, this research paper decided to eliminate this research gap by collecting information about how Jeff Bezos, one of the most renowned transformational leaders is motivating employees. Further, this research paper will identify how that employee motivation is influencing performance of Amazon by collecting their reviews about their work experience in Amazon.

Based on the above discussion and present literature gap this research has focused on the below research objectives.

- To find out last five year's organizational performance of Amazon
- To find out how Jeff Bezos follows transformational leadership
- To analyze how transformational leadership of Jeff Bezos is triggering employee motivation
- To identify how employee motivation is playing a mediator role between transformational leadership of Jeff Bezos and Amazon's organizational performance

Concept of Transformational Leadership

Transformational leadership is considered as a theory of leadership where a leader works with different teams or subordinates to facilitate change through influence, inspiration and executing the change in tandem with committed employees of a group. James Macgregor Burns first introduced the concept of transformational leadership in 1978 in his book called "Leadership." He defined transformational leadership as a "method through which leaders and their subordinates raise one another to higher levels of morality and motivation" (7). The concept of transformational leadership stands on four components such as idealize influence, inspirational motivation, individualized consideration and intellectual stimulation.

In terms of idealized influence, it means transformational leaders act as role models for their subordinates. This also states that leaders "walk the talk" that triggers admiration among the subordinates for that leader (8). According to this concept, a transformational leader injects the qualities that he/she wants in his/her subordinates. This concept helps leaders to become trustworthy to their subordinates.

The second component connected to transformational leadership is inspirational motivation through which transformational leaders motivates their subordinates through their unique vision. Idealized influence and inspirational motivation are responsible for increasing productivity of the transformational leaders. Under this concept, the role of a transformational leader is to convince their followers with simple and easy-to-understand words.

Under individualized consideration, transformational leaders demonstrate authentic concern for the requirements and feeling of subordinates. By providing personal attention to the followers, transformational leaders acquire trust from their subordinates (9). For example, transformational leaders identify issues of a particular team member while working in a group. Based on that issue, that team member is then provided with training by that transformational leader to improve that team member's skills and competences. In this manner, that team member starts trusting that transformational leader.

The fourth component of transformational leadership is intellectual stimulation. Through this component, transformational leaders challenge their subordinates to think in a creative and innovative manner (10). Transformational leaders motivate their followers to challenge the status quo. Some criticize transformational leaders, as they are soft however; the fact is this type of leaders constantly challenges their subordinates to perform at a higher level.

If Big Five Personality test is considered, then it can be found that transformational leaders include traits such as extraversion, openness, agreeableness and conscientiousness.

Concept of Organizational Performance

If the concept of organizational performance is considered, then existing literature divides it into areas such as financial performance, product market performance and shareholder return. However, there are arguments regarding this. Along with all these organizational performance criteria, concepts such as social performance are also considered in terms of organizational performance.

However, sometimes, performance of an organization completely considered based on whether that organization is able to make profits or not. If an organization is not making profits and is not generating revenues then it is considered that the organization is not accomplishing positive performance. For this particular research paper, Focus is mostly given on financial performance of Amazon while analyzing its overall performance. Financial performance of Amazon's last five year is considered in this research paper.

Concept of Employee Motivation

Employee motivation simply means the enthusiasm, commitment and creativity that employees ring to the organization regularly while performing their daily activities. The word motivation is derived from the Latin word "movere" which means movement (11). Employee motivation can be categorized into two areas that are intrinsic motivation and extrinsic motivation.

Intrinsic motivation means an individual is being motivated from within. It means an employee due to his/her personal beliefs, honor and desire to become successful performs in a motivated manner. Extrinsic motivation means an employee is motivated by external factors such as incentives, bonus, promotion, rewards and other rewards. There are different theories and models regarding employee motivation such as Maslow's Hierarchy of Needs.

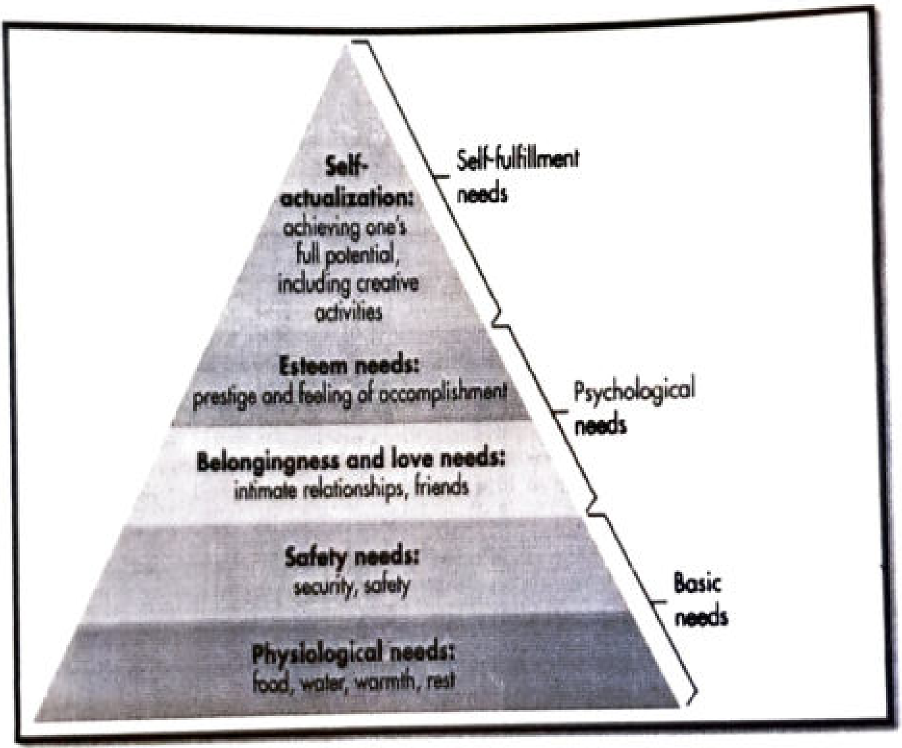


Figure 1: Maslow's Hierarchy of Needs (11)

Figure above displays diagram of Maslow's Hierarchy of Needs that includes five components such as self-actualization, esteem needs, belongingness and love need, safety needs and physiological needs. Physiological needs are considered as biological requirement of employees that include but not limited to things that they need for survival such as food, drink, shelter, clothing and sleep (12). Once physiological needs are fulfilled then employees opt for safety needs such as emotional security, financial security and job security. When physiological needs and safety needs are fulfilled, employees look for love and belongingness need in a workplace. In a workplace, if teamwork is promoted and factors such as friendship, intimacy, trust and acceptance are there then belongingness and love need of employees and fulfilled (13). Esteem needs of employees include dignity, accomplishment, independence and desire for reputation of respect from colleagues. Last but not the least; self-actualization needs include an employee's needs connected to personal growth and higher level of working experience (14). If all these needs are fulfilled then an employee feels motivated while working in an organization.

Research Method

Mostly, this research collected secondary data from journals, articles, books and websites to fulfill first three objectives. However, fulfill the fourth objective, this research collected primary data from 65 random employees of Amazon. However, 15 incomplete responses were found and therefore, 50 complete responses were considered in this research work. While collecting primary data this research followed random sampling method and followed Data Protection Act 2018.

Impact of transformational leadership on organizational performance through employee motivation

Transformational leadership of Jeff Bezos

According to (7) some common principles of transformational leadership are simplification, motivation, facilitation, innovation, mobilization, preparation and determination.

If Jeff Bezos is considered in terms of motivation, he always works hard to get people on-board. He always provides personal attention to the employees and love to create personalized solution to employee problems which is similar to individualized consideration component of transformational leadership. Jeff Bezos implemented a unique vision in the workplace called as "work hard, have fun and make history." This vision is injected in every employee organization and Jeff Bezos himself follow this motto to motivate his employees to do the same. It shows Jeff Bezos also follows idealized influence.

In terms of facilitation, Jeff Bezos strongly focuses on training and development of its employees. For example, Jeff Bezos has decided to invest $1.2bn by the year of 2025 to train more than 300,000 of its U.S employees. This plan is called as up-skilling 2025. Besides, the organization under the command of Jeff Bezos is also providing full college tuition fees for frontline employees.

If mobilization is considered then it can be stated that transformational leaders empower other leaders and subordinates when facing turmoil situations. Jeff Bezos strongly trusts his subordinate called Jeff Wilke who is famous on Amazon for his cerebral and impatient management style. In this manner, Jeff Bezos is putting his trust on these subordinates, which is helping those employees to put their trust on Jeff. Not only that, Jeff is also continuously challenging those subordinates to perform their tasks in a creative manner that is similar to intellectual stimulation component of transformational leadership.

If Innovation is considered then it is Jeff Bezos that ensured that Amazon could present itself as a highly innovative organization in the industries where it operates. Amazon Prime, Prime Now, Prime Air, One-Click Purchase, Alexa and Kindle are only some examples of innovation that Jeff Bezos instilled in the organization. Through these innovative ideas, Jeff complete changed Amazon's performance and activities; connected with changing consumer trends. In this manner, Jeff Bezos connected mission, vision and goals of the organization with consumer trends and preferences. This entire analysis fulfills the second objective developed in introduction, "To find out how Jeff Bezos follows transformational leadership."

Employee Motivation in Amazon

One of the biggest strategies through which Amazon motivates its employees is its Amazon Career Choice Option. Through this option, the organization is paying 95% of up to $12,000 tuition fees of its employees (15). It is only allowing employees to learn new skills but is also helping them to secure their job and acquiring career growth in Amazon. Besides, Amazon is also investing in courses such as aircraft mechanics, computer-aid design, machine tool technologies and medical lab technologies of its employees. Then there is Amazon Upskilling Program that is already mentioned above. As part of Upskilling 2025, Amazon continues to launch new training opportunities and expand on existing programs for employees across the U.S., including (15), AWS Grow Our Own Talent: It provides on-job-training and placement chances to Amazon workers with non-traditional backgrounds (15).

Surge2IT: It is developed to provide assistance to entry level IT workers across the organization's operation network. It helps those employees to opt for higher-paying technical roles in the organization (15).

UXDR Apprenticeship Program: This program includes instructor-led training and practical experience throughout one year (15). This training program is responsible for offering employees the chance to learn and establish new skills on different teams across Amazon that include Prime Video, Alexa, AWS and Amazon Fashion.

Amazon Technical Academy: It is simply a training and job-placement program, which allows non-technical employees of the organization to learn technical skills and competencies (15). Through this, Amazon employees from non-technical background can thrive in software engineering careers.

These training programs allow Amazon employees to acquire job security that is relevant to security needs of Maslow's Hierarchy of needs; that in turn is motivating employees to work for Amazon (15). Jeff Bezos develops all these programs with the help of its subordinates and different stakeholders. Therefore, through these programs, Jeff Bezos is triggering employee motivation in Amazon.

Along with these programs, Amazon is providing $15 per hour wage, which is double the national minimum wage (15). Amazon is also allowing its employees to buy Amazon stock through financial counseling and estate planning services. The higher amount of wage is fulfilling physiological needs of the employees. Then there is Amazon Care that is 24/ medical service for Amazon employees (15). It is a virtual clinic, through which employees can get nurses to visit them in their home for taking care of them or their family members. Then there is Childcare program through which Amazon employees have access to two million caregivers. Amazon also offers twenty weeks of parental leave to birth mothers and six weeks for parents who adopt.

Through these programs that are the brainchild of transformational leader, Amazon is trying to motivate its employees.

Last Five Year's Financial Performance of Amazon

In 2020, Amazon made a profit of $26.9bn, which is considered as higher than past 3 years.

In the year of 2019, Amazon made a profit of $24.7bn. This was due to the fact that its net sales increased by 44% and reached to $108bn.

In the year of 2018, the profit of Amazon was $22.6bn, which was up by 35% from the previous year, which means, in 2017 the organization made profit of $16.36bn (17).

In the year of 2016, Amazon's revenue was $136bn and its net income increased by almost 300% (16).

Therefore, it can be seen that year by year, Amazon has only made increased profits since the past 5 years. Therefore, a relationship can be developed that states Amazon is continuously improving its performance due to the fact that its employees' performance is improving regularly as they are feeling motivated because of different strategies of Amazon. It fulfills the objective that higher motivation of Amazon's employees is increasing its performance. Now, whether transformational leadership is responsible for employee motivation in Amazon or not; primary data is collected and displayed below.

TABLE I. Impact of transformational leadership on Amazon's financial performance via employee motivation

Questions	Options	Responses	Total number of employees
What is your age?	18-20	8	50
	21-25	12	50
	26-35	15	50
	Over 35	15	50

What is our gender?	Male	34	50
	Female	16	50
How Long are You working in Amazon?	Less than one year	17	50
	1-5 years	23	50
	6-10 years	5	50
	Over 10 years	5	50
Are you familiar with the concept of transformational leadership?	Yes	49	50
	No	1	50
Do you think Jeff Bezos follows transformational leadership?	Yes	46	50
	No	2	50
	May Be	2	50
Do you think transformational leadership is motivating you to perform better in Amazon?	Yes	39	50
	No	2	50
	May Be	9	50
What parts of Jeff Bezon's transformational leadership is motivating you?	Focusing on employee training and development	8	50
	Motivating employees to think and act innovatively	8	50
	Bringing regular changes in employee benefits	9	50
	Leading through unique vision	11	50
	Allowing and motivating employee participation in decision making	14	50

Graphical representations of the answers of the participants that are showcased in the table above are shown through appendix 1, appendix 2, appendix 3, appendix 4, appendix 5, appendix 6 and appendix 7. If the most important questions are analyzed then it can be found that most of the participants are familiar with transformational leadership style and most of the believe that Jeff follow this leadership style. Most importantly, 39 participants stated that leadership style of Jeff is motivating them to perform in a better manner. It fulfills another objective "To identify how employee motivation is playing a mediator role between transformational leadership of Jeff Bezos and Amazon's organizational performance" as participants are being motivated by Jeff's transformational leadership style which is improving their performance. Therefore, it can be concluded that employee motivation, through transformational leadership is improving employee performance, which is automatically increased organizational performance of Amazon. Most of the participants (11 and 11) like how Jeff leads through vision and how he motivates employees to take part in decision-making process.

Conclusion

In the end, it can be concluded that transformational leadership style of Jeff Bezos is triggering employee motivation in Amazon, the leading online retailer around the world. Now, those motivated employees are working harder and working to improve their performance on a daily basis. This improved performance of the employees is helping Amazon to increase its profitability and revenue generation from past 5 years. While other retailers are struggling to maintain profit, though mediating role of employee motivation, Jeff Bezos through his transformational leadership is ensuring higher profits for Amazon.

Future scope of the research

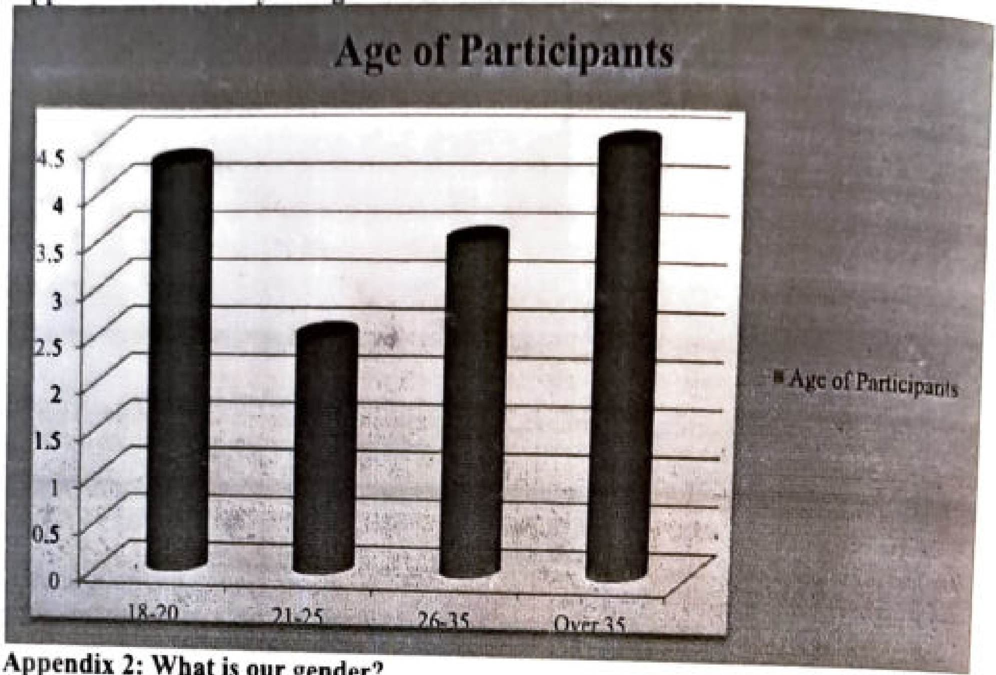
Due to lack of time and word count, it was possible to collect data from only 50 completed responses. Considering the topic, it was required to collect at least 500 responses. It was also required to collect qualitative data through conducting interviews with Jeff Bezos. Therefore, in the future, this research can be conducted again by eliminating these limitations.

References

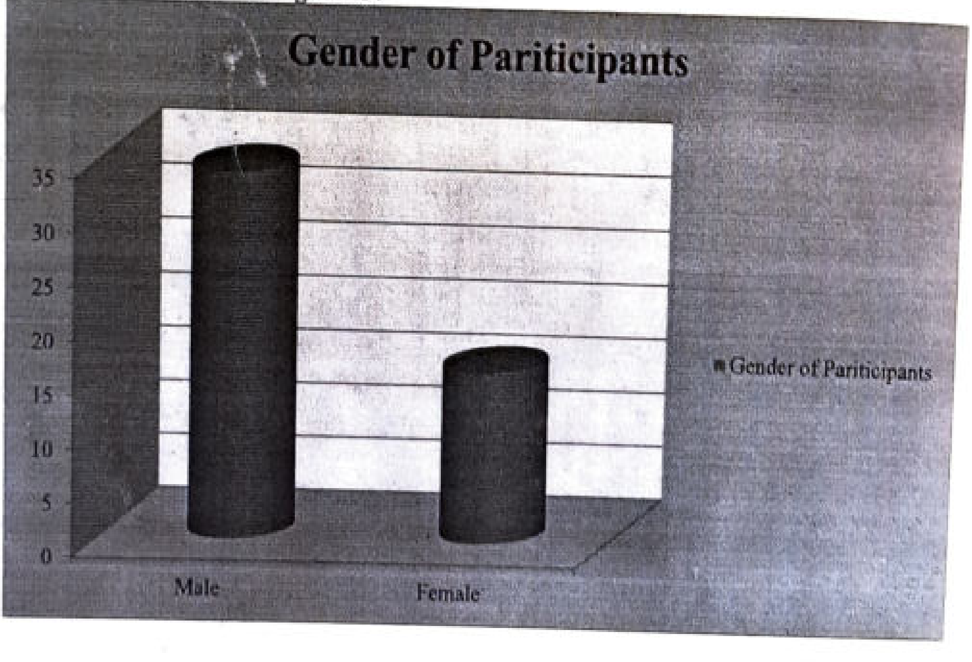
1. Schneider, K.T., Wesselmann, E.D. and DeSouza, E.R., Confronting subtle workplace mistreatment: The importance of leaders as allies. *Frontiers in Psychology*, *8*, p.1051, (2017).
2. Caldwell, C., Lakota virtues and leadership principles: insights and applications for ethical leaders. *Journal of Management Development*, (2017).
3. Hickman, L. and Akdere, M., Effective leadership development in information technology: Building transformational and emergent leaders. *Industrial and Commercial Training*, (2018).
4. Chestnut, B., *The 9 types of leadership: mastering the art of people in the 21st century workplace*. Simon and Schuster, (2017).
5. Kilicoglu, D., Understanding Democratic and Distributed Leadership: How Democratic Leadership of School Principals Related to Distributed Leadership in Schools?. *Educational policy analysis and strategic research*, *13*(3), pp.6-23, (2018).
6. Anderson, M., Transformational leadership in education: A review of existing literature. *International Social Science Review*, *93*(1), p.4, (2017).
7. Arthur, C.A., Bastardoz, N. and Eklund, R., Transformational leadership in sport: Current status and future directions. *Current Opinion in Psychology*, *16*, pp.78-83, (2017).

8. Hansbrough, T.K. and Schyns, B., The appeal of transformational leadership. *Journal of Leadership Studies*, *12*(3), pp.19-32, (2018).
9. Harb, B. and Sidani, D., Transformational leadership for organizational change in the Lebanese public sector. *Problems and Perspectives in Management*, *17*(2), pp.205-216, (2019).
10. Lee, Y.D. and Kuo, C.T., PRINCIPALS'TRANSFORMATIONAL LEADERSHIP AND TEACHERS'WORK MOTIVATION: EVIDENCE FROM ELEMENTARY SCHOOLS IN TAIWAN. *International Journal of Organizational Innovation*, *1*(3), (2019).
11. MADAN, S., MOVING FROM EMPLOYEE SATISFACTION TO EMPLOYEE ENGAGEMENT. *CLEAR International Journal of Research in Commerce & Management*, *8*(6), (2017).
12. Oved, O., Rethinking the place of love needs in Maslow's hierarchy of needs. *Society*, *54*(6), pp.537-538, (2017).
13. Hopper, E., Maslow's Hierarchy of Needs Explained. *ThoughtCo. ThoughtCo*, *24*, (2020).
14. Guo, J., Weng, D., Zhang, Z., Liu, Y. and Wang, Y., March. Evaluation of Maslows Hierarchy of Needs on Long-Term Use of HMDs–A Case Study of Office Environment. In *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 948-949). IEEE, (2019).
15. aboutamazon.com, *Our Upskilling 2025 programs*. [online] US About Amazon. Available at: <https://www.aboutamazon.com/news/workplace/our-upskilling-2025-programs> [Accessed 23 September 2021], (2020).
16. digitalcommerce360.com, *Amazon grows sales 27% in 2016 and is increasingly profitable*. [online] Digital Commerce 360. Available at: <https://www.digitalcommerce360.com/2017/02/02/amazon-grows-sales-27-2016-increasingly-profitable/> [Accessed 23 September 2021], (2017).
17. digitalcommerce360.com, *Amazon sales, Amazon revenue and Amazon annual profits*. [online] Digital Commerce 360. Available at: <https://www.digitalcommerce360.com/article/amazon-sales/> [Accessed 23 September 2021], (2018).

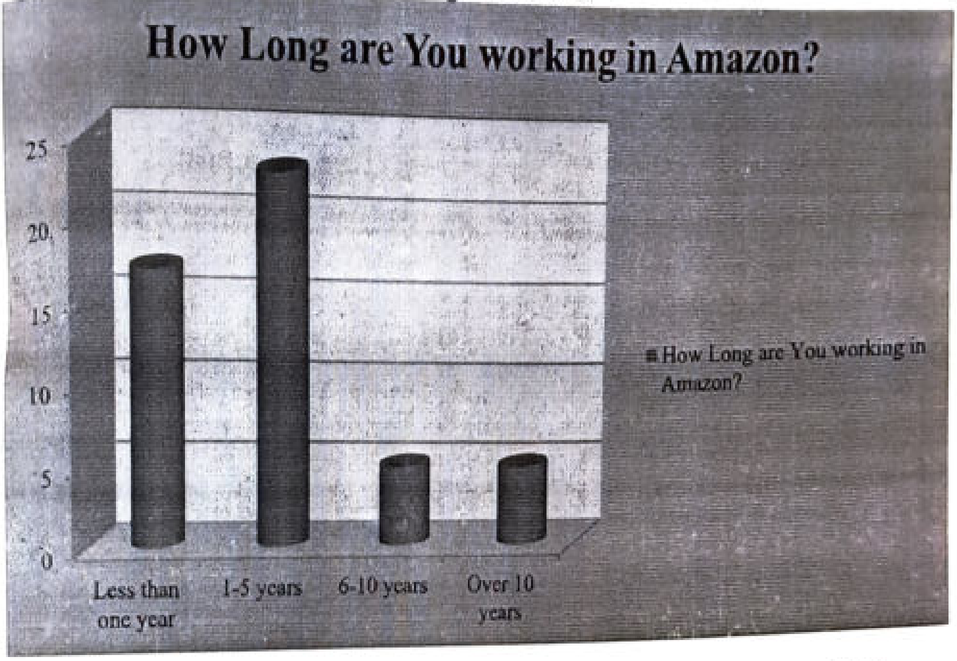
Appendix 1: What is your age?



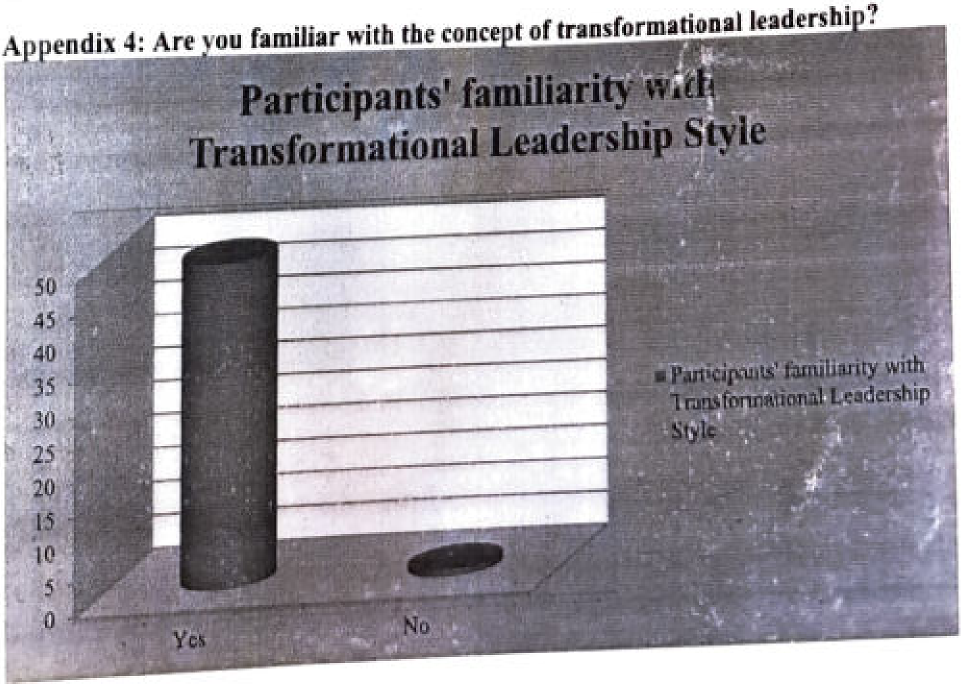
Appendix 2: What is our gender?



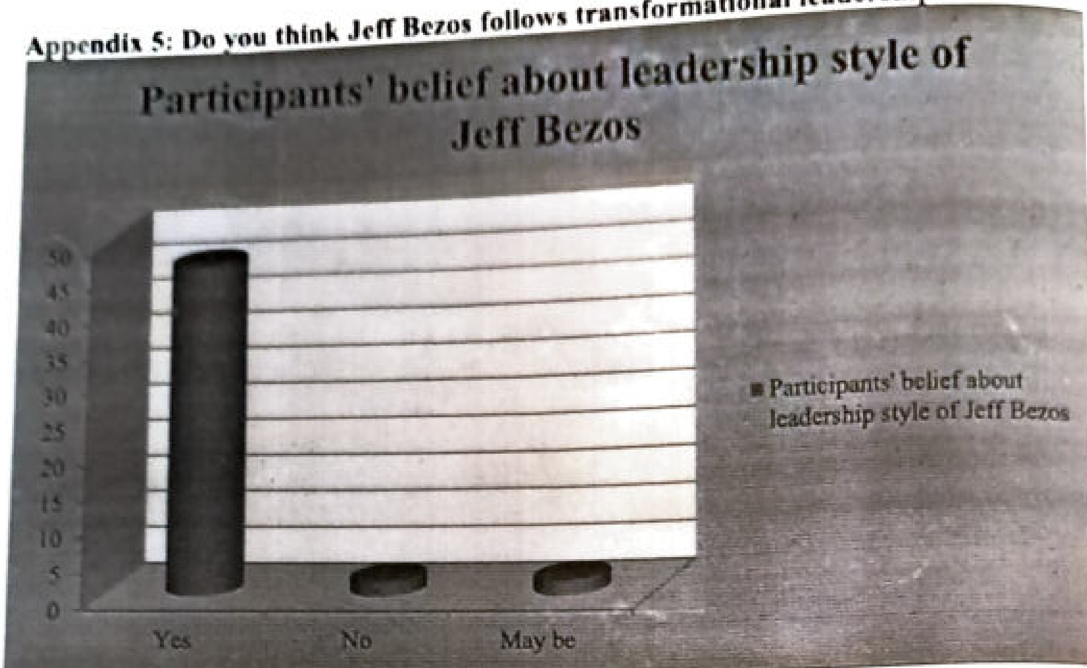
Appendix 3: How long are you working in Amazon?



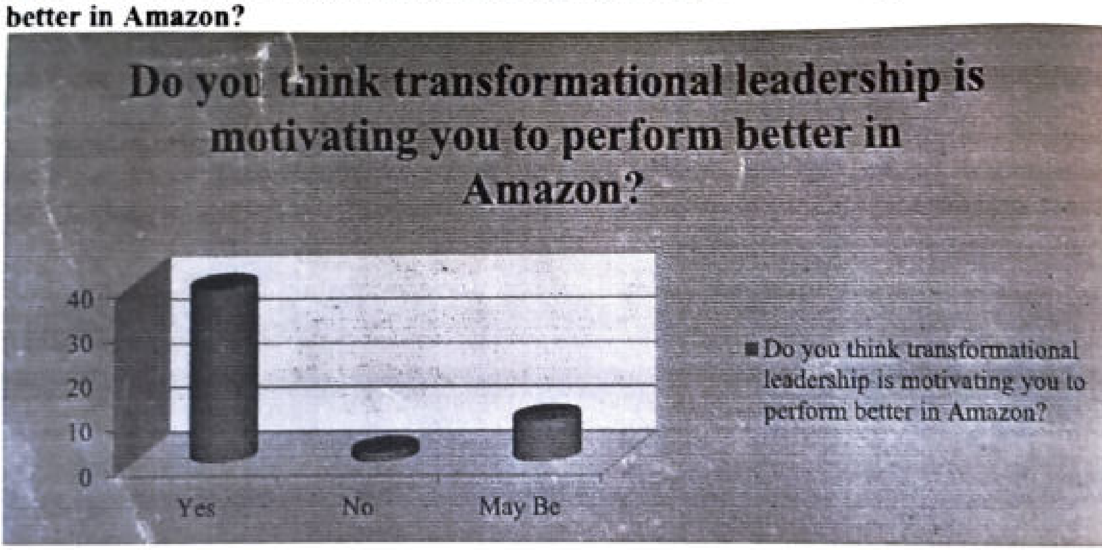
Appendix 4: Are you familiar with the concept of transformational leadership?



Appendix 5: Do you think Jeff Bezos follows transformational leadership?



Appendix 6: Do you think transformational leadership is motivating you to perform better in Amazon?



Appendix 7: **What parts of Jeff Bezon's transformational leadership is motivating you?**

3.2.1

ECS Transactions

The Electrochemical Society
Advancing solid state & electrochemical science & technology

ISSN- 1938-5862

Effect of E-Learning on the Academic Achievement of Students

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

ECS Transactions, 107 (1) 9957-9966 (2022)
10.1149/10701.9957ecst ©The Electrochemical Society

Effect of E-Learning on the Academic Achievement of Students

Keerthi Kumar N[a], Shaifali Garg[b], Vijayalakshmi N.S[c], Korakod Tongkachok[d]

[a] Department of Mechanical Engineering, BMS Institute of Technology and Management, Bangalore, keerthikumarn@bmsit.in
[b] Institute of business management, GLA University, shefali.garg@gla.ac.in
[c] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com
[d] Faculty of Law, Thaksin University, Thailand, tokorakod@tsu.ac.th

E-learning has become one of the most debated concepts in today's global education industry. While some speak in favour of e-learning, others criticize e-learning and state that it cannot cultivate better results compared to traditional learning. In today's Covid situation, e-learning has become necessary for universities around the world, this research has once again focused on this topic to identify whether e-learning can positively influence the performance of students or not. While identifying the same, three factors are selected that are technical competency, e-learning standards and e-learning infrastructure. After collecting data and information from existing empirical research works, it was found that e-learning can cultivate positive results in terms of student's performance in different universities and classes. However, it was found that for that positive performance, technical competency must be high and the standard of materials shared through e-learning must be effective enough. In terms of infrastructure, contradictory results are found as one research work stated that it is not vital for improved performance while the other stated that it is important for better academic performance. Overall, this research identified that e-learning can increase academic performance with the right tools and techniques implemented with it.

Keywords: e-learning, ICT infrastructure, information and communication technology, inductive research approach.

Introduction

Information and communication technologies, vastly known as ICTs are providing significant opportunities for online education and training. According to Suresh *et al.* (1), e-learning can facilitate collaboration and creativity for individuals and organizations. However, Rasheed *et al.* (2) raised questions that e-learning can be problematic for students as the absence of a traditional school/class alike environment can affect their concentration and learning process. On this topic, several scholars and researchers have provided different comments and judgments. Where some supported e-learning in not only schools but also in higher education studies is required for better knowledge sharing, some has strongly countered it by saying e-learning cannot provide proper education and it would further affect the performance of the students. Based on this controversy, this research intends to identify where e-learning is capable of improving the performance of the students or not.

After the spread of Covid-19, lockdowns have become a regular part of the lives of residents living in different nations across the world. In this situation, implementing e-learning has become necessary instead of a luxury. Universities and schools around the world are now forced to conduct online classes to ensure education remains uninterrupted during lockdowns (3). Even, online exams are now conducted to maintain the efficiency of the education systems around the world (4). In this situation, the argument and counterarguments related to e-learning are again triggered. Now, until now online classes or e-learning has not created any problem for the students or their parents as today's digital technologies have made it easier to connect with anyone using laptops or even smartphones. The question is whether e-learning is improving the performance of the students or not? If the answer to this question is found then even small universities in underdeveloped nations that are currently wondering whether to implement e-learning or not will be able to take the right decision regarding it. Besides, De-Marcos *et al.* (5) has presented some major challenges as he stated that the success of e-learning depends on several factors such as technical competency, the standard of e-learning service and reliable infrastructure. Therefore, this research will also identify whether the absence of these factors would actually influence the performance of the students during e-learning or not.

This research aims to discover out whether e-learning can improve the performance of students or not. While following this aim, this research will also focus on some other factors connected to e-learning such as technical competency, the standard of e-learning and reliable infrastructure.

- To identify the impact of e-learning on the performance of students
- To analyze the impact of technical competency (in e-learning) on the performance of the students
- To analyze the impact of e-learning standards on the performance of the students
- To analyze the impact of reliable infrastructure (of e-learning) on the performance of students
- What is the impact of e-learning on the performance of students?
- What is the impact of technical competency (in e-learning) on the performance of the students?
- How of e-learning standards influence the performance of the students?
- How reliable infrastructure (of e-learning) can influence the performance of students?

Structure of the Research

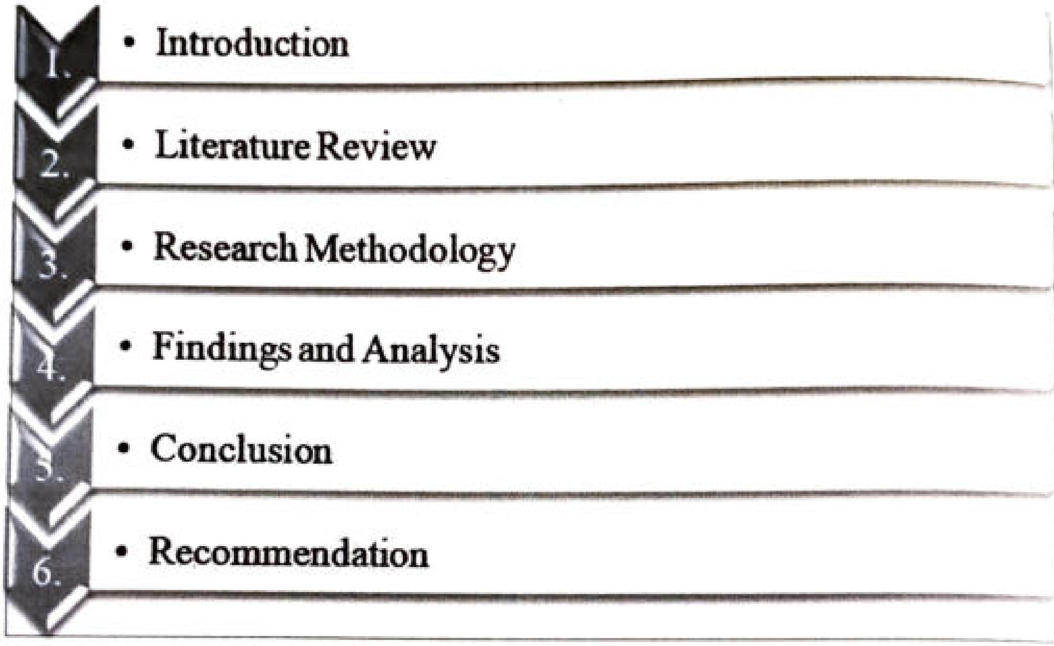


Figure 1: Research Horizons

Literature Review

Concept of e-learning

E-learning is considered as a method dependent on technology, association and supervision which bestow upon the students the capability to learn through the internet and facilitate their learning. According to Jimenez (6), e-learning utilizes telecommunications technology to acquire information to accomplish all the relevant reaching and learning objectives. On the other hand, Islam (7) has defined e-learning as the attainment of the distributed knowledge using electronic devices. Overall, e-learning means using different systems such as computers, the internet, multimedia disks, virtual newscasts, smartphones and others to provide education. It allows students to acquire education while staying at home.

When there was no internet, distance learning-related courses were offered to ensure students can acquire particular skills and competencies. For example; during the 1840s, Isaac Pitman taught his students shorthand through correspondence. In the year of 1924, a testing machine was first launched that helped students to evaluate themselves. In the year of 1954, BF Skinner who was a professor at Harvard introduced a teaching machine that allowed educational organizations to administer programmed directions to their students. The initial computer-based training system was invented during the 1960s. This was called a computer-based training program. It was also known as PLATO- Programmed logic for Automated Teaching Operations. This was introduced for the students of Illinois University, however; later several other educational organizations started to use it.

With the introduction of computers and the internet, e-learning tools and methods were evolved significantly in the late 20th century. The very first MAC that was introduced during the 1980s allowed people to acquire personal computers. It made it easier for them to learn different subjects or to acquire particular skills from their homes. During the early 1990s, numbers of educational institutes began to distribute courses online only that brought education to many people who would not beforehand have been able to be present at college due to geological issues or time constraints (8). During the 2000s, business organizations started to use the concept of e-learning to train their employees. Seeing the benefits of e-learning such as cost-effective, more fun, elimination of boundaries and zero restrictions, several well-renowned universities around the world has started to provide online studies for a student sitting in other nations or continents. E-learning can be performed using different methods and strategies. Some of those methods are hereby mentioned below.

- E-learning through face-to-face communication
- E-learning where tutor is not present or communication with tutor is not applied. This type of e-learning is known as self-learning.
- E-learning method where tutor is not physically present but is guiding the student through e-communication known as asynchronous
- E-learning process where tutor is virtually present for example through video call and communication with the student is taking place, known as synchronous
- E-learning with presence of tutor and with the presence of e-communication (known as blended/hybrid synchronous)

Impact of e-learning on the performance of the students

In terms of the impact of e-learning on the performance of students, different researchers have provided different views. For instance, according to Tan and Shao (9) e-learning minimizes the capability of the students in terms of what is being trained or delivered. They also stated that there are some significant dissimilarities between normal face-to-face learning and e-learning as face-to-face learning allows students to grasp any concept in a better manner. Similar views were presented by Kokoç and Altun (4). Through their research, they identified that online education or teaching negatively impacts on academic performance of the students. On the other hand, Aboderin (10) provided opposite views and stated that using video conferences and telecommunication services for k-12 academic students can cultivate effective results. He conducted a quantitative study and identified that in terms of outcomes, there is not much difference between e-learning activities and traditional face-to-face methods. Kumari *et al.* (11) have also argued in the favour of e-learning and stated that e-learning can have an affirmative impact on the academic performance of the students. Tawafak *et al.* (12)

identified that students who e-learn can accomplish the same level of performance equal to face-to-face teaching methods.

Despite the fact that these research works provide some valuable insight about e-learning and its impact on the performance of the students, most of these research works completely depended on the collection of secondary data. Even, most of the research works did not even consider collecting information from previous empirical studies. Besides, all these research works only focused on finding whether e-learning provides positive performance or negative performance and failed to provide reasons for that. For example, if research identifies that e-learning provides positive performance then why? On the other hand, if e-learning provides negative performance then why? These are the research gaps that must be eliminated to reach a suitable research outcome.

Barriers to e-learning

Existing literature states some major points that display that e-learning despite being a phenomenal concept is not without challenges, for example, as mentioned by Misopoulos *et al.* (13) using advanced technologies cannot guarantee expected results or benefits from e-learning. They stated that the triumph of e-learning completely depends on the motivation of the tutor and the learner or the motivation of the learner only (in terms of self-learning). However, Tawafak *et al.* (14) criticized this view and stated that learner motivation is also required in face-to-face learning as without motivation even traditional learning approaches cannot cultivate expected results. Vanitha *et al.* (15) stated that the major issue with e-learning is the absence of a classroom environment that can de-motivate learners. Barriers to e-learning are most significant in developing nations such as India. In countries like India, due to high familiarity with the traditional education environment, parents do not trust the e-learning process. On the other hand, guideline related to online courses or programs in India was developed in 2018, only three years ago. The guideline is known as UGC Regulations 2018. As a result, it is still a new format for educational organizations and students. On the other hand, to ensure uninterrupted e-learning classes, high bandwidth internet is required which is not present in most of the rural areas of India that is preventing students from rural areas to acquire the benefits of e-learning.

Research Methodology

Research Philosophy

Among different research philosophies such as positivism, realism, objectivism, constructivism, pragmatism and Interpretivism, this research has followed positivism research philosophy. Positivism research philosophy is used in research works where research questions and/or hypotheses are created to reach the desired outcome (16). On the other hand, positivism can be used in research works where existing theories or concepts can be used. In this particular research work, research questions are developed regarding e-learning. Besides, existing theories, concepts and knowledge about e-learning are enough to meet research objectives and aims developed here. That is why; it was decided to follow positivism philosophy.

Research Approach

Inductive and deductive are two types of research approaches. The inductive research approach is used in research works where the goal is to create new theories following a particular topic. On the other hand, the deductive approach that is connected to positivism helps researchers to use existing theories and concepts to meet research objectives (17). In this research, to find out the impact of e-learning on the performance of students, following and analyzing existing concepts of e-learning is enough and thus development of new theories is not required. That is why; the deductive approach is followed in this research work.

Research Strategy

Some useful and effective research strategies that can be used in research work are experiment, survey, case study, action research, grounded theory, ethnography and archival research. This research has followed the archival method due to lack of time and Covid.

Research choice

Three types of research choices are mono-method, mixed-method and multi-method. The mixed-method means collecting both qualitative and quantitative data to meet research aims and objectives. In the mono method, either quantitative or qualitative data is acquired. In the multi-method, both qualitative and quantitative data is collected however, a researcher only focuses on only one type of data for analysis purposes. This research has followed qualitative data as statistics and findings from other empirical research works are collected to meet the objectives developed above.

Time-horizons

Cross-sectional and longitudinal are two-time horizon methods. In a cross-sectional time, horizon, it is possible to collect both qualitative data and quantitative data. This method mainly assists a researcher to observe and analyze the attitudes of a group of people. On the other hand, the longitudinal method helps a researcher to use the qualitative method and quantitative method to analyze events and behavior for a longer amount of time.

This research has followed a cross-sectional time horizon. First of all, due to lack of time, it was not possible to research for a long time. On the other hand, through the cross-sectional method, it was possible to analyze the behavior of the students in terms of using e-learning methods.

Techniques and procedures

This research has followed the secondary data collection method instead of the primary data collection process. For a better collection of reliable data, conducting primary analysis was necessary. However, due to Covid, it was not possible to conduct face-to-face interviews. Due to a lack of time and expertise, it was not possible to create a questionnaire to collect quantitative data from a large sample size. In terms of secondary data,

Analysis and Discussion

Impact of technical competency, e-learning standards and reliable infrastructure:

Franklin and Nahari (18) conducted an empirical study in the King Khalid University that is a famous public university located in Abha, Saudi Arabia. This research intended to find out how e-learning can boost the academic purpose of the students of the King Khalid University. While performing empirical research, data was collected from 163 respondents. A total of 8 hypotheses were developed in this research work where the focus was given on factors such as technical skill, real-time lecture, recorded lecture, collaborative methods, online support, quality standards, reliable infrastructure and acceptance for online teaching and their impact on academic performance (19). The collected data were analyzed in three steps. In the first step, exploratory factor analysis was performed to assess the variability of the items. The second step included the evaluation of the reliability of the data using Cronbach's alpha. In the third step, structural equation modeling was performed using AMOS and the maximum likelihood was selected as a process of parameter estimation (19). After analyzing the collected data, hypotheses 1, 2, 3, 4 and 9 were rejected. However, hypotheses such as acceptance for online teaching and technical competence were accepted. It means the research shows that acceptance of students or their parents in terms of online teaching and technical competency of the teachers and the students influence academic performance. From the literature review, it was found that in developing nations like India, online teaching or e-learning is a new concept and therefore, acceptance is low. Besides, as it is a comparatively new concept, tutors aged above 50 who are not good at handling advanced technologies are not completely competent in handling technologies needed for e-learning. Therefore, in these nations, e-learning might have issues while ensuring positive academic performance. From this research, it is found that e-learning can ensure effective academic performance however, these factors (acceptance for online teaching and technical competence) must be present. Surprisingly, this study stated that e-learning infrastructure cannot influence academic performance in e-learning.

Another research was conducted at Strathmore University located in Kenya. In this research, information was collected from 50 students through survey questionnaires. From the responses, it was found that 61% of the participants approved that e-learning is capable of better teaching, idea gathering and learning. On the other hand, 63% of the participants stated that e-learning helped them to accomplish course objectives (19). However, participants raised questions regarding the materials that were provided. For

example, 53% of the participants stated that e-learning could not provide practical knowledge (19). Now, from this, it can be considered that e-learning is capable of ensuring better academic performance however, shared material and its quality provides a major impact on it. It means, e-learning standard if poor can affect performance, however, if strong can cultivate better academic performance.
Another research was conducted by Zolochevskaya *et al.* (20) where data was collected from 150 studies conducted by Russian educational institutes. The acquired data revealed that the absence of effective ICT facilities could significantly affect the learning and performance of the students to a considerable degree. It means if a university does not have a proper ICT infrastructure, then it will not improve the academic performance of the students.

Conclusion

The reason of this research study was to discover out whether e-learning can advance the academic performance of students or not. Besides, this research also intended to identify whether technical competency, e-learning standard and infrastructure can influence performance or not. By collecting existing information from some of the empirical results, interesting outcomes were found. For example, one study confirmed that technical competency can influence academic performance in e-learning. However, this study also stated that infrastructure should not affect e-learning. However, later another study mentioned that ICT infrastructure, if good, can ensure good academic performance only. Therefore, contradictory results were found in terms of infrastructure. Another research confirmed that e-learning standards such as shared materials have a direct impact on performance.

A major limitation of this research was not collecting primary data from a particular university and its students. In the future, this research can be conducted again by collecting responses from students from a particular or from different Indian universities.

Recommendation

From the entire research works, based on the findings, the following recommendations can be provided to the universities that already have e-learning facilities and to the universities that are planning to introduce e-learning facilities in the future.

- Despite the fact that contradictory findings were there regarding e-learning infrastructure; it is recommended that universities should develop effective, secure and easy-to-use ICT infrastructure so that learning through online portals can become easier for the students.
- The focus of the universities should be to share practical knowledge with the students at the time of e-learning as sharing theoretical knowledge only will not cultivate better performance.

- In terms of technical competency, teachers must be provided with proper and in-detailed training so that they can operate all the features regarding e-learning technology to provide better knowledge to the students. Every university that has or is planning to introduce e-learning must have a small technical team that would train and guide teachers and also students to use e-learning tools in an effective manner.

References

1. Suresh, M., Vishnu Priya, V. and Gayathri, R., Effect of e-learning on academic performance of undergraduate students. *Drug Invention Today*, *10*(9), (2018).

2. Rasheed, H.M.W., He, Y., Khalid, J., Khizar, H.M.U. and Sharif, S., The relationship between e□learning and academic performance of students. *Journal of Public Affairs*, p.e2492, (2020).

3. Ramdani, Y., Mohamed, W.H.S.W. and Syam, N.K., E-Learning and Academic Performance during COVID-19: The Case of Teaching Integral Calculus. *International Journal of Education and Practice*, 9(2), pp.424-439, (2021).

4. Kokoç, M. and Altun, A., Effects of learner interaction with learning dashboards on academic performance in an e-learning environment. *Behaviour & Information Technology*, *40*(2), pp.161-175, (2021).

5. De-Marcos, L., García-López, E., García-Cabot, A., Medina-Merodio, J.A., Domínguez, A., Martínez-Herráiz, J.J. and Diez-Folledo, T., Social network analysis of a gamified e-learning course: Small-world phenomenon and network metrics as predictors of academic performance. *Computers in Human Behavior*, *60*, pp.312-321, (2016).

6. Jimenez, E., Contextualized-E-Learning Resource A Tool for Stronger Academic Platform. *Jimenez, EC (2020). Contextualized E-Learning Resource: A Tool for Stronger Academic Platform. International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, *4*(2), pp.110-116, (2020).

7. Islam, A.N., E-learning system use and its outcomes: Moderating role of perceived compatibility. *Telematics and Informatics*, *33*(1), pp.48-55, (2016).

8. Puška, E., Ejubović, A., Đalić, N. and Puška, A., Examination of influence of e-learning on academic success on the example of Bosnia and Herzegovina. *Education and Information Technologies*, *26*(2), pp.1977-1994, (2021).

9. Tan, M. and Shao, P., Prediction of student dropout in e-Learning program through the use of machine learning method. *International journal of emerging technologies in learning*, *10*(1), (2015).

10. Aboderin, O.S., A multidisciplinary study on the relationship between ICT literacy levels and academic performance of e-learners in an e-learning setting. *Journal of Management & Administration, 2019*(1), pp.1-23, (2019).

11. Kumari, P., Jain, P.K. and Pamula, R., March. An efficient use of ensemble methods to predict students academic performance. In *2018 4th International Conference on Recent Advances in Information Technology (RAIT)* (pp. 1-6). IEEE, (2018).

12. Tawafak, R.M., AlSideir, A., Alfarsi, G., Al-Nuaimi, M.N., Malik, S.I. and Jabbar, J., E-learning vs. traditional learning for learners satisfaction. *E-learning, 29*(3), pp.388-397, (2019).

13. Misopoulos, F., Argyropoulou, M. and Tzavara, D., Exploring the factors affecting student academic performance in online programs: A literature review. *On the line*, pp.235-250, (2018).

14. Tawafak, R.M., Romli, A.B. and Arshah, R.B.A., February. E-learning Model for Students' Satisfaction in Higher Education Universities. In *2019 International Conference on Fourth Industrial Revolution (ICFIR)* (pp. 1-6). IEEE, (2019).

15. Vanitha, V., Krishnan, P. and Elakkiya, R., Collaborative optimization algorithm for learning path construction in E-learning. *Computers & Electrical Engineering, 77*, pp.325-338, (2019).

16. Alharahsheh, H.H. and Pius, A., A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), pp.39-43, (2020).

17. Azungah, T., Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*, (2018).

18. Franklin, U.E. and Nahari, A.A., The Impact of e-learning on academic performance: preliminary examination of King Khalid University. *DEVELOPMENT*, *7*(1), (2018).

19. Neema-Abooki, P. and Kitawi, A.K., Impact of E-Learning Strategy on Students' Academic Performance at Strathmore University, Kenya. *Makerere Journal of Higher Education*, *6*(1), pp.99-108, (2014).

20. Zolochevskaya, E.Y., Zubanova, S.G., Fedorova, N.V. and Sivakova, Y.E., Education policy: the impact of e-learning on academic performance. In *E3S Web of Conferences* (Vol. 244, p. 11024). EDP Sciences, (2021).

JETIR

Journal of Emerging Technologies and Innovative Research

An International Open Access Journal

www.jetir.org | editor@jetir.org

Certificate of Publication

The Board of

Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)

Is hereby awarding this certificate to

RUDRAKUMAR M M

In recognition of the publication of the paper entitled

BANKING TRANFORMATION THROUGH GREEN BANKING IN INDIA , THEIR EFFECTS AND IMPLICATION OF KODAGU DISTRICT

Published In JETIR (www.JETIR.org) ISSN UGC Approved & 5.87 Impact Factor

Published in Volume 5 Issue 10 , October-2018

EDITOR IN CHIEF

Journal of Emerging Technologies and Innovative Research

ISSN 2349-5162

JETIRG006014

Research Paper Weblink http://www.jetir.org/view?paper=JETIRG006014

Registration ID : 189009

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

BANKING TRANFORMATION THROUGH GREEN BANKING IN INDIA , THEIR EFFECTS AND IMPLICATION OF KODAGU DISTRICT

RUDRAKUMAR M M
RESEARCH SCHOLAR
P G DEPARTMENT OF COMMERCE
MANGALORE UNIVERSITY

ABSTRACT

This paper suggests the banking transformation through green banking and how this transformation has a greater implication and effects in kodagu district. Today Indian banking has undergone a tremendously transformation moving forward from manual to technological leading position. Today a consumer can go to an ATM across locations, operate the bank account through web, call a customer service centers for queries and never need a visit to branch for banking transactions.On account of demonetization of 500 and 1000 rupee notes the banks and the customers were involved in acceptance and exchange of currencies. During this all the banks were overcrowded in kodagu district and now people are adopting themselves to the green banking technology. Even if the banking transactions become easy, people are not accepting the modern banking technology rather than using ATMs. This shows that even if there is Digitization people look back the disadvantages and the fraud which might occur due to green banking technology.

KEYWORDS: Banking, Demonetization, Technology, transformation, Digitization.

INTRODUCTION

Banking sector is considered as the key element for today's sustainable development and is environment friendly. Environmental impact of banks is not physically related to their banking activities but with the customer's activities. Today a larger transformational change is taking place in banking sector. Demonetization process has lead the people to use the technology for their banking transactions.

Although banks are considered environment friendly and do not impact the environment greatly through their own internal operations, the external impact on the environment through their customers activities is substantial. ''Green banking" refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance green technology and pollution reducing projects.

Digitization has brought a major change in the minds of people particularly in kodagu district. People are adopting themselves to the banking technologies but still there are some loopholes which may lead to the failure of digitization process. ATMs have been widely adopted but the level of adoption of other electronic banking means despite their potential are yet to pick in a big way.

REVIEW OF LITERATUTE

Green Banking aims at greener and a clean future. From the primary survey conducted we found that surprisingly even those people who are using online facilities provided by their banks nearly 60 percent of them are unaware of the term Green Banking. They find that among those who are aware of Green Banking term consider it mainly related to online bill payment and cash deposit system. Other Green Banking aspects like Green CDs, solar powered ATM, bonds for environment protection are among few of which consumers are not aware of. The attempt to analyze the awareness of green initiatives by bank specially E-Statements, Net Banking and Green loans is also done. The major obstacle in Green Banking is the technical issues involved followed by lack of education.

OBJECTIVES OF THE STUDY

Following are the main objectives:

1. To know the green banking implications in Kodagu district.
2. To know the impact of demonetization.
3. To know the awareness and implication of banking technology.
4. To know how far the digitisation is implemented.
5. To provide some findings and suggestions based on the study.

RESEARCH METHODOLOGY

For the purpose of study both Primary data and secondary data has been collected. Primary data has obtained through distribution of questionnaires and secondary data which consist of books, journals, websites etc.

LIMITATIONS OF THE STUDY:

- Time limitation
- Study is limited to Kodagu district .
- Study confines only to 100 respondents.

STEPS IN GREEN BANKING

Following are green banking steps of Indian Banks:-

- **Mobile Banking:-**
  Mobile banking is tricky. On the one hand, it is great to have the ability to check balances, transfer funds or pay bills from you phone. One the other hand, it saves time and energy of the customers. It also helps in reducing use of energy and paper of the bank. Most of the Indian banks introduced this paper-less facility.
- **Power Saving Equipment:-**
  Banks can directly contribute to controlling climate change and as an initial step they intend to start a campaign to replace all fused GSL bulbs, in all owned premises offices and residential areas. Banks can also make a feasibility study to make rain water harvesting mandatory in all the Bank's owned premises. In December 2009 IndusInd Bank inaugurated Mumbai's first solar-powered ATM as part of its ''Green Office Project" campaign titled ''Hum aur Hariyali".
- **Going Online:-**
  Online banking is a new and fast-developing concept in young and corporate India. It helps in conservation of energy and natural resources.
  Online Banking incorporates:
  Paying bills online
  Remote deposit
  Online fund transfers

Online statements.

Online savings account and mobile banking is the easiest way to do your bit to bank green and help the environment. Online banking creates savings from less paper, less energy, and less expenditure of natural resources from banking activities. Customers can save money by avoiding late payments of fees and save time by avoiding standing to queues and paying the bill from home online. These are also highly effective ways to keep track of your finances and to avoid late payment fees. Paying bills online is something of a lifestyle change, but it can be done. Telephone bills, cable bills, utility bills, credit card payments and mortgage payments can all be paid electronically.

- **Using Green Checking Accounts:-**

Customers can check their accounts on ATM or special touch screens in the banks. This can be called as green checking of account. Using a green checking account helps the environment by utilizing more online banking services including online bill payment, debit cards, and online statements. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees etc.

- **Green Loans for Home Improvements:-**

The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to those customers interested in buying solar equipment. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank Green loan are perfect for energy-saving project around the house. For example, the new Green Home Loan Scheme from SBI will support environmentally-friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits –a 5 percent concession in margin, 0.25 percent concession in interest rate and processing fee waiver.

- **Saving Paper:-**

Bank should purchase recycled paper products with the highest post-consumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil based inks.

- **Green Credit Cards:-**

Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly non-profit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.

- **Use Of Solar And Wind Energy:-**

Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.

Online statements.

Online savings account and mobile banking is the easiest way to do your bit to bank green and help the environment. Online banking creates savings from less paper, less energy, and less expenditure of natural resources from banking activities. Customers can save money by avoiding late payments of fees and save time by avoiding standing to queues and paying the bill from home online. These are also highly effective ways to keep track of your finances and to avoid late payment fees. Paying bills online is something of a lifestyle change, but it can be done. Telephone bills, cable bills, utility bills, credit card payments and mortgage payments can all be paid electronically.

- **Using Green Checking Accounts:-**

  Customers can check their accounts on ATM or special touch screens in the banks. This can be called as green checking of account. Using a green checking account helps the environment by utilizing more online banking services including online bill payment, debit cards, and online statements. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees etc.

- **Green Loans for Home Improvements:-**

  The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to those customers interested in buying solar equipment. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank Green loan are perfect for energy-saving project around the house. For example, the new Green Home Loan Scheme from SBI will support environmentally-friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits –a 5 percent concession in margin, 0.25 percent concession in interest rate and processing fee waiver.

- **Saving Paper:-**

  Bank should purchase recycled paper products with the highest post-consumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil based inks.

- **Green Credit Cards:-**

  Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly non-profit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.

- **Use Of Solar And Wind Energy:-**

  Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.

DATA ANALYSIS :

The survey results are as follows:

1.0 Inclusion in Banking activities.

Table 1.0

Age	Frequency	Percentage
15-25	08	08
26-35	32	32
36-45	16	16
46-55	24	24
55 above	20	20
Total	**100**	**100**

Table 1.0 shows the inclusion of people in banking activities.

2.0 Qualification of the respondents.

Table 2.0

Particulars	Frequency	Percentage
SSLC	14	14
PUC	20	20
Degree	40	40
PG and above	26	26
Total	**100**	**100**

Table 2.0 reflects the qualification of respondents. Majority of the respondents are Degree holders

3.0 Type of bank account used

Table 3.0

Particulars	Frequency	Percentage
SB Account	58	58
Current Account	12	12
FD Account	19	19
Recurring Account	23	23
Total	**100**	**100**

Table 3.0 shows the bank account used by customers in different banks. Majority are S B a/c holders

4.0 Frequency of Transaction

Table 4.0

Particulars	Frequency	Percentage
Daily	21	21
Weekly	40	40
Monthly	17	17
Quarterly	10	10
Yearly	12	12

4. Online banking awareness has to be created so as to make each individual to be included in the banking activity.
5. Safety should be given priority while making the debit card transactions.
6. The fear of fraud taking place in the online transactions has to be minimised in order to increase the banking activities go green.

CONCLUSION

Banks provide a platform to perform our day to day activities. After the demonetization effect people are slowly moving to the world of digitization and yet in a world of transformation. Green banking concept is slowly achieving popularity and the day is near where there is a revolutionary change in banking transactions and a formation of paperless society.

References:

1. Ahuja Neyati. (2015), "Green Banking in India: A Review Of Literature", International Journal for research in management and pharmacy, Vol.4, January , pp.11-16.
2. Amin Ashitha (2016), "Green Banking In India And Global Perspective – A Review", International Journal of Management and Social Science Research Review, Vol.1,
3. Bahl Sarita. (2012),"Green Banking- The New Strategic Imperative", Journal Of Asian Research Consortium, Vol.2, Issue 2, February, pp.176-185.
4. Bhardwaj B. R and Malhotra A(2013), "Green Banking Strategies: Sustainability through Corporate Entrepreneurship", "Greener Journal of Business and Management Studies",Vol.4,pp.180-193.
5. Chaurasia Kumar Ashis(2014) "Green Banking Practices In Indian Banks", Blue Square Publishing House,Vol.1,February, pp.41-54.
6. Equator Principles (2011), About equator principles, available at http://www.equator principles.com/index.php/about-ep/aboutep.
7. http://greenbankreport.com
8. Mahesh.A.C, Nirosha.M and Pavithra .V(2016) "Reacent Trends In Indain Banking-Green Banking Intiative In India", International Journal Of Science Technology And Management , Vol.5,February,pp.369-374.
9. www.bucb.in
10. www.indianjournals.com
11. www.kanaradccbank.com
12. www.milagrescooperative.com
13. www.rbi.org.in
14. www.wikiepedia.com

Emerging Issues, Challenges and Suggestions of Higher Education in India

Rudrakumar.M.M[1]

Abstract

Education is one of the significant factors instrumental to the development of a country. It should be transformed to the needs of the time and changing scenario of the world. It provides an opportunity to critically reflect upon the social, economic, cultural, moral and spiritual issues facing humanity. India needs more efficient and educated people to drive our economy forward. There are many Indian around the corner who known for their capabilities and skills. To develop India as an education hub or to become a prosperous partner in global economy, India has to qualitatively strengthen education in general and higher education with research and development in particular. This paper is mainly focused on the overall performance of higher education system in India. We try to find out the initiatives taken by the government to raise level of education system. This paper aims to identify emerging issues and challenges in the field of Higher Education in India. Finally the paper concludes here is need of plans requires solutions that combine, employers and youth need of Expectations of from various stakeholders Students, Industry, Educational Institutions, Parents and Government.

KEY WORDS: Higher Education, Financing,challenges, Issues.

Introduction

Higher education is very important for a developing country like India and it is encouraging to increasing human development. Higher education in India has experienced phenomenal expansion since independence. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the world. Now it is one of the top ten countries in our industrial and technological capacity, because of the significant contribution of manpower and tools provided by higher education, especially, technical education. India has already entered into the era of knowledge explosion. It has proved its tremendous potential by its performance in nuclear and space domains. In the coming few decades will be heralded by space craft, satellites, internet offshoots of scientific enquires. Higher Education provides opportunities to the people to reflect on the critical social, cultural, moral, economic and spiritual issues facing humanity. Higher education provides specialized knowledge and skilled persons for national development. In next few decades, India will have world's largest set of young people. While the correlation between people and higher education is not up to the mark. The increasing youth population can be agreat asset if potential employability is brought to fruition. Conversely, if we fail to provide education and employment then it will open a downside gate for Indian economy. Education is an essential tool for achieving sustainability. The Education Commission 1964-66 described the role of education in social and economic transformation through a statement- the density of a nation is shaped in its class rooms. Education creates human capital which is the core of economic progress and assumes that the externalities generated by human capital are the source of self sustaining economic process. This paper aims to identify emerging issues and challenges in the field of Higher Education.

Objectives

1. To analyze the current scenario of higher education system in India
2. To study the total student and girls enrolment in Higher Education
3. To identify on the Emerging issues of higher education in India
4. To identify on the Emerging Challenges of higher education in India
5. Suggestions for improving quality of higher education and Conclusion

Higher Education Scenario in India reveals that there has been appreciable growth of higher education since 1951. Number of university level institutions and colleges has grown up from 28 to 677 and 578 to 3800 respectively from 1951 to 2014. As a result, the number of teachers as well as students has also increased significantly. The growth of students" enrolment is more than the growth of number of teachers over the period of time, may be due to the massive investment by government at school level in form of primary as well as secondary education. Rise in enrolments and institutions at school level, there is mushrooming growth in higher education institutions At the end of 2014 there were 677 Universities and 38000 colleges in India. But still we need more than 1500 universities to cater the demand. The table 1 shows that our education system is improving not only in number of colleges and universities but also in enrolment. Most of these universities have affiliated colleges where undergraduate courses are

education. There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education.

Student-Centred Education and Dynamic Methods-

Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centred education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale. Examination Reforms- Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning must be implemented. International Cooperation- Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them. To increase Quantity of Universities- We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrolment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India. Cross Culture Programmes- After education, tour to every the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human society in the world.

 ISBN : [illegible]

Indian education system is more focused on theoretical knowledge rather than practical knowledge. In many jobs there is also a minimum requirement of percentage which is high. Traditional methods of teaching: Professors still stick to those older methods of teaching like board, marker. They don't like to make use of audio visual aids in teaching. Also they are not up to date with the information available and what global industry demands.

Privatization:

In the present scenario, privatization of higher education is apparently a fledgling but welcome trend and is essential to maintain creativity, adaptability and quality. The economic trail of liberalization and globalization demands it. In India both public and private institutions operate simultaneously. Approximately 50 per cent of the higher education in India is imparted through private institutions, mainly unaided involving high cost. However, the situation is not so simple. Private providers, in the interest of maximizing profit, have every incentive to 'minimize costs' by compromising on the quality of education provided in their institutions. Last but not least, quality of teaching staff is one of the considerable issues for higher education sector to sustain in the future. Earlier, they were committed to their students to their subjects and to their profession. Today, high salaries are available but the commitment is less. Thus, it is the need of the hour to free the higher education system from unnecessary constraints and political interference.

Infrastructure:

In India, many of the universities don't have adequate infrastructure or facilities to teach students. Even many private universities are running courses without classrooms. Internet and Wi-Fi facility is still out of reach of many students.

Quota System:

Bringing the reservation and quota system for different categories in education lost its quality. Even deserving candidates of general categories are ignored and on quota we have to select other person from reserved category even though he is not suitable. Emerging Challenges The system of Indian Higher education is the second largest in the world which fulfills the educational requirements of millions of students who come from different sections of the

 ISBN : 978-81-[illegible]

approved and taught. But still, if we compare this improving stat with increasing population, then we have to rethink, is it still improving. Growth of higher education level wise student enrolment boys and girls 2010-2011 has revealed in table -2.The study explores the fact that the women enrolments ratio is less when compare to male. The data evidently speaks the truth that the enrolment difference has found with19 percent in research and next come with17 percent in under graduation and next come with 13 percent in post graduate.

Emerging Issues

The role of higher education in the emerging scenario of knowledge economy is very crucial and multifaceted for any country in general and India in particular. There are many basic problems faced by higher education system in India. These include Lower level of teaching quality, Financing of higher education, More concentrated on theories and rather than practical knowledge, Traditional methods of teaching, Privatization, Inadequate facilities and infrastructure Quota system.

Level of teaching quality:

Our education system is torture by issues of quality in many of its institutions and Universities. Many of the issues like lack of faculty, poor quality teaching, Traditional teaching methods, outdated and rigid curricula and pedagogy, lack of accountability and quality assurance and separation of research and teaching are raise questions on Indian education system.

Higher EducationFinancial Constraints:

One of the most important things that have to be noticed is the issue of financial constraints regarding higher education before the government. Expenditure on education in common and on higher education in particular by the government, is one of the parameters to judge the quality in education for at all nation. The State Government have already been spending 20-30 per cent of its revenue budget on education. It cannot afford to spend more. In India, higher education has received less attention in terms of public spending than other levels. It is not feasible for India to makemassive state investments in research and development that produced research led universities in the west such as MIT, University of California, Berkeley in the US or University of Cambridge in Britain. M[illegible] on theories and rather than practical knowledge:

[illegible]

[illegible] problem, challenges have emerged [illegible] are [illegible] educational [illegible] institutions. Varieties of colleges [illegible] institutions have evolved and different types and [illegible] Some of them are really imparting qualitative education [illegible] doing the dirtiest job. Thanks [illegible] publishing the [illegible] and Institutions indulging in educational malpractice.

Political Interference:

Most of the Institutions imparting education (As defended/awarded) are owned by the dominant political leader [illegible] role in governing bodies of the Universities. They have established their own youth cells and encourage students organization on political basis. They exploit the students energy for their political purposes. The students forget their own objectives and begin to develop their career in politics.

Economic Difficulties:

It is one of the most troublesome changes that the present higher education system has imposed on the communities. The numbers of students are coming from the ordinary classes, many of them are unable to provide the minimum necessities of life for themselves. Economic miseries have grown due to the increasing prices, habits of wasting money on luxuries, increasing population, scarcity of food supply, corruption, selfish etc. students hold part time jobs in order to pay for the their educational expenses and should divide their attention between a job and College/University education. Near about seventy five percent of the total students community today, have been facing the financial problems. Earn while learn scheme cannot adequately support student to face economic challenges. Lack of Moral values: Rapid growth of science and technology and subsequent industrialization has caused a great and danger to our old moral and values. The younger generation's dissatisfaction and revolt is the outcome of a decaying system of values. Suggestions for improving quality of higher

education. There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education.

Student-Centred Education and Dynamic Methods-

Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centred education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale. Examination Reforms- Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning must be implemented. International Cooperation- Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them. To increase Quantity of Universities- We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrolment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India. Cross Culture Programmes- After education, tour to every the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human society in the world.

December 2018

3

VOLUME 46
CODEN:JPCR DW
ISSN (PRINT) 0304-5242
ISSN (ONLINE) 2454-8480

JOURNAL OF PLANTATION CROPS

A multi disciplinary international journal devoted to tropical and subtropical plantation crops

CONTENTS

Research Articles

Continued on back cover

INDIAN SOCIETY FOR PLANTATION CROPS

http://indsocplantationcrops.in

doi.org/10.25081/jpc.2018.v46.i3.2056
Journal of Plantation Crops, 2018, 46(3): 218-220

Evaluation of selective cocoa (*Theobroma cacao* L.) clones from Central and South America in their initial years of growth

S. Elain Apshara and K.J. Krithika

ICAR - Central Plantation Crops Research Institute, Regional Station, Vittal-574 243, Karnataka, India

(Manuscript Received: 30-12-2017, Revised: 15-08-2018, Accepted: 01-11-2018)

Keywords: Cocoa, clones, dry bean yield, growth

Cocoa (*Theobroma cacao* L.) has originated from Amazon basin and other tropical areas of South and Central America. Genetic resources from these regions with their establishment potential, high yield, disease resistance and other desirable commercial qualities, have been utilised in breeding programs of Cocoa Research Institutes of Ghana, Nigeria, Trinidad and Fiji for development of superior varieties (Martin, 1987; Adu Ampomah, 1996). In India, initial introductions were made from Malaysia and Nigeria at ICAR-CPCRI, Regional Station, Vittal and subsequently collections were made from Central and South American region to widen the genetic base. Also, these collections have been assessed for their morphological, physiological and molecular characteristics in their initial years of establishment (Elain Apshara *et al.*, 2013). Results of evaluation trials in Indonesia have claimed that progress in breeding with new clones is 20-40 per cent over hybrids (Napitupulu, 1993). Genetic evaluation of germplasm collections for their diversity, quantitative and qualitative characteristics is very essential in selection of promising genotypes and further improvement in hybridization programs (Minimol *et al.*, 2015). Hence, the evaluation of newly collected 15 specific clones comprising of Bolivar (B), Pound (POU), Rio Branco (RB), Rosario Izupa Mexico (RIM), Santa Cruz (SCZ) and Trinitario Selected Hybrid (TSH) were carried out to assess their adaptability, precocity in bearing, variability in pod characteristics and yielding potential.

The clones were planted during 2007 with 2.7 m x 5.4 m distance under 2.7 m x 2.7 m spaced arecanut. Five trees from each clone were evaluated for their cropping efficiency in the arecanut based cropping system from fifth to ninth year of growth. Growth characters *viz.*, plant height (m), girth (cm), first branching height (m), number of branches and canopy area (m^2) were recorded. During the main harvest season in the month of June, five pods from each tree were observed for pod weight (g), husk thickness (cm) and beans number per pod. The husked fresh beans were fermented, dried and observed for single dry bean weight (g), shelling (%), nib recovery (%) from 50 beans. Fat (%) from powdered nibs were estimated by Soxhlet extraction method using petroleum ether as solvent. The data were analysed using SAS programme.

From the growth characters of nine year old trees, provided in Table 1, it was observed that only girth and canopy area of clones differed significantly. Vigour with respect to girth or trunk circumference and canopy size influences the yielding potential of the crop in all clonal evaluation trials (Efron *et al.*, 2000). Among the clones studied, girth of trees ranged from 25 to 32 cm and canopy

*Corresponding Author: elain_apshara@yahoo.co.in

M. Mahadeva
PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

Table 1. Morphological characters of Central and South American cocoa clones (9 years old)

Clones	Height (m)	Girth (cm)	HAFB (m)	Branches (No.)	Canopy area (m^2)
B 5/3	3.20	30	1.08	3.0	13.10
B 7/14	2.60	30	0.84	4.8	9.43
POU 7/B	2.79	30	1.55	4.0	8.11
POU 16/A	2.90	28	0.82	3.3	10.90
POU 18/A	3.05	28	1.03	2.3	5.58
RB 33/3	3.15	31	1.23	7.4	11.40
RB 46	2.96	32	1.20	8.3	10.4
RB 49	2.93	28	1.21	3.6	8.76
RIM 41	3.11	28	1.31	5.8	9.96
RIM 189	3.15	28	0.94	6.0	12.60
SCZ 1	3.25	28	1.17	6.5	10.10
SCZ 4	2.85	29	1.16	5.0	8.30
SCZ 9	2.91	26	1.20	4.1	9.10
SCZ 20	3.03	27	1.06	4.9	10.30
TSH 516	2.84	29	0.90	3.5	10.00
SEd	NS	10	NS	NS	24
CD (5%)	-	5	-	-	11

HAFB: Height at first branching

area ranged from 8-15 m^2, which is maintained by annual structural pruning. Studies at French Guiana on family competition effects of trees showed that vegetative vigour explained 34 per cent of the potential and the use of the production: vigour ratio as the main selection criterion in cocoa breeding (Lachenaud and Montagnon, 2002). In our study, optimal trunk strength and canopy area contributed to the high yielding nature of clones and made them suitable in the arecanut based intercropping system.

Pod yield ranged from 7 to 31 in the 5th year of bearing (Table 2) and increased from 22 to 39 in the 9th year of bearing. Tree adaptability and yield stability have been used to screen agronomically superior cultivars for yield, bean quality and disease resistance in Brazil (Carvalho *et al.*, 2002; 2003). Among the clones studied, pod yield stabilised in 12 clones from 7th year onwards. Substantial variability was reported between cultivars for pods per tree, pod weight, fresh bean weight per fruit and bean size when several multivariate methods have been used in divergence analysis of populations (Dias and Kageyama, 1998; Fallo and Cilas, 1998). In our collections also, pod and bean characters varied among the clones with pod weight ranging from 218 to 555 g with husk thickness of 0.67 to 1.58 cm and number of beans per pod ranging from 31 to 45 with single dry bean weight of 0.62 to 1.06 g (Table 3). The dry bean yield is compiled here from ninth year

Table 2. Pod yield of Central and South American cocoa clones for five years (No. of pods tree^{-1} year^{-1})

Clones	2012	2013	2014	2015	2016
B 5/3	7.33	10.8	34.4	24.5	24.3
B 7/14	9.30	15.4	33.4	24.3	25.0
POU 7/B	12.7	26.2	31.3	34.0	21.6
POU 16/A	18.0	16.0	35.8	35.5	35.0
POU 18/A	11.0	25.6	12.8	25.0	27.8
RB 33/3	31.0	11.6	33.4	34.2	28.9
RB 46	12.3	9.20	24.6	25.0	25.0
RB 49	18.0	16.6	18.8	22.5	24.4
RIM 41	10.3	15.0	36.8	30.8	25.3
RIM 189	9.0	16.0	24.2	27.8	26.8
SCZ 1	14.0	17.8	37.8	37.3	37.6
SCZ 4	15.3	9.40	20.8	28.5	26.8
SCZ 9	12.0	12.0	34.4	34.3	29.9
SCZ 20	10.3	18.6	35.2	35.6	38.0
TSH 516	17.0	16.0	37.2	35.0	35.0
SEd	1.96	2.71	3.22	12.5	3.5
CD (5%)	3.18	5.76	6.94	27.1	7.0

pod yield, single dry bean weight and number of beans per pod, which ranged from 0.49-1.46 kg tree^{-1} year^{-1}. The industrial value of clones was assessed and the shelling, nib recovery and fat percentages ranged from 10-25, 75-90 and 30-53 respectively (Table 3).

The clones, SCZ-1, SCZ-20, TSH-516 and POU-16A, with a vigour of around 28 cm and 10 m^2 canopy, yielded on an average 35 pods with >40 beans of 0.97-1.01 g weight recorded 1.37 to 1.46 kg

Table 3. Pod and bean characters of Central and South American cocoa clones

Clones	Pod wt. (g)	Husk (cm)	No. of beans pod⁻¹	SBW (g)	DBY (kg tree⁻¹ yr⁻¹)	Shell (%)	Nib recovery (%)	Fat (%)
B 5/3	550	1.58	31	0.65	0.49	25	75	35
B 7/14	555	1.58	40	0.68	0.68	23	79	36
POU 7/B	446	1.26	41	0.62	0.55	14	86	40
POU 16/A	350	0.90	45	0.97	1.43	10	90	50
POU 18/A	218	0.88	42	0.64	0.75	21	79	36
RB 33/3	284	1.30	39	0.71	0.80	14	86	42
RB 46	302	1.27	33	1.06	0.87	10	90	40
RB 49	334	1.14	41	0.83	0.83	12	88	38
RIM 41	278	0.95	38	0.90	0.87	17	83	37
RIM 189	268	0.67	37	0.96	0.95	18	82	30
SCZ 1	352	0.90	40	1.01	1.46	14	86	52
SCZ 4	242	0.91	34	0.62	0.56	13	88	40
SCZ 9	420	1.38	38	0.94	1.07	11	89	53
SCZ 20	352	1.00	42	1.00	1.45	14	86	50
TSH 516	360	0.94	43	0.98	1.37	13	88	50
SEd	12.9	0.09	3.96	0.05	0.04	1.45	2.46	6.93
CD (5%)	25.9	0.18	7.94	0.10	0.07	2.90	4.93	12.8

SBW: Single dry bean weight, DBY: Dry bean yield

dry bean yields with favourable industrial value. These clones, which showed high adaptability and bearing behaviour, are selected as potential clones and will be utilised in hybridization programs and multi location trials. However, the stability in performance will be assessed for further more years for the heritable characters like number of beans and bean size to explore their true potential.

References

Adu Ampomah, Y. 1996. The cocoa breeding programme in Ghana: Achievements and prospects for the future. *Cocoa Growers Bulletin* **50**: 17-21.

Carvalho, PMT, Almeida, C.M.V.C., Cruz, C.D. and Machado, P.F.R. 2002. Yield repeatability and evaluation period in hybrid cocoa assessment. *Crop Breeding and Applied Biotechnology* **2**: 149-156.

Carvalho, PMT, Almeida, C.M.V.C., Cruz, C.D. and Machado, P.F.R. 2003. Hybrid cocoa tree adaptability and temporal yield stability in Rondonio state Brazil. *Crop Breeding and Applied Biotechnology* **3**: 237-244.

Dias, L.A. dos S and Kageyama, P.Y. 1998. Comparison between multivariate methods applied for the evaluation of genetic divergence in cacao. *Brazilian Archives of Biology and Technology* **41**: 199-206.

Fallo, J. and Cilas, C. 1998. Genetic study of cocoa bean size in relation to agronomic traits. *Plantations Recherche Developpement* **5**: 195-200.

Efron, Y., N'Goran, J.A.K. and Lachenaud, P. 2000. Evaluation of vigour, yield, pod and bean traits. In: *Working procedure for cocoa germplasm evaluation and selection.* (Eds.) Eskes, A.B., Engels, J.M.M. and Lass, R.A.). IPGRI, Rome, Italy, pp. 76-82.

Elain Apshara, S., Rajesh, M.K. and Balasimha, D. 2013. Assessment of morphological, physiological and molecular characteristics of cocoa accessions from Central and South America in relation to drought tolerance. *Journal of Plantation Crops* **41**(3): 389- 397.

Lachenaud, P. and Montagnon, C. 2002. Competition effects in cocoa hybrid trials. *Euphytica* **128**: 97-104.

Martin, M.P.L.D. 1987. Performance of Amelonado and hybrid cocoa in Fiji. *Fiji Agriculture Journal* **49**: 17-24.

Minimol, J.S., Suma, B., Ummer, M. and Chithira, P.G. 2015. Genetic improvement of cocoa by developing superior hybrids. *Journal of Tropical Agriculture* **53**(2): 157-165.

Napitupulu, L.A. 1993. Progress of cocoa breeding and development prospect of high yielding planting material. *Bulletin of Oil Palm Research Centre* **1**: 55-61.

International Journal of Advance and Innovative Research ISSN 2394 - 7780
Volume 5, Issue 4 (XII): October - December, 2018

CAMPUS ADAPTATIONS OF ENGINEERING UNDERGRADUATES ACROSS RELIGIONS

Dr. Vijayalakshmi N. S[1] and Dr. A. H. Sequeira[2]
Faculty[1], P. G. Department of Economics, University College Mangalore, Mangalore
Professor[2], School of Management, N. I. T. K Surathkal, Mangalore

ABSTRACT

Objective: The study aims to empirically test the relationship between types of campus adaptations across student religion at birth of engineering undergraduate B. Tech students pursuing a four-year study at Indian Institute of Technology (IIT's) and National Institute of Technology (NIT's) in India.

*Method: - The **Multivariate Analysis of Variance** (Manova) test was run with SPSS vs. 21 to compare the student's campus adaptations of IIT's and NIT's by religion. Multistage random sampling with n = 1420 students were selected accounting for Hindus (n = 1206), Muslims (n = 45), Christian's (n = 29). Students belonging to other minority communities were Christians (n = 29), Jains (n = 24), Sikh (n = 08) and Buddhist (n = 03). However, the student population who surprisingly did not want to associate themselves with any religion loomed large with associating themselves with being called Indian (n = 28), humanity (n = 15), Atheist (n = 35) and not applicable (n =26).*

Result and Conclusions: - There are significant differences across student religion on different forms of campus adaptations where much noticeably students who less associated themselves to any religion by being known on the survey as Indian, humanitarian, atheist and not applicable – all had positive institutional adaptation with negative academic, social and physical – psychological adaptation. In short, campus adaptations do vary across student's religion influencing student's experiences at university.

Keywords: Campus, adaptation, academic, social, physical, psychological and institution

INTRODUCTION

Religion on Campus impacts campus ethos (Proctor, 2002) with religious inclusion influencing higher education (Stevenson, 2014) resulting in college adjustment varying by student's religious background (Jackson, Mark Pancer, Pratt, & Hunsberger, 2001). It is often observed that when education and religiosity is taken into consideration, colleges do not dampen or damage student's religious commitment (Schmalzbauer, 2013). Religiosity impacts life of students (Abdel-Khalek & Lester, 2015). Of recent years there is a shift from religiosity to spirituality (Cragun, Henry, Mann, & Russell Krebs, 2014). Spirituality and religiosity are overlapping construct with one forming the subset of the other sharing some characteristics but also retaining nonshared features (Joshanloo, 2012). Exploring the essence of spirituality where spirituality is the human attempt to make meaning of the self in connection to and with the external world (Mayhew, 2004) proves vital to understand and assess spiritual health of student's (Fisher, 2009). Spirituality relates to each student's field of study influencing them in thier making of sound professionals especially in that of engineering (Halsmer et al., 2010) where spiritual wellbeing heavily influenced college adjustment (Mansor & Syahidah, 2012). Further campus climate experiences and perceptions differed by religious and spiritual views of students impacting diversity (Mayhew, Bowman, & Rockenbach, 2014). The campus spiritual climate affects student's diverse world views (A. B. Rockenbach & Mayhew, 2014) shaping student satisfaction (A. B. Rockenbach & Mayhew, 2014). Hence religion and spirituality impacts quality of life of college students (Hsien-Chuan Hsu, Krägeloh, Shepherd, & Billington, 2009). In Brief, religion impacts higher education (Mayrl & Oeur, 2009) where religious belief impacts college adjustment among college students (Edmondson & Park, 2009) and religiousness impacts college life (Moran, Roberts, Tobin, & Harvey, 2008) as it contributes to giving a meaning in life and general wellbeing (Z. H. Khan, Watson, Naqvi, Jahan, & Chen, 2015). In short, campus context, college encounters and religious spiritual struggle impact ecumenical world view development (Bryant, 2011) where religious coping depends on individual levels of religiosity and spirituality (Krägeloh, Chai, Shepherd, & Billington, 2012).

The student undergraduate B.Tech population of Institute of National Importance of IIT's and NIT's classified as per All India Survey Report on Higher Education (AISHE) from 2011 – 2016 on the basis of religion are as follows :-

Year	Total Student Across Religions		Muslim		Other Minorities	
	Male	Female	Male	Female	Male	Female
2011 - 12	56640	8099	190	22	305	92
2012 – 13	68296	10327	760	86	654	148

2013 - 14	71801	11332	1036	146	1041	267
2014 – 15	82281	13425	1114	187	949	249
2015 – 16	73566	12796	926	121	1534	412
Source :- AISHE Reports						

From the table above, it is evident that there has been a rise in the enrolment of Muslim and other minority community student population of 0.32% and 0.61% of year 2011 – 12 towards 1.21% and 2.25% of the year 2015 – 16. However much noticeably, the enrolment of female students continuing to be low compared to that of male students. Hence its vital to introspect the underrepresented minority student population adaptation at campus by religion.

The study seeks to analyse the relationship among student groups by their religious faith with the following research question and research objective: -

Research Question: - What makes campus adaptations of academic, social, physical - psychological and institutional attachment be unique across student religion?

Research Objective: - To examine existence of variance among campus adaptations of academic, social, physical psychological and institutional across student religion.

1. CAMPUS ADAPTATION

1.1 Academic Adaptation

Religious faith impacts performance (Aruguete, Goodboy, Jenkins, Mansson, & Mccutcheon, 2012) where spiritual wellbeing influenced good academic achievement (Mansor & Syahidah, 2012). Religion influenced students' academic major choice (Nudelman, 1972) which is supported of recent that religious variables are generally strong predictors of attitudes toward individual involving contested science issues like human evolution and other (Jelen & Lockett, 2014) as opposed to student's perceptions of conflict on dichotomy of religion and science (Martin-Hansen, 2008). The frequency of religious service attendance impacted college adjustment varying by gender and achievement (Suppaiah, 2003) revealing that students who had non-religious club involvement and non-religious attendance service had higher academic achievement (Good & Willoughby, 2011). Further it is observed that spirituality impacts learning (Sucylaite, 2013) and individuals who have a strong spiritual relationship with a higher power and are religious due to intrinsic motivation tend to be more confident in their ability to make career (Duffy & Blustein, 2005). Hence students who are spiritual are more motivated as students than non-spiritual students (Barmola, 2016) and college students who are more religiously engaged have a positive academic performance (Mayrl & Oeur, 2009).

1.2 Social Adaptation

Religious socialisation has positive implication on adjustment among youths (Jackson et al., 2001) where religion and region impacts women's autonomy (Jejeebhoy & Sathar, 2001) with vehemently noticed religious commitment higher in men than women (Schludermann et al., 2001). This was particularly observed in campus experience that varied by religious origin especially of minority religion like Muslims (Peek, 2003) who have been easily adhered to dress code impacting college adjustment (Rangoonwala, Sy, & Epinoza, 2011). More noticeably religion is an identity (Raman, 2003) and in particular racial identity attitude was predictive of religious orientation (Hwzhhq, Dqg, Phulfdq, Sanchez, & Carter, 2005) with an observed relationship between gender race and religion among university students (Arndt & Bruin, 2006). The generation next students, in the era of proposed secularisation on campus believed less in religion (Finnegan, 2007) as it was the vivid diversity that enhanced co-operation on campus (Patel, 2007). The effects of involvement in campus religious communities helped in establishing emotionally beneficial friendship networks making students delve more spiritually to be confident and committed at campuses (Bryant, 2007) with a positive relationship between the level of perceived discrimination and the percentage of campus friends who were of the same ethnicity but different religion (Shammas, 2009). Thus the role of interfaith leadership engaging religious diversity on campus and religious pluralism on college and university campuses (Patel & Meyer, 2009) influenced campus diversity in student's experiences belonging especially to that of religious minority (Darnell Cole & Shafiqa Ahmadi, 2010). Religiously diverse students, specifically Muslim veiled women, share some of the same adverse experience on campus as culturally and ethnically diverse students (Seggie & Sanford, 2010). In this regard, the greatest help can be faculites who serve as social supports for underrepresented minorities, in particular as mentors with socio cultural and spiritual resources (Strayhorn, 2010). Never the less, student religious organisations on campus preserve religious orthodoxy in secular campuses by excluding non-believers from their organisation (Thro & Russo, 2010), with the grave need of levelling the sense of social belonging by religion alone (Thorat, 2010).

ISSN 2394 - 7780

Spirituality and religion social indicators of university students (Yiengprugsawan, Seubsman, & Sleigh, 2012). Contradiction and conflict between 'leading identities' of becoming an engineer versus becoming a 'good Muslim woman are counter backed by religion (Black & Williams, 2013). Differentiation of self-impacted relationships between spiritual well-being and both social justice commitment has intercultural competence (Sandage & Jankowski, 2013) with religion influencing social relation and lifestyle of people (Baloch, Chhachhar, & Singutt, 2014) and spirituality enhancing nurturing and caring (Yilmaz & Gurler, 2014). Among college student's everyday theologies—personal religious beliefs that emerge through individuals' lived experiences and social interactions— had influence of attitudes than religion (Walls, Woodford, & Levy, 2014). Communication and interaction patterns impact student spiritual identity formation among students over four-year period in undergraduate community institutions (Forward, Moore, Richardson, & Shimansky, 2014) as some observe that religion hampers students entrance and progress in education with slow growth and low level of attainment (Rissler, Duncan, & Caruso, 2014) with an off late player of academic staff at campus also witnessing spiritual intelligence on job burn out at campus (Karampoor & Beig, 2015).

Further the primary influence on gender inequality in education is through culture and religion (Cooray & Potrafke, 2011) Religion's Impact on gender inequality in attitudes and outcomes persist as no single religion stands out as more gender inequitable than others transmitting stealth effects (Seguino, 2011). Spirituality is positive significant predictor of life satisfaction differing by gender (M. Khan, Shirazi, & Ahmed, 2011) contrarily with religiosity affecting sexuality diversifying by culture and race alone (Woo, Morshedian, Brotto, & Gorzalka, 2012). Therefore, ethno - centric niche persist as a thin line between cultural education and religious education (Fox, Buchanan, Eckes, & Basford, 2012).It is true that religion based stigma are experienced by students at campus (Mavhandu-mudzusi & Sandy, 2015) The inter faith co - curricular engagement impacts student's pluralism orientation at campus (A. N. Rockenbach, Mayhew, Morin, Crandall, & Selznick, 2015). Religious and non - religious activity engagement as an emotional regulation acts as assets in promoting social ties throughout university (Semplonius, Good, & Willoughby, 2015) especially where social life and identity of women on campus varied by religion (Pschaida, 2015). In short, spiritual quality of life and spiritual coping is impacted by spirituality, religiousness and personal beliefs module (Krägeloh, Billington, Henning, & Chai, 2015) with spirituality increasing and religiosity decreasing at college and it varied by culture of students of minority race (Nunez & Foubert, 2015) having a positive bearing on underrepresented students in higher education (Hicks, 2016)

1.3 Physical Adaptation

There is an inter relationship between spirituality religiosity and health (Tomasso, Beltrame, & Lucchetti, 2011) where spirituality was positively correlated with life satisfaction in india (M. Khan et al., 2011) and attachment to god impacts health risk-taking behaviour in college students (Horton, Ellison, Loukas, Downey, & Barrett, 2012). Spirituality impacts health of college students reducing health associated risk like alcohol and drugs (Nelms, Hutchins, Hutchins, & Pursley, 2007) while religious commitment and dispositional religious coping are protective against alcohol use (Menagi, Harrell, & June, 2008). Religious life on secular college campus today (Speers, 2008) are salience in shaping alcohol choices impacting student's health (Ellison, Bradshaw, Rote, & Storch, 2008) with levels of spirituality (Pillon, Santos, Gonçalves, Araújo, & Funai, 2010) religious beliefs (Moore & Starlyn, 2013) and religious coping (Harrell & Powell, 2014) resulting in reduced levels of alchohol consumptions. This is further supported as a negative relationship were found between a student's level of spirituality and their licit and illicit drug use (Jules et al., 2015) Spirituality and religion impacts health and well-being acting as virtual social indicators of university students (Yiengprugsawan et al., 2012). Spirituality impacts health (Gonçalves, Helena, Osório, & Oliveira, 2015) varying by gender (Shaikh, Kamal, & Naqvi, 2015). However, Religion influences sexual attitude and behaviour among students (Odimegwu, 2005) with noticeably sexual behaviours of student of race being influenced by sexual attitudes, religiousness, and spirituality (Luquis, Brelsford, & Pe, 2014). Hence spirituality impacts education on sexual tension in cross sexual relationships (George, Adalikwu-Obisike, Boyko, Johnson, & Boscanin, 2014) with religiosity vehemently impacting sexual attitude and behaviour among college students (Onyebuchukwu, Sholarin and Emerenwa, 2015). Apart from these, university micro environments impacted eating behaviours among undergraduate students, mediated by the role of religion (Tanton, Dodd, Woodfield, & Mabhala, 2015) and ratings of conscientiousness from physical appearance predict undergraduate academic performance (Di Domenico, Quitasol, & Fournier, 2015).

1.4 Psychological Adaptation

Religious faith positively impacted psychological wellbeing as it is strength of religious faith that impacts psychological functioning among university students (Plante, Yancey, Sherman, & Guertin, 2000). The fear of rejection was predictive of lower religious commitment and lower levels of adjustment to college by students

 ISSN 2394 - 7780

(Schludermann et al., 2001) while strength of religious faith had a no positive effect in coping stress adding less to physical and mental health (Plante, Saucedo, & Rice, 2001). However, it is though acknowledged that spirituality acts as a motivation (Hodge, 2003) as it is religion via spirituality that binds students on psychological sense of community (Bohus, Jr, Chan, Woods, & Chan, 2005); It is higher levels of religiousness and religious coping was associated with poorer levels of adjustment among college students (Edmondson & Park, 2009)

Spirituality impacts mental health of students (Bonab, Hakimirad, & Habibi, 2010) as it is forgiveness, spiritual instability, mental health symptoms that impacts wellbeing with mediator of self (Sandage & Jankowski, 2010). On the contrary, spirituality is also said to have a negative relationship with mental health where the spiritual dimensions of relation with god, finding meaning in life, spiritual actualization and activities (Bonab et al., 2010) with cultural differences in religious coping resulted in stress impacting quality of life of students (Pei, Chai, Krägeloh, & Billington, 2011) varying by gender(Yadav, Khanna, & Singh, 2016).Taking this further, generativity, relational spirituality, and gratitude impacts mental health (Sandage, Hill, & Vaubel, 2011) as it is religious fundamentalism that lead to system justifying thoughts (Dirilen-Gumus, 2011) even to that of forming religious belief by race. (Taylor & Merino, 2011). The relational spirituality observed thereon with differentiation of self and virtue predicts intercultural development (Sandage & Harden, 2011) as more often religious belief play a psychologically protective role for low Socio economic individuals who are independent of realistic economic concerns.(Brandt & Henry, 2012).Religiousness is found to be more positively intrinsic (Taunay et al., 2012) with most college students witnessing the spiritual struggle of powerful adverse impact on adjustment influencing loss of distress among them. (Wortmann, Park, & Edmondson, 2012) as it is noted that psychological distress increases religious involvement, which then increases purpose in life and social support that then lead to lower psychological distress (Wang, Koenig, Ma, & Shohaib, 2016). Spirituality also prepares undergraduate students to recognise spiritual cues and learn to assess and provide spiritual care (Cone & Giske, 2012) with spiritual dwelling influencing the wellbeing in distressed adults (Jankowski & Sandage, 2012). An extended view in this regard could be of the college student's religious affiliation that influences wellbeing in them (N. A. Bowman & Small, 2012). The psychosocial approach to religious fundamentalism among university students found psychosocial configurations organised around gender (Valladares, Carvajal, & García, 2013).

Delving towards spirituality reduces stress among students of Indian institute of technology Bombay (Yadav & Khanna, 2014) with parent's religious involvement influenced psychological health, family functioning and development of their children (Kong & Chan, 2014). The purpose in life is also said to mediate relationship between religiosity and happiness (Aghababaei & Błachnio, 2014). spirituality influenced quality of life of undergraduate students impacting cognitive and psychosocial development (Lau, Hui, Lam, Lau, & Cheung, 2015). Thus there is a relationship between religion and spirituality and students who are religious have better mental health (Ahmadi & Shahmohammadi, 2015) with observed positive psychosocial functioning in adolescents and young adults (Sanders et al., 2015).Spirituality among students helps to combat anxiety (ECL et al., 2015) and it tethered that student's resiliency can be predicted by spirituality (Mehrinejad, Tarsafi, & Rajabimoghadam, 2015) Religious belief aspects and customs with religiousness (Ahmadi & Shahmohammadi, 2015) enhances quality of life with religious awareness (Parniyan, Kazemiane, Jahromi, & Poorgholami, 2016) required especially among students of minority race, low socio economic status students at first academic year (Zhao et al., 2015). Of late, Prayers, the aspect mostly ignored by students at higher education at large could help in restoring the mental wellbeing (Shaikh et al., 2015). Religion also helps to combat depression and home sickness among college students (Longo & Kim-spoon, 2013) which is higher among first generation students than non first generation students (Ferrari, Drexler, & Skarr, 2015). In brief, spirituality undoubtedly impacts mental health (Karimipour & Md.Sawar, 2015) with its extended hand of attitude towards the external environment with nature at its green side (Nunn et al., 2016) and religiousness soaring high on psychological outcomes with subjective well being impacting life satisfaction(Aghababaei et al., 2016)

1.5 Institution

Student Spiritual Identity is formed at religious affiliated university to a greater extent (Forward et al., 2014) Persistence patterns of religious minority students are at a greater level of introspection in religious affiliated universities (Patten & Rice, 2008) as it is observed that attendance at religious services influences persistence and retention of students at four-year higher education institutions (Burks & Barrett, 2009). Further individual privileged religious experience impacts spiritual development of students within dynamics of institution (N. A. Bowman & Small, 2010) especially when religion performs a support factor function among women of race or colour impacting their persistence towards degree attainment (Ceglie, 2013). Moreover, attending an institution with an inclusive religious worldview climate is positively associated with participation in student engagement (N. a. Bowman, Rockenbach, & Mayhew, 2015).

International Journal of Advance and Innovative Research
ISSN 2394 - 7780
Volume 5, Issue 4 (XII): October - December, 2018

The study proposes the following research hypothesis

H1: - Campus adaptations of academic, social, physical – psychological and institutional environments do not vary among undergraduate students by their religion.

H1a: - There is a significant difference among undergraduate students across religion in campus adaptations of academic, social, physical – psychological and institutional adaptations.

2. METHODS

2.1 Participant

The reference population were undergraduate 4-year B. tech students enrolled on a regular study mode at IIT's and NIT's. A total of 1460 students participated with 1420 of valid responses for an overall 97.26 percent participation rate after deducting the questionnaire that contained empty answers. Data was collected for 20 weeks across institutions of IIT's and NIT's. Of the 1420 undergraduate respondents, 84.9% were Hindus and 3.16% were Muslims, Students belonging to other minority communities were Christians with 2.04%, Jains with 1.69%, Sikh with 0.56%, Buddhist with 0.21%. However, the student population who surprisingly did not want to associate themselves with any religion loomed large with associating themselves with being called Indian – 1.97%, humanity – 1.05%, Atheist – 2.46% and not applicable – 1.83%.

2.2 Sampling

Probability sampling technique followed by cluster sampling in identification of institutes of IIT's and NIT's was adopted. This is followed up with stratified sampling in sample choice of undergraduate students' population and simple random in collecting data from the chosen student population stated above.

2.3 Instrument and Procedure

The survey was conducted using a structured online questionnaire with reference to student's campus and non - campus email accounts. At all times, the students were informed of the anonymous, confidential, and voluntary nature of their participation and any doubts that arose were clarified.

2.4 Measures

All the 21 items in the questionnaire were measured with rating on a five point Likert scale ranging from "1 = strongly disagree" to "5 = strongly Agree". Reliability and validity of the questionnaire was tested

3. DATA ANALYSIS

Multivariate analyses of variance (MANOVA) were conducted to asses' religious group differences in campus adaptation. This was followed by discriminant analysis to determine the nature of effect of campus adaptations by each religious group. There are several assumptions behind a MANOVA, including multivariate normality, linearity of relationships, low influence of univariate and multivariate outliers, homogeneity of variance–covariance matrices and an absence of multicollinearity. Each assumption was tested, and no serious violations were noted.

Table-1: Pearson Correlation

Campus Adaptation	1	2	3	4	M	SD
1.Academic Adaptation	1.00	.	.		2.60	0.702
2.Social Adaptation	0.580	1.00		.	2.72	0.755
3.Physical – Psychological Adaptation	0.523	0.575	1.00	.	2.28	0.771
4.Institutional Adaptation	0.575	0.614	0.789	1.00	2.14	0.784
Note :- $n = 1420$ .Correlations greater than 0.05 are statistically significant ($p < 0.5$)						

A Pearson product moment correlation analysis, that examined the relationship between campus adaptations revealed correlations greater than 0.05, hence statistically significant

Table-2: Distribution of difference in dimensions of campus adaptations

Religion	Campus Adaptation: Academic		Social		Physical - Psychological		Institutional	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Hinduism (n = 1206)	2.59	0.698	2.72	0.751	2.29	0.771	2.14	0.783
Islamism (n = 45)	2.82	0.719	2.81	0.752	2.51	0.850	2.32	0.839
Christianity (n = 29)	2.61	0.643	2.78	0.647	2.20	0.684	2.17	0.782
Jainism (n =24)	2.38	0.621	2.54	0.826	2.02	0.794	1.70	0.640
Sikhism (n = 8)	2.43	0.462	2.82	0.704	2.20	0.770	2.00	0.501

 ISSN 2394 - 7780

Buddhism (n = 3)	2.44	0.254	2.01	0.916	2.33	0.577	2.00	0.871
Indian (n = 28)	2.78	0.755	2.51	0.747	2.12	0.820	2.09	0.780
Humanity (n = 15)	2.73	0.720	2.81	0.860	2.32	0.679	2.24	0.764
Atheist (n = 35)	2.65	0.860	2.82	0.841	2.25	0.672	2.19	0.698
Not Applicable (n = 26)	2.57	0.761	2.83	0.794	2.28	0.841	2.18	0.997
Total (n =1420)	2.60	0.702	2.72	0.755	2.28	0.771	2.14	0.784

3.1 Descriptive statistics

The mean in the descriptive statistics indicate that among undergraduate B Tech students, students enjoyed high level of social adaptation irrespective religion , with students following Hinduism (M = 2.72 , SD = 0.751), Christianity (M = 2.78 , SD = 0.647), Jainism (M = 2.54, SD = 0.826) Sikhism (M = 2.82, SD = 0.704) and students who did not like to associate themselves with religion by stating themselves as humanity also had high social adaptation (M = 2.81, SD = 0.860) atheist (M = 2.82, SD = 0.841) also not applicable (M = 2.83, SD = 0.794) however Muslim , Buddhism and students who stated themselves as Indians had high level of academic adaptation (M =2.82, SD = 0.719), (M = 2.44, SD = 0.254) and (M = 2.78, SD = 0.755)

However, across religions students had low level of institutional adaptation, with Hinduism (M = 2.14, SD = 0.783), Islamism (M = 2.32, SD = 0.839), Christianity (M = 2.17, SD = 0.782) Jainism (M = 1.70, SD = 0.640), Sikhism (M = 2.00, SD = 0.501) Buddhism (M = 2.01, SD = 0.871) Indian (M = 2.09, SD = 0.780) humanity (M =2.24, SD = 0.764) atheist (M = 2.19, SD = 0.698) not applicable (M = 2.18, SD = 0.997)

Further within Academic Adaptation, student who followed Islam religion had high level of impact on adaptation (M = 2.82, SD = 0.719) and Sikhism sect students had low level of adaptation (M = 2.43, SD = 0.462)

In Social Adaptation, not applicable students had high level of impact on adaptation (M = 2.83, SD = 0.794) and Buddhism sect impacted in low level of adaptation (M = 2.01, SD = 0.916)

In Physical - Psychological adaptation, Islamism students had high impact on level of adaptation (M = 2.51, SD = 0.850) and Jainism impacted in low level of adaptation (M = 2.02, SD = 0.770)

In Institutional adaptation, Islamism students had high impact on student's level of adaptation (M = 2.32, SD = 0.839) and Jainism impacted on student's low level of adaptation (M = 1.70, SD = 0.640)

Overall, across campus adaptations and fathers educational level groups, students had high level of social adaptation (M = 2.72, SD = 0.755) and low level of Institutional adaptation (M = 2.14, SD =0.784). However, within religious sect, religion as not applicable to them had high level of social adaptation (M = 2.83, SD = 0.794) and Jainism had low level of institutional adaptation (M = 1.70, SD = 0.640)

3.2 Inferential statistics

The Box's M value of 82.555 indicates test of assumption of equality of covariance matrices are roughly equal as assumed with $p = 0.613$ ($p \geq 0.001$).

Using Manova test statistic of Pillai's Trace, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional environments ($V = 0.032$, $F(40, 5636) = 1.132$ and $p = 0.261$) *($p > 0.05$).

Using Manova test statistic of Wilk's Lambda, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional ($\Lambda = 0.968$, $F(40,5333) = 1.132$ and $p = 0.262$) *($p > 0.05$).

Using Manova test statistic of Hotelling's trace, there was a non-significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional ($T = 0.032$, $F(40, 5618) = 1.132$ and $p = 0.262$) *($p > 0.05$).

Using Manova test statistic of Roy's largest root, there was a significant effect of student's religious entity on student's campus adaptations of Academic, Social, Physical – Psychological and Institutional ($\Theta = 0.015$, $F(10, 1409) = 2.091$ and $p = 0.022$) *($p > 0.05$).

The univariate test statistic with levenes test of equality of variances for each of the dependent variable is non-significant with academic adaptation of 0.365, social adaptation of 0.557, physical – psychological adaptation of 0.871 and institutional adaptation of being close to 0.394 enabling the assumptions of homogeneity of variance being met.

 ISSN 2394 - 7780

However separate univariate analysis or anova on the outcome with F (10, 1409) for Academic, social, Physical – Psychological and institutional adaptation revealed a non-significant effect with F value (1.018) (1.164) (1.055) (1.277) and p value (0.426) (0.311) (0.395) (0.238) greater than 0.05

Further the between – subjects SSCP matrix indicates that the sum of squares for the error SSCP matrix are substantially bigger than in the model (or religious level) SSCP matrix, whereas absolute values of cross products are fairly similar. This pattern of relationship indicates that the relationship between dependent variables is significant than individual dependent variables themselves. Thus to determine the nature of effect of religious entity among dependent variables Manova is followed with discriminant analysis

The first discriminant function explained 46 % of the variance with canonical R2 = 0.015; the second discriminant function explained 28.4 % of the variance with canonical R2 = 0.009; the third discriminant function explained 18.7 % of the variance with canonical R2 = 0.006; the fourth discriminant function explained 6.9 % of the variance with canonical R2 = 0.002 indicates that the variance in the canonical derived dependnant variable was associated for religious level

In combination these discriminant functions did not significantly discriminate among the religious groups. The first discriminant function $\Lambda = 0.968$, x2 (40) 45.255, $p = 0.262$ ($p > 0.05$) The second discriminant function $\Lambda = 0.983$, x2 (27) 24.464, $p = 0.604$ ($p > 0.05$). The third discriminant function $\Lambda = 0.992$, x2 (16) 11.621, $p = 0.770$ ($p > 0.05$) and the fourth discriminate function $\Lambda = 0.998$, x2 (7) 3.151, $p = 0.871$ ($p > 0.05$).

The correlations between outcomes and the discriminant functions revealed that institutional adaptation loaded highly on second function ($r = 0.984$) indicating it contributed more to the age group separation (Bragman, 1970) than the relatively fair high loading in positive relationship with first function ($r = 0.053$) and third function ($r = 0.161$) with negative relationship in fourth function ($r = - 0.047$);

Physical - Psychological adaptation loaded highly on second function ($r = 0.697$) indicating it contributed more to the religious group separation than the relatively high loading in positive relationship with first function ($r = 0.134$) third function ($r = 0.664$) and fourth function ($r = 0.235$);

Social adaptation loaded highly on second function with ($r = 0.642$) indicating it contributed more to the religious group separation than the than relatively fair high loading in the first function ($r = 0.499$) and fourth function ($r = 0.571$) with negative relationship from the third function ($r = -0.111$)

Lastly academic adaptation loaded highly on fourth function with ($r = 0.646$) indicating it contributed more to the religious group separation than the relatively fair high loading in positive relationship with second function ($r = 0.642$) with negative relationship in third function (-0.033)

4. FINDINGS

Hinduism as a religious sect had positive outcomes on academic (0.010) and Physical –Psychological (0.011) adaptation with negative outcomes on social (-0.003) and institutional (-0.010) adaptation

Students who practised Islamism faith had positive social (0.212) Physical – Psychological (0.189) and institutional (0.173) adaptation with negative outcome on academic adaptation (-0.180)

Christian students had positive outcomes in academic (0.048) and social (0.079) adaptation with negative outcomes in Physical – Psychological (-0.252) and institutional (-0.036) adaptation

Jain sect students had positive outcomes in academic (0.086) Physical – Psychological (0.022) and institutional (0.158) adaptation with negative outcomes in social (-0.580) adaptation.

Sikhism sect students had positive outcomes in academic (0.409) and institutional (0.082) adaptation with negative outcomes in Social (-0.196) and Physical – Psychological (-0.078) adaptation

Buddhism sect students had positive outcomes in Physical – Psychological (0.740) adaptations with negative outcomes in academic (- 0.787) social (- 0.293) and institutional (-0.519)

Students who stated themselves outside religious sect as Indian, humanity, atheist and not applicable – all of them had positive institutional adaptation (0.008) (0.086) (0.040) and (0.000). However, academic (-0.606) social (-0.004) Physical – Psychological (-0.201) adaptation had negative outcome among students who preferred to state themselves as Indians.

Students who referred to themselves as humanitarian had positive outcomes in social adaptation (0.146) with negative outcomes in academic (-0.073) and Physical – Psychological adaptation (-0.107)

Students who referred to themselves as atheist or non-believer in god or religious faith had positive academic (0.055) and social (0.092) adaptation with negative outcomes in Physical – psychological adaptation (-0.193)

ISSN 2394 - 7780

Students who denied the applicability on religion on them had positive outcomes on academic (0.210) and social (0.055) adaptation with negative outcome on Physical – psychological (-0.107) adaptation.

In brief the alternate hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected at $p < 0.05$.

In short, campus adaptations vary across religion of engineering undergraduate students.

5. CONCLUSION

Religion being the most sensitive issue in a country like India is often hyper testified amidst secularist objective of promotion. The association through religious practises and coping be it to dietary practises or frequenting to religious shrine, student as a social being does carry the bandwagon of religious identity from young which cannot be unshouldered all of a sudden, though might be minimised in its eventual being at crowded campuses.

6. IMPLICATION

The identification of students apart from being associated to a religious sect is a promising scenario that campuses stand tall and fair in their being and individuality, irrespective to the multiple religious' sect to which a student belongs or less identifies with. Never the less, atheist students are less inclined than are their peers to perceive a positive campus climate for nonreligious students (A. N. Rockenbach, Mayhew, & Bowman, 2015)

Campuses are known for its vivid diversity and religion being a vital part of it is less agglomerated by the student population themselves showcasing that being part of campus as an individual student with its learning and socialising perspective is much more important than associating the identity of oneself with religion and coping of religious practises. This sensitive issue has been humanised by students at large who often dream to have 'one' unified society loomed large.

REFERENCES

1. Abdel-Khalek, A. M. ., & Lester, D. (2015). Self – Reported religiosity in kuwaiti and American college students, Psychological Reports: Sociocultural Issues in Psychology, 116(3), 986–989.
2. Aghababaei, N., & Błachnio, A. (2014). Purpose in life mediates the relationship between religiosity and happiness: evidence from Poland. Mental Health, Religion & Culture, 17(8), 827–831. http://doi.org/10.1080/13674676.2014.928850
3. Aghababaei, N., Sohrabi, F., Eskandari, H., Borjali, A., Farrokhi, N., & Chen, Z. J. (2016). Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators. Personality and Individual Differences, 90(FEBRUARY), 93–98. http://doi.org/10.1016/j.paid.2015.10.046
4. Ahmadi, A., & Shahmohammadi, N. (2015). Studying the Relationship between Mental Health, Spirituality and Religion in Female Students of Tehran Azad University: South Branch. Procedia - Social and Behavioral Sciences, 205(May), 236–241. http://doi.org/10.1016/j.sbspro.2015.09.065
5. Arndt, M., & Bruin, G. De. (2006). Attitudes toward Lesbians and Gay men relations with gender, race and religion among university students. Psychology in Society, 33, 16–30. Retrieved from http://www.pins.org.za/pins33/Arndt & de Bruin.pdf
6. Aruguete, M. S., Goodboy, A. K., Jenkins, W. J., Mansson, D. H., & Mccutcheon, L. E. (2012). Does Religious Faith Improve Test Performance? NORTH AMERICAN JOURNAL OF PSYCHOLOGY, 14(1), 185–196.
7. Baloch, G. M., Chhachhar, A. R., & Singutt, W. V. (2014). Influence of Religion on Life Style and Social Behavior in Christianity . Perspective of Malaysian Christian Students. Journal of Basic and Applied Scientific Research, 4(4), 300–307.
8. Barmola, K. (2016). Spirituality and Motivation of College Students. The International Journal of Indian Psychology, 3(2), 84–88.
9. Black, L., & Williams, J. (2013). Contradiction and conflict between "leading identities": becoming an engineer versus becoming a "good muslim" woman. Educational Studies in Mathematics, 84(1), 1–14. http://doi.org/10.1007/s10649-013-9481-7
10. Bohus, S., Jr, R. H. W., Chan, K. C., Woods, R. H., & Chan, K. C. (2005). Psychological Sense of Community Among Students on religious Collegiate campuses in the Christian Evangelical Tradition. Christian Higher Education, 4(1), 19–40. http://doi.org/10.1080/153637590507423

 ISSN 2394 - 7780

11. Bonab, B. G., Hakimirad, & Habibi. (2010). Relation between mental health and spirituality in Tehran University student. Procedia - Social and Behavioral Sciences, 5(2), 887–891. http://doi.org/10.1016/j.sbspro.2010.07.204
12. Bowman, N. a., Rockenbach, A. N., & Mayhew, M. J. (2015). Campus Religious/Worldview Climate, Institutional Religious Affiliation, and Student Engagement. Journal of Student Affairs Research and Practice, 52(1), 24–37. http://doi.org/10.1080/19496591.2015.996045
13. Bowman, N. A., & Small, J. L. (2010). Do College Students Who Identify with a Privileged Religion Experience Greater Spiritual Development? Exploring Individual and Institutional Dynamics. Research in Higher Education, 51(7), 595–614. http://doi.org/10.1007/s11162-010-9175-2
14. Bowman, N. A., & Small, J. L. (2012). Exploring a Hidden Form of Minority Status: College Students' Religious Affiliation and Well-Being. Journal of College Student Development, 53(4), 491–509. http://doi.org/10.1353/csd.2012.0050
15. Brandt, M. J., & Henry, P. J. (2012). Psychological Defensiveness as a Mechanism Explaining the Relationship Between Low Socioeconomic Status and Religiosity. The International Journal for the Psychology of Religion, 22(4), 321–322. http://doi.org/10.1080/10508619.2011.646565
16. Bryant, A. N. (2007). The Effects of Involvement in Campus Religious Communities on College Student Adjustment and Development. Journal of College and Character, 8(3), 1–26. http://doi.org/10.2202/1940-1639.1178
17. Bryant, A. N. (2011). The Impact of Campus Context, College Encounters, and Religious/Spiritual Struggle on Ecumenical Worldview Development. Research in Higher Education, 52(5), 441–459. http://doi.org/10.1007/s11162-010-9205-0
18. Burks, S. A., & Barrett, T. G. (2009). Student Characteristics and Activity Choices of College Freshmen and their Intent to Persist in Religiously Affiliated Institutions. Christian Higher Education, 8(5), 351–392. http://doi.org/10.1080/15363750902917276
19. Ceglie, R. (2013). Religion as a Support Factor for Women of Color Pursuing Science Degrees : Implications for Science Teacher Educators. Journal of Science Teacher Education, 24, 37–65. http://doi.org/10.1007/s10972-012-9286-z
20. Cone, P. M. H., & Giske, T. (2012). Teaching spiritual care : A grounded theory study among undergraduate nursing educators. Journal of Clinical Nursing, (April), 1–11. http://doi.org/10.1111/j.1365-2702.2012.04203.x
21. Cooray, A., & Potrafke, N. (2011). Gender inequality in education : Political institutions or culture and religion ? European Journal of Political Economy, 27(2), 268–280. http://doi.org/10.1016/j.ejpoleco.2010.08.004
22. Cragun, R. T., Henry, P., Mann, M., & Russell Krebs, S. (2014). Chapel Use on College and University Campuses. Journal of College and Character, 15(2), 103–118. http://doi.org/10.1515/jcc-2014-0014
23. Darnell Cole, & Shafiqa Ahmadi. (2010). Reconsidering Campus Diversity: An Examination of Muslim Students' Experiences. The Journal of Higher Education, 81(2), 121–139. http://doi.org/10.1353/jhe.0.0089
24. Di Domenico, S. I., Quitasol, M. N., & Fournier, M. A. (2015). Ratings of Conscientiousness from Physical Appearance Predict Undergraduate Academic Performance. Journal of Nonverbal Behavior, 39(4), 339–353. http://doi.org/10.1007/s10919-015-0213-9
25. Dirilen-Gumus, O. (2011). Differences in system justification with respect to gender, political conservatism, socio-economic status and religious fundamentalism. Procedia - Social and Behavioral Sciences, 30, 2607–2611. http://doi.org/10.1016/j.sbspro.2011.10.510
26. Duffy, R. D., & Blustein, D. L. (2005). The relationship between spirituality , religiousness , and career adaptability. Journal of Vocational Behavior, 67, 429–440. http://doi.org/10.1016/j.jvb.2004.09.003
27. ECL, C., DH, I., CC, M., LC, C., AM, S., & EC, C. (2015). Anxiety and spirituality in university students : a cross-sectional study. REVISTA BRASILEIRA DE ENFERMAGEM, 68(3), 444–449. http://doi.org/10.1590/0034-7167.2015680318i

28. Edmondson, D., & Park, C. (2009). Shifting foundations: religious belief change and adjustment in college students. Mental Health, Religion & Culture, 12(3), 289–302. http://doi.org/10.1080/13674670802627339

29. Ellison, C. G., Bradshaw, M., Rote, S., & Storch, J. (2008). Religion and Alcohol Use among College Students: Exploring the Role of Domain-Specific Religious Salience. Journal of Drug Issues, 38, 821–846. http://doi.org/10.1177/002204260803800308

30. Ferrari, J. R., Drexler, T., & Skarr, J. (2015). Finding a spiritual home: A pilot study on the effects of a spirituality retreat and loneliness among urban homeless adults. Psychology, 6(3), 210–216. http://doi.org/10.4236/psych.2015.63020

31. Finnegan, D. E. (2007). The College "Y": Student Religion in the Era of Secularization (review). The Review of Higher Education, 31(2), 243–244. http://doi.org/10.1353/rhe.2007.0068

32. Fisher, J. W. (2009). Understanding and Assessing Spiritual Health. In International handbook of education for spirituality, care and well-being. (pp. 1–34). http://doi.org/10.1007/978

33. Forward, G. L., Moore, J., Richardson, M., & Shimansky, M. (2014). "Children of a Lesser God:" The Effects of Communication and Interaction Patterns on Student Spiritual Identity at a Church-Related University. Studies in Media and Communication, 2(1). http://doi.org/10.11114/smc.v2i1.326

34. Fox, R. A., Buchanan, N. K., Eckes, S. E., & Basford, L. E. (2012). The Line Between Cultural Education and Religious Education: Do Ethnocentric Niche Charter Schools Have a Prayer? Review of Research in Education, 36, 282–305. http://doi.org/10.3102/0091732X11420808

35. George, D., Adalikwu-Obisike, J., Boyko, J., Johnson, J., & Boscanin, A. (2014). Harry and Sally Revisited: The Influence of Spirituality and Education on Sexual Tension in Cross-Sex Friendships in Secular and Christian Universities. Journal of Research on Christian Education, 23(1), 70–94. http://doi.org/10.1080/10656219.2014.882721

36. Gonçalves, L. M., Helena, I., Osório, S., & Oliveira, L. L. (2015). Learning from Listening: Helping Healthcare Students to Understand Spiritual Assessment in Clinical Practice. Journal of Religion and Health, (March 2016), 1–17. http://doi.org/10.1007/s10943-015-0146-y

37. Good, M., & Willoughby, T. (2011). Evaluating the Direction of Effects in the Relationship Between Religious Versus Non-Religious Activities , Academic Success , and Substance Use. Journal of Youth and Adolescence, 40, 680–693. http://doi.org/10.1007/s10964-010-9581-y

38. Halsmer, D., Butay, E., Hase, B., McDonough, S., Tryon, T., & Weed, J. (2010). Exploring connections between engineering and human spirituality. In ASEE Annual Conference and Exposition, Conference Proceedings.

39. Harrell, Z. A. T., & Powell, K. (2014). The Relationship Between Parent and Student Religious Coping and College Alcohol Use. Journal of Religion and Health, 53, 895–903. http://doi.org/10.1007/s10943-013-9683-4

40. Hicks, T. (2016). Spirituality Research Studies in Higher Education University Press of America , Inc . Spiritualty Research Studies in Higher Education. http://doi.org/10.13140/2.1.3984.8005

41. Hodge, D. R. (2003). The Intrinsic Spirituality Scale : A New Six-Item Instrument for Assessing the Salience of Spirituality as a Motivational Construct. Journal of Social Service Research, 30(1), 41–61. http://doi.org/10.1300/J079v30n01

42. Horton, K. D., Ellison, C. G., Loukas, A., Downey, D. L., & Barrett, J. B. (2012). Examining Attachment to God and Health Risk-Taking Behaviors in College Students. Journal of Religion and Health, 51(2), 552–566. http://doi.org/10.1007/s10943-010-9380-5

43. Hsien-Chuan Hsu, P., Krägeloh, C. U., Shepherd, D., & Billington, R. (2009). Religion/spirituality and quality of life of international tertiary students in New Zealand: an exploratory study. Mental Health, Religion & Culture, 12(4), 385–399. http://doi.org/10.1080/13674670902752920

44. Hwzhhq, S. W. K. H., Dqg, G., Phulfdq, P. I., Sanchez, D., & Carter, R. T. (2005). Exploring the Relationship Between Racial Identity and Religious Orientation Among. Journal of College Student Development, 46(3), 280–295. http://doi.org/10.1353/csd.2005.0031

 ISSN 2394 - 7780

45. Jackson, L., Mark Pancer, S., Pratt, M. W., & Hunsberger, B. E. (2001). Great Expectations: The Relation Between Expectancies and Adjustment During the Transition to University'. Journal of Applied Social Psychology, 30(10), 2100–2125. http://doi.org/10.1111/j.1559-1816.2000.tb02427.x

46. Jankowski, P. J., & Sandage, S. J. (2012). Spiritual dwelling and well-being: the mediating role of differentiation of self in a sample of distressed adults. Mental Health, Religion & Culture, 15(4), 417–434. http://doi.org/10.1080/13674676.2011.579592

47. Jejeebhoy, shireen j, & Sathar, zeba A. (2001). Women ' s Autonomy in India and Pakistan : The Influence of religion and region. Population and Development Review, 27(December), 687–712.

48. Jelen, T. G., & Lockett, L. A. (2014). Religion, Partisanship, and Attitudes Toward Science Policy. SAGE Open, 4, 1–8. http://doi.org/10.1177/2158244013518932

49. Joshanloo, M. (2012). Investigation of the factor structure of spirituality and religiosity in Iranian Shiite university students. International Journal of Psychology, 47(3), 211–221. http://doi.org/10.1080/00207594.2011.617372

50. Jules, M. A., Noh, S., Hamilton, H., Brands, B., Gastaldo, D., Wright, M. G. M., … Khenti, A. (2015). Spirituality, gender, and drug use among students from one University in Barbados . Texto E Contexto Enfermagem, 24(April), 117–124. http://doi.org/10.1590/0104-07072015001140014

51. Karampoor, H., & Beig, S. R. (2015). Studying the relationship between spiritual intelligence and job burnout of Payame Noor University staff. International Journal of Review in Life Sciences, 5(6), 1072–1078.

52. Karimipour, M., & Md.Sawar, S. S. (2015). Scrutinizing the Effect of Spirituality on Huffaz students Mental Health In Itqan Institute. Research Journal of Social Science and Management, 5(7), 92–96.

53. Khan, M., Shirazi, M., & Ahmed, M. (2011). Spirituality and life satisfaction among Adolescents in India . Journal of Subcontinent Researches, 3(7), 71–84.

54. Khan, Z. H., Watson, P. J., Naqvi, A. Z., Jahan, K., & Chen, Z. J. (2015). Muslim Experiential Religiousness in Pakistan : Meaning in Life , General Well-Being and gender differences. Mental Health Religion and Culture, 1–12. http://doi.org/http://dx.doi.org/10.1080/13674676.2015.1079602

55. Kong, H., & Chan, J. W. K. Y. Y. (2014). Parents ' Religious Involvement , Family Socialization and Development of Their Children in a Chinese Sample. Social Indicators Research, 117, 987–1010. http://doi.org/10.1007/s11205-013-0371-2

56. Krägeloh, C. U., Billington, D., Henning, M. A., & Chai, P. (2015). Spiritual quality of life and spiritual coping: evidence for a two-factor structure of the WHOQOL spirituality, religiousness, and personal beliefs module. Health and Quality of Life Outcomes, 13(1), 26. http://doi.org/10.1186/s12955-015-0212-x

57. Krägeloh, C. U., Chai, P. P. M., Shepherd, D., & Billington, R. (2012). How Religious Coping is Used Relative to Other Coping Strategies Depends on the Individual's Level of Religiosity and Spirituality. Journal of Religion and Health, 51(4), 1137–1151. http://doi.org/10.1007/s10943-010-9416-x

58. Lau, W. W. F., Hui, C. H., Lam, J., Lau, E. Y. Y., & Cheung, S.-F. (2015). The relationship between spirituality and quality of life among university students: An autoregressive cross-lagged panel analysis. Higher Education, 69(6), 977–990. http://doi.org/10.1007/s10734-014-9817-y

59. Longo, G. S., & Kim-spoon, J. (2013). Homesickness in college students : the role of religion in combating depression. Mental Health, Religion & Culture, 16(5), 489–500. http://doi.org/10.1080/13674676.2012.696600

60. Luquis, R. R., Brelsford, G. M., & Pe, M. A. (2014). Exploring Latino College Students ' Sexual Behaviors in Relation to Their Sexual Attitudes , Religiousness , and Spirituality. Journal of Religion and Health, 1–13. http://doi.org/10.1007/s10943-014-9929-9

61. Mansor, N., & Syahidah, N. (2012). Spiritual well-being of INSTED , IIUM Students and its Relationship with College Adjustment. Procedia - Social and Behavioral Sciences, 69(Iceepsy), 1314–1323. http://doi.org/10.1016/j.sbspro.2012.12.068

62. Martin-Hansen, L. M. (2008). First-Year College Students' Conflict with Religion and Science. Science & Education, 17(4), 317–357. http://doi.org/10.1007/s11191-006-9039-5

 ISSN 2394 - 7780

63. Mavhandu-mudzusi, A. H., & Sandy, P. T. (2015). Religion-related stigma and discrimination experienced by lesbian , gay , bisexual and transgender students at a South African rural-based university university. Culture Health & Sexuality, (April 2016), 1–11. http://doi.org/10.1080/13691058.2015.1015614

64. Mayhew, M. J. (2004). Exploring the essence of spirituality: A phenomenological study of eight students with eight different worldvews. NASPA Journal, 41(3), 647–674. http://doi.org/10.2202/1949-6605.1392

65. Mayhew, M. J., Bowman, N. A., & Rockenbach, A. B. (2014). Silencing Whom ? Linking Campus Climates for Religious , Spiritual , and Worldview Diversity to Student Worldviews. The Journal of Higher Education, 85(2), 219–245. http://doi.org/10.1353/jhe.2014.0005

66. Mayrl, D., & Oeur, F. (2009). Religion and Higher Education: Current Knowledge and Directions for Future Research. Journal for the Scientific Study of Religion, 48(2), 260–275. http://doi.org/10.1111/j.1468-5906.2009.01446.x

67. Mehrinejad, S. A., Tarsafi, M., & Rajabimoghadam, S. (2015). Predictability of Students' Resiliency by Their Spirituality. Procedia - Social and Behavioral Sciences, 205(May), 396–400. http://doi.org/10.1016/j.sbspro.2015.09.024

68. Menagi, F. S., Harrell, Z. A. T., & June, L. N. (2008). Religiousness and College Student Alcohol Use : Examining the Role of Social Support. Journal of Religion and Health, 47, 217–226. http://doi.org/10.1007/s10943-008-9164-3

69. Moore, E. W., & Starlyn, J. Y. B. (2013). Religiosity , Alcohol Use , and Sex Behaviors Among. Journal of Religion and Health, 52, 930–940. http://doi.org/10.1007/s10943-011-9543-z

70. MORAN, C. D., ROBERTS, C., Tobin, J. A., & Harvey, L. M. (2008). Religious Expression Among Residents and Resident Assistants in Residence Halls at Public Colleges and Universities : Freedoms and Constraints Religious Expression Among Residents and Resident Assistants in Residence Halls at Public Colleges and Universit. The Journal of college and University Student Housing, 35(2), 48–61.

71. Nelms, L. W., Hutchins, E., Hutchins, D., & Pursley, R. J. (2007). Spirituality and the Health of College Students. Journal of Religion and Health, 46(2), 249–265. http://doi.org/10.1007/s10943-006-9075-0

72. Nudelman, A. E. (1972). Christian Science and Secular Science: Adaptation on the College Scene. Journal for the Scientific Study of Religion, 11(3), 271–276. Retrieved from http://www.jstor.org/stable/1384551

73. Nunez, R., & Foubert, J. (2015). Understanding the Meaning Making Process of Hispanic College Students in Their Spiritual and Religious Development. Religion & Education, (April), 1–39. http://doi.org/10.1080/15507394.2015.1093880

74. Nunn, P. D., Mulgrew, K., Scott-Parker, B., Hine, D. W., Marks, A. D. G., Mahar, D., & Maebuta, J. (2016). Spirituality and attitudes towards Nature in the Pacific Islands: insights for enabling climate-change adaptation. Climatic Change, 1–17. http://doi.org/10.1007/s10584-016-1646-9

75. Odimegwu, C. (2005). Influence of religion on adolescent sexual attitudes and behaviour among Nigerian university students: affiliation or commitment? African Journal of Reproductive Health, 9(2), 125–140. http://doi.org/10.2307/3583469

76. ONYEBUCHUKWU, I. J., SHOLARIN, M. A., & EMERENWA, A. B. (2015). Age , Gender , Religiousity and Family Factors on Sexual Attitude and Behaviour of University of Ibadan Undergraduate Students. Research on Humanities and Social Sciences, 5(6), 130–140.

77. Parniyan, R., Kazemiane, A., Jahromi, M. K., & Poorgholami, F. (2016). A Study of the Correlation between Religious Attitudes and Quality Of Life in Students at Jahrom University of Medical Sciences in 2014. Global Journal of Health Science, 8(10), 43–49. http://doi.org/10.5539/gjhs.v8n10p43

78. Patel, E. (2007). Religious Diversity and Cooperation on Campus. Journal of College and Character, 9(2), 37–41. http://doi.org/10.2202/1940-1639.1120

79. Patel, E., & Meyer, C. (2009). Engaging Religious Diversity on Campus : The Role of Interfaith Leadership. Journal of College and Character, 10(7), 1–9. http://doi.org/10.2202/1940-1639.1436

80. Patten, T. A., & Rice, N. D. (2008). Religious Minorities and Persistence at a Systemic Religiously-Affiliated University. Christian Higher Education, 8(1), 42–53. http://doi.org/10.1080/15363750802349323

 ISSN 2394 - 7780

81. Peek, L. a. (2003). Reactions and response: Muslim students' experiences on New York city campuses post 9/11. Journal of Muslim Minority Affairs, 23(2), 271–283. http://doi.org/10.1080/1360200032000139910

82. Pei, P., Chai, M., Krägeloh, C. U., & Billington, R. (2011). Stress and quality of life in international and domestic university students : cultural differences in the use of religious coping. Mental Health Religion and Culture, (November 2011), 37–41. http://doi.org/10.1080/13674676.2011.571665

83. Pillon, S. C., Santos, M. A. dos, Gonçalves, A. M. de S., Araújo, K. M. de, & Funai, A. (2010). : 493 - 513 Risk Factors, Levels of Spirituality and Aclchohol use in Students of Two Nursing Courses, Rev. Eletrônica Saúde Mental Alcohol Drug., 6, 493–513.

84. Plante, T. G., Saucedo, B., & Rice, C. (2001). The Association Between Strength of Religious Faith and Coping with Daily Stress. Pastoral Psychology, 49(4), 291–300. http://doi.org/10.1023/A

85. Plante, T. G., Yancey, S., Sherman, A., & Guertin, M. (2000). The Association Between Strength of Religious Faith and Psychological Functioning. Pastoral Psychology, 48(5), 405–412. http://doi.org/10.1023/A

86. Proctor, A. (2002). Religion on Campus. Journal of College and Character, 3(4). http://doi.org/10.2202/1940-1639.1321

87. Pschaida, D. A. (2015). Muslim American Women on Campus: Undergraduate Social Life and Identity. Journal of Muslim Minority Affairs, 35(1), 158–160. http://doi.org/10.1080/13602004.2015.1021106

88. Raman, R. (2003). Book Reviews : Anshu Malhotra, Gender, Caste, and Religious Identities. New Delhi: Oxford University Press. 2002. 232 pages. Indian Journal of Gender Studies, 10(3), 477–481. http://doi.org/10.1177/097152150301000305

89. Rangoonwala, F. I., Sy, S. R., & Epinoza, R. K. E. (2011). Muslim Identity, Dress Code Adherence and College Adjustment among American Muslim Women. Journal of Muslim Minority Affairs, 31(2), 231–241. http://doi.org/10.1080/13602004.2011.583517

90. Rissler, L. J., Duncan, S. I., & Caruso, N. M. (2014). The relative importance of religion and education on university students' views of evolution in the Deep South and state science standards across the United States. Evolution: Education and Outreach, 7(1), 24. http://doi.org/10.1186/s12052-014-0024-1

91. Rockenbach, A. B., & Mayhew, M. J. (2014). The Campus Spiritual Climate: Predictors of Satisfaction Among Students With Diverse Worldviews. Journal of College Student Development, 55(1), 41–62. http://doi.org/10.1353/csd.2014.0002

92. Rockenbach, A. N., Mayhew, M. J., & Bowman, N. a. (2015). Perceptions of the Campus Climate for Nonreligious Students. Journal of College Student Development, 56(2), 181–186. http://doi.org/10.1353/csd.2015.0021

93. Rockenbach, A. N., Mayhew, M. J., Morin, S., Crandall, R. E., & Selznick, B. (2015). Fostering the Pluralism Orientation of College Students through Interfaith Co-curricular Engagement. The Review of Higher Education, 39(1), 25–58. http://doi.org/10.1353/rhe.2015.0040

94. Sandage, S. J., & Harden, M. G. (2011). Relational spirituality, differentiation of self, and virtue as predictors of intercultural development. Mental Health, Religion & Culture, 14(8), 819–838. http://doi.org/10.1080/13674676.2010.527932

95. Sandage, S. J., Hill, P. C., & Vaubel, D. C. (2011). Generativity, Relational Spirituality, Gratitude, and Mental Health: Relationships and Pathways. International Journal for the Psychology of Religion, 21(1), 1–16. http://doi.org/10.1080/10508619.2011.532439

96. Sandage, S. J., & Jankowski, P. J. (2010). Forgiveness, spiritual instability, mental health symptoms, and well-being: Mediator effects of differentiation of self. Psychology of Religion and Spirituality, 2(3), 168–180. http://doi.org/10.1037/a0019124

97. Sandage, S. J., & Jankowski, P. J. (2013). Spirituality, social justice, and intercultural competence: Mediator effects for differentiation of self. International Journal of Intercultural Relations, 37(3), 366–374. http://doi.org/10.1016/j.ijintrel.2012.11.003

98. Sanders, P. W., Allen, G. E. K., Fischer, L., Richards, P. S., Morgan, D. T., & Potts, R. W. (2015). Intrinsic Religiousness and Spirituality as Predictors of Mental Health and Positive Psychological Functioning in

 ISSN 2394 - 7780

Latter-Day Saint Adolescents and Young Adults. Journal of Religion and Health, 54(3), 871–887. http://doi.org/10.1007/s10943-015-0043-4

99. Schludermann, E. H., Schludermann, S. M., Mulenga, M., Schludermann, S. M., Needham, D., & Reformed, A. A. (2001). Fear of Rejection versus Religious Commitment as Predictors of Adjustment Among Reformed and Evangelical College Students in Canada. Journal of Beliefs & Values : Studies in Religion & Education, 22(2), 209–224. http://doi.org/10.1080/13617670120092438

100. Schmalzbauer, J. (2013). Campus Religious Life in America: Revitalization and Renewal. Society, 50(2), 115–131. http://doi.org/10.1007/s12115-013-9640-6

101. Seggie, F. N., & Sanford, G. (2010). Perceptions of female Muslim students who veil: campus religious climate. Race Ethnicity and Education, 13(1), 59–82. http://doi.org/10.1080/13613320903549701

102. Seguino, S. (2011). Help or Hindrance? Religion ' s Impact on Gender Inequality in Attitudes and Outcomes. World Development, 39(8), 1308–1321. http://doi.org/10.1016/j.worlddev.2010.12.004

103. Semplonius, T., Good, M., & Willoughby, T. (2015). Religious and Non-religious Activity Engagement as Assets in Promoting Social Ties Throughout University: The Role of Emotion Regulation. Journal of Youth and Adolescence, 44(8), 1592–1606. http://doi.org/10.1007/s10964-014-0200-1

104. Shaikh, M. A., Kamal, A., & Naqvi, I. (2015). Gender association of prayer for health - perspective from university students in Islamabad and Rawalpindi. JPMA. The Journal of the Pakistan Medical Association, 65(10), 1116–8. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/26440845

105. Shammas, D. S. (2009). Post-9 / 11 Arab and Muslim American Community College Students : Ethno-religious Enclaves and Perceived Discrimination. Community College Journal of Research and Practice, 33, 283–308. http://doi.org/10.1080/10668920802580507

106. Speers, S. (2015). The Secular Thesis Revisited: Religious Life on the Secular College Campus Today. Journal of College and Character, 10(1), 0–11. http://doi.org/10.2202/1940-1639.1056

107. Stevenson, J. (2014). Internationalisation and religious inclusion in United Kingdom higher education. Higher Education Quarterly, 68(1), 46–64. http://doi.org/10.1111/hequ.12033

108. Strayhorn, T. L. (2010). Work in progress — Social barriers and supports to underrepresented minorities' success in STEM fields. In 2010 IEEE Frontiers in Education Conference (FIE) (p. S1H–1–S1H–5). IEEE. http://doi.org/10.1109/FIE.2010.5673227

109. Sucylaite, J. (2013). Nurses' Spiritual Learning at University. Procedia - Social and Behavioral Sciences, 89(April), 199–204. http://doi.org/10.1016/j.sbspro.2013.08.834

110. Suppaiah, K. (2003). Religious services Attendance and College adjustment of diploma in computer science UTM students. Jurnal Teknikaldankajjan Sosial, 81–88.

111. Tanton, J., Dodd, L. J., Woodfield, L., & Mabhala, M. (2015). Eating Behaviours of British University Students: A Cluster Analysis on a Neglected Issue. Advances in Preventive Medicine, 2015(April 2016), 1–8. http://doi.org/10.1155/2015/639239

112. Taunay, T. C., Cristino, E. D., Machado, M. O., Rola, F. H., Lima, J. W. O., Macêdo, D. S., ... Carvalho, A. F. (2012). Development and validation of the Intrinsic Religiousness Inventory (IRI). Revista Brasileira de Psiquiatria, 34(1), 76–81. http://doi.org/10.1590/S1516-44462012000100014

113. Taylor, M. C., & Merino, S. M. (2011). Race, Religion, and Beliefs about Racial Inequality. The ANNALS of the American Academy of Political and Social Science, 634(1), 60–77. http://doi.org/10.1177/0002716210389537

114. Thorat, A. (2010). Ethnicity, Caste and Religion: Implications for Poverty Outcomes. Economic & Political Weekly, 51(december 18), 47–53.

115. Thro, W. E., & Russo, C. (2010). Preserving Orthodoxy on Secular Campuses : The Right of Student Religious Organizations to Exclude Non-Believers. Educational Law Reporter, (April), 497–516.

116. Tomasso, C. D. S., Beltrame, I. L., & Lucchetti, G. (2011). Knowledge and attitudes of nursing professors and students concerning the interface between spirituality, religiosity and health. Revista Latino-Americana de Enfermagem, 19(5), 1205–1213. http://doi.org/10.1590/S0104-11692011000500019

117. Valladares, J. T., Carvajal, M. R., & Garcia, M. V. (2013). Religious fundamentalism among Costa Rican university students: Political conservatism and spirituality without religion. Rev. Ciencias Sociales, 139(1), 115–135.

118. Walls, N. E., Woodford, M. R., & Levy, D. L. (2014). Religious Tradition, Religiosity, or Everyday Theologies? Unpacking Religion's Relationship to Support for Legalizing Same-Sex Marriage Among a College Student Sample. Review of Religious Research, 56(2), 219–243. http://doi.org/10.1007/s13644-013-0140-3

119. Wang, Z., Koenig, H. G., Ma, H., & Shohaib, S. Al. (2016). Religion, Purpose in Life, Social Support, and Psychological Distress in Chinese University Students. Journal of Religion and Health, 55(3), 1055–1064. http://doi.org/10.1007/s10943-016-0184-0

120. Woo, J. S. T., Morshedian, N., Brotto, L. A., & Gorzalka, B. B. (2012). Sex Guilt Mediates the Relationship Between Religiosity and Sexual Desire in East Asian and Euro-Canadian College-Aged Women. Archives of Sexual Behavior, 41(6), 1485–1495. http://doi.org/10.1007/s10508-012-9918-6

121. Wortmann, J. H., Park, C. L., & Edmondson, D. (2012). The Spiritual Struggle and Adjustment to Loss in College Students : Moderation by Denomination. The International Journal for the Psychology of Religion, 22(4), 303–320. http://doi.org/10.1080/10508619.2011.638605

122. Yadav, R., & Khanna, A. (2014). Impact of Spirituality on Stress: With the Special Reference of Engineering Students of Indian Institute of Technology. Research on Humanities and Social Sciences, 4(25), 29–35.

123. Yadav, R., Khanna, A., & Singh, D. (2016). Exploration of Relationship Between Stress and Spirituality Characteristics of Male and Female Engineering Students: A Comprehensive Study. Journal of Religion and Health, (JANUARY), 1–12. http://doi.org/10.1007/s10943-015-0174-7

124. Yiengprugsawan, V., Seubsman, S., & Sleigh, A. C. (2012). Health, Well-being, and Social Indicators Among Monks, Prisoners, and Other Adult Members of an Open University Cohort in Thailand. Journal of Religion and Health, 51(3), 925–933. http://doi.org/10.1007/s10943-010-9410-3

125. Yilmaz, M., & Gurler, H. (2014). The efficacy of integrating spirituality into undergraduate nursing curricula. Nursing Ethics, 21(8), 929–945. http://doi.org/10.1177/0969733014521096

126. Zhao, M., Lu, W., Bian, Q., Song, Y., Ren, J., & Xu, X. (2015). Prevalence and related risk factors of anxiety and depression among Chinese college freshmen. Journal of Huazhong University of Science and Technology, 35(6), 815–822. http://doi.org/10.1007/s11596-015-1512-4

International Journal of Research in Social Sciences
Vol. 9 Issue 6, June 2019,
ISSN: 2249-2496 Impact Factor: 7.081
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

THE ACCEPTANCE OF DEBIT CARDS AS MODERN-DAY BANKING PRACTISES AMONG RURAL POOR – A CASE STUDY OF BANTWAL RURAL

Dr.Vijayalakshmi N.S*

Mr.Suresh**

Abstract

Objective: - The perception on modern day banking practices in terms of acceptance of debit cards among rural poor people of bantwal rural is undertaken in the study

Methodology: - A case study approach with descriptive research and deductive reasoning is followed with mixed method sampling is adopted for the study. Stratified sampling helps to identify bantwalrural as the largest densely populated rural area among rural taluks of Dakshin kannada. Further under probability sampling, simple random technique is used to identify respondents who had bank accounts at nationalized commercial banks followed with non-probability sampling technique of convenience sampling was chosen to collect data from respondents using structured questionnaire.

Findings and Conclusions: - The findings indicate that though there is significant effect in debit card acceptance of modern-day banking practice with male having upper hand. This leads us to future research on what makes women less accept a debit card as part of the modern-day banking practices with few women confirming on a fragile note that though they had bank accounts with basic minimum cash whose transactions laid at hands of their better half or their husband; the male head of the family contouring them only as symbolic representative of bank accounts.

Key Words: -Debit cards, Modern day banking practices, rural, male and female

* **Faculty,Post Graduate Department of Economics,University College Mangalore, hampankatta**

** **Assistant Professor,Post Graduate Department of Economics,University College Mangalore, hampankatta**

Introduction: - In an economy there is a need to classify and specify who uses debit cards (Porter, Swerdlow, & Staples, 1979).Banking Institutions play a central role in the financial system (Cousin, 2011) with traditional banking practices effecting modern banking practices (Mittal & Agrawal, 2016). Further despite the growing importance of the debit card in most developed countries, there are relatively few academic studies that analyze the impact of such evolution on the demand for cash with use of debit cards. Beyond data availability, this research is complicated by the fact that the debit card provides two services for consumers - cash withdrawal and payment - that have contrasting effects on cash holdings and cash usage.

Research Question: - What are the determinants of rural customer perception on acceptance of debit cards for banking transactions?

Research Objective: - To examine rural customer perception of acceptance of debit card for banking transactions.

Literature Review: -

Safety of cash holdings: -

Banks safety nets have information issues (Ponce, 2006). Regulating bank safety ensures enhanced performance and the postmodern bank safety net differs from premodern bank safety nets(Calomiris, 1997).ThusBanks usher to act as a safety net ensuring prompt resolution against financial crisis that touches the central nerve of the economy untethering financial instability(Cousin, 2011). However this could vehemently impact Consumers' payment preferences which are strongly influenced by their views on the safety of payment instruments (Wironen, 2013). Further the current migration of banking systems to software defined networks has made consumers all sceptical of their acceptance of modern banking practises especially among rural areas(Yuan, Huang, Ma, & Zhang, 2017).

Adopting Banking Instruments: -

Debit card is the key to online banking (Jones, 2005). Electronic banking instruments have an impact on monetary policy efficiency (Tuaneh & Ewubare, 2016)where ICT is an instrument for enhanced banking system(Ekwonwune, Egwuonwu, Elebri, & Uka, 2017). Thus financial instruments are key in promoting banking (Núñez Ferrer, 2018) with money acting as a specific good with maximum Liquidity level (Barasheva, 2018). Hence debit cards via E-banking has an impact on quality of banking services in public commercial banks (Aboujdiryha, 2019)

Acceptance of Debit Cards: -

There is a need for update on trends in debit cards (Cheney, 2007)because the banking system has observed that use of debit cards has the enhanced risk of frauds (Worthington, 2009) therefore knowledge about debit card policy and procedures could be of help (Salzman & Ruble, 2010). People should accept debit cards as a means of payment(Kim & Lee, 2010) aspayment methods are the determinants of debit cards acceptance(Ismail, Bakri, Zulkepli, Adnan, & Azizi, 2014). Further the use of debit cards has a direct relationship with demand for cash (David, Abel, & Patrick, 2016) because there is a positive relationship between cost of cash and the need for debit cards (Abele & Schaefer, 2016).

The above literature review leads to the following formation of Conceptual Framework: -

The Study perpetuates the following research hypothesis: -

H_1: Acceptance of debit cards as modern-day banking practice does not vary by gender among rural poor of bantwal rural

H_{1a}: - Acceptance of debit cards as modern-day banking practice does vary by gender among rural poor of bantwal rural

Methodology: -

A case study approach with descriptive research and deductive reasoning is followed with mixed method sampling is adopted for the study. Stratified sampling helps to identify bantwal rural as the largest densely populated rural area among rural taluks of Dakshin kannada. Further under probability sampling, simple random technique is used to identify respondents who had bank accounts at nationalized commercial banks followed with non-probability sampling technique of convenience sampling was chosen to collect data from respondents using structured questionnaire with one item measured as "Do you accept debit card as essential part of modern day banking practice " with nominal categorical scale of 'yes' and 'no' between male and female.

Data Analysis, Findings and Conclusions: -

The independent t – test was used to analyse the data n = 96 where on average male accepted debit card as part of modern day baking practice with (M = 5, SE = 0.48) than female accepting debit card as part of modern day banking practice with (M = 4.28 , SE = 0.78). The difference - 2.25, BCa 95%, CI [-2.706, 0.125] was significant t (24) = -2.31, p = 0.03 with medium sized effect of d = 0.56.

The findings indicate that though there is significant effect in debit card acceptance of modern-day banking practice with male having upper hand. This leads us to future research on what makes women less accept a debit card as part of the modern-day banking practices with few women confirming on a fragile note that though they had bank accounts with basic minimum cash whose transactions laid at hands of their better half or their husband; the male head of the family contouring them only as symbolic representative of bank accounts.

Limitations: - It is a cross sectional study for a limited period of 15 days used to collect data from respondents. The respondents were limited to the commercial bank set up at bantwal rural only.

References: -

1. Abele, H., & Schaefer, G. (2016). The cost of cash and debit cards in Austria. *The Journal of Financial Market Infrastructures*, *4*(4), 1–16. https://doi.org/10.21314/JFMI.2016.061

2. Aboujdiryha, A. (2019). هيقيبطتلا و هتحبلا مهلعا هقجه E-banking and its impact on quality of banking services in Libya : a case of public commercial banks service in Sebha city : يف اي ب يل .قيراجت ةلماعلا قد يدمب اهبس ت لودأ لا ر قق ري ي نورت كللإا ةرث او ه ا د لع قدهج لاذ امدخ قيو فررملا *Journal of Pure and Applied Science*, *17*(2), 255–271.

3. Barasheva, E. V. (2018). Liquidity Of Cash And Non-Cash Money. *International Conference on Research Paradigms Transformation in Social Sciences CAPITAL AND*

COMPETENCES FORMED WITHIN, 113–119. https://doi.org/10.15405/epsbs.2018.12.15

4. Calomiris, C. (1997). The Postmodern Bank Safety Net: Lessons from Developed and Developing Economies. In *AEI Press*.

5. Cheney, J. S. (2007). An Update on Trends in the Debit Card Market. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1007276

6. Cousin, V. (2011). The State and the Banking Safety Net. In *Banking in China* (pp. 42–49). https://doi.org/10.1057/9780230306967_3

7. David, B., Abel, F., & Patrick, W. (2016). Debit card and demand for cash. *Journal of Banking and Finance*, *73*, 55–66. https://doi.org/10.1016/j.jbankfin.2016.08.009

8. Ekwonwune, E. N., Egwuonwu, D. U., Elebri, L. C., & Uka, K. K. (2017). ICT as an Instrument of Enhanced Banking System. *Journal of Computer and Communications*, *05*(01), 53–60. https://doi.org/10.4236/jcc.2017.51005

9. Ismail, S., Bakri, M. H., Zulkepli, J., Adnan, A., & Azizi, A. (2014). Determinants of debit cards acceptance: An empirical investigation. *AIP Conference Proceedings*, *1635*(Icoqsia), 113–117. https://doi.org/10.1063/1.4903571

10. Jones, D. (2005). The debit card is the key to on-line banking. *Card Technology Today*, *17*(2), 16. https://doi.org/10.1016/S0965-2590(05)00250-1

11. Kim, Y. S., & Lee, M. (2010). A model of debit card as a means of payment. *Journal of Economic Dynamics and Control*, *34*(8), 1359–1368. https://doi.org/10.1016/j.jedc.2010.03.003

12. Mittal, D., & Agrawal, S. R. (2016). The effects of traditional practices on modern banking system. *International Journal of Bank Marketing*, *34*(4), 476–500. https://doi.org/10.1108/IJBM-01-2015-0008

13. Núñez Ferrer, J. (2018). Financial Instruments and Promotional Banking in the EU are Growing — But is this Justified? *Intereconomics*, *53*(6), 326–331. https://doi.org/10.1007/s10272-018-0777-9

14. Ponce, J. (2006). Banking Safety Nets : Information Issues. *Mémoire Presented at the Université de Toulouse in June, 2006.*, (2000), 1–16.

15. Porter, T. C., Swerdlow, R. A., & Staples, W. A. (1979). Who uses bank debit cards? *Business Horizons*, *22*(1), 75–83. https://doi.org/10.1016/0007-6813(79)90111-3

16. Salzman, T., & Ruble, W. (2010). Debit Card Policy and Procedure Questionnaire. *Edpacs*, *24*(2), 8–18. https://doi.org/10.1080/07366989609452263

17. Tuaneh, G. L., & Ewubare, D. B. (2016). Impact of electronic banking instruments on monetary policy efficiency in nigeria. *International Journal of Business and Applied Social Science*, *2*(2), 92–99.

18. Wironen, J. (2013). The safety of cash and debit cards: A study on the perception and behavior of dutch consumers. *International Journal of Central Banking*, *9*(4), 77–98.

19. Worthington, S. (2009). Debit cards and fraud. *International Journal of Bank Marketing*, *27*(5), 400–402. https://doi.org/10.1108/02652320910979906

20. Yuan, T., Huang, X., Ma, M., & Zhang, P. (2017). Migration to software-defined networks: The customers' view. *China Communications*, *14*(10), 1–11. https://doi.org/10.1109/CC.2017.8107628

3.3.4/333

Print-ISSN-2320-5504
Online-E-ISSN-2347-4793

Asia Pacific Journal of Research

A Peer Reviewed International Journal

Dr. G. Shankar Government Women's First Grade College & P.G. Study Centre, Ajjarkadu, Udupi- 576101

National Conference

On

"CONTEMPORARY ISSUES IN COMMERCE AND MANAGEMENT"

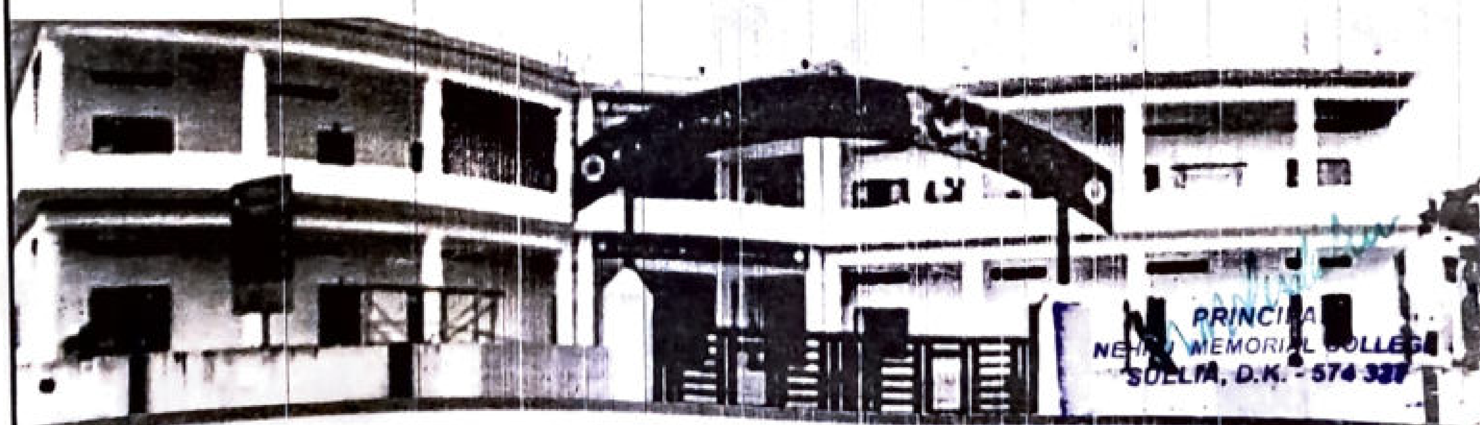
Date: 31st January, 2020

Organized by

DEPARTMENT OF COMMERCE & MANAGEMENT

Dr. G. Shankar Government Women's First Grade College & P.G. Study Centre, Ajjarkadu, Udupi- 576101

Vol: I. Special Issue XII, January 2020



ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

APJR Asia Pacific Journal of Research
A peer reviewed international Journal
IMPACT FACTOR : 6.58
Print -ISSN -2320 - 5504
Online-E-ISSN - 2347 - 4793

A SURVEY ON IMPACT OF PLASTIC BAN IN SULLIA CITY

Miss. Leena Y N
Lecturer, Dept. of Business Administration
Nehru Memorial College, Sullia, D.K
Email add: leenayn20@gmail.com
&
Mrs. Anantha lakshmi
Lecturer and Head, Dept. of Business Administration
Nehru Memorial College, Sullia, D.K
Email add: anantha_sbhat@yahoo.in

ABSTRACT

Plastic bags have been introduced in 1970's decade and it gained a huge popularity amongst consumers and retailers. India's population is increasing along with plastic users also increasing drastically day by day. Many plastic factories are producing the tons of plastic bags. Which are very popularly used by people for shopping purposes, because of cheapness and convenience to use. But it creates a negative impact. Many countries have been banned plastic bags due to public concern over the negative impact on environment and agriculture especially in agricultural countries such as India, Bangladesh, Pakistan South Africa, etc. We have conducted the survey to know the usage of plastic bags in Sullia city before and after the plastic ban by Indian Government. We are recorded the respondents response regarding the impact of plastic ban in Sullia city. It revealed that, still people are continuing the use of plastic bags for their daily purposes. So, Government should take strict action to control and dispose of plastic bags to create a healthy environment.

Keywords: Plastic bags, cheapness, respondents, population

INTRODUCTION

Plastic bags have been introduced in 1970's (Williamson, 2003) and gained an increasing popularity amongst consumers are varieties across the world. It is estimated that around 500 billion plastic bags are used every year worldwide. This widespread utilization is attributed to their cheapness and convenience to use. The vast majority of these bags are discarded as wastes usually after a single use. The reason, these plastic bags are very thin and non recyclable materials.

Different reports showed that plastic bags are still causing severe environmental pollutions and also human and animal health damages in urban and rural areas of the country and especially for agriculture countries. Because these plastics are decompose with soil. It will reduce the fertility of the soil. Some of the basic reasons could be poor waste management and perhaps lack of awareness about the negative impacts of plastic bags. This is the main reason to increasing of plastic bags usage in India.

OBJECTIVES

The objectives of the study

- To know the impact of plastic bag ban regulation on consumers and retailers before and after
- To know the consumer opinion regarding plastic ban and alternatives can adopt instead of plastic bags

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

RELEVANCE OF THE STUDY

'A Survey on Plastic ban in Sullia city' is relevant to study because; consumer and retailers are using more plastic bags for their convenience purpose. It creates negative impact on environment. But, after the plastic ban how they are changed their life style without plastic is the question arising in mind. To find the answer this study is relevant.

IMPACT OF PLASTIC BAGS

Impact of plastic bag usage on environment and cattle health indicated that plastic bag wastes were dumped near roadsides, open plots, riversides, in drains and public places. Consequently, over flowing of water was reported to be a common problem during rainy seasons as a result of blockage of drains. If plastic bags get access to agricultural fields, they reduce percolation of water and proper aeration in soil. This results in reduction of productivities of such fields. If we burn the plastic, it infuse the air with toxic fumes. And sometimes cows eat plastic bags, which become indigestive food to animal and cause the health issues.

PRECAUTIONS

Several precautions are being employed to reduce the negative impacts of plastic bags.

- A tote bag can be used. It makes a good substitute for holding the shopping.
- We can keep the bag with the cahier, and then put our purchases into it instead of the usual plastic bag.
- Reduce plastic usage in our schools and colleges.
- Avoid buying items which is packaged in plastics.
- We can use cloth shopping bags
- Pack lunches in unbleached wax paper and reusable container made of stainless steel or glass.

PLASTIC BAG REGULATION IN INDIA

The plastic manufacture, **Sale and Usage Rules, 1999,** as amended in 2003 under the **Environment Protection Act of 1986,** regulates plastic bag use in India. The Rules prohibit the manufacture, stocking, distribution or sale of carry bags made of virgin or recycled plastic less than 20×30 centimeters in size and 20 microns in thickness.

The Rules also disallow the use of recycled plastic bags and containers for storing, carrying, dispensing or packaging of food items. Further the Rules require units manufacturing plastic bags to register with the respective **State Pollution Control Board (SPCB) or Pollution Control Committee (PCC)** prior to the commencement of production.

The **Plastic Waste (Management and Handling) Rules, 2011,** which would replace the earlier **Recycled plastic manufacturer and usage rules, 2003,** is the latest drives both by the government of India to limit plastic waste in the country. The new rules raised the minimum thickness of plastic bags to 40 microns and require recycled carry bags made from compostable plastics to conform to specific BIS (Bureau of Indian standards).

PLASTIC BAN IN SULLIA

Sullia is a small city of Dakshina Kannada District. In this city plastic usage was more before the plastic ban. People are using below 40 micron plastic for carrying each item. But some reputed shops were using above 40 micron plastic. It causes for the environmental effect on human health and animals.

After the plastic ban, many of the residents and shop keepers stop their usage. But some of them, did not stop the usage of plastic bag below 40micron. Some shop keepers providing cloth bag instead of plastic bag.

According to survey, people opinion is manufacturer has to stop the production of plastic bags to decrease the usage of plastic bags. And people should use the paper bags and cloth bags for their conveniences. It will definitely reduce the usage of plastic bag and it will save the environment also.

LITERATURE REVIEW

1. A study on **'The Impact of Plastic Bags on the Environment: A field Survey of the City Of Sana'a And The Surrounding Areas, Yemen' by** Riyad. Moharam and Maher Ali. Al. Maqtari (October-December,2014)

   Plastic bugs were there in the streets , roads, the trees, the power cords, most markets and vegetables, where the prevalence of the plastic bags and waste plastic materials cause serious environment problems, so the waste materials removed by using the microorganism that associated with plastic bags. This method was cheap and effective, so that it can be used widely for the treatment of Plastic bags.

2. A study on ' **Ban on Plastic Bags And The Emergence Of New Varieties: A Study Of Awareness on Shopping Bags And The Possibility Of Behavior Change Towards Eco-Friendly Consumption ' by** Ishrat Jahan Synthia and Shafquat Kabir(2014)

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

The level of consumer awareness regarding the harmful effects of the new varieties of shopping bags were determined through in-depth interview of consumers, wholesalers and industry experts, followed by a home audit among consumers. This study found that level of awareness did not vary with demographic characteristics like age, income or occupation, suggesting that this is a common phenomenon across all segments of the society.

3. A study on **'Usage of plastic carry bags and impact on Environment, in Mumbai' by Dr. Tanusree chaudhuri(2016)**
This study says, people know the adverse impact of plastic on environment. While talking to them it is understood that many of them in favor of banning plastic carry bags. Respondent they want plastic free city and that's why many respondents carry their own bag during the time of shopping. Therefore, the Government in collaboration with NGO's, educational institution and the city youth should encourage people to use environmental friendly alternative material such as paper bag, cloth bag etc to protect the city from environmental damages.

HYPOTHESIS

Null hypothesis: People are completely stopped plastic bag usage in Sullia city.

Alternative hypothesis: People are still be continuing plastic bag usage in Sullia city.

This study proved that, people are still be using plastic bags for their day to activities even after banning of plastic bag in sullia city. So, null hypothesis rejected and alternative hypothesis is accepted.

RESEARCH METHODOLOGY

Here we adopted exploratory research method. For the data collection, we used primary data and secondary data. Under primary data, sources are collected through questionnaires and personal opinion. Under secondary data, sources are collected through internet, library, newspapers, and neighbors.

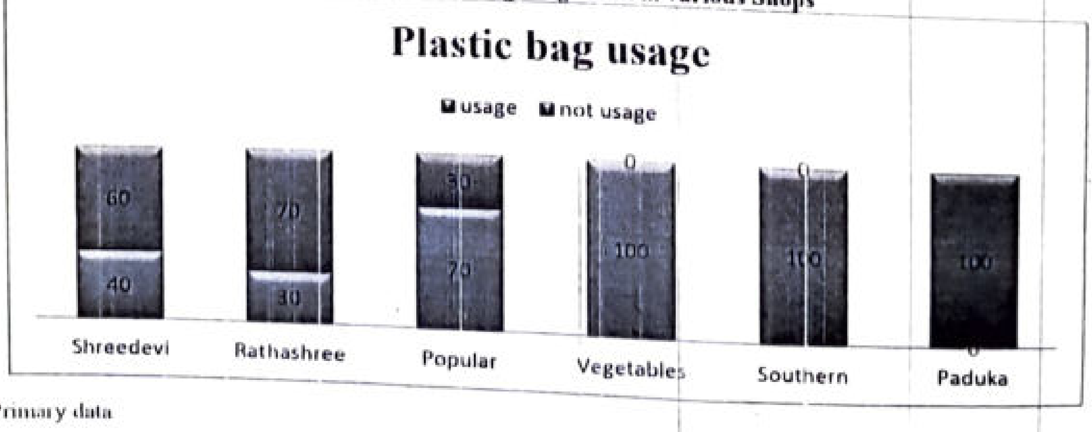
RESULTS AND DISCUSSION

The survey results indicated that, majority of the city residents widely used plastic bags in their daily life activities. Some of the main reasons attributed to the widespread usage were low price, easy availability, easy to carry and light weight. Among 16 respondents, 6 respondents are shop keepers and 10 are residents. We found two respondents (shopkeepers) are using plastic bags in high frequency (i.e. 100% in vegetable shop and hotel). These results also indicated that usage of plastic bags is high in Sullia city.

Table no:1 Survey of plastic ban in shops

Shop Name	Usage	Not Usage
Shreedevi book stall	40%	60%
Rathashree fancy	30%	70%
Popular bakery	70%	30%
Vegetable shop	100%	0
Southern restaurant	100%	0
Paduka collection	0	100%

Chart No:1 Plastic Bag usage level in various Shops



Source: Primary data

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

Table no:2 Respondent profile

Variables	Categories	RESIDENTS		SHOPS	
		Numbers	%	Number	%
Sex	Male	3	30	6	100
	Female	7	70	0	0
Age	<20 years	2	20	0	0
	20-29	2	20	1	17
	30-39	4	40	3	50
	>40	2	20	2	33
Education	Illiterate	0	0	1	17
	High School	2	20	1	17
	PUC	4	40	2	33
	Higher Education	4	40	2	33
Occupation	Students	2	20	0	0
	Govt employees	1	10	0	0
	Pvt business	3	30	6	100
	Home-maker	4	40	0	0

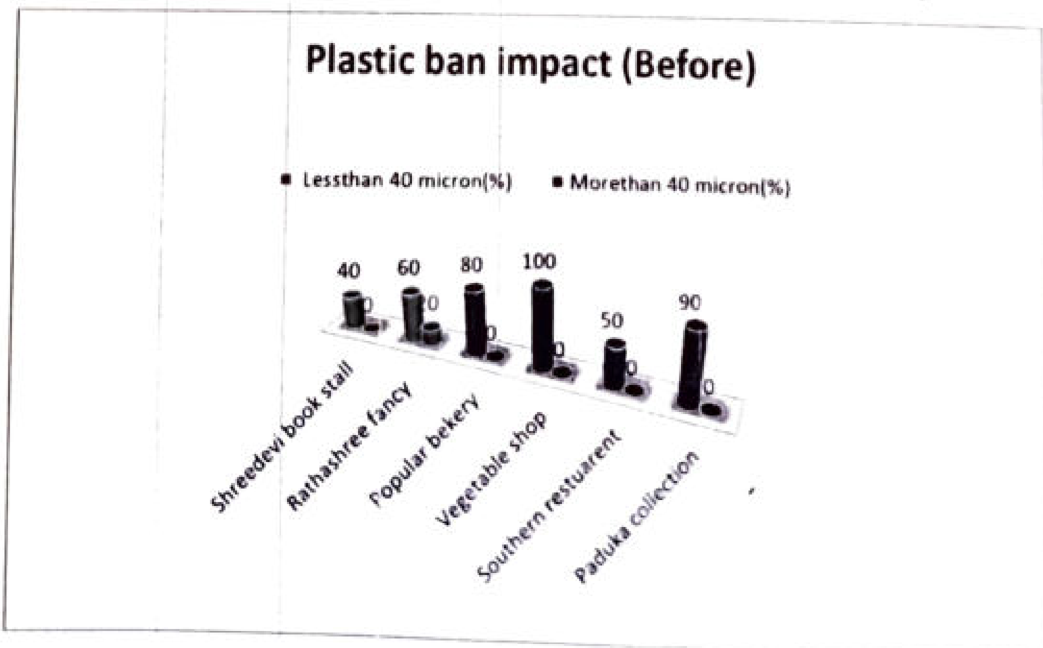
Source: Primary data

The survey results indicated that regardless of sex, educational level, age group and occupation, majority of the city residents widely use plastic bags in their daily life activities. Some of the main reasons attributed to the widespread usage were low price, light weight and easy availability. During the course of our survey, we also observed that most of the shopkeepers distributing plastic bags free of charge to their customers for carrying sold items and also to keep the customer relationship for a longer period. But this is the main reason for increasing the plastic usage by residents

Table no:3 Plastic ban impact on shop keepers in Sullia (Before)

Shops names	Less than 40 micron (%)	More than 40 micron (%)
Shreedevi book stall	40	0
Rathshree fancy	60	20
Popular bakery	80	0
Vegetable shop	100	0
Southern restaurant	50	0
Paduka collection	90	0

Chart No:2 Plastic ban impact on shop keepers in Sullia (Before)



Source: Primary data

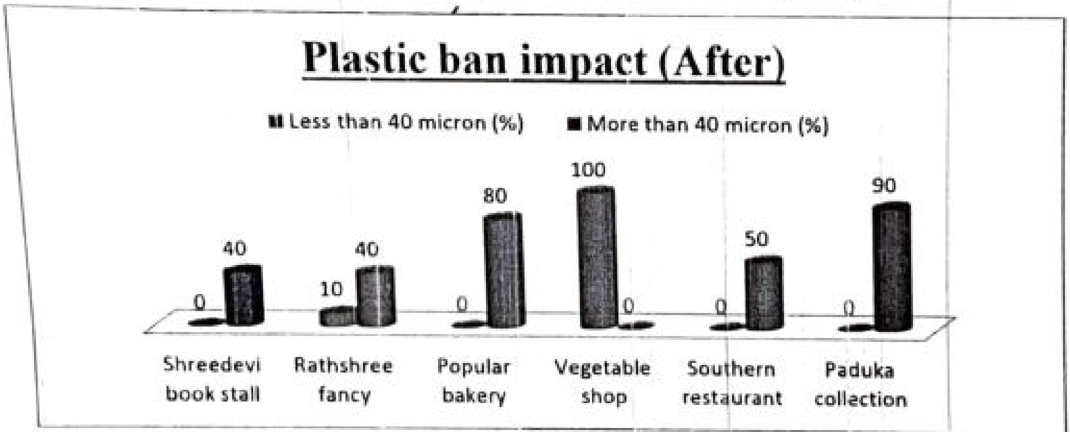
Interpretation: The above chart shows that, before the plastic ban in sullia all shops were using plastic bags below 40 micron. And Rathashree fancy using 20%, above 40 micron plastic bags also

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

Table no:4 Plastic ban impact on shop keepers in Sullia(After)

Shops names	Less than 40 micron (%)	More than 40 micron (%)
Shreedevi book stall	0	40
Rathshree fancy	10	40
Popular bakery	0	80
Vegetable shop	100	0
Southern restaurant	0	50
Paduka collection	0	90

Chart no:3 Plastic ban impact on shop keepers in Sullia(After)



Source: Primary data

Interpretation: The above chart shows that, after the plastic ban except Rathashree fancy and vegetable shop, others were stopped below 40 micron plastic bag usage. Vegetable shop still be providing plastic bags to the customer below 40 micron. And Rathashree fancy reduced their plastic providing percentage but did not stopped completely. Other shops started using above 40micron plastics in their shops.

CONCLUSION

The results of our survey indicated that, most of respondents are in favor of banning of plastic bags. They know very well about plastic bag usage is very harmful to environment and it creates thousands of negative impacts also. But, still it was widely used by the community. Stopping of plastic bags are highly necessary for the community. So, plastic bag waste materials can remove by using the paper and cloth bags. This method will effective and healthy. So people have to create awareness about the negative impact of plastic bag usage and realize the alternatives in people mind. It will create a good environment in Sullia.

Table no:5 Respondent's responses

SHOPE NAMES	Using cloth bags	Burning of plastic	Affect to Environment	Need plastic	Plastic not necessary	Stop production	Above 40 micron plastic usage
Shreedevi book stall	NO	YES	YES	YES	NO	YES	YES
Rathashree fancy	NO	NO	YES	YES	NO	NO	YES
Popular bakery	NO	NO	YES	YES	NO	NO	YES
Vegetable shop	NO	YES	YES	YES	NO	NO	NO
Southern restaurant	NO	YES	YES	YES	NO	NO	YES
Paduka footwears	YES	NO	YES	NO	YES	YES	NO
Residences	YES	YES	YES	YES	NO	NO	YES

Source: Primary data

ISSN (Print): 2320-5504
ISSN (Online): 2347-4793

REFERENCE

1. International jounal of engineering research and review ISSN 2348-697X(online) Vol:2, Issue 4, PP⊗61-69), Month: October-December, 2014
2. Abhinav International Monthly Refereed journal of Research in Management and Technology- Volume 5, Issue 3 (March 2016) Online ISSN-2320-0073
3. Plastic lifecycle management: An insight into a plast-less economy by Vikesh Mehta-October 2019
4. https://en.wikipedia.org/wiki/Plastic_bag
5. https://www.environment.act.gov.au/waste/plastic-bag-ban/information-for-retailers
6. https://pib.gov.in/newsite/PrintRelease.aspx?relid=74888
7. https://www.google.com/search?rlz=1C1PRFI_enIN831N831&q=plastic++images

Our Heritage

ISSN: 0474-9030

Vol-68-Issue-30-February-2020

A Conceptual Framework on Sustenance of Business Models towards Business Continuity

Dr.Vijayalakshmi N.S
Assistant Professor
Department of Economics
Nehru Memorial College, Sullia – 574327
email: nandalike17@gmail.com

Rudrakumar M.M
Assistant professor
Department of commerce
Nehru Memorial college, Sullia– 574327
email: rudra.kumar33@gmail.com

Abstract

Business remains dynamic in business environment. The sustenance of business through applied business models in dynamic business environment vary according to the nature and functioning of every organisation. Further the duration of sustenance of business model among business diverge among economies and organisations. This research paper is thus an attempt to focus on the nature and level of sustenance of emerging versus existing business models across economic stride with consecutive development in technology towards business continuity.

Key words:- business model, business continuity, Sustenance

Introduction:-

Worldwide markets have been suffering in the recent years from significant and sudden changes due to different processes like globalization, European integration, ICT development, and global economic crisis. All the above elements pose global competition thereby insisting companies to change their business strategies and business models in order to fight against the challenges. This change becomes even more necessary when small and medium business enterprises are exposed to the loss of competitiveness coming from market changes. Hence business continuity is threatened and challenged.
It is therefore vital to find sustenance of business models towards business continuity.

Business models have always existed and the concept of the business model itself is more recent (DaSilva & Trkman, 2014; Zott, Amit, & Massa, 2011). Business models have severely threatened business continuity (Eggers & Park, 2017). Business models have a central role in companies' business strategies and in ensuring the continuity of revenue streams (e.g. Amit &

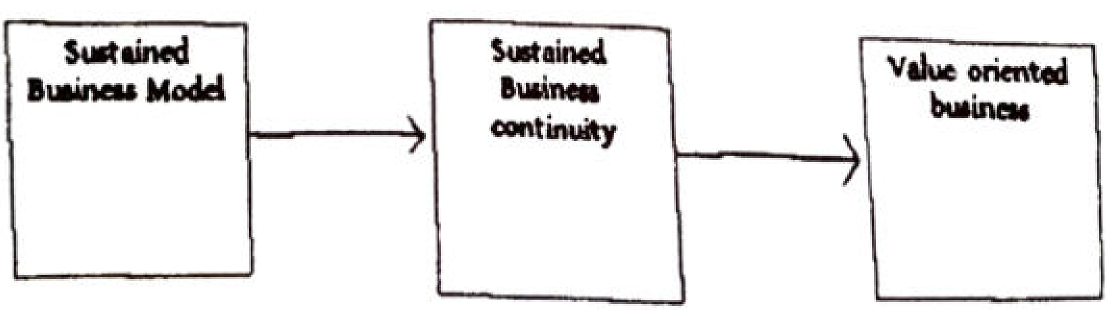
ISSN: 0474-9030

Vol-68-Issue-30-February-2020

Zott, 2001; Bouwman et al., 2008; Chesbrough & Rosenbloom, 2002; Chesbrough, 2010). Business models focus on the mechanisms through which technologies are transformed to value, as technologies do not have any inherent value outside of their use potential (Baden-Fuller & Haefliger, 2013). DaSilva and Trkman argue (2014) that a business model has a shorter temporal perspective than a strategy, which views business on a long-term basis. Business models need to adapt in response to the external contingencies (Demil & Lecocq, 2010) engendered by technology-driven innovations. Thus Business models are strategic assets for organisations and define the logic through which they transform the produced goods and services into profit (Foss & Saebi, 2017). In short businesses must consider what makes them valuable to the market in the first place and how to best position that understanding in the current operating environment, adjusting that view as needed to changing circumstances and customer demands. All this call for accurate industry perception and decision making in business continuity solutions.

Business continuity broadly refers to a company's socio-technical ability to withstand and restore from intra- and extra-organisational contingencies (Niemimaa, 2015a). Business continuity market remains unexplored with unique complexity of technology, consultancy, training, marketing etc delving into multitudinous nature of functioning. Business continuity has increasingly become a focus of emergency response and coordination, as awareness heightens about the precarious circumstances of businesses, and especially small enterprises, in the post-hazard event context, and how disruptions might impact the surrounding community. There is good reason for business continuity planning as a capacity that should be encouraged by predictive business models. This calls for sustenance check of business models in terms of longevity in business arena.

Conceptual Framework:



The above conceptual framework determines that after the identified new business model is described, it can be juxtaposed with the company's existing business model in order to intrigue the company's sustenance on the basis of applicability of models towards value oriented business continuity. This derivation is counter to the statement that successful business continuity is ensuring that the business model is resilient against environmental contingencies (Bouwman et al., 2015; Haaker et al., 2017). Thereby responding to contingencies requires not just incremental

ISSN: 0474-9030

Vol-68-Issue-30-February-2020

hanges but reconsidering as a whole what is it that the company is actually doing and rethinking in what business does it actually operate.

To conclude persistence is the eventual dilemma every business face. The level of sustained persistence
companies should have already identified those business models that they deem to have the most potential for disrupting their own business. By systematically going through the different components of the business model, the company will get a clear picture of the threat that the identified business model poses towards sustenance.

References

•Amit, R., & Zott, C. 2001. "Value creation in e-business," *Strategic Management Journal* 22(6–7), 493–520

•Baden-Fuller, C. & Haefliger, S. 2013. "Business Models and Technological Innovation," *Long Range Planning*, 46(6), 419-426.

•Bouwman, H., Faber, E., Haaker, T., Kijl, B., & Reuver, M. D. 2008. Conceptualizing the STOF Model. In *Mobile Service Innovation and Business Models* (pp. 31–70). Springer, Berlin, Heidelberg.

•Chesbrough, H. 2010. "Business model innovation: opportunities and barriers," *Long range planning* (43:2), pp. 354-363.

•Chesbrough, H., & Rosenbloom, R. S. 2002 "The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies," *Industrial and Corporate Change* (11:3), 529–555.

•DaSilva, C. M., & Trkman, P. 2014 "Business Model: What It Is and What It Is Not," *Long Range Planning* (47:6), 379–389.

•Demil, B. and Lecocq, X. (2010). "Business Model Evolution: In Search of Dynamic Consistency". Business Models (43:2–3), pp. 227–246.

•Eggers, J. & Park, K. 2017. "Incumbent Adaptation to Technological Change: The Past, Present, and Future of Research on Heterogeneous Incumbent Response," *Academy of Management Annals* (11:2), pp. 1-83.

•Foss, N. J., & Saebi T. 2017 "Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?," *Journal of Management* (43:1), 200-227

•Niemimaa, M. 2015a. "Interdisciplinary Review of Business Continuity from an Information Systems Perspective: Toward an Integrative Framework," *Communications of the Association for Information Systems* (37:4), pp. 69-102.

•Zott, C., Amit, R., & Massa, L. 2011 "The Business Model: Recent Developments and Future Research," *Journal of Management* (37:4), 1019–1042.

ISBN: 978-93-84734-06-2

E-BANKING SERVICES IN INDIA

Rudrakumar.M.M
Assistant Professor, Nehru Memorial College, Sullia, DakshinaKannada, Karnataka

ABSTRACT

The tremendous advancement in information technology and communication is a rapid change in banking sector. E-banking has come up with various banking services which allowed customer to transact their account from anywhere and anytime using internet. The objective of the study is to observe the trend and growth of the E- banking services in India. The study is based on the secondary data which is being collected from annual report of RBI and represented in tabulation form. From the study the research a found that there is a tremendous growth in modern banking services.

Key words: Technology, E-banking, modern banking .

Introduction:

The information technology has become one of the vital features in the banking sector. With the proliferation in information technology and communication there is a rapid change in the banking sector. Innovation in the banking sector has changed the whole financial system in the economy. Now a day's banks are pushed to develop new and innovative techniques and customer oriented service to maintain competition against competitor. E-banking is defined as automatic delivery of banking product and services which includes traditional and modern banking services through internet. Internet banking allows customer to transact their account from anywhere and anytime using internet and it also avoids waiting in queue for banking services as time factor is very important for the customers, so modern banking services offered by banks in an effective way that satisfies customer. E-banking is less expensive and reduces transaction cost. Modern banking delivery channels includes ATM, Debit card, Credit card, POS, NEFT, RTGS, ECS, Mobile banking etc. the study " E-BANKING SERVICES IN INDIA" is undertaken to know the growth in modern banking servers in India

Electronic channels:

Automated Teller Machine (ATM):

The Automated Teller Machine (ATM) is a machine which facilitates basic banking activities viz, withdrawal of money, depositing money and checking of ones own balances etc. ATM does most of the functions of cashier in the bank. ATM is operated by plastic card issued by the bank which is called as ATM Card, with it special features. This plastic ATM Card is replacing cheque, personal attendance of the customer, banking hours and bank holidays restriction and paper based verification.

Debit card:

Debit card is also known as plastic card which is used for making payment while making purchase, money comes directly from the user's account when transaction is made. Debit cards usually also allow for instant withdrawal of cash, acting as an ATM card for withdrawing cash.

Credit card:

A credit card is a payment card issued to users (cardholders) to enable the cardholder to pay a merchant for goods and services based on the cardholder's promise to the card issuer to pay them for the amounts so paid plus the other agreed charges.

Point of sale (pos):

The point of sale (POS) or point of purchase (POP) is the time and place where a retail transaction is completed. At the point of sale, the merchant calculates the amount owed by the customer, indicates that amount, may prepare an invoice for the customer (which may be a cash register printout), and indicates the options for the customer to make payment. It is also the point at which a customer makes a payment to the merchant in exchange for goods or after provision of a service. After receiving payment, the merchant may issue a receipt for the transaction, which is usually printed but is increasingly being dispensed with or sent electronically.

Electronic Clearing Service (ECS):

ECS is an electronic mode of payment / receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment of amounts towards distribution of dividend, interest, salary, pension, etc., or for bulk collection of amounts towards telephone / electricity / water dues, cess / tax collections, loan instalment repayments, periodic investments in mutual funds, insurance premium etc. Essentially, ECS facilitates bulk transfer of monies from one bank account to many bank accounts or vice versa. ECS includes transactions processed under National Automated Clearing House (NACH) operated by National Payments Corporation of India (NPCI).

National electronic funds transfer (neft):
NEFT is a facility enabling bank customers in India to transfer funds between any two complete details such as receiver name, bank account number, account type, city, branch name etc. should be furnished to the bank at the time of requesting such transfer so that the amount reaches beneficiary account.

Real-time gross settlement (rtgs):
Real-time gross settlement are specialist funds transfer systems where the transfer of money or securities takes place from one bank to another on a "real time" and on a "gross" basis. Settlement in "real time" means a payment transaction is not subjected to any waiting period, with transactions being settled as soon as they are processed. "Gross settlement" means the transaction is settled on one-toone basis without bundling or netting with any other transaction. "Settlement" means that once processed, payments are final and irrevocable.

Mobile banking:
Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions ely using a mobile device such as a Smartphone or tablet. Unlike the related internet banking it uses software, usually called an app, provided by the financial institution for the purpose. Mobile banking is usually available on a 24-hour basis. Some financial institutions have restrictions on which accounts may be accessed through mobile banking, as well as a limit on the amount that can be transacted.

Objective of the study:

- To discuss E-banking services in India.
- To observe trends in banking services.
- To measure the growth of services provided in banking sector in India.

Research methodology:
This study is undertaken by researcher using the secondary data. The data used are published in annual report of RBI and various books and websites and the same has been presented in table and graphs.

Various Electronic Banking Channels

Electronic Channels	Year 2017-18	2018-19	Growth (%)
No. of ATM deployed	22,34,364	23,74,749	6.2%
No. of POS deployed	19,45,879	22,46,388	11.54 %

Annual Report of RBI

Electronic Channels	Year 2017-18 2018-19 (Millions) (Millions)	Growth (%)
RTGS	108.7 112.9	3.86%
ECS DR	8.8 7.9	-9.7%
ECS CR	10.1 8.3	-8.2%
NEFT	1622.2 1842.5	13.58%
Credit cards	1097.1 1967.6	79.34%
Debit cards	2352.8 4658.9	98.01%
Mobile Banking	12854.6 18634.8	44.9%

Findings:

- From the study we can inferred that there is increase in the number of ATM's deployed and increase in the number of POS deployed in the year 2016-17 when compared to 2015-16.
- Numbers of POS deployed are more than the number of ATM's deployed.
- There is also increase of value and volume of transaction in RTGS and NEFT.
- There is tremendous increase in the volume and value of transaction of debit card, credit card and mobile banking in the year 2018-19when compared to 2017-18, which shows that usage of e-banking has increased in recent trends of banking sector.
- The study reveals that the banking sector has introduced various electronic channels which make transactions easier and same has been accepting by the customers.

Suggestions:
As per the study, we can say that the banking sector is introducing various electronics channels which also increase the size of customer base so for banking industry serving mass market

ISBN: 978-93-84734-86-2

of India is the biggest challenge. The better we understand our customer the better we will be successful in fulfilling the needs of the customers. Now a day's customers need internet banking, mobile banking so consumer awareness should be created significantly higher as compared to previous years and also banks must cut their cost of their services.

Conclusion:

In the present scenario banking industry is re-defined and re-engineering with the use of information technology and it is sure that the future of banking will offer more services to the customers with the continuous innovation in the product and services. Thus there is a paradigm shift from the seller's market to the buyer's market in the industry and finally it affected at the bankers level to change their approach from conventional banking to convenience banking and mass banking to class banking. The shift has also increased the degree of accessibility of a [illegible] man.

References:

- A Mahalingam "Customer preference [illegible] modern banking services of SBI in [illegible] district": ManonmaniamSundaranar [illegible] 2016.
- M.Amutha "Customers attitude on the [illegible] technological services of banking [illegible] dindigul district: A study with special reference to net banking": Madurai Kamaraj University, 2015.
- Dr.S.Sudalai Muthu "Acceptance of mobile banking services: Antecedents and Consequences": Pondicherry University, 2015.
- M.SadiqSohail "E-banking and customer preference in Malaysia: An empirical investigation": DOI: 10.1016/S0024-0255(02)0s0378-X.Source: DBLP, 2003.

Advances in Intelligent Systems and Computing 1146

Zheng Xu
Reza M. Parizi
Mohammad Hammoudeh
Octavio Loyola-González *Editors*

Cyber Security Intelligence and Analytics

Proceedings of the 2020 International Conference on Cyber Security Intelligence and Analytics (CSIA 2020), Volume 1

Springer

Zheng Xu · Reza M. Parizi ·
Mohammad Hammoudeh ·
Octavio Loyola-González
Editors

Cyber Security Intelligence and Analytics

Proceedings of the 2020 International Conference on Cyber Security Intelligence and Analytics (CSIA 2020), Volume 1

Springer

The Construction of Off-School Practice Teaching Base for Investment Major Based on Big Data

Yanli Wang(✉)

Jilin Engineering Normal University, Changchun 130052, Jilin, China
181963510@qq.com

Abstract. Aiming at the problems in securities investment practice teaching, such as the large gap between school practice teaching and industry demand, the core business connection in off-campus practice teaching is difficult, exploring the construction of off-campus practice bases, and reducing the gap between on-campus practice teaching and industry demand. Based on the construction of traditional off-campus practice teaching bases, this paper proposes an off-campus practice teaching base combining big data technology. The off-campus practice teaching base based on big data technology is an important part of campus construction. It not only meets the needs of "Internet +" vocational education development, but also meets the requirements for training enterprise talents. Based on the system structure of the practice base under big data, combined with the characteristics of 5 V of big data, it comprehensively analyzed the management strategies of the personnel, equipment and teaching process of the base. Through the use cases of the practice base outside the school, in the context of the era of big data, it effectively implemented the "education for the fittest is the best education" modern education concept. In this paper, a questionnaire survey is conducted on the satisfaction of students in a practical teaching base outside the school, and the teaching effect is evaluated. Experimental simulation results show that students have a good response to the experimental base. After training, the temperament and business quality of students have been improved, and teamwork awareness has been enhanced. It can be seen that the construction of a practical teaching base based on the background of big data will greatly integrate the base resources and provide timely feedback and countermeasures to the problems that arise at the base. The questionnaire survey shows that the proportion of students who are satisfied with the management of the practice base is 64%, the basic satisfaction rate is 28%, and the dissatisfied rate is 8%, which indicates that the students are mostly agreeable with the management of the practice base and are basically satisfied. The dissatisfaction accounted for 36% of the total, indicating that there is a certain deviation in the management of the practice base. Based on the big data background, the construction of an off-campus practice base for investment majors has certain research value. Big data technology can be used to improve traditional practice base some flaws.

Keywords: Investment science · Teaching base · Big data · Off-campus practice

Z. Xu et al. (Eds.): CSIA 2020, AISC 1146, pp. 522–530, 2020.
[illegible]

1 Introduction

With the rapid development of IT technology, people's work, study and lifestyle are undergoing tremendous changes, efficiency has been greatly improved, and information resources are shared to the greatest extent. At present, the biggest difficulty encountered by investment majors when they go out for internships is the lack of practical ability and practical project experience. According to a survey of counterparts in professional companies related to network and cloud computing and big data, the main reason for students' lack of practical experience is that investment is a very practical, practical and comprehensive specialty, and the application of investment science in enterprises is also Comprehensive and complex.

Every graduation time, tens of thousands of students flock to the market. A large number of graduates cannot meet the job requirements of employers. They need retraining before they can take up jobs, but it is always difficult for companies to recruit suitable employees [1, 2]. In view of the difficulty of finding employment for college students and the difficulty of recruiting ideal new employees, it is proposed that school-enterprise cooperation should be strengthened and the employment capacity of students should be improved through the research on the construction of big data extracurricular training and practice bases [3, 4].

The emergence of a distributed stream big data analysis platform solves the constantly generated data stream. In streaming big data analysis, the data processing workflow is abstracted into a directed graph called topology. Data is read from memory and processed tuple-by-tuple, and the results of these processes are dynamically updated. The performance of a topology is evaluated by its throughput. Aiming at the heterogeneous flow big data analysis cluster shared by multiple topologies, Jiang proposed an efficient resource allocation scheme to achieve the maximum and minimum fairness of the throughput utilization of each topology. The simulation results show that the resource allocation scheme proposed by Jiang significantly improves the maximum and minimum fairness in the practicability of the topology throughput, and the calculation complexity is low [5, 6]. Through a four-year qualitative study of four large Scandinavian companies, Caesarius was able to develop typologies in how emerging companies deal with exploration and resistance to big data technologies [7, 8]. The maturity of the information society is characterized by mass production of data that provides insight into human behavior. Analytics (as in big data analytics) is a practice of understanding data trajectories through interactions with network devices, platforms, and organizations. Mittelstadt explores the ethical significance of special groups in analytics and believes that the privacy interests of algorithmic groups with inviolable personality must be recognized along with individual privacy rights. Individuals grouped algorithmically have collective interest in creating information about the group and the actions taken on behalf of the group. In assessing the ethical acceptability of the analytics platform, group privacy was proposed as a third benefit, balancing personal privacy and social, business, and cognitive interests [9, 10]. Due to the high complexity of today's data centers, a lot of research attempts to understand data center workloads and resource utilization. However, there is little work to explore unsuccessful jobs and task executions. Rosa researched and predicted three types of developing students. Objective requirements for development. Although there ar[e] hidden dangers such as data integrity, authenticity, science, and security in the appli[-] cation process, with the operation and continuous updating of the system, the invest[-] ment professional training base will be increasingly perfected to better adapt to the construction of modern vocational education, Effectively serving the needs of corporat[e] talent training, more in line with the inevitable trend of "Internet +" vocational edu[-] cation development.

Acknowledgement. This work was supported by the research achievement of Jilin Province higher education reform research project "research and practice of collaborative construction of local applied undergraduate investment professional" inside and outside "practice teaching base" [Higher Education Department of Jilin Province (2017) No. 71].

References

1. Cashin, A.: The transition from university completion to employment for students with autism spectrum disorder. Issues Mental Health Nurs. **39**(2), 1–4 (2018)
2. Vijayalakshmi, N.S., Sequeira, A.H.: The nature of mother's employment on nurturing campus persistence among undergraduate students. Asian Soc. Sci. **13**(6), 36–45 (2017)
3. Hassani, H., Huang, X., Ghodsi, M.: Big data and causality. Ann. Data Sci. **4**, 1–24 (2017)
4. Mikalef, P., Pappas, I.O., Krogstie, J., et al.: Big data analytics capabilities: a systematic literature review and research agenda. IseB **2**, 1–32 (2017)
5. Jiang, Y., Huang, Z., Tsang, D.H.K.: Towards max-min fair resource allocation for stream big data analytics in shared clouds. IEEE Trans. Big Data **4**(1), 130–137 (2018)
6. Cai, H., Xu, B., Jiang, L., et al.: IoT-based big data storage systems in cloud computing: perspectives and challenges. IEEE Internet of Things J. **4**(1), 75–87 (2017)
7. Caesarius, L.M., Hohenthal, J.: Searching for big data: how incumbents explore a possible adoption of big data technologies. Scand. J. Manage. **34**(2), 129–140 (2018)
8. Mittelstadt, B.: From Individual to group privacy in big data analytics. Philos. Technol. **30**(4), 475–494 (2017)
9. Liu, X., Wang, X., Zhang, W., et al.: Parallel data: from big data to data intelligence. Moshi Shibie yu Rengong Zhineng/Pattern Recognit. Artif. Intell. **30**(8), 673–681 (2017)
10. Rosa, A., Chen, L.Y., Binder, W.: Failure analysis and prediction for big-data systems. IEEE Trans. Serv. Comput. **10**(6), 984–988 (2017)
11. Khan, S., Liu, X., Shakil, K.A., et al.: A survey on scholarly data: from big data perspective. Inf. Process. Manage. **53**(4), 923–944 (2017)

3.2.1 Scopus, UGC care listed - 2

An Empirical Study on Adaptability of Mobile Banking Services in India - A Quantitative Investigation

Article in Xi'an Shiyou Xueyuan Xuebao/Journal of Xi'an Petroleum Institute (Natural Science Edition) · November 2021

2 authors, including:

Vijayalakshmi N S
Nehru Memorial College Sullia

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

An Empirical Study on Adaptability of Mobile Banking Services in India – A Quantitative Investigation

Dr.Vijayalakshmi N.S [1]

Asssistant Professor & Head of Department of Economics

Nehru Memorial College, Kurunjibag, Sullia , Karnataka - 574327

Dr.Jayavanth Nayak [2]

Associate Professor

Department of P.G Studies in Economics

University College Mangalore, Mangalore, Karnataka - 575001

Abstract

Objective: - To make mobile banking system adaptable with easy hands on access to its beneficial features among Indian banking customers with high end access to digital payment system.

Methodology: - An empirical study comprised a sample of 170 respondents were data was collected based on convenience sampling through a structured questionnaire created on five-point likert scale.

Data Analysis: - Mean and t-test was applied to identify the results.

Conclusion: - Banks must take collective efforts to organize campaigns to make customers aware about the benefits of mobile banking in order to make them adopt the technology as the future of Indian banking relies on technology-based devices.

Keywords: Mobile banking; Adoption intention; customer adaptability, features of M-banking

Introduction

With time, banking has risen beyond its conventional model of customers waiting in line while banks rendered their services, to now making their services available to customers round the clock. For businesses all around the globe, technology has proved to bring about intense development. The banking industry has continually explored the chance for innovation to give its customers a much improved and convenient experience with its services. In this regard, technology has served two great purposes for the industry – one which has brought about direct connectivity between a bank and its customers, and the second is ease of process of functioning. The invention of the Mobile phone has been one of technology's greatest and most innovative moves to serve the purpose of bringing customers closer to their banking needs. Before the year 2017 came to a close, the number of mobile subscriptions was nearly 7 billion **(ITU, 2017)**. Also, the Telecom Authority of India **(TRAI, 2015)**, in its report suggested that by February of 2017, Internet and wireless subscribers in India reached 18 million and 961 million respectively.

Innovation in technology has changed the whole functioning landscape of banks in India and administration of financial services. With the development of ICT, huge propagation of mobile phones and wireless networking and its technology, there is no more a need for customers to be physically present at a bank in order to fulfil their banking needs. Instead, they can complete banking transactions at their own convenient time and place. The 1980s saw the computerization of the Indian banking sector, as per a report by the Rangarajan Committee. Another report in 1988 formulated a thorough arrangement to extend innovative technological models to different areas of banking, like funds transfer, withdrawals, etc. Between the latter part of the 1990s and all through the early 2000s, many benefits of IT started materialising and showing its effects on the Indian banking sector with ATMs, CBS, computerization of banks' branches and the monopolization of tasks. In 1996, RBI set up IDRBT for upgrading the examination and appropriation of innovation in banks.

Technology has played a critical role in the development of the Indian banking industry. Through technology, banks have found a solution to numerous customer problems and the unmet needs. It has put an end to customers toiling it out with lots of stress in the waiting lines, to withdraw and deposit cash. The future of banking industry is smart mobile phones, but still not most of the customers have realized this truth. Mobile banking has provided banks with the capability to maintain their technologically advanced client base and delivering them the creative and value added services **Burra (2021)**. With limited working hours and banking infrastructure, the banking system required to be decongested. The technological interventions adopted by banks all over have allowed customers to conveniently complete their banking needs irrespective of time or place. The banks adopted technology-based service processes not only to lower the cost and improve efficiency but also to reach the unreached customers living across the country. The technology

ISSN : 1673-064X

enabled processes have helped the banks to set up electronic based strategies and services channels that include the customer segments to access the normal banking features and facilities **(Jaiswal & Kama, 2019).**

Both bankers as well as the customers faced challenges to operate with the limited operation mode. Opening up of the Indian market for the multinational companies sparked the development of banking industry through technology and innovative processes that brought in new service channels. These banking channels came into existence over the period of time in the most recent decade. The Indian financial industry moved from traditional branch banking channel towards the technology-based channels like ATM, E-banking and Mobile Banking. The initial addition to banking channel was the phone-based banking that functioned through call centre system. Electronic banking has become very successful in India as it offers an effective platform that not only allows the customers to access their account using computers but also helps in accessing bank account through Mobile phones, by courtesy the new technology phones that are easier to access and use. The latest technology phone with applications have made the jobs of the banks easier as they offer the full range of services with the application platform that can be downloaded and installed into the customers' smart phones. Mobile baking in present time has become an important and evolving instrument to execute banking related transactions. In a developing country like India, mobile banking has a huge potential **Kumar et al. (2020).**

Literature Review

Yadav *et al.* (2015) has looked into the suitability and iniquitousness that was established in consumers who favored mobile strategies, which are responsible to make stick from their customary practice to the latest technology in mobile banking. In connection to this, it was notice that the impact of this had on mobile battery, which become comparatively short. It became the reason that was regarded as main limitations for obligated them not follow the practice of mobile banking for their customer.

Timothy & McDowell (1984) scrutinized the association between the choice to take on innovative technology and its determining factor by which the banks that fluctuate significantly in connection with the challenging environments where they function. As it was noticed that mostly the superior banks and banks functioning in further focused local banking markets list in a sophisticated provisional in which the possibility of accepting fresh technology, altogether another equivalent.

ISSN : 1673-064X

Karjaluoto, Mattila & Pento (2002) focused on to discover the outcome of not the same aspects affecting attitude establishment headed for Internet banking in Finland. Another area they have determined those relevant elements that stimulus the materialization that are concerning with banking via Internet. Taking into consideration the service of banking via internet with the customer. Online banking behaviour is one such practice that demographic factors have effect deeply upon rendering to the study. Particularly, another point to be noted is the employment and household returns were noteworthy variables. Basically, the four different factors that are responsible are specifically prior computer involvement, previous technology practice, banking for personal purpose familiarity, that are orientation that influence the group have a great impact on usages and online banking facility.

Gerrard & Cunningham (2003 noted that there are eight features that have inclined the frequency of implementation of services Internet banking among their Singapore consumers respectively. The study, which shows that Internet banking according to people perceive service to be further appropriate, less intricate, well-suited to them and fit to those who are good at PC management. Here, the people who adhere to banking through internet which considered as a additional economically advanced. According to the perceptions about the adopters and non-adopters had were considered to be commonly appealing, confidentiality, approachable and also had economic welfares were not diverse.

Akinci, Aksoy & Atilgan (2004) identified that during banking through Internet, in which the user are attached to technology who are individuals in the direction of convenience-minded. On the other hand, comparatively the non-adopters are considered to be additional old-fashioned channel oriented, they are doubtful consumers, requiring banking system through internet, in which the service area comparatively these facilities are provided in the branches. According to the study's findings, one can say that safekeeping, consistency and confidentiality concerns such as business deal speed; download and the concern with user-friendly web site, remained amongst the utmost notable reasons of the behavior for the selection of bank selection.

Kolodinsky, Hogarth & Hilgert (2004) discovered the reasons that are been responsible for the adoption or purpose to accept three e-banking technologies and vicissitudes in these influences to overtime in the USA. According to the study, which revealed relative advantage, complexity/simplicity, compatibility, observability, risk tolerance, and product participation are connected with the acceptance. The various factors such as assets, income, education, gender and marital status, and age etc. of consumers likewise affect acceptance. The study exhibits the acceptance altered over time, but the influences of other features on adoption did not change.

Kim & Prabhakar (2004) study showed the established on theory that are related to social network and belief theory, contributing factor of belief in the electronic channel like propensity-to-trust, word-of-mouth, structural assurances. Study investigates of self-determining variables designated that propensity-to-trust, essential declarations, and interpersonal content of WOM were substantial judges of initial trust in the electronic channel.

Brown & Molla (2005) recognized the aspects which are responsible for Cell Phone banking and Internet practiced in South Africa. In study, which compares dissimilarities that are the influencing factors that are taken as cell phone banking Internet banking. According to the study, the reason responsible for the inspiration of attitudinal aspects in which taking into consideration. highlighting the several elements such as virtual benefit, compatibility, trialability, intricacy, threat, personal rules (social factors) and supposed behavioural controller factors that accept Internet and banking over cell phone users respectively.

Eriksson, Kerem& Nilsson (2005) focused on the acceptance of technology in the field of internet banking in Estonia. An elegant and user-friendly approach, in which it presents that internet banking is not useful highlighted in the reading. By doing so it serves as constructive measures to promote customer to use the observed that banking through internet is usefulness.

Awamleh & Fernandes (2005) discloses the features that are responsible for customer satisfaction for the influence of the internet banking service. The study highlighted suitability and safekeeping of internet banking transactions that have a substantial impression on fulfilment. Internet safety measures banking transactions was important for the users those who use internet banking for more than two years, while not for others.

Arvidsson (2013) initiated an examination to identify consumer's behavior on acceptance of mobile settlement method. The outcome of research shows that the most essential element describing if users are preferring to practice mobile payment services is ease of use or not. Additionally, related benefit, high trust, low insecurity, higher age and low income were accompanied with positive view on accepting the service. The outcome of the study shows that the study of invention in the payment industry cannot depend on technology adoption models and innovation diffusion theory all alone.

Objectives

1. To identify the features of mobile banking services in India.
2. To know the adaptability of mobile banking services by customers.

Methodology

The study is empirical in nature. 170 respondents participated in the study. The data was collected from them through a structured questionnaire. Mean and t-test application was done to identify the results. The method of sampling was convenience sampling.

Finding of the study

Table 1 displays the gender, where male respondent is 58.23%, and female respondent is 41.77%. Looking at the age, respondents who are at the age of 22 and 28 years are 40.59%, those between the Ages of 28 to 35 years are 25.29%, and one who are 35 years & above are 34.12%. With reference to the Occupation of the respondents, Business are 27.65%, Service are 45.29%, and others are 27.06%. Location of the respondents, respondents in Rural location are 42.94%, and Urban are 57.06%.

Table1 Respondent's Basic details

Variables	Number of respondent	%age
Gender		
Male	99	58.23%
Female	71	41.77%
Total	**170**	**100%**
Age		
22 to 28 years	69	40.59%
28 to 35 years	43	25.29%

ISSN : 1673-064X

35 years & above	58	34.12%
Total	**170**	**100%**
Occupation		
Business	47	27.65%
Service	77	45.29%
Others	46	27.06%
Total	**170**	**100%**
Location		
Rural	73	42.94%
Urban	97	57.06%
Total	**170**	**100%**

Source: Survey Data

Table2 Features & Adaptability of Mobile Banking Services in India

Sr. No.	Statements	Mean Score	t-Value	Sig.
1.	Bank's website enables customer to complete the transaction quickly	4.02	14.46	0.000
2.	Website of the bank is simple to use	4.13	13.28	0.000
3.	Customers are finding the process of money transfer easy	4.11	14.73	0.000
4.	Bank's website is truthful about their services & offerings	4.21	15.29	0.000
5.	Mobile banking help customers save their time and efforts	4.33	15.20	0.000
6.	Customer service representatives are always available online, whenever needed	4.10	15.59	0.000
7.	Mobile banking is a free service to customer	3.45	5.29	0.000

8.	Banks do not share customer's personal information with other banks or websites	3.69	9.15	0.000
9.	Various different banking services are offered by mobile banking system	4.31	16.55	0.000
10.	Mobile banking provides services more efficiently and quickly	4.17	13.37	0.000

Source: Survey Data

Table 2 shows the Mean values for statement with reference to the "Features & adaptability of Mobile banking services in India," the statement with highest mean value is "Mobile banking help customers save their time and efforts" with the mean score of 4.33. Second highest mean score is 4.31 for statement "Various different banking services are offered by mobile banking system." Third highest mean value is 4.21 for statement "Bank's website is truthful about their services & offerings." Statement "Mobile banking provides services more efficiently and quickly" has the mean score of 4.17; mean score of 4.13 is for statement "Website of the bank is simple to use." Statement "Customers are finding the process of money transfer easy" scores the means value of 4.11, "Customer service representatives are always available online, whenever needed" has the mean value of 4.10, "Bank's website enables customer to complete the transaction quickly" has the mean score of 4.02. Banks do not share customer's personal information with other banks or websites" and "Mobile banking is a free service to customer" the mean scores are 3.69 and 3.45 respectively. T-value of all statements in context of Features & adaptability of Mobile banking services in India are significant, because t-value statements are found to be positive and significance value also less than 0.05.

Conclusion

Mobile banking has represented a breakthrough for financial institutions and banks in terms of remote banking services. However, many customers are still hesitant to adopt mobile banking system because of security reasons. Mobile banking system and introduction of ICT has made the bond between customers and banks more strong. Banks and financial institutions are offering their customers with the possibility of connecting their account with their mobile phone numbers and with the help of that can access their account and various other banking services through their smart mobile phones. Banks must take efforts and organize campaigns to make customers aware about the benefits of mobile banking in order to make them adopt the technology. The customer must understand the easiness and convenience of mobile banking as it is beneficial for customers as well as banks.

References

1. Burra, B. (2021). Use And Adoption Of Mobile Banking In Rural Areas Of India: A Descriptive Study On Emergence Of E-Banking, *Journal of Xi'an University of Architecture & Technology*. 13(2), 175-184.
2. Jaiswal, B. & Kamal, Y. (2019). Study of Customer Adaptability for Electronic Banking Services in India, *Kaav International Journal of Economics, Commerce & Business Management*, 6(2), 48-55.
3. Kumar, A., Dhingra, S., Batra, V., and Purohit, H. (2020). A Framework of Mobile Banking Adoption in India, *Journal of Open Innovation: Technology, Market and Complexity*, 6(40), 1-17.
4. Yadav, M., Joshi, Y., & Rahman, (2015). Mobile social media: The new hybrid element of digital marketing communications, *Procedia - Social and Behavioral Sciences*, 189, 335 – 343.
5. Timothy, H., & John M. (1984). The Impact of Technology Adoption on Market Structure, *the Review of Economics and Statistics*, 72(1), 164-168.
6. Karjaluoto, H., Mattila, M., &Pento, T. (2002). Electronic banking in Finland: Consumer beliefs and reactions to a new delivery channel, *Journal of Financial Services Marketing*, 6, 346–361.
7. Gerrard, P. & Cunningham, B. (2003). The diffusion of Internet Banking among Singapore Consumers, *Journal of Bank Marketing*, 21(1), 16-28.
8. Akinci S., Aksoy S. & Atilgan E. (2004). Adoption of Internet banking among sophisticated consumer segments in an advanced developing country, *The International Journal of Bank Marketing*, 22(3), 212-232.

9. Kolodinsky, J.M., Hogarth, J.M., & Hilgert, M.A. (2004). The adoption of electronic banking technologies by US consumers, *The International Journal of Bank Marketing*, 22(4), 238-259.

10. Kim, K.K., & Prabhakar, B. (2004). Initial trust and the adoption of B2C e-commerce, DOI:10.1145/1007965.1007970, 35(2):50-64.

11. Brown, I., & Molla, A. (2005). Determinants of Internet and Cell Phone Banking Adoption in South Africa, *Journal of Internet Banking and Commerce*, 10(1).

12. Eriksson, K., Kerem, K., & Nilsson, D. (2005). Customer Acceptance of Internet Banking in Estonia, *International Journal of Bank Marketing*, DOI: 10.1108/02652320510584412, 1-32.

13. Awamleh, R., & Fernandes, C. (2005). Internet Banking: An empirical investigation into the extent of adoption by banks and the determinants of customer satisfaction in the United Arab Emirates, *Journal of Internet Banking and Commerce*, 10(1).

14. Arvidsson, N. (2013). Consumer attitudes on mobile payment services - results from a proof of concept test, *International Journal of Bank Marketing*, DOI:10.1108/IJBM-05-2013-0048, 32(2).

15. Maditinos, D., Chatzoudes, D., & Sarigiannidis, L. (2013). An examination of the critical factors affecting consumer acceptance of online banking: A focus on the dimensions of risk, Journal of Systems and Information Technology 15(1), 97-116.

3.2.1 Scopus & ABDC indexed + UGC care listed 2

ResearchGate

Role of Market Microstructure in Maintaining Economic Development

Article in The Empirical Economics Letters · December 2021

5 authors, including:

Vijayalakshmi N.S
Nehru Memorial College Sullia

Sumit Kumar
Indian Institute of Management, Kozhikode

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

Role of Market Microstructure in Maintaining Economic Development

Dr.Mohammad Salameh Almahirah
Business Administration Department
IRS University Amman Jordan
Email: mohammad.almahirah@iu.edu.jo
Dr. Vijayalakshmi N.S.
Assistant Professor and Head of Department of Economics
Nehru Memorial College Sullia, Dakshin Kannada, Karnataka 574327
Email: drvijayalakshmins@gmail.com
Dr. Misbah Jahan
Lecturer, University of Kashmir.
Mohalla Qadria, Model town A Sopore. J&k. 193201
Email: misbah.jahan@gmail.com
Dr. Sonam Sharma
Assistant Professor, Chandigarh Business School of Administration
Chandigarh group of colleges, Landran
Email: Sonam.sharma138b@gmail.com
Sumit Kumar
Research Scholar, Indian Institute of Management Kozhikode, Kerala , India
Email: sumit01phdpt@iimk.ac.in

Abstract: The study aims to explore the brief idea of market microstructure and its effects on the trade market and the price discovery process. The findings will be further discussed and the effect of market microstructure in the financial market will also be discussed. Microstructure components and their effects in various business markets have become an important challenge that will be solved through the identification of them. A systematic review will be chosen for conducting the study as the topic is surveyed before. Therefore, the data collection method will help the study in finding reliable data and information that makes a study valuable. The problem in the market structure such as price volatility as well as changes in the equilibrium price rate of the market is vital. This has been related with the relevant nature of the stock market changes, which took into, account the trading problems as well as price volatility. This has also been part of the financial market problems and the relevant change in the market decisions due to non-trading barriers.

Keywords: Microstructure, Market microstructure, financial growth, Equilibrium price, Economy.

1. Introduction

The microstructure is regarded as the study based on the financial market and the operation. The primary focus of microstructure is to analyse market exchange and the venues for trading. The microstructure of the market is very important in analysing the economic structure of the market as it helps in discovering the price process and determines the spreads and quotes. Hence, understanding the growing impacts of market microstructure needs to be understood for implementing better strategies in the market. The microstructure is becoming one of the growing topics of financial research as it is important for the growth and development of the algorithm and for electronic trading. As a result, rapid financial evolution is noticed in the market. The primary focus of market microstructure is to explore the range of exchange structure, trading venue, the process of price discovery, trading behaviour on intraday stock, and cost for the transaction.

The report will explore the role of market microstructure for maintaining economic development as well as the growing impact it has on the market. The impact of microstructure in exchange and its evolution will be made along with the identification of its role in the financial market. Microstructure in the currency market will also be discussed in the report. The report will further demonstrate the methodology used for constructing the paper which will show that it is made with proper ethical consideration. Moreover, some SMART recommendations will be made so that the financial organizations can implement the suggestions for their growth and development.

Aim of the study
The aim of the study is "To understand the role of microstructure in the economic development and its maintenance".

Objectives of the study
The study will fulfil some objectives that will help the study to achieve its goal. The first objective of the study is to examine the impacts of microstructure in exchange and its evolution. The second objective is to identify the role of microstructure in the financial market. The third objective of this paper is to recognize the impact of microstructure in the currency market. Finally, the fourth objective is to understand the impacts of the microstructure in trading.

Background
Market microstructure is regarded as the purest form in financial intermediation. According to Kasach et al. (2021), the trading market works between investors to investors where they deal with financial assets. The market microstructure is the field for study in the financial section where the subject makes an exploration cost trading securities and trading costs' impact on the financial market. The cost of the trading is dependable on the relatable measurements and deals with commissions. However, as argued by Biswas et al. (2021), the focus of microstructure and its working area is on the measurable rather than the commissions. As viewed by Rengarajan & Geng (2020), the components of the microstructure are introduced to the investors in the financial market so that they can understand and examine the trading process.
The economic structure of the financial industry is based on the analysis of the microstructure components as it holds a piece of empirical evidence in the character of trading costs. The sources of the spread are not independent as trading costs draw an inference on the importance of these sources. Microstructure literature has three themes that are a) the original transaction process in the stock market, b) the impacts cast upon the transaction process by market structure as well as trading rules, c) the implication of the transaction process in economic decisions that are compulsory. A chronological development can also be seen due to the application of market microstructure in these divisions.Keeping all these things in mind, it can be stated that the use of market microstructure has become a fundamental thing in the financial industry. The microstructure is important in the market as it assures the economic valuation of the financial organizations.

2. Literature review

Examination of the impacts and its evolution of microstructure in exchange
Market microstructure is based on the study of organizational trading and its development in the financial market. As opined by Dębska et al. (2021), the investor needs to find a buyer and a seller who are willing to make the investment for buying instruments in the financial market. The seller is also required to look for the buyers who are interested in buying based on the market value of the instrument. Making a buying and selling process in the financial market is typically limited to the participants of the exchange system. However, the exchange system can mitigate the issues arising between the buyer and the seller during bargaining. On the contrary, as suggested by Natrayan et al. (2021), dealers make contracts directly with the client where they negotiate terms within themselves.

Identifying the role of microstructure in the financial market
The microstructure plays a big role in the market liquidity spiral where the liquidity of the stock market is linked to it. The nature of the market liquidity spiral has many dimensions based on the informational events, stock market and its nature, and risk management. As explained by Setiani et al. (2021), the time period between the negotiation of the final seller and buyer is very crucial as it holds risk management issues. The margin of trade is destabilized due to the crisis in the market that can be normalized and balanced with the help of market microstructure.

Impact of microstructure in the currency market
The currency market is influenced by the microstructure of the market that helps the market in currency stabilization. According to Pu et al. (2021), the currency is structured and balanced by the foreign exchange that is examined with spot exchange. Trading is not necessarily controlled by the exchange and trading where trading is regarded as a basic requirement of the market. The impact of microstructure is important in the currency market as the market needs to find equilibrium between the trading market and currency. A link can also be found between currency trading and the condition of microeconomic. As per the view of Aneke et al. (2021), micro-based research has been made recently that can justify the existing link and the micro foundation can be found for the dynamics.

Understanding the impacts of the microstructure in trading

The trading style and its approaches are determined by the microstructure as the practice of microstructure in the financial industry is constantly growing. Trading is influenced by the characteristics of the seller, buyer, and investors. As mentioned by Ivanova et al. (2020), the microstructure is a dominant factor in the understanding trading market as the subject matter and its different perspectives.

Theories

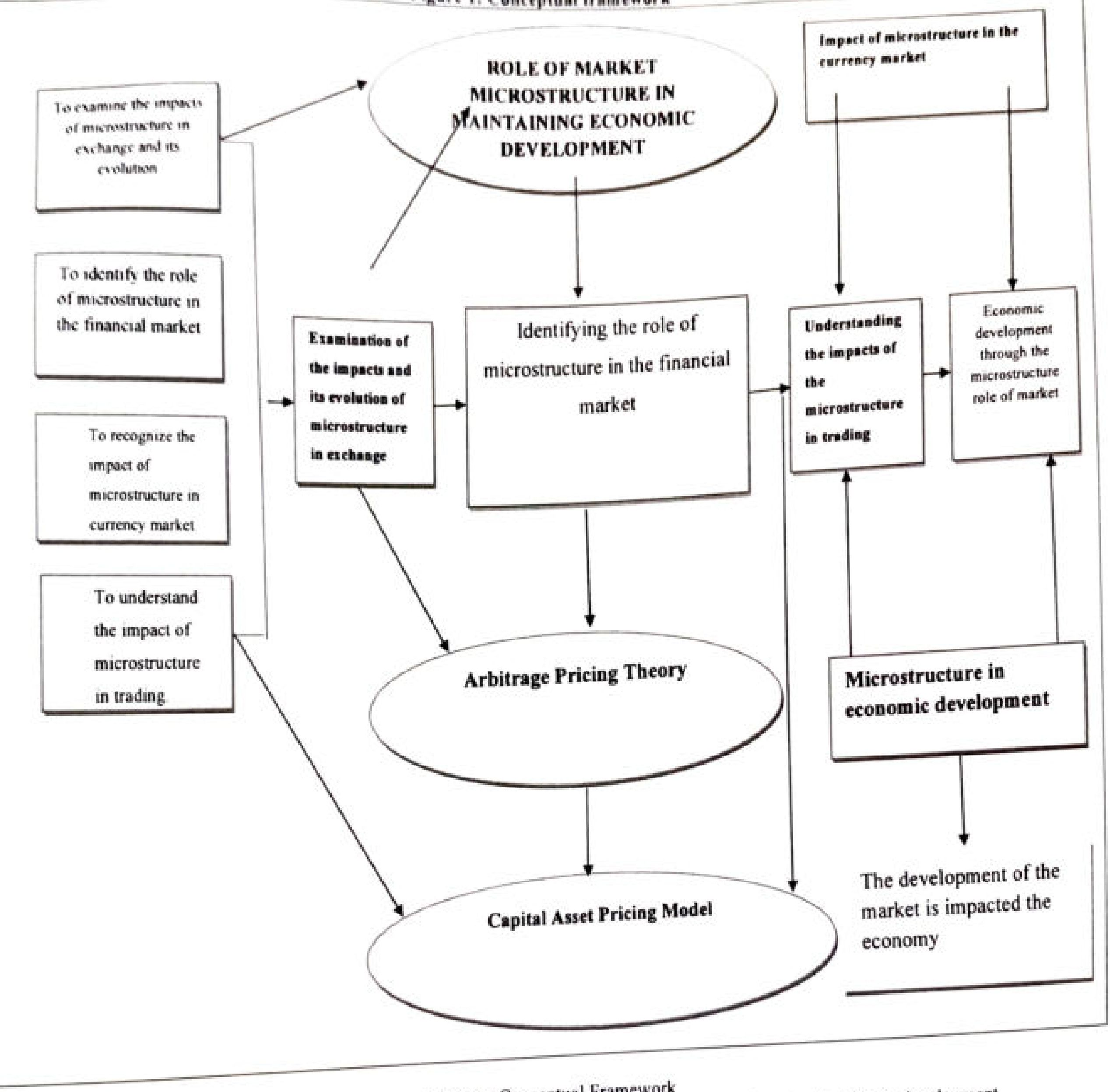
The ***Arbitrage Pricing Theory*** is effective in understanding the financial scenarios as the theory explains how the capital market is becoming competitive day by day. The microstructure is an important field to be discovered as it explores the distribution of trading facilities among the traders; as a result, it helps to understand the impact of microstructure in the financial market.As discussed by Nanomaterials (2021), the prediction can be made about the return from the assets on the basis of a linear relationship. The relationship is based on the asset return and microeconomic variables. The currency market is suffering due to the massive changes in market microstructure and the trading section is especially seen to be affected by it. Therefore, the implementation of this theory explains the components of market microstructure that can predict the return of the assets in the currency market and protect it from further provocation.

Another effective model that can be used in outlining the concept of microstructure in the development of the economy is the ***Capital Asset Pricing Model***. As suggested by Whitaker et al. (2020), this model demonstrates that liquidity behaviour and spirals also depend on the traders as they play a major role in the financial market.The risk in market premium is a vital element of the theory that helps in understanding the effect of market microstructure in the financial market. Market premium and its effect on the money value will point out that is essential for evaluating the risks in the financial market. As illustrated by Peter Tsung-Wen Yen et al. (2021),the impacts of microstructure are huge in the exchange and the identification of such components assist in building the required measurements in the microstructure that will help in rectifying them. The security of various markets can be enhanced with the aid of the components of the theory and their impacts on market microstructure.

Empirical Economics Letters, 20 (Special Issue 2) (September 2021) ISSN 1681 8997

Conceptual framework

Figure 1: Conceptual framework

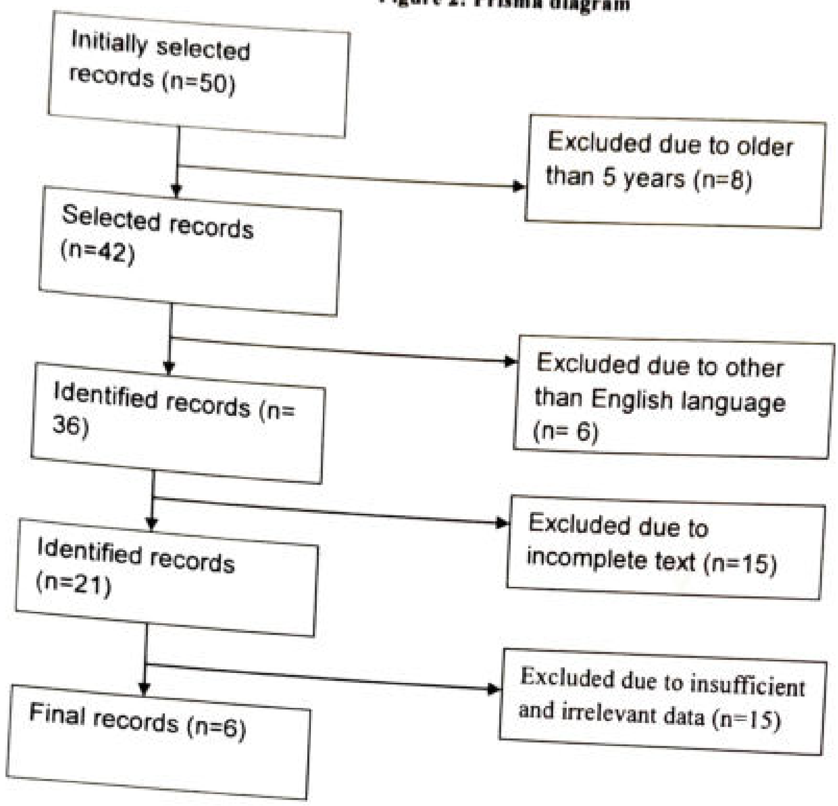


Source: Conceptual Framework

A conceptual framework has been made that demonstrates the rising issues of the microstructure in the development of economic growth of a country. The framework shows how the theories have been used to generate the issues into a problem-solving approach. The factors regarding microstructure and its growing impact on the economy have been briefly shown in the framework. In this case, ***Arbitrage Pricing Theory*** and ***Capital Asset Pricing Model*** demonstrated how the impacts of microstructure can be mitigated.

3. Methodology

PRISMA diagram
Figure 2: Prisma diagram



The above-mentioned Prisma diagram has shown how many records have been taken initially and how many were excluded due to the past 5 years record. After that, the excluded reports were due to the English language from the selected records. Then, there is the number of incomplete text records and their exclusion from the selected ones. Finally, the number is insufficient and irrelevant data to make a final record.

Table for research papers

Table 1: Analysis of research paper

Author	**Year**	**Research paper**	**Sample research method**	**Relevance**
Bajto et al.	2021	*"Pilot Scale Production of Precast Concrete Elements with Wood Biomass Ash"*	Secondary	It is relevant as the paper is selected based on the topic, also the paper has various data and graph
Butt	2021	*"Exploring the Interrelationship between Additive Manufacturing and Industry"*	Secondary	It is relevant as the paper has relevance to the topic
Nikolova et al.	2020	*"A Novel Methodology to Calculate the Probability of Volatility Clusters in Financial Series: An Application to Cryptocurrency Markets"*	Secondary	It is relevant as the paper holds statistical references related to the topic.
Peter Tsung-Wen et al.	2021	*"Understanding Changes in the Topology and Geometry of Financial Market Correlations during a Market Crash"*	Secondary	It is relevant as the paper holds important information about the topic.
Sharma et al.	2020	*"Sailing through the COVID-19 Crisis by Using AI for Financial Market Predictions."*	Secondary	It is relevant as the paper holds informative knowledge relevant to the topic.
Wang et al.	2021	*"The Stock Market Model with Delayed Information Impact from a Socioeconomic View"*	Secondary	It is relevant as the paper provides data and resources about the financial outcomes.

Source: 6 different sources collected for research

Data collection

The secondary research method has been chosen as the data collection method for this paper as it helps in gathering data and information based on previous researches on the same field. As stated by Pu et al. (2021), a systematic review provides the research with valued and authentic data that is peer-reviewed. ***[Refer to appendix 1]*** Therefore, the data and information provided in the report are reliable and can be used for further research in this field. The data have been collected from peer-reviewed journals derived from ProQuest as well as scholarly journals and articles. Hence, this systematic review has helped the study to reach the desired goal. ***[Refer to appendix 2]***

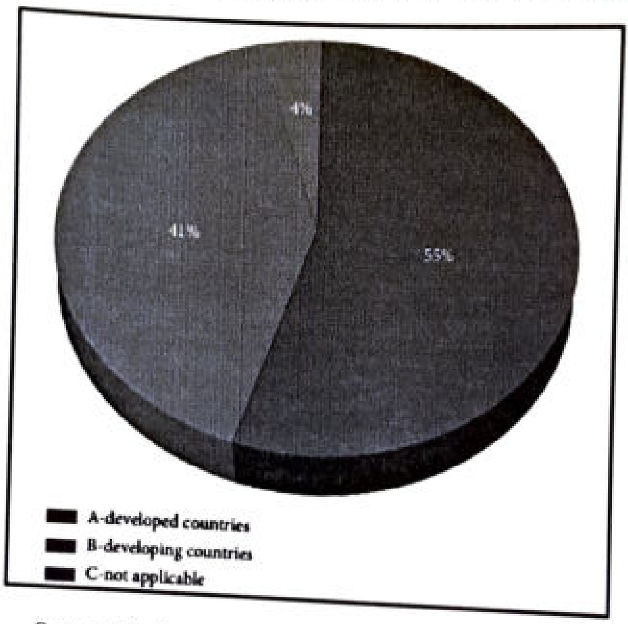
Data analysis

The data and information have been analysed through a thematic analysis that has assisted the project to make an elaborate description of issues raised by microstructure in the financial market. According to Setiani et al. (2021), thematic analysis helps a project to make a descriptive and productive analysis that the topic needs. The data have been extracted from ProQuest using some filters as the project needed current information regarding the financial market and its values.

4. Findings

The market structure has been facing an unprecedented situation due to COVID, which has been needing advancement through artificial neural networks in handling financial market development. The nature of the market has also been linked with the effectiveness in the economic development through proper economic decisions, which improves equilibrium price level in the market.

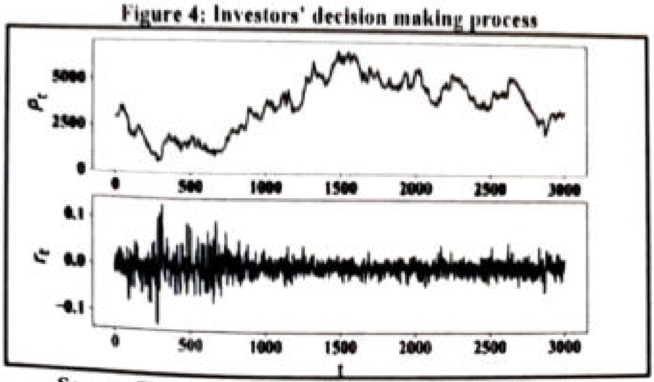
Figure 3: Economic development in developed and developing countries



Source: Based on the influence of stock market and its development

From the above graph, it has been seen that market micro structuring has made a huge development in developed countries by almost 55% and an impact of 41% in developing countries. Sharma et al. (2020) argued that potentiality in various computing technologies has made a relative impact in the financial sector through probabilistic reasoning and neural network theory.

Figure 4: Investors' decision making process

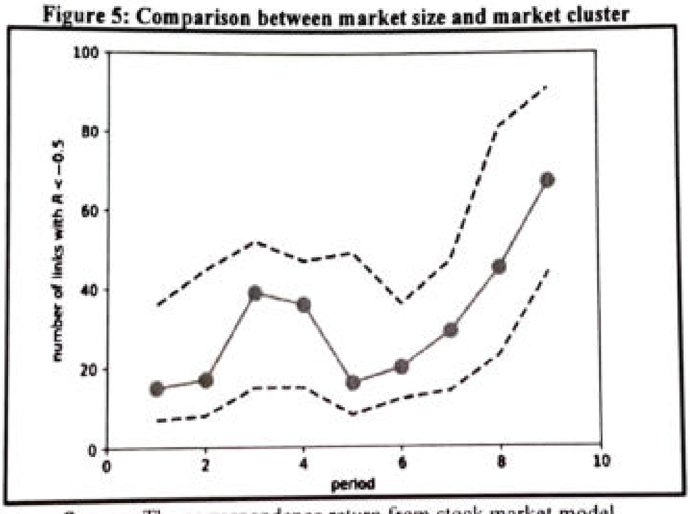


Source: The correspondence return from stock market model

From the above graph, the stock price model has illustrated the changes in the market structure where it has arguably put forth a clustering, which has been volatile in nature. It has displayed a decision-making process of investors which depicted a collective behavior of stock price to promote economic development. As opined by Sharma et al. (2020), the asset portfolio has higher risks as a part of volatility in stock markets. The market has been variable and has a large number of stochastic events, which makes a change in the performance of the investors. On the contrary, Wang et al. (2021), macro level changes on the market have been part of demand and supply changes, which evaluates stock price.

The use of Ollivier-Ricci curvature has been important to determine the correlation between topological change in an economy and changes in market crash. Wang et al. (2021) commented that this type of change has been part of the economical-problems arising from higher price prediction dealing with sudden market crash. It has also been related with the changes in price structure resulting in the volatile nature of the market.

Figure 5: Comparison between market size and market cluster

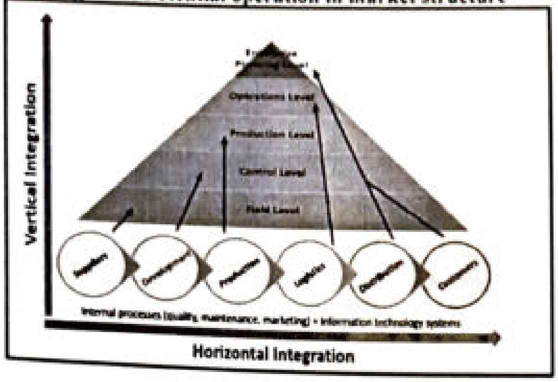


Source: The correspondence return from stock market model

It has been justified from the above figure that changes in ORC have been occurring through a specified periodic concept. Peter Tsung-Wen Yen et al. (2021) justified that the necessary changes involve a period from 2019 to 2020 where it quarterly depicted ups and downs in ORC. Furthermore, it also states a change in the required market capitalization process, which also considers a comparison of market size with the market cluster. This has also stated a cluster change in the network of stocks where cross correlation has been part of the positive and negative ORCs as per the rise and fall in the price value. As opined by Peter Tsung-Wen Yen et al. (2021), the changes have been dealt through by positive as well as negative changes in the stock market structure. The orange line has been significant in describing the negativity of ORC due to higher rise in price; blue line showed a price adjustment which improved economic stability while green line showed a period of unchanged price conditions.

The changes have been analysed through a required micro structural impact of the nature of production, which improves market conditions. This has been described through the nature of technical requirements, which further analysed large-scale change in the work requirements. The improvement in the economy has been part of the effective rise as well as fall in the technical feasible factors where the effectiveness lies in changing various conditions. This includes various factors such as improved market conditions, activity rate as well as consistent change in the industrial production.

Figure 6: Potential operation in market structure



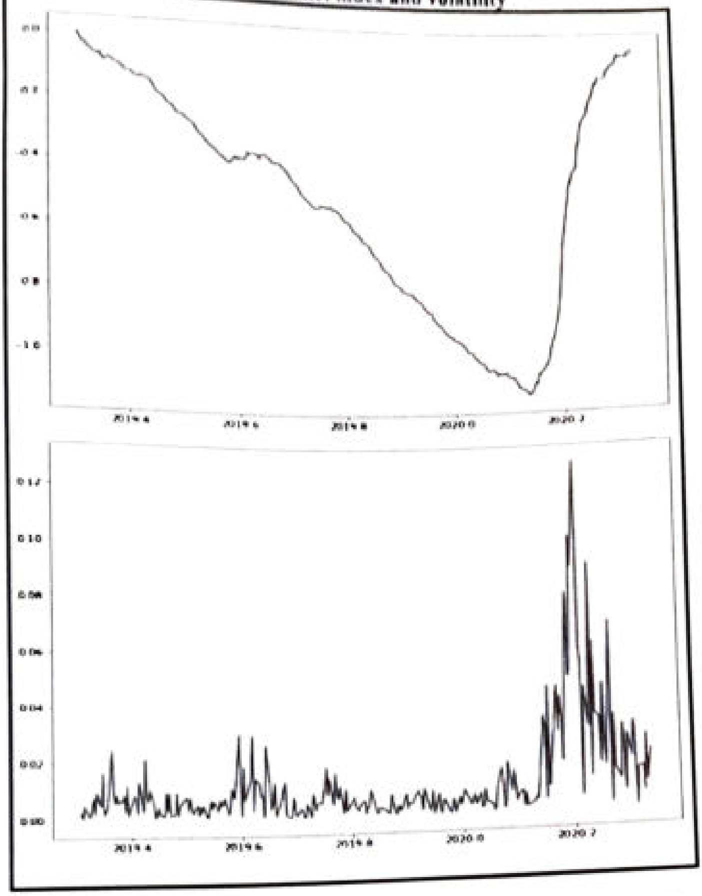
Source: The integrated models in economic market structure

From the above figure, it has been analysed that the potential operations have been part of the relevant structuring of the market as per the steps of integration. Considering the two models of integrations, this has been beneficial to deal with required changes in the products manufactured to meet changes in supply as well as demand for economic development. Nikolova et al. (2020) stated that vertical integration took into account field level operations, control factors, production, operations as well as planning level to develop a productive market chain. On the other hand, the integrated model, which shows horizontal process, has been related with the internal process of manufacturing and production namely productive quality, maintenance and marketing showed a level of employee engagement process. Nikolova et al. (2020) opined that the required form of structural impact takes into account various forms of relationship between the market chain structures. This has been related with the various forms of production where the changes have been meant for the creation of a customer value through a logistic improvement in technical process. This has also been improvising various other methods, which depicts the cost-effective materials production and an adaptable transformation into improved goods.

The use of the integrated technology has been analysing the changes in the economy through a large-scale supply and an accelerated improvement in the quality of the products. It has also taken into account an illustrated benefit of the standardized digital operations in the 4.0 industries. Nikolova et al. (2020), argued that this technologically advanced industry has been providing a large-scale employment, which further led to the further improvement in the digital operations. This has also been intensifying growth as well as capability in the research process, which took into account the generation of the data, protection of crucial information as well as high market operations. As counter argued by Butt (2020), the simulating business operations have formed a market trend, which has made changes in the microstructure framework to improve the nature of the market.

Empirical Economics Letters, 20 (Special Issue 2) (September 2021) ISSN 1681 8997

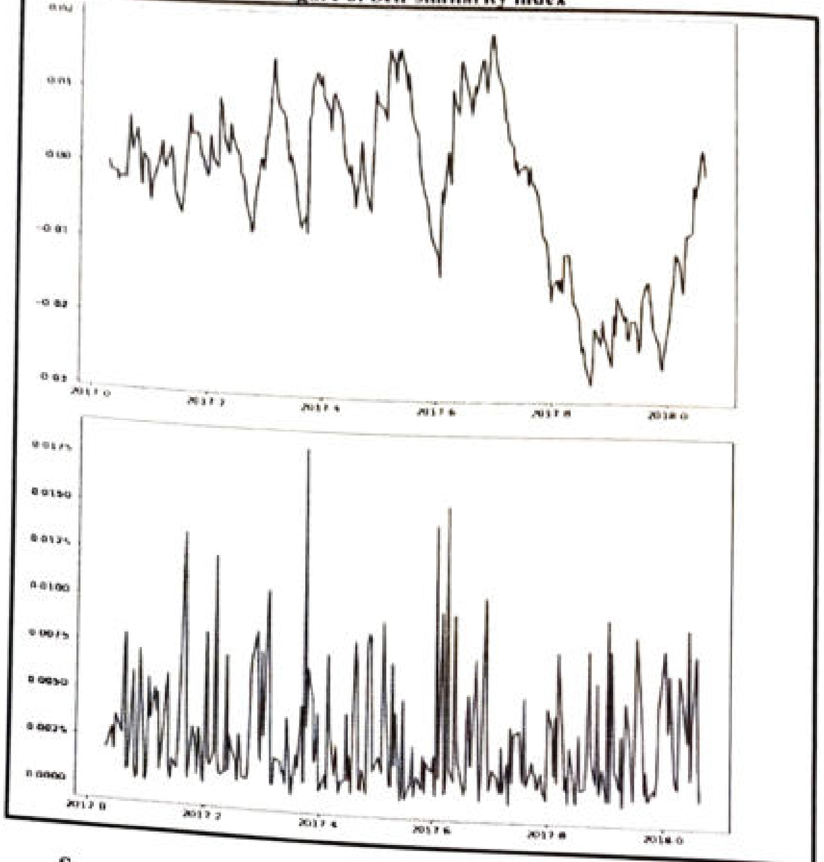
Figure 7: Market index and volatility



Source: Based on the change in market structure in respect to market volatility

From the above figure, it has been seen that the required existence of market volatility has been linked with the economic development, which has been measured through a market index. Baton et al. (2021) opined that the market index, namely self-similarity index led towards a change in the market from the period of 2018 to 2020. Here, the justified change in the market has been part of the benchmark, which described the price change, as well as volume of supply in the relevant form of the market function. In addition, Bajto et al. (2021) argued that the required change has been mentioned through the address to key issues, which took into account transparency, trading cost, and design of market as well as price formation.

Figure 8: Self-similarity index



Source: Based on further volatility in the market as per self-similarity index

From the above figure, it has been analysed that the corresponding volatility in the financial market has been linked with the volatility of a Hurst exponent. As per the views of Bajto et al. (2021), this exponent has been linked with the traditional change in the market volatility where price change not only considers change in assets but also the change in the electronic market. By electronic market, it has been taking into account-required analysis of assets such as crypto currencies and an incident with the price structure resulting in market instability.

5. Discussion

The authors in the research paper did not wholly agree with the nature of the market condition. As opposed to Mironescu et al. (2021), they mostly argued that the market has been facing large-scale price volatility that led to market crash and fall in the investment. This has also been leading to a differentiated price structure as well as fall in the optimal trading strategy where the entire nature of the investment has been facing price volatility. Mironescu et al. (2021) had opined that it has analysed that the nature of the productive operations has been following a horizontal as well as vertical marketing approach where the pricing mechanism faces a no optimal market condition.
Here, the changes have also been justified through a change in the traded asset class as well as in the asymmetrical information collected from fair value asset prices. On the contrary, Godina et al. (2020) argued that the nature of the market has been facing a change in the trading algorithm as well as in the market research condition. This has been part of the entire form of the augmented neural network as well as in the effectiveness present in the management of stock prices. It has also illustrated that the nature of the market has been part of the temporary changes in the estimation of stocks as well as adaptive approaches in AI based functioning. As justified by Ching et al. (2021), this has also analysed the required form of the actions where price volatility has been seen in financial markets. It has

also taken into account the various forms of the investor's decision-making process as well as in the required changes in the structure for price evolution.

Furthermore, the conventional mechanism has been linked with the AI as well as neural network theory, which analyse the required changes in the trading mechanism. As per the views of Ching et al. (2021), this has also illustrated the change in the empirical analysis where the investment decisions in the financial market have made an impact on the optimal pricing strategy. This has been part of the insecure marketing decisions as well as in the phenomenal variables, which hampers the correlation. Chen et al. (2021) had opined that the justified changes have been linked with the required form of the investment options, which analyse stock market options, and the required form of the casual challenges in the investment options.

The microstructure has improved changes in the stock exchange as well as its required impact in the currency market. As per the views of Chen et al. (2021), considering the changes, it has analyzed the ups and downs in the financial market as well as in the digital market especially crypto currencies. This has also taken into account trading impact on the investment performance, which further led to the fall in the profit structure for the investors. Hence, it analysed the ineffectiveness in the market conditions, which in turn also hampered the investment making decisions of the investors.

6. Recommendation

The non-trading barrier and price mechanism during imports and exports needs to consider significant change in the equilibrium price rate. As per the views of Chen et al. (2021), this must take into account asymmetrical change in the price as well as creation of a monopolistic competition rather than forming a monopoly. It also takes into account market crashes where price volatility plays an important factor. This has been recommended through an adoption of a horizontal or vertical market integration process. Suriani et al. (2021) argued that the structure of the market must also be recommended through a significant relationship between the trading price and the fair asset value of the firm.

This has also been part of the maintenance of liquidity in the market, which took into account the recommended nature of information availability as per price transitions. Here, the nature of the economic development must also be recommended with a stepwise process of market determination, which includes market fragmentation, algorithmic process of trading in multi assets and a relevant high trading frequency. Suriani et al. (2021) opined that the nature of the era of market structure must have been incorporating a transaction cost selection for market portfolios and selection of stocks.

7. Limitation

The research limitation has been the adoption of a secondary research method instead of adopting a primary research method. This has been part of the problems in the manipulated findings and a general systematic opinion evaluated from the collected journal articles. On the other hand, the primary research method would have presented a practical view on the scenario collected through interview or survey method. The primary research method has been based on the current findings, which has lesser means of manipulation. Here, the ethical issues include breach of information as well as non-maintenance of confidentiality of the collected journal articles and required consent.

Reference List

Aneke, F. I., Bankole, O. A., Mostafa, M. M. H., & Okorafor, C. (2021). Durability Assessment and Microstructure of High-Strength Performance Bricks Produced from PET Waste and Foundry Sand. Materials, 14(19), 5635. http://dx.doi.org/10.3390/ma14195635

Biswas, P., Ghosh, S., Sarkar, A., & NG, R. (2021). Investigation of deep cryogenic treatment of Steels for medical tooling applications. Journal of Physics: Conference Series, 1797(1)http://dx.doi.org/10.1088/1742-6596/1797/1/012057

Dębska, B., & Guilherme Jorge, B. S. (2021). Mechanical Properties and Microstructure of Epoxy Mortars Made with Polyethylene and Poly(Ethylene Terephthalate) Waste. Materials, 14(9), 2203. http://dx.doi.org/10.3390/ma14092203

Grain Boundary Control of Organic Semiconductors via Solvent Vapor Annealing for High-Sensitivity NO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Detection. (2021). Sensors, 21(1), 226. http://dx.doi.org/10.3390/s21010226

Ivanova, M., Dorina-Maria Buda, & Burrai, E. (2020). Creative and disruptive methodologies in tourism studies. Tourism Geographies, https://www.proquest.com/scholarly-journals/creative-disruptive-methodologies-tourism-studies/docview/2417812675/se-2

Kasach, A. A., Kharytonau, D. S., Paspelau, A. V., Ryl, J., Sergievich, D. S., Zharskii, I. M., & Kurilo, I. I. (2021). Effect of TiO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Concentration on Microstructure and Properties of Composite Cu–Sn–TiO0RW1S34RfeSDcfkexd09rT421RW1S34RfeSDcfkexd09rT4 Coatings Obtained by Electrodeposition. Materials, 14(20), 6179. http://dx.doi.org/10.3390/ma14206179

Natrayan, L., Ravichandran, M., Veeman, D., Sureshkumar, P., Jagadeesha, T., Suryanarayanan, R., & Mammo, W. D. (2021). Enhancement of Mechanical Properties on Novel Friction Stir Welded Al-Mg-Zn Alloy Joints Reinforced with Nano-SiC Particles. Journal of Nanomaterials, 2021 http://dx.doi.org/10.1155/2021/2555525

Pu, Y., Li, Y., & Wang, Y. (2021). Structure Characteristics and Influencing Factors of Cross-Border Electricity Trade: A Complex Network Perspective. Sustainability, 13(11), 5797. http://dx.doi.org/10.3390/su13115797
Rengarajan, V., & Geng, J. (2020). Fabrication of Tapered 3D Microstructure Arrays Using Dual-Exposure Lithography (DEL). Micromachines, 11(10), 903. http://dx.doi.org/10.3390/mi11100903

Setiani, B. E., Dwiloka, B., Pramono, Y. B., Arroyan, T. N., Mardhika, H., & Puspitoasih, A. D. (2021). Physicochemical properties of steak made of post laying hen breast meat thawed using various methods. IOP Conference Series.Earth and Environmental Science, 803(1)http://dx.doi.org/10.1088/1755-1315/803/1/012033

Whitaker, B. I., Walderhaug, M., Hinkins, S., Steele, W. R., Custer, B., Kessler, D., Leparc, G., Gottschall, J. L., Bialkowski, W., Stramer, S. L., Dodd, R. Y., Crowder, L., Vahidnia, F., Shaz, B. H., Kamel, H., Rebosa, M., Stern,

M., & Anderson, S. A. (2020). Use of a rapid electronic survey methodology to estimate blood donors' potential exposure to emerging infectious diseases: Application of a statistically representative sampling methodology to assess risk in US blood centers. Transfusion, http://dx.doi.org/10.1111/trf.15941

Bajto, J. Š., Štirmer, N., Cerković, S., Carević, I., & Jurić, K. K. (2021). Pilot Scale Production of Precast Concrete Elements with Wood Biomass Ash. Materials, 14(21), 6578.http://dx.doi.org/10.3390/ma14216578
Butt, J. (2020). Exploring the Interrelationship between Additive Manufacturing and Industry 4.0. Designs, 4(2), 13. http://dx.doi.org/10.3390/designs4020013

Chen, T., Peng, L., Yang, J., Cong, G., & Li, G. (2021). Evolutionary game of multi-subjects in live streaming and governance strategies based on social preference theory during the COVID-19 pandemic. Mathematics, 9(21), 2743. doi:http://dx.doi.org/10.3390/math9212743

Ching, H. L., Khalina, A., N, M. N., Norli, A., Harussani, M. M., Rafiqah, S. A., Aisyah, H. A., & Ramli, N. (2021). The Challenges and Future Perspective of Woven Kenaf Reinforcement in Thermoset Polymer Composites in Malaysia: A Review. Polymers, 13(9), 1390.http://dx.doi.org/10.3390/polym13091390

Godina, R., Ribeiro, I., Matos, F., Ferreira, B. T., Carvalho, H., & Peças, P. (2020). Impact Assessment of Additive Manufacturing on Sustainable Business Models in Industry 4.0 Context. Sustainability, 12(17), 7066. http://dx.doi.org/10.3390/su12177066

Mironescu, M., Andrada Lazea-Stoyanova, Barbinta-Patrascu, M., Lidia-Ioana Virchea, Rexhepi, D., Mathe, E., & Georgescu, C. (2021). Green Design of Novel Starch-Based Packaging Materials Sustaining Human and Environmental Health. Polymers, 13(8), 1190.http://dx.doi.org/10.3390/polym13081190

Nikolova, V., Trinidad Segovia, J.E., Fernández-Martínez, M., & Sánchez-Granero, M. A. (2020). A Novel Methodology to Calculate the Probability of Volatility Clusters in Financial Series: An Application to Cryptocurrency Markets. Mathematics, 8(8), 1216. http://dx.doi.org/10.3390/math8081216

Peter Tsung-Wen Yen, Xia, K., & Cheong, S. A. (2021). Understanding Changes in the Topology and Geometry of Financial Market Correlations during a Market Crash. Entropy, 23(9), 1211. http://dx.doi.org/10.3390/e23091211

Sharma, G. D., Erkut, B., Jain, M., Kaya, T., Mahendru, M., Srivastava, M., Raminder, S. U., & Singh, S. (2020). Sailing through the COVID-19 Crisis by Using AI for Financial Market Predictions. Mathematical Problems in Engineering, 2020http://dx.doi.org/10.1155/2020/1479507

Suriani, M. J., Ilyas, R. A., Zuhri, M. Y. M., Khalina, A., Sultan, M. T. H., Sapuan, S. M., Ruzaidi, C. M., F, N. W., Zulkifli, F., Harussani, M. M., Azman, M. A., Radzi, F. S. M., & Sharma, S. (2021). Critical Review of Natural Fiber Reinforced Hybrid Composites: Processing, Properties, Applications and Cost. Polymers, 13(20), 3514.http://dx.doi.org/10.3390/polym13203514

Wang, Z., Shi, G., Shang, M., & Zhang, Y. (2021). The Stock Market Model with Delayed Information Impact from a Socioeconomic View. Entropy, 23(7), 893.http://dx.doi.org/10.3390/e23070893

3.2.1

UGC care listed

ISSN No. 0974-035X
An indexed refereed & peer-reviewed journal of higher education
Towards Excellence
UGC-HUMAN RESOURCE DEVELOPMENT CENTRE
Gujarat University, Ahmedabad-380009, Gujarat, India

A STUDY ON THE IMPACT OF COVID 19 ON INDIAN ELECTRONIC RETAIL INDUSTRY

Dr. Vijayalakshmi N.S

Abstract

Before COVID-19, the modest rate of growth in electronics industry was seen globally. Post this pandemic, the electronics industry globally has witnessed a double impact. Production facilities of electronic parts have also been halted because of a slowdown in logistics along with an unavailability of workforce throughout the world. On the contrary, different E-commerce giants throughout the world have discontinued delivery of the non-essential goods including maximum electronics goods which might affect electronics industry.

Studies have been done for understanding the electronics industry in India and abroad based on application, type of products, geography, etc. On the basis of type of products, market can be classified into SSD, DRAM, Image sensor, MCP, etc. On the basis of application, market is assessed based on communication equipment, automotive, industrial, enterprise systems, personal electronic goods, etc. Personal electronics industry is being expected to be affected the most because of coronavirus pandemic.

Geographically, market is assessed into Asia, Europe, North America, etc.

Keywords: COVID-19, Indian electronic industry, impact of COVID on retail sector

Introduction

Mitigation measures aim at slowing COVID-19 taken in the past couple of months have impacted the demand, supply as well as daily operations of retail sector. This includes the resale activities of used as well as new electronic goods mainly to general population for household and personal consumption and use.

The impact of the retailing sector is large mainly because of various factors. The electronics retails sector is considered to be economic heavyweight. On an average, in India approximately 1 out of 12 workers is employed in the electronic retail sector and this sector accounts for about 5% of the total GDP. Also, it serves the final demand and therefore occupies a significant position in the value chain both as the household and the provider and as outlet for the upstream sector. It even compliments the activities in the hard hit segments like tourism. Additionally, the electronics retail sector in India is quite labour intensive. So any kind of disruptions have disproportionate rate of employment consequences. This sector mainly depends on part time and low wages, gig workers and part time workers which aren't covered by the conventional measures of social protection which strengthens social consequences of crisis being witnessed in this particular sector(**Bhatti*et. al.*, 2020**).

Also, the effect of the pandemic on electronic sector is mainly heterogeneous and it depends mainly on combined impact of the 3 characteristics. Firstly, the impact of measures of social distancing on the individual retail business depends mainly on whether they're essential or not. On one hand, most of the non-essential electronic retail activities are shut, the essential electronic retail businesses on the contrary, often work in tough conditions. This includes shortages in labour supply, major disruptions in the supply chain and working conditions, many a times huge spike in demand for some particular items.

Also, COVID 19 disrupts the major electronic retail brands. China is one of the largest exporters and producers of different electronic input supplies which are used essentially for producing finished electronic items. The current halt in production has compelled the electronic manufacturers for holding production of finished goods temporarily. Some of the major electronic giants to be affected by COVID are Canon Inc., Apple Inc., Hitachi Ltd, etc. The biggest market players have been taking all necessary steps for reducing adverse effect of the crisis (**Tran, et. *al.*, 2020**),

Literature Review

This pandemic has triggered a number of short term and midterm disruptions of different action forms. Studies have been done which aim at understanding the reaction that the workers have given to this pandemic in the electronic retail segment. The electronic retail segment has taken several measures for protecting the workers' health. The retail segment aims at adapting the technological developments for making things easier for both the consumers. Studies have proved that the wellbeing of the employees and the policies of the government positively and significantly impact the performance of the retail electronics sector while protection of the brand and the customers, technology use and supply chains have a significant effect on the performance of the retailers(**Hasana*et. al.*, 2020**). Considering the reality of the electronic retailers from different old standards, time isn't wasted for taking bold actions.

India still continues to flourish in electronic retail sector following national manufacture policy of 2011. It had a vision of being independent in domestic electronics goods supply chain and competing in global exports market. At present, India is facing difficulties for competing with the economies in the different segments of the electronic manufacturing at different stages of value chain. It is a fact that the domestic electronics manufacturing has also gone up in the past few years substantially(**Liu*et. al.*, 2020**). The production of hardware in India has also increased exponentially. Domestic value addition is still quite low because of lack of an efficient ecosystem in different segments of the electronic manufacturing industry i.e. display manufacturing, electronic components and semi-conductors. Major growth of the domestic electronic manufacturing industry today is because of assemble of the finished goods from the imported electronics components, parts and sub-assemblies. It caters mainly to domestic market in India. In the situation that India is in today, it needs higher domestic value addition(**Pantelimon*et.al.*2020**). The NPE of 2019 states the vision of India for becoming global hub for the electronic systems designing and manufacturing. For achieving this goal, driving efficiencies need to be developed to make core components like the chipsets and for creating competing environments for the industrial sector in India. The semi-conductors and the electronic components are changes constantly because of the technological advancements. Therefore the electronic manufacturing industry should be capital intensive. The electronic components segment constitutes the electronic products, thus playing an important value on billing of the material. Thus, the spirited electronics manufacturing eco-system has to achieve the net balance in payments **(Salem, and nor,2020)**. The main obstacle in attracting investment in manufacturing of the electronic components or the semi-conductors is including import at the "Nil" customs duty. Most of the semi-conductors or the electronic components come under information technologies agreement. Thus, high cost capital is needed for competing at the global scale. More resistance offered to inadequate infra, lack of good quality, poor power and water supplies at the competing rate, lack of the supply chains, high cost of logistics, local environment problems, lack of proper technology, skilful human resource, etc.**(Kunchaparthi,2020).**

Last scheme that was introduced for fighting these lacunae has been the modified special package scheme which was designed for providing the financial incentives for offsetting disabilities as well as high cost in manufacturing of the electronic goods. The scheme was on till 2018, sec, 31st for the new projects and expansion projects. It offered subsidies to investment in the capital expenditure in order to set up the electronic manufacturing facilities. It also played a significant role for promoting investments in this regard. Although in past 4 years the electronic manufacturing industry in India depicted a growth of about 25% CAGR, because of the efforts made by GoI. This potential and actual growth is still under the constraints like the huge capital investments as well as the high paced technological advancements. Government is still making a lot of efforts for creating a conducive business environment for manufacturing electronic goods in India. It aims at getting alarge investments in the manufacturing hub**(Nakhate,2020)**.

One of the major suppliers of electronics in India is China. The electronic goods industry in India might face a lot of disruptions in terms of supply, production, impact of reduction on the prices of products because of heavy dependent on the electronic components supply directly and indirectly as well as local manufacturing. China exports about 50% of electronic goods in India. The imports of electronic goods has already reduced to 40% because of the pandemic and the subsequent foreclosure. The countermeasure of this was that India promoted an indigenous production. It aims at reducing the dependence on the single market. Further, China is the 3rd largest esports partner of India for exporting raw material like mineral fuel, organic chemicals, cotton, etc. **(Mirza and Gupta, (2020).**

The impact depends on scope of activities that are happening with China. The shutdown that has happened in China has completely banned import of different electronic components which affect the Indian automakers as well as auto components segment.

However the current level of inventory seems to be sufficient for Indian industry. In case the shutdown persists in China, it will cause a contraction of about 8 to 10% in India in the car manufacturing sector**(Zarembaet.al. 2020).**

Talking about E-commerce industry, the online stores are benefitting a lot from this switch of customer behaviour to shopping online. Now, they have been positioned quite well for

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

serving the rising demand for electronic commodities. However, their challenges have to be met. Ecommerce isn't magical and there are certain issues in terms of its adoption especially amongst the low income consumers. This has had a dampening impact against the uplift in terms of sales. The supply chain as well as products delivery also has certain issues. However, the companies are now resolving them through innovative practices(**Saha,Barman,andChouhan, 2020**).

Another limiting factor is their readiness for ecommerce offering. In case the online platforms aren't capable enough to offer competitive experience to the users, it would fail to impress, entice, and retain the customers. Making sure that the e-commerce websites are optimised and free rom any glitches is crucial for success of the online electronic businesses. Additionally, the competitiveness of the business in a competitive landscape helps in determining the outcome of the business(**Debnath, 2020**). According to Fortune magazine, companies which have robust offerings on ecommerce have better chances of surviving the present day turmoil. Analysts have agreed to the fact that the retailers still have a lot of catch up to be done on e-commerce. Such stark warnings have asserted that the businesses have to make sure that therewebsites aren't just good, but outstanding. They should be able to deliver best of ecommerce experience. Firstly, the ecommerce websites should be discoverable through search engines when the customers want to buy goods. Secondly, once the customers reach the website, the e-commerce platform should be responsive and should be able to exceed the expectations of the customers. Some of the major alterations in the search behaviour of the consumers have been seen in this sector. If we look at the fashion brands, they generally receive a prominent proportion of traffic by branded search(**Zaremba and Kizys, 2020**).

The behaviour of the users is changing the behaviour of online consumers significantly. As the pandemic continues to cause havoc on population of the world and as consumers are adapting to it, the companies which have effective ecommerce offerings can assure presence when the consumers require them. With changes in the consumer behaviour and with growing online community, the market becomes even more competitor with companies seeking to capitalise with such trend(**Ayittey *et. al.*, 2020**). When the website of a company isn't available on the search engine for the relevant search or if the website is not responsive as compared to the competitors' website, the ability of the business to compete is diminished severely. In today's difficult economic situation, this kind of deficiency might prove to be quite harmful(**Nader and Saleh, 2020**).

Objectives of the Study:

1. To find the reasons for impact of COVID-19 on electronics retail industry
2. To ascertain the significance of the reasons for impact of COVID-19 on electronics retail industry

Research Methodology

The present study is descriptive in nature in which the reasons for impact of COVID-19 on electronics retail industry have been studied. The sample size of the study is 140. The data were collected with the help of a structured questionnaire on a five-point scale and analysed with the help of the mean values and t test.

Table1. Demographic profile of the respondents

Variables	Number of respondents	% age
Gender		
Male	75	54%
Female	65	46%
Total	**140**	**100%**
Electronic goods Manufacturer/ Retailer/ Wholesaler		
Manufacturer	28	20%
Retailer	86	61%
Wholesaler	26	19%
Total	**140**	**100%**
Deals in		
Electronic parts	67	48%
Finished goods	73	52%
Total	**140**	**100%**

Table 1 presents demographic profile of the respondents. There are 54% males and 46% females in the study. Among the respondents 20% are manufacturers, 61% are retailers, and 19% are wholesalers. The percentage of respondents who deal in electronic parts are 48% and who deal in finished good are 52%.

Table 2. Mean Value of the impact of COVID on Indian electronic retail industry

Sr. No.	Impact of COVID on Indian electronic retail industry	Mean Score
1.	Before COVID, the electronics industry was growing significantly globally	4.12
2.	Electronics retail sector in India is labor intensive	4.32
3.	Employee well-being and government policies significantly and positively impact retailer performance	4.41
4.	The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty	4.44

5	India has made a lot of efforts for expanding its electronic goods industry globally	4.42
6	Major supplier of electronic goods in India is China	4.46
7	India would be able to cope with supply deficit of electronic goods from China	3.95
8	The electronic e-commerce industry has benefitted from the pandemic	4.48
9.	Competitiveness of the business in a competitive landscape helps in determining the outcome of the business	4.45
10.	With the currents scenario, it is important for businesses to have extremely strong website	4.39

Source:- Survey Data

Table 2 shows the opinion of respondents on impact of COVID on Indian electronic retail industry. It is observed that the electronic e-commerce industry has benefitted from the pandemicis the most important impact of COVID on Indian electronic retail industry with the mean value of 4.48. It is followed by Major supplier of electronic goods in India is China (4.46), Competitiveness of the business in a competitive landscape helps in determining the outcome of the business (4.45). The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty (4.44), India has made a lot of efforts for expanding its electronic goods industry globally (4.42) and Employee well-being and government policies significantly and positively impact retailer performance (4.41). Further, With the currents scenario, it is important for businesses to have extremely strong website (4.39),Electronics retail sector in India is labour intensive (4.32), Before COVID, the electronics industry was growing significantly globally (4.12) and India would be able to cope with supply deficit of electronic goods from China (3.95) were also considered important.

Table 3

Sr. No.	Impact of COVID on Indian electronic retail industry	Mean Score	t-Value	Sig
1.	Before COVID, the electronics industry was growing significantly globally	4.12	7.675	0.000
2.	Electronics retail sector in India is labor intensive	4.32	9.547	0.000
3.	Employee well-being and government policies significantly and positively impact retailer performance	4.41	10.333	0.000
4.	The main obstacle in attracting investment in manufacturing of the electronic components is including import at the "Nil" customs duty	4.44	9.116	0.000
5.	India has made a lot of efforts for expanding its electronic goods industry globally	4.42	9.363	0.000
6.	Major supplier of electronic goods in India is China	4.46	11.019	0.000

7.	India would be able to cope with supply deficit of electronic goods from China	3.95	5.366	0.000
8.	The electronic e-commerce industry has benefitted from the pandemic	4.48	12.926	0.000
9.	Competitiveness of the business in a competitive landscape helps in determining the outcome of the business	4.45	11.388	0.000
10.	With the currents scenario, it is important for businesses to have extremely strong website	4.39	10.737	0.000

Source: - Survey Data

Table 3 shows the results of t-test. It is found from the table that the significance value for all the statements is below 0.05, hence all the statements regarding the impact of COVID on Indian electronic retail industry are significant.

Conclusion

The key points to be noted here is that recession in retail oriented impacts the spending habits of the consumers and these are expected to remain forever. A long standing recession will have a major impact on buying behaviour of the consumers. It takes a lot of time for the consumers to stop buying and even for rehabilitation and sales. It means that the retailers have to consider the fact that such habits can't be reversed and thus businesses need to plan for a prominentshift in the model of business. Further, this shift in the behaviour of consumers is less lasting since the issues can be handled very easily and the customers may restart while going shopping offline.

References

1. Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B., (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449-1452
2. Tran, L. T. T., (2020). Managing the effectiveness of e-commerce platforms in a pandemic. *Journal of Retailing and Consumer Services*, 58, 102287
3. Hasanat, M. W., Hoque, A., Shikha, F. A., Anwar, M., Hamid, A. B. A., and Tat, H. H., (2020), theImpact of Coronavirus (Covid-19) on E-Business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), 85-90
4. Liu, H., Manzoor, A., Wang, C., Zhang, L., & Manzoor, Z., (2020),the COVID-19 Outbreak and Affected Countries Stock Markets Response. *International Journal of Environmental Research and Public Health*, 17(8), 1-19
5. Pantelimon, F. V., Georgescu, T. M., and Posedaru, B. Ş., (2020), The Impact of Mobile e-Commerce on GDP: A Comparative Analysis between Romania and Germany and how Covid-19 Influences the e-Commerce Activity Worldwide. Informatica Economica, 24(2), 27-41
6. Salem, M. A., and nor, K. M., (2020), The Effect Of COVID-19 On Consumer Behavior In Saudi Arabia: Switching From Brick And Mortar Stores To E-Commerce. *International Journal of Scientific & Technology Research*, 9(07), 15-28
7. Kunchaparthi S., (2020), Impact of COVID 19 on E-Commercevol. 12(9), 1161- 1165
8. Nakhate, S.B., (2020), the effect of coronavirus on E-commerce. Studies in Indian place Names, 40(68), 516- 518
9. Mirza A. and Gupta A., (2020), The impact of COVID- 19 on organised retailing in India, 10(39), 1-4
10. A.Zaremba, R. Kizys,D.YAharon,andE.Demir, InfectedMarkets:NovelCoronavirus,GovernmentInterventions,andStoc k Return VolatilityaroundtheGlobe,Financ.Res.Lett., 35, 101597 (2020),
11. J.Saha, B. Barman,andPChouhan, (2020), Lockdownor COVID-19anditsimpactoncommunity mobilityinIndia:AnanalysisoftheCOVID-19 CommunityMobility Reports, 2020,Child. YouthServ.Rev.,116, 105160
12. Debnath S.,(2020), Impact of COVID-19 on Consumer Purchase Behaviour in Retail Sector - Study Based in Kolkata Area, 31(56), 103-114
13. Zaremba, A., Kizys, R., (2020), Infected Markets: Novel Coronavirus, Government Interventions, and Stock Return Volatility around the Globe. Finance Research Letters. 35, 101597
14. Foster K. Ayittey, Matthew K. Ayittey, Nyasha B. Chiwero, Japhet S. Kamasah, Christian Dzuvor, (2020), Economic impacts of Wuhan 2019-nCoV on China and the world, 92(5), 473- 475
15. Nader A. and Saleh A.,(2020), The Impact of Covid-19 Spread on Stock Markets: The Case of the GCC Countries International Business Research, 13(11), 16-23

Dr.Vijayalakshmi N.S
Assistant Professor and Head of Department of Economics
Nehru Memorial College, Sullia, D.K, Karnataka - 574327
Email:- drvijayalakshmins@gmail.com

Scopus + UGC care listed 2

3.2.1

Role of Internet of Things (IOT) to improve Overall Recruitment and Manpower management system of an organization

Article · January 2022

6 authors, including:

Nehru Memorial College Sullia

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

ISSN: 0974-5823

Vol. 7 No. 1 January, 2022

International Journal of Mechanical Engineering

Role of Internet of Things (IOT) to improve Overall Recruitment and Manpower management system of an organization

Dr. Vijayalakshmi N.S.
Assistant Professor and Head of Department of Economics,
Nehru Memorial College Sullia, Dakshin Kannada, Karnataka 574327

Melanie Elizabeth Lourens
Deputy Dean: Faculty of Management Sciences
Durban University of Technology

Isaac Tweneboah AGYEI
PhD Candidate
Graduate School of Business & Leadership
University of Kwazulu-Natal
Durban, South Africa.

Juan Carlos Cotrina-Aliaga
University: Cesar Vallejo
Av. Alfredo Mendiola 6232, Los Olivos -15314
Lima, Peru

Zakariya Chabani, Faculty of Management, Canadian University Dubai.
Al Safa Street – Al Wasl
City Walk Mall
Dubai - United Arab Emirates

Dr Arif Hasan
Assistant Professor
Amity University, Gwalior

Abstract

With technological advancement, organizations are evolving and building a novel-tech culture by the implementation of IoT-based devices including big data, cloud computing, and Google glasses. Organization can predict their future events across all functional areas including marketing, human resource management, finance, and operations with the digitalization of both structured and unstructured data present in the organization. Organizations are rapidly shifting towards the IoT for improving the overall recruitment process as well as the manpower management system of the organization. The decision-making ability of the organizations is highly affected by the implementation of IoT-based devices. The article will highlight the role of IoT in an organization and how it impacts overall recruitment and manpower management. Recruitment is one of the most critical factors for the growth of the organization. IoT-based applications such as Google glasses allow capturing the interviews for analyzing the behavior and attitude of the candidate. IoT helps to capture the information that enhances the decision-making ability of the organization as well as helps in choosing the well-deserved employees for the organization. Hire bue is an AI-based application used by the organization for improving the recruitment process.

Keywords: **IoT, recruitment process, manpower management, Google glasses, and Hire Bue**

Introduction

In this article, the role of IoT in improving the overall recruitment and manpower management system of the organization has been studied. Due to the rapid development of economic globalization and the advent of information technology, various organizations have shown changes under the influence of the technologies therefore organizations have focused on the manpower management of the organization and turn them into their competitive advantages. The recruitment process is the most critical aspect of the manpower management system of the organization as it plays an important role in the success of the organization. The organization needs to develop strategies to use the IoT-based application for the overall recruitment process and manpower management system of the organization. Numerous devices are connected to the internet with the development of computer and network communication technology[1]. The introduction of IoT has blurred the differences between the real world and the virtual world. HR managers of the organizations use IoT to search the details of the candidates as IoT stores the various details such as objects, people, and web pages that are important for the manpower management and overall recruitment of an organization.

The growth of Big Data and 5G technology has played an important role in the growth of IoT business data. Using IoT-based technology such as cloud computing and big data helps the organization to store their big volume of data that enhances the task efficiency of the organization. Construction of the HRM information technology gets improved with the IoT-based applications and reduces the expenditure of management costs. Labor costing, recruitment monitoring, payroll accounting, automatic attendance, and tacking compensation are some of the major advantages of using IoT-based applications in the organization[2]. IoT helps an organization to gain competitive advantages and provides opportunities for research on strategic information. Using IoT-based applications by the company helps them to develop and implement new systems.

Based on the information technology and competitive strategy, the strategic significance of HR information technology has been discussed. The organization uses IoT-based applications to understand the needs of the employees as well as easily achieve the goals of maximizing economic benefits[3]. It helps to develop an appropriate route for organizational development by reducing the human resources challenges in the organizations. Increasingly fierce competition in the market has forced the organization to adopt the IoT based applications in their organizations for enhancing the manpower management of the organization[4]. The changes in the market environment are easily adapted to the HR management system as it helps in promoting the reform process. The system helps to enhance the efficiency of personnel management and the development of various tasks that happen due to favorable conditions.

2. *Literature review*

2.1 overview of the chapter

IoT and digitalization have a long-term effect on the success of the organization such as changes in the employment forms, the transformation of job profiles and occupation, and provide a huge platform for economic development for the organizations. In the literature review, the effect of IoT on the recruitment process of the organization as well as the manpower management system of the organization. The chapter will discuss the process of e-recruitment, digitalization, and the impact of IoT on the productivity of the organization. The manpower management system of the organization can be defined as the planning of human resources available in the organization. The manpower management system is one of the most important factors for the success of the organization. In the chapter, the role of IoT in the manpower management system of the organization can be discussed.

2.2 IoT Design for Manpower management system of an organization

IoT systems have become one of the most important tools for generating spatial-temporal data in organizations. The IoT system has been used by the organization to solve the problem of storing large volumes of data in the organization. The user terminal

[1] Gaur, Bhawna, Vinod Kumar Shukla, and Amit Verma. "Strengthening people analytics through wearable IOT device for real-time data collection." *2019 international conference on automation, computational, and technology management (ICACTM)*. IEEE, 2019.

[2] Margherita, Emanuele Gabriel, and Ilenia Bua. "The role of human resource practices for the development of Operator 4.0 in Industry 4.0 organisations: a literature review and a research agenda." *Businesses* 1.1 (2021): 18-

[3] Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

[4] Zhou, Zhiping, et al. "Effects of resource occupation and decision authority decentralisation on performance of the IoT-based virtual enterprise in central China." *International Journal of Production Research* (2020): 1-17.

(UE) and sensing terminal (SE) is used by cloud computing to upload IoT data on the cloud, and from the cloud data are fed back after the successful execution of the task. Network congestion is created due to the huge test for the bandwidth that affects the experience of users while using the IoT applications. These problems in the manpower management system can be reduced by the introduction of edge computing architectures. Manpower management of the organization is positively influenced by the IoT-based application. Smart technology based on IoT is used by the employees in the organization to enhance the efficiency of the workforce and productivity of the organization[5].

The Decision-making ability of the employees increased with the presence of huge amounts of data due to IoT search. IoT generates a lot of data associated with the employees and their related processes. These data are used for enhancing the decision-making process of the organization. Experiences of the employees improve with the IoT as it allows the employees and the HR managers to get connected through Internet-enabled mobile devices. It allows the managers to book meeting rooms, exchange ideas, and communicate easily with the team members. IoT technology plays an important role in providing a flexible work environment to employees as it allows them to manage the flex and provide flexibility to work with the mobile from remote areas[6]. Employees are the most important asset of any organization and IoT based applications allow to monitor the wellness of the employees

2.2 Importance of IoT in the recruitment process of organization

Recruitment is the fundamental part of the growth of any origination. Recruitment is the way for choosing the right employees for the organization who can enhance the productivity of the organization. The recruitment process of an organization is a critical thing as a selection of the appropriate candidate is a must for the growth and success of the organization. Choosing the correct employees during the recruitment process is the sensitive thing that puts various challenges to the HR management of the organization[7]. The introduction of IoT has highly influenced the recruitment process of the organization and provides an effective way for choosing the right employees for the organization. The recruitment process varies with the size of the organization. In the normal recruitment process, organizations have hiring managers who hire the employees; however, in a large and giant company, it is difficult for a single hiring manager to choose the appropriate employees. Selection becomes complicated in the giant company through the traditional method of hiring as they require a team for the selection of the appropriate employees that is much more expensive. Internal, external, and e-sources are the various sources used in the organization for the recruitment of employees.

Internal sources for the recruitment process involve the transfer of employees intra-organization and promotion. It is cost-effective and economically beneficial for the organization. External sources for the recruitment process involve choosing the fresher candidates from the schools, colleges, and universities and providing them training about the work. The external source recruitment process involves getting inexperienced and fresh candidates who need proper training and guidance about the work. E-sources are the most popular way for the recruitment of employees. This process of recruitment invokes websites posted on the agency as well as digital advertisements for hiring candidates from different backgrounds. All these sources are used for the hiring of the employees in the organization, however; all these sources have certain limitations such as hiring cost, expenses and have a higher probability of wrong selection of the employees.

Recruitment in an organization is a dynamic process that caters to the employees as well as the organization. Recruitment in the organization has several benefits and is considered an important parameter of the human resource management of the company. Some of the major benefits of the recruitment process are explained below.

The recruitment process provides a potential chance for the candidates to get aware of the organization and get employment.. Recruiters provide various options for the candidates to choose from to cater to the needs of the organization.

The Success Rate of Selection: The success rate of the selection enhances during the recruitment process as it allows choosing the more qualified candidates over the under-qualified candidates[8].

Meeting Obligations: The recruitment process allows to choose the right candidates that help in maintaining the legal obligations of the organization and the workforce composition.

[5]Braccini, Alessio Maria, and Emanuele Gabriel Margherita. "Exploring organizational sustainability of industry 4.0 under the triple bottom line: The case of a manufacturing company." *Sustainability* 11.1 (2019): 36.

[6]Cantoni, Franca, and Gianluigi Mangia, eds. *Human resource management and digitalization*. Routledge, 2018

[7]Nasar, N., Ray, S., Umer, S. and Mohan Pandey, H., 2020. Design and data analytics of electronic human resource management activities through Internet of Things in an organization. *Software: Practice and Experience*

[8]Ghosh, Swapan, et al. "Corporate Digital Entrepreneurship: Leveraging Industrial Internet of Things and Emerging Technologies." *Digital Entrepreneurship* (2021): 183.

candidates. Streamlining the sourcing part of the recruitment process is the best use of the Iot in the recruitment process. Selection of candidates based on the Iot is less time-consuming as well as cost-effective for the company. Offer rejection can be rescued as well as turnover rates get reduced with the use of IoT in the recruitment process.

IoT allows the data and processes to be automated. Networks of objects are involved in the IoT that is controlled by the sensors, transducers, and software. IoT helps the HR recruiters to access information regarding the information of the possible candidates[15].

IoT helps in building an effective and intelligent workforce without involving time-consuming processes[16]. Thousands of resumes support from the AI-guided ATS. Based on the interest, traits, qualification and social media posts.

ATS refine the resume and help the recruiters as well as the candidates to choose the right job. AI algorithm is used for classifying the candidates based on their interests and qualifications submitted on their various social media platforms[17]. This helps the hiring agencies to select the most relevant and best-qualified candidates. Turnaround time and productivity of the organization gets positively impacted by the IoT-based recruitment process. Google Glasses is the revolutionary IoT-based technology that is used by the HRM of the organization. Google glasses are used for recording the interviews that help in the decision-making process of the recruitment[18]. It allows the recruiters to rewind the video of the interview and choose the appropriate candidates. This allows the HR management group to match the behavior and ethics of the candidates with the job role. Huge databases of the candidates are available to the candidates that help to malaise the behavior and approach of the candidate during the interviews. Cloud technology is also used by the company during the recruitment process to back up their data in cloud computing infrastructure[19].

Cloud computing allows access to the candidate data from anywhere that reduces the chance of disk failures and theft. IoT and AI-based technology are the initial interviews process as most of the HR companies are using AI-based video platforms to capture the interviews of the candidate[20]. These interviews are later analyzed which helps in the decision-making of choosing the appropriate candidate. Biometric and psychometric analyses of the candidates are done through the captured data. The pandemic period has increased the demand for IoT and AI-based technology for the recruitment process of the organization. Most of the company has shifted to AI-based platform for the recruitment process. The basic screening of the candidates has been removed through AI-driven recruitment. Hire Bue is an AL-based hiring platform used by most organizations to select the candidate with the help of prediction of the AI-led. It allows us to take the interviews consistently and reduce the biases of the recruitment process.

3. Materials and methods

Materials

To provide an overview of the research on the role of the IoT on the recruitment and manpower management of the organization's various IoT-based applications. Systematic Reviews and Meta-Analysis has been used in the study to determine the effect of the Iot on the recruitment process and manpower management of the organization. The Systematic Literature Reviews (SLR) method has been used to evaluate, identify and analyze the current need of IoT in the recruitment process as well as manpower management of the organization.[21] This technique involves the restrictive collection, localization methodological analysis,

---

[15]Labib, Nader S., et al. "Trustworthiness in iot–a standards gap analysis on security, data protection and privacy." *2019 IEEE Conference on Standards for Communications and Networking (CSCN)*. IEEE, 2019.

[16]El-Aziz, RashaAbd, Sarah El-Gamal, and Miran Ismail. "Mediating and Moderating Factors Affecting Readiness to IoT Applications: The Banking Sector Context." *International Journal of Managing Information Technology (IJMIT) Vol* 12 (2020).

[17]Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

[18]Kebande, Victor R., et al. "Holistic digital forensic readiness framework for IoT-enabled organizations." *Forensic Science International: Reports* 2 (2020): 100117.

[19]de Vass, Tharaka, Himanshu Shee, and Shah J. Miah. "Iot in supply chain management: a narrative on retail sector sustainability." *International Journal of Logistics Research and Applications* (2020): 1-20.

[20]] Singh, Anupam, and Satyasundara Mahapatra. "Network-based applications of multimedia big data computing in iot environment." *Multimedia Big Data Computing for IoT Applications*. Springer, Singapore, 2020. 435-452.

[21]Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

Transparency: The recruitment process involves organizational transparency and it is an effective way to maintain the transparency of the organization. Transparency is not only important for the organization, however, but it is also important for the selection of the employees. HR managers, clients, field recruiters should have a complete awareness of the process of the organization and there should be transparent procedures to ensure the candidates regarding the job profile and job status of their job applications[9].

Confidence: Transparency of the recruitment process enhances the confidence of the organization. The awareness among the recruiters, clients, and managers regarding the entire recruitment process creates confidence among them and brings satisfaction among the HR manager and the candidates[10].

In the recruitment process, there is less chance of discrimination among the candidates based on their race, color, caste, and personal connection.

Job Description: Job description plays an important role in choosing the candidates during the recruitment process. Framing a proper job description is a detrimental factor during the recruitment process. Recruitment helps in curating an effective job description that includes primary, secondary, and tertiary aspects of the job role[11].

Consistency: Consistent system of recruitment is needed for choosing the right candidate who provides standardized results. The recruitment process should be consistent to ensure fair judgment as well as the selection of the right job. The organization has shifted its focus from increased production to increased productivity through the uses of IoT.

2.3 Effect of IoT on the future HRM of the organization

Advancement in technology has a tremendous effect on the development of human society. HRM of the organization has been positively influenced by technological progress and inventions. Information and Communications Technologies (ICT) have highly influenced the recruitment process of the organization.The importance of IoT has been released by the HR managers and recruiters and they tried to recruit the employees digitally. The old way of recruitment has been changed by the introduction of Iot in the field of the recruitment process of HRM. Using Iot for the recruitment process has several positive advantages and helps to select the right candidates for the job profile[12]. The traditional method of recruitment process unimpressed the candidates hover, using Iot for choosing the candidates can bring the attraction of the candidate nearer to the organization. An HR manager uses Iot to gather various information regarding the most qualified candidate who uses the Smartphone. IoT helps the recruiters to easily find the most suitable candidates for the job role without being physically present at every place.The vast amount of data allows the recruiters to analyze the data and choose the right one[13].

In the traditional recruitment process hiring managers have to be physically present to select the candidates; however, Iot allows to get notification of the employees who are interested in the job and can virtually be selected. Iot helps to reduce the recruitment cost of the organization as well as provide a more qualified selection of the employed as compared to the traditional way of the recruitment process. IoT allows the HR manager to get information about the right candidate's through smart phones, the candidate who visited the profile of the company as well as several times the page visited by the candidates gets saved through the IoT. It helps the HR manager to know the job-seekers and can easily choose the best candidates among them. The recruiter prepares the data from the information gathered by the IoT[14].

Recruiters can easily acquire the skills and hardware needed to process the data. This allows the recruiters to make the appropriate selection based on the IoT gathered information. The recruitment process gets easier with the adoption of IoT as preparing for IoT allows to hire the right people who know software and applications that enhance the opportunity to engage more and more employees. Organizations use social media platforms to recruit the right and well deserving candidates as Iot helps and the

---

[9]Solanki, Vijender Kumar, Vicente García Díaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

[10]Barrozo, Edgar N. "Strategic Management System For Competitive Business Performance: A Literature Review."

[11]Sherif, K. and Al-Hitmi, M., 2017. The moderating role of competition and paradoxical leadership on perceptions of fairness towards IoT monitoring.

[12]Moyeenudin, H. M., and R. Anandan. "IoT Implementation at Global Enterprises for Progressive Human Resource Practices." *Proceedings of First International Conference on Mathematical Modeling and Computational Science: ICMMCS 2020*. Springer Nature.

[13]J. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

[14]Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

rous scientific and elimination of the subjective element[22]. SLR has been used to build an overview and provide an effective mmary of the literature that resulted in the effect of the study[23]. In social distancing, research SLR is becoming more important. is possible to determine the theme or domain of the study, based on the function of the SLR method. Snyder's approach has een used to conduct the literature review regarding the role of IoT in the recruitment process and manpower management of the rganization. Four processes were involved in conducting this study that includes designing the review, conducting the review, analysis and writing up the review[24].

3.1 Information Source Search Strategy, and Identification

For using the Web of Science database a proper and effective strategy was developed. A search was made on the various IoT-based applications such as Google Glass, AI-based applications such as Hire Bue. Due to the ability of the broad coverage, a web of science database has been selected[25]. Open access sources have been selected due to budgetary constraints. The initial search has been shown in figure 1. In the systematic literature review of the effects of IoT in the recruitment process and manpower management system, only journal articles were chosen. High-quality studies have been ensured by the review process of the study[26]. In the study, non-journal articles, another language than English, studies not focus on the recruitment process as well as a manpower management process, no open-access paper, and conceptual Achilles which haven't any evidence that involves IoT based technology has been excluded.

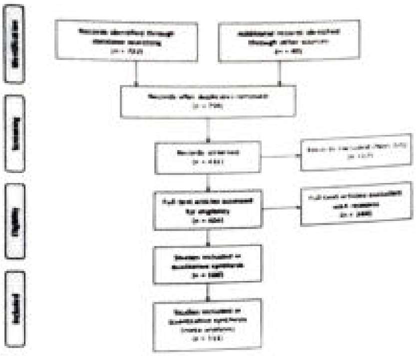


Figure 1: Flowchart of selection criteria[27]

(Source: Authors own design based on PRISMA)

3.2 Inclusion and Exclusion Criteria

Figure 1 show the inclusion and exclusion criteria. According to the time present in the PRISMA flow diagram, the inclusion and exclusion process was prepared. Abstracts were first screened in the qualitative analysis and 20 records were excluded as they were not provided information regarding the relation with IoT and recruitment process of the organization as well as the way

---

[22]Mathur, Geetika, Harshit Sharma, and Rishabh Pandey. "A Study on Self-Driving Car an Application of IoT." *International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)* 9 (2019): 25-34.

[23]. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4. 0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

[24]Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26

[25]Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

[26]Main, A., and N. A. Zakaria. "IPv6 Readiness towards Future Internet of Things (IoT)." *International Journal of Human and Technology Interaction (IJHaTI)* 2.2 (2018): 1-8.

[27]Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

through which IoT impacts the manpower management of the organization[28].

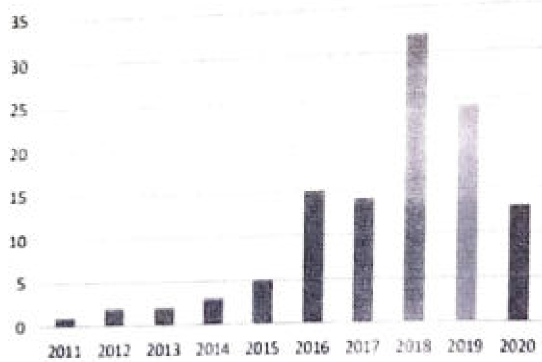
Various other methodologies have been used in the study to identify the impact of IoT on the recruitment process of the organization and the manpower management of the organization. Mythologies help to select the appropriate tools and techniques for the systematic completion of the study. It allows one to choose the appropriate approach, philosophy, design, and data collection method for the collection of the data that helps in the completion of the study[29].

Research philosophy allows us to collect the data in a way that enhances the authenticity of the study. Positivism, paramitism, and intervism are the four types of research philosophy used in the various studies according to the nature of the study. Positivism philosophy has been used in this study, as it follows the easy structure for collecting the data. The deductive research approach has been used in the study as it is an existing study therefore deductive approach helps to collect the data easily[30]. Descriptive research design has been used in the study for collecting the data as it provides information regarding the Iot and its impact on the recruitment process and manpower management of the organization[31].

Primary and secondary are the two types of data collection methods used in the study. In this study, a secondary way of data collection has been used. Journal and articles have been chosen for collecting the data and helps in maintaining the authenticity of the study[32].

4. Results

More than 50 articles were used for analyzing the role of IoT in the recruitment process and manpower management of an organization. After exclusion criteria and duplicate removal, 30 articles and abstracts were chosen. 15 full articles were analyzed in detail and helped in analyzing the role of IoT-based applications in the recruitment process and manpower management of the organization[33]. The number of selected published articles used in the study has been shown in figure 2. The number of publications regarding the role of IoT in the recruitment process and manpower management has increased linearly. The findings suggest that using IoT-based applications has increased the recruitment process of the organization in the pandemic period[34].



[28]MOHANTY, Sasmita, and Padma Charan MISHRA. "Framework for understanding Internet of Things in human resource management." *Revista ESPACIOS* 41.12 (2020).

[29].Sahidon, AtirahBinti, et al. "Integration of Shari'ah Governance Framework in Human Resource Management Practice in Malaysia."

[30]Dhanpat, Nelesh, et al. "Industry 4.0: The role of human resource professionals." *SA Journal of Human Resource Management* 18.1 (2020): 1-11.

[31]Orakcioglu, Selim, DenizHoruz, and MuhammedPaksoy. "The influence of effective human resource management on the success of SMEs in Gaziantep and its environment in 2" *Research Papers in Economics and Finance* 4.4 (2020): 15-30.

[32]Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

[33]Piwowar-Sulej, Katarzyna. "Human resource management in the context of Industry 4.0." *OrganizacjaiZarządzanie: kwartalniknaukowy* 1.49 (2020).

[34]Rafique, Maryam, Muhammad Asim, and Salman Manzoor. "Human Resource Management in Industrial Revolution 4. O." (2021).

Figure 2; Increment in the recruitment process through the use of IoT

(Source: Created by author)

Table 1: Mean and Standard deviation of the function

HR Functions	un-weighted		Weighted	
	Mean	Standard Deviation	Mean	Standard Deviation
Recruitment and Selection	3.00	1.0	3.01	1.10
Performance Management	2.98	0.81	3.00	0.80
Training and Development	3.43	0.91	3.45	0.86
HR Information and Analytics	3.27	0.76	3.62	0.78
Compensation Management	2.900	0.88	3.00	0.9

Various IoT-based applications such as Google Glasses, ATS and Hire blu are rapidly accepted by the HR managers for the adoption of IoT for the recruitment process and the improvement of the Manpower management process. IoT has become an integral part of the HRM of the organization as it allows users to interact with software and devices[35]. IoT-based technology such as Voices and Gestures and Speeches are the most important thing of communication used as an HRM technology in the organization[36]. Technology enables HR to take the organization to the core competency level. Manpower management of the organization gets integrated with the IoT's smart functions that make the system more powerful and allow ease to the HR leaders[37]. Recruitment is one of the most important domains that is used in the human resource of the company. IoT guides the HR recruiters to gauge the candidates during the interviews. Less subsequent attrition is present that enhances the efficiency of the recruitment process.

Table 2: Optimization of the manpower management system in the organization based on Internet of Things

Primary node	Secondary node	Introduction to functional design	Values
Basic settings	1	Basic crotch case	12.518
Basic settings	2	Salary period	3.154
Basic settings	3	Salary standard category	45.257
Basic settings	4	Salary standard table	14.879
Basic settings	5	Salary standard setting	46.578

Comparative analysis between the role of Iot in overall recruitment and manpower management of an organization

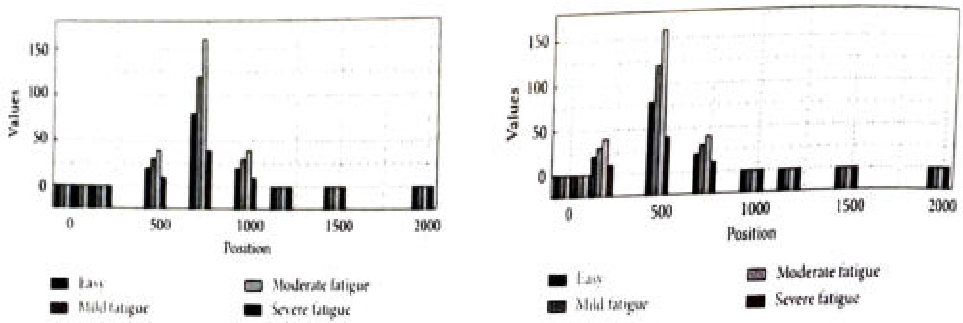
[35]Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

[36]Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

[37]Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

IoT has been rapidly adopted by various organizations for the overall recruitment process and manpower management of the organization. Advancement in information and communication technology changes the human resource management of organization by modifying the way the organization produces and markets its products. Figure 1 shows the shifting on IoT by organizations in the various years[38]. The figure has shown the growth of adoption of IoT trends by organizations. From the year 2015 to 2020, the rise in the use of IoT-based applications has been shown. Global human capital trends have been shown in figure 2, which shows the HR recruitment process based on the IoT. Sourcing outreach, screening, applications, assessment, offer generation, selection, candidate closing are some of the parameters used in the recruitment process of the candidates based on the IoT. Figure 3 has shown the adoption of IoT by various organizations[39].

The departmental file of the organization plays an important role in the management of the human resource and helps in sharing the data related to the management[40]. The construction of comprehensive departmental information helps in reducing the basic input volume of human resource management[41]. To maintain the personnel information, personnel information maintenance is used. Personal information, job information, and subset information are the various information covered in the personal information. Personnel cards, add users and personnel rosters are the various information that is used for managing the ability matching function to view the employee's works in the organization and workability qualities[42]. For the analysis of the employee's personal information including transferred employees, current employees, terminated employees, and retired employees statistical analysis is used. Results of the statistical analysis can be done with the help of flexible statistical analysis[43]. A variety of graphics is used for displaying the statistical analysis. Based on positions and posts to the performance of the employee's salary system is built and it also considered the fairness and efficiency of the designed systemThe establishment of the multi payroll category scheme allows the configuration of the salary rule table[44]. Salary period, salary item setting, substitute bank, tax rate table, and statistical report are the various attributes of payroll items. In the given figure 4 count taxi items have been shown after the configuration of the items in the payroll system[45].



---

[38] Yadav, Sanjeev, Sunil Luthra, and Dixit Garg. "Internet of things (IoT) based coordination system in Agri-food supply chain: development of an efficient framework using DEMATEL-ISM." *Operations Management Research* (2020): 1-27.

[39]Esangbedo, Moses Olabhele, et al. "Evaluation of human resource information systems using grey ordinal pairwise comparison MCDM methods." *Expert Systems with Applications* 182 (2021): 115151.

[40]. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

[41]de Vass, Tharaka, Himanshu Shee, and Shah Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

[42]. Laosirihongthong, Tritos, et al. "Logistics 4.0: implementation of Internet of Things (IOT)." *Proceedings of the 24th Asia-Pacific Decision Science Institute International Conference (APDSI): Technology Supporting People and Decision Making, July 15-18, 2019, Mercure Hotel, Brisbane, Australia.* 2019.

[43]Guerrero, PhD César D. "Technology readiness for IoT adoption in Colombian SMEs."

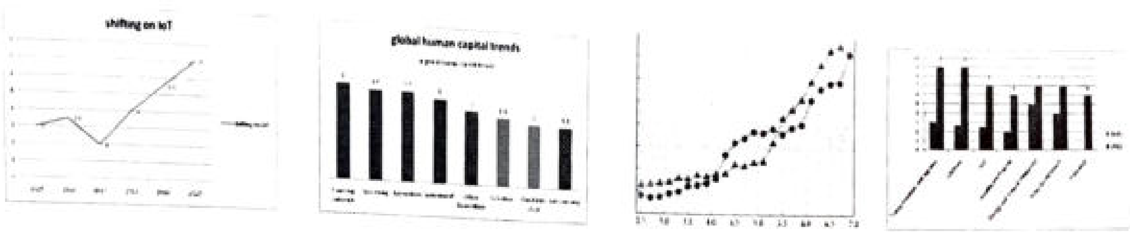
[44]Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

[45]Dlamini, Nomusa Nomhle, and Kevin Johnston. "Exploring the Barriers and Challenges That Limit the Uptake of the Internet of Things (IoT) in South African Retail Businesses." *MESSAGE FROM CONFERENCE CHAIR: DR ALBERT VAN JAARSVELD (UKZN).*

Figure 3: Payroll statistics[46]

To generate the natural monthly payroll period, the payroll period can be set up and refer to as the accounting period. Business management systems are involved while using the information technology systems for the overall recruitment and manpower management of the system. Information system allows us to consider the way of optimizing the business management quality through the information system[47]. It is important to consider the management and facilities of the organization for the employees as well as for the customers.

Year	Area	Outcomes
2015	IoT and Human	Provided two-way interaction between humans and opportunistic IoT
2016	IoT in retail business	Motivations of the customers for the shop have a major influence on the customers for the acceptance of IoT.



Spending on IoT by the various organizations in 2015 and 2020[48]

Figure 4: Scaling factor[49]

Table 3: IoT in Business and HR of the organization

[46]Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

[47]Wei, Jaimy. *Where are the employees?!: The expansion of an integral IoT model*. MS thesis. University of Twente, 2020.

[48]Carlén, Niclas, et al. "IoT Enabled Process Innovation: Exploring Sensor-Based Digital Service Design Through an Information Requirements Framework." *IFIP International Internet of Things Conference*. Springer, Cham, 2018.

[49]. Singh, G., L. Gaur, and R. Ramakrishnan. "Internet of Things—Technology adoption model in India." *Pertanika J. Sci. Technol* 25.3 (2017): 835-846.

2017	High-resolution management to develop business models	Efficient, security, transparency gets enhanced with the IoT
2018	BcRMS and BcHRM in factor management	Application of Blockchain technology helps in achieving efficient, secure, smart, transparent, and effective HRM
2019	Smart things and HRM	Modifications in HR activities, change task and qualification of hR actors
2020	Information technology and HRM variables	For measuring the strategic organizational variables need to develop a comprehensive model for information technology

Conclusion

From the study, it has been concluded that IoT plays an important role in the recruitment process and man power management of the organisation. IoT gathers all the essential data of the candidate that helps the recruiters during the hiring process. The availability of a huge amount of data regarding the candidate allows the recruiter to choose the bests among the best. Various possibilities are present for HR during the selection process and Iot based information is sufficient for the recruiters to choose the appropriate candidates. HR gets an appropriate chance to shortlist the right and desirable candidates among the various options present through the IoT. As compared to the traditional way of the recruitment process HR managers have more options to gather information regarding the candidates. Initial screening processes are automated for the basic task and intense. The process becomes cognitive with smart applications through the IoT. One of the most time-consuming tasks during the traditional recruitment process is sourcing candidates; however, IoT technology allows to shortlist the candidates who have digitally applied for the job.

References

1. Gaur, Bhawna, Vinod Kumar Shukla, and Amit Verma. "Strengthening people analytics through wearable IOT device for real-time data collection." *2019 international conference on automation, computational, and technology management (ICACTM)*. IEEE, 2019.

2. Margherita, Emanuele Gabriel, and Ilenia Bua. "The role of human resource practices for the development of Operator 4.0 in Industry 4.0 organisations: a literature review and a research agenda." *Businesses* 1.1 (2021): 18-33.

3. Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

4. Zhou, Zhiping, et al. "Effects of resource occupation and decision authority decentralisation on performance of the IoT-based virtual enterprise in central China." *International Journal of Production Research* (2020): 1-17.

5. Braccini, Alessio Maria, and Emanuele Gabriel Margherita. "Exploring organizational sustainability of industry 4.0 under the triple bottom line: The case of a manufacturing company." *Sustainability* 11.1 (2019): 36.

6. Cantoni, Franca, and Gianluigi Mangia, eds. *Human resource management and digitalization*. Routledge, 2018.

7. Nasar, N., Ray, S., Umer, S. and Mohan Pandey, H., 2020. Design and data analytics of electronic human resource management activities through Internet of Things in an organization. *Software: Practice and Experience.*

8. Ghosh, Swapan, et al. "Corporate Digital Entrepreneurship: Leveraging Industrial Internet of Things and Emerging Technologies." *Digital Entrepreneurship* (2021): 183.

9. Barrozo, Edgar N. "Strategic Management System For Competitive Business Performance: A Literature Review."

10. Sherif, K. and Al-Hitmi, M., 2017. The moderating role of competition and paradoxical leadership on perceptions of fairness towards IoT monitoring.

11. Moyeenudin, H. M., and R. Anandan. "IoT Implementation at Global Enterprises for Progressive Human Resource Practices." *Proceedings of First International Conference on Mathematical Modeling and Computational Science: ICMMCS 2020*. Springer Nature.

[Kodithuwakku, Purna Dhakshika. "INTERNET OF THINGS IN HUMAN RESOURCE MANAGEMENT."

12. Labib, Nader S., et al. "Trustworthiness in iot–a standards gap analysis on security, data protection and privacy." *2019 IEEE Conference on Standards for Communications and Networking (CSCN)*. IEEE, 2019.

13. El-Aziz, RashaAbd, Sarah El-Gamal, and Miran Ismail. "Mediating and Moderating Factors Affecting Readiness to IoT Applications: The Banking Sector Context." *International Journal of Managing Information Technology (IJMIT) Vol* 12 (2020).

14. Kebande, Victor R., et al. "Holistic digital forensic readiness framework for IoT-enabled organizations." *Forensic Science International: Reports* 2 (2020): 100117.

15. de Vass, Tharaka, Himanshu Shee, and Shah J. Miah. "Iot in supply chain management: a narrative on retail sector sustainability." *International Journal of Logistics Research and Applications* (2020): 1-20.

16. Singh, Anupam, and Satyasundara Mahapatra. "Network-based applications of multimedia big data computing in iot environment." *Multimedia Big Data Computing for IoT Applications*. Springer, Singapore, 2020. 435-452.

17. Mathur, Geetika, Harshit Sharma, and Rishabh Pandey. "A Study on Self-Driving Car an Application of IoT." *International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)* 9 (2019): 25-34.

18. Main, A., and N. A. Zakaria. "IPv6 Readiness towards Future Internet of Things (IoT)." *International Journal of Human and Technology Interaction (IJHaTI)* 2.2 (2018): 1-8.

19. MOHANTY, Sasmita, and Padma Charan MISHRA. "Framework for understanding Internet of Things in human resource management." *Revista ESPACIOS* 41.12 (2020).

20. Sahidon, AtirahBinti, et al. "Integration of Shari'ah Governance Framework in Human Resource Management Practice, Malaysia."

21. [Orakcioglu, Selim, DenizHoruz, and MuhammedPaksoy. "The influence of effective human resource management on the success of SMEs in Gaziantep and its environment in 2" *Research Papers in Economics and Finance* 4.4 (2020): 11-30.

22. Piwowar-Sulej, Katarzyna. "Human resource management in the context of Industry 4.0." *OrganizacjaiZarządzanie: kwartalniknaukowy* 1.49 (2020).

23. Dhanpat, Nelesh, et al. "Industry 4.0: The role of human resource professionals." *SA Journal of Human Resource Management* 18.1 (2020): 1-11.

24. Rafique, Maryam, Muhammad Asim, and Salman Manzoor. "Human Resource Management in Industrial Revolution 4. O." (2021).

25. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

26. Esangbedo, Moses Olabhele, et al. "Evaluation of human resource information systems using grey ordinal pairwise comparison MCDM methods." *Expert Systems with Applications* 182 (2021): 115151.

27. Laosirihongthong, Tritos, et al. "Logistics 4.0: implementation of Internet of Things (IOT)." *Proceedings of the 24th Asia-Pacific Decision Science Institute International Conference (APDSI): Technology Supporting People and Decision Making, July 15-18, 2019, Mercure Hotel, Brisbane, Australia*. 2019.

28. Akpinar, Sinem, Moritz Hofmann, and Erik Månsson. "Adoption of IoT Platforms: In Swedish municipalities for smart city initiatives." (2020).

29. Dlamini, Nomusa Nomhle, and Kevin Johnston. "Exploring the Barriers and Challenges That Limit the Uptake of the Internet of Things (IoT) in South African Retail Businesses." *MESSAGE FROM CONFERENCE CHAIR: DR ALBERT VAN JAARSVELD (UKZN)*.

30. Wei, Jaimy. *Where are the employees?!: The expansion of an integral IoT model*. MS thesis. University of Twente, 2020.

31. Carlén, Niclas, et al. "IoT Enabled Process Innovation: Exploring Sensor-Based Digital Service Design Through an Information Requirements Framework." *IFIP International Internet of Things Conference*. Springer, Cham, 2018.

32. Venkatraman, Sitalakshmi, and Anthony Overmars. "New method of prime factorisation-based attacks on RSA Authentication in IoT." *Cryptography* 3.3 (2019): 20.

33. Singh, G., L. Gaur, and R. Ramakrishnan. "Internet of Things—Technology adoption model in India." *Pertanika J. Sci. Technol* 25.3 (2017): 835-846.

34. de Vass, Tharaka, Himanshu Shee, and Shah Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

35. Guerrero, PhD César D. "Technology readiness for IoT adoption in Colombian SMEs."

36. [36]. Yadav, Sanjeev, Sunil Luthra, and Dixit Garg. "Internet of things (IoT) based coordination system in Agri-food supply chain: development of an efficient framework using DEMATEL-ISM." *Operations Management Research* (2020): 1-27.

37. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

38. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

39. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

40. Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

41. Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

42. Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

43. Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

44. Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

45. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4. 0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

46. Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26.

47. Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

48. Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

49. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

50. Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

51. Solanki, Vijender Kumar, Vicente Garcia Diaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

38. Shee, Himanshu, Tharaka de Vass, and Shah Jahan Miah. "IoT in Supply Chain Management: Opportunities and Challenges for Businesses in Early Industry 4.0 Context." *Operations and Supply Chain Management: An International Journal* 14.2 (2021): 148-161.

39. Dubey, Rameshwar, et al. "Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: A study of manufacturing organisations." *International Journal of Production Economics* 226 (2020): 107599.

40. Fredriksson, Cecilia, et al. "Big data in the public sector: A systematic literature review." *Scandinavian Journal of Public Administration* 21.3 (2017): 39-62.

41. Shamim, Saqib, et al. "Role of big data management in enhancing big data decision-making capability and quality among Chinese firms: A dynamic capabilities view." *Information & Management* 56.6 (2019): 103135.

42. Arnaboldi, Michela, Cristiano Busco, and Suresh Cuganesan. "Accounting, accountability, social media and big data: revolution or hype?." *Accounting, auditing & accountability journal* (2017).

43. Amankwah-Amoah, Joseph, and Samuel Adomako. "Big data analytics and business failures in data-Rich environments: An organizing framework." *Computers in Industry* 105 (2019): 204-212.

44. Cockcroft, Sophie, and Mark Russell. "Big data opportunities for accounting and finance practice and research." *Australian Accounting Review* 28.3 (2018): 323-333.

45. Mohammadian, Hamid Doost. "IoT-Education technologies as solutions towards SMEs' educational challenges and I4.0 readiness." *2020 IEEE Global Engineering Education Conference (EDUCON)*. IEEE, 2020.

46. Jirasatjanukul, Kanokrat, Prachyanun Nilsook, and Panita Wannapiroon. "Intelligent Human Resource Management Using Latent Semantic Analysis with the Internet of Things." *International Journal of Computer Theory and Engineering* 11.2 (2019): 23-26.

47. Vrontis, Demetris, et al. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review." *The International Journal of Human Resource Management* (2021): 1-30.

48. Hsu, Hsiao-Tzu, et al. "Improve IoT security system of smart-home by using support vector machine." *2019 IEEE 4th International Conference on Computer and Communication Systems (ICCCS)*. IEEE, 2019.

49. Dash, Debasis, et al. "Internet of Things (IoT): the new paradigm of HRM and skill development in the fourth industrial revolution (industry 4.0)." *IUP Journal of Information Technology* 15.4 (2019): 7-30.

50. Puhovichova, Diana, and Nadežda Jankelova. "Changes of human resource management in the context of impact of the fourth industrial revolution." *Industry 4.0* 5.3 (2020): 138-141.

51. Solanki, Vijender Kumar, Vicente García Díaz, and J. Paulo Davim, eds. *Handbook of IoT and big data*. CRC Press, 2019.

3.2.1

Scopus

Journal of Positive School Psychology

Q2 Education

best quartile

SJR 2020

0.54

powered by scimagojr.com

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

Journal of Positive School Psychology
2022, Vol. 6, No. 3, 3134-3139

Scopus & UGC care listed 2

http://journalppw.com
ISSN 2717-7564

Role of Art Conservation Science in the Study of Tangible Cultural Heritage

Dr. Indrajit Patra[1], Dr Upasana Reddy[2], Dr. Vijayalakshmi N.S[3], Dr. Laxmi Kirana Pallathadka[4]

[1]Researcher, [2]Lecturer, [3] Assistant professor and head of department of economics
[1]NIT Durgapur, [2]A.B.shetty memorial institute of dental sciences, [3] Nehru memorial college sullia, [4]Manipur International University
[1,2,3,4] India
[1]ipmagnetron0@gmail.com, [3]drvijayalakshmins@gmail.com, [4]laxmikirana@miu.edu.in

Abstract

Global benchmarks for assessing tangible cultural heritage are particularly maintained by the rules and regulations on cultural property in particular countries. This paper examines the validity of conversation science for cultural heritage, and what its role is to increase human knowledge. The evolving capacity of conversation science is changing over time differing from the conventional method of conversation. It significantly considers the long-term learning procedures constrained with specific methods. Over years it is evolving and new capacities are included in it. The unique concept of "tangible cultural heritage" is a living idea, and currently, in broader terms, it is illustrating the legacy of the manmade creation. Conservation science consists of a diverse practical side which expects to be understood in the theoretical constructions. Moreover, implicitly the complex parity of the cultural heritage involves multiple sets of new values and depicts the field of visual arts. The major purpose of this study is to depict the important factors of conversation science. Furthermore, this article examines the value of the conservation process maintaining the tangible heritages. Specifically, the article gives the details of the government approach in India to maintain its cultural heritage over time. It has given the value functions in understanding the current benefits of art conservation along with the value determination for the future generation. In attributing the sustainable goal of the conservation, this article had made unique approaches increasing the maximum potential vitality. In broader terms, the greatest importance of this study affirms the understanding of the role of conservation methods for cultural heritage.

Keywords— Tangible, Cultural Ministry of India, Economical value, socio-economic value, tangible cultural heritage, conservation science

INTRODUCTION

The multi-faceted world cultural heritage is similar to the essence of the core of humanity, though its definition overpowers enlightenment. However, it is naturally expressed in different cultures over time when it indicates natural patrimony, valuation, and the legacy of the generations. The innovative philosophy of cultural heritage is classified into two groups- the tangible heritage, and the intangible components of the cultural heritage, whereas the intangible heritage is the cultural norms such as the regional language, performing art of a particular community. The tangible heritage of a country needs to be organized and managed properly in terms of the sociological, economical, political, and emotional value of the people. Conservation science is related here to manage those tangible cultural heritages of a country. Here, in this article, the significant described along with its value to manage the tangible heritage of the country. The article also emulates the fund by the government of India over time to give a better understanding of the conservation norms.

Concept of Conservation Science

Conservation science is the experienced concept of specific nuances which comprise the achievement of the inside organization. Conservation science includes scientific analysis in the study of the ***"tangible cultural heritage"***. It improves the knowledge of deterioration, interceptive treatment, identification, and preventive conservation of various cultural materials. This type of work is immensely interdisciplinary, and it typically involves the unique collaborations of the conservators, collection managers, and curators (Atalan, 2018). Various aspects like building rapport and continuing a conversation consistent between the prospective client, and the opposition are key pieces of equipment that determine the role of conversation science. Conservation science is crucially implemented to characterize the biological, chemical, and significant physical properties of different cultural materials. It also empowers the deterioration procedures of objects offering a better understanding of it. Moreover, the conventional or the contemporary treatment, technique, and materials are significantly through the equipment of the conservation science. Developing new analytical tools are the components of conservation science to examine the validity and relevance of all the physical objects of the "tangible cultural heritage". Measuring, and interpreting the different constituents such as the light exposures, quality, or deterioration also falls under the criteria of the conservation science.

The specific activities can identify those treatments, authenticity, provenance, and the fabrication process of different objects. It also allows one to gain a better understanding of the current treatments, and its effects. This knowledge is important and effective for the conservators, collections managers, or those curators who have ascribed the responsibilities. significant procedure, and the preserv strategies of the tangible heritages of a coun

Education, pieces of training, potencies of the conservation science

No set path exists there to acquire knowled and norms of conservation science as it evolve with time. It exhibits several wide backgrounds, each of them requires a concise view to be managed properly. Therefore the range of the tangible heritage along with the intangible heritage of a country is different. It varies in different countries representing the history, geography, and cultural norms of that specific country.

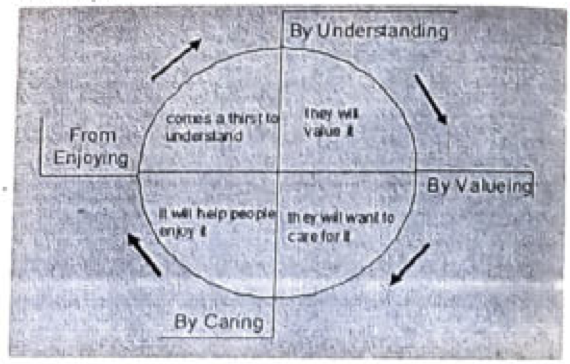


Figure 1: Cycle of conservation science (Source: Inspired by Kulkarni, 2021)

Role of Conservation Science for tangible cultural heritage

"Tangible Cultural Heritage" indicates the physical artifacts originated, organized, and transmitted intergenerationally within a society. It takes into account the artistic creation, maintaining heritages such as monuments, buildings, and other tangible human creation that has cultural importance in a nation. Degrees are ascribed to the scholars who research in a particular area such as, biology, physics, geology, and others. The most important thing in conservation science is the desire to gain knowledge about art history, studio art, archeological features, and anthropologies (Kulkarni, 2021). It needs to undergo a wide range of research and training to acquire sufficient knowledge about conservation science. Several general interpretations can be given from the current material of conservation sciences. Technologies and new instruments have arrived there in the technological development for the investigation of tangible heritage artifacts stimulated by accelerating the progress is providing a huge range of innovative facilities. On the other hand, it becomes easier to foresee the development.

Two major outlines can be identified here-

1. Development of portable instruments to enable non-invasive investigation	2. Easier access to huge international facilities
Development of easy-to-use equipment enabling non-invasive inquiries of different artifacts, often resides directly on site of the museums, especially without requirements of transport or the sampling which are destructive. It often depends on the spectroscopic techniques. The workshops provided multitude examples of those methods. Similarly, a different line of development here is the construction of equipment for the remote sensing such as the ground-penetrating radar, and the laser technology of remote sensing.	ESRF Grenoble, MAX Lund, SSRL Stanford are several examples of synchrotrons which provide easier access to huge scale international facilities. New sources such as ESS ("European Spallation Sources") are also included in it. The carbon dating system is almost similar to such notions- Drendo Chronology, and the Carbon dating helps in determining the period of the Indus Valley Civilization (2500 BC- 1750 BC) applying it to the investigations of the destruction of monuments of those civilizations (Nocca, 2017).

Table 1: Key components conservation science
(Source: Self-developed)

Values of Cultural Heritage

In the contemporary world a huge diversity can be noted as the societies are multi-faceted with their individual unique cultural properties. It is important to understand the implementing solutions to accelerate the role of tangible heritage as the feature of cohesion within diversified communities. Presently, digital revolution, communication, and information technology, mass transportation, tourism are empowering rapid societal changes unprecedentedly. Specialists are becoming more aware concerning the responsibilities, and difficulties from the historical point of view in the evolution process of conservation science. This awareness is the outcome of different attitudes of cultural heritage embedding in different civilizations. Conservation theory is presently preoccupied with group or personal identity. More than other sides of conservation history ***Voluntary association, the government's fund allocations, and initiates*** all incorporate the conservation of cultural heritage significance. The value is highly determined by those (Nocca, 2017).

Methods and techniques

This article has been developed based on the ***secondary dataset*** in giving the important analysis about the role of art conservation. The ***qualitative and the quantitative analysis*** of the secondary dataset have examined the various notions and efforts of the tangible heritage conservation of the country. Significant data on the topic has drawn significant description here. The benefit can be seen in analyzing the different factors of art conservation. Quantitative analysis of the secondary data provides the information of the government allocation that is significant to draw a concise illustration about the topic. Leveraging the findings it has helped to p[illegible]ficially.

Discussion

Contribution of the Indian Government to preserve the tangible cultural heritage

The Ministry of Culture of India has allocated a notable fund in order to preserve all the cultural heritages of the country. India is full of tangible heritage, such as Victoria *Memorial, Taj Mahal, India Gate, Museum,* and many more which are the greatest attractions for the tourists from foreign (Thomas, 2021). These tangible cultural products of the country have the greatest contribution in the economic growth of the country. During the time period between the 2011 and 2016 cultural ministry has been allocated notable funds increasingly. In figure 1, it can be noted that during 2011-12, it was 1300 crore, which increased to 2600 crore during 2016-17 (Thomas, 2021).

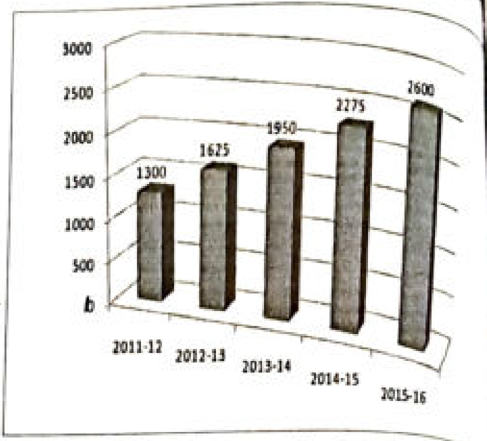


Figure 2: Fund allocation by Cultural Ministry of India

(Sources: Inspired by Thomas, 2021)

Cultural-historical value and the socio economic value of the conservation of tangible heritage

The effect of the conservation procedures is long-term indeed and consists both from the sociological, economical aspect. Valuation is highly intellectual in terms of the historical values too. The cultural-historical aspects, and the present socio-economic aspects are described in the below table.

Cultural historical value	Socio-economic value
Relative artistic validation	Educational value (it can't be ignored that ho the art and culture of one country defines i history, the other can't define it with such gre significance. From all the features of the a conservation the education value the highest)
The aesthetic visual appeal of the people	Economic value (the art and tangible heritage a country is the greatest asset of tourism whi takes a notable part in the economy of a countr Tangible heritage this considered as the greate source of the economic growth of the nation)
Age value	Functional value (it is the evidence of the hum activities over time)
Memorial value in terms of the historical paradox (denotes the historical importance of the conservation procedures)	Social access (It is reflective depicting the sto of a society)
Identity value (Importance of cultural heritage providing unique identity of a society, both regional, and global)	Regional value, political value

Scientific value (innovative with important creative thought, impactful on the discoveries of relevant new theories about the conservation)	Operational value It records the chronolo[illegible] taking the creators of various tangible cultur[illegible] products which ultimately determines t[illegible] importance of a community (McCandlish a[illegible] McPherson, 2021)
Rarity functions (all the tangible heritage consists unique features, the importance can be found in providing the rarity function upon each)	Newness value
Authenticity value (the conservation procedure indicates the authentic process providing authenticity into it)	Situational value
Emotional value (It is greatly impactful as the emotions of particular communities are connected with its culture. Conservation gives the accommodation in preserving the emotional value of the communities illustrating the history, geography of a society)	Financial value
Integrating value (Conservation science of the cultural products is integrates the capacity of a particular society, and determines the innovative participation of all the communities within a specific zone of a country (Salomon *et al.* 2018)	Potential future exploitation (Determining t[illegible] entire historical time period of creation identifies the potentiality of the future creation)
Symbolic value, and association (The art conservation is the symbol of the integration of all the zone of a country such as the political place, education, tourism, science and technologies)	Cognizance (practices according is the greate[illegible] notions of human behavior depending upon th[illegible] the pillar of cognizance develops)

Table 2: Value of conservation science for maintaining tangible cultural heritage (Source: Self-developed)

Conclusion

Observing and examining the entire study, the role of conservation science to maintain the cultural heritage can be clearly understood. Turning the broader horizon the natural consequences opens exploring the importance in historical, and cultural value. The value of the conservation sciences is highly implicative as culture is directly related to the cognitive and emotional advancement of a particular community. Illustrating the history of the creator the chronology can be finely depicted. The discussion in this article is highly effective explaining details about conservation science, and the way it is related to the cultural heritage of a country. Furthermore, the brief discussion in this study determines the importance of national efforts to preserve the essence of culture. Having so many tangible heritages India stands in notable places in the globe. ***"Unification in the Diversity"*** which is the representative line of India, can be understood by the cultural heritage of the country. Visual art of the country is highly influential connecting the past, present, and future in one single thread. This study is important in giving suitable relevant knowledge to the readers, and the peer researchers.

Reference

1. Thomas, M., 2021. *A fading Taj and shabby museums: India spends less than 1% of its annual budget on culture and it shows*. [online] Quartz. Available at: <https://qz.com/india/897228/a-fading-taj-and-shabby-museums-india-spends-less-than-1-of-its-annual-budget-on-culture-and-it-shows/> [Accessed 20 August 2021].
2. Kulkarni, A., 2021. *Intangible aspects of cultural heritage - RTF | Rethinking The Future*. [online] RTF | Rethinking The Future. Available at: <https://www.re-thinkingthefuture.com/rtf-fresh-perspectives/a2874-intangible-aspects-of-cultural-heritage/#729d9f90aaec9859afe58db9e3ae0d83d2fffdd1#193779> [Accessed 19 August 2021].
3. Salomon, A.K., Lertzman, K., Brown, K., Wilson, K.I.B., Secord, D. and McKechnie, I., 2018. Democratizing conservation science and practice. *Ecology and Society*, *23*(1).
4. Atalan, Ö., 2018. Importance of cultural heritage and conservation concept in the "architectural education". *Journal of Human Sciences*, *15*(3), pp.1700-1710.
5. FLORESCU, O., SANDU, I.C.A., SPIRIDON-URSU, P. and SANDU, I., 2020. INTEGRATIVE PARTICIPATORY CONSERVATION OF MUSEUM ARTEFACTS. THEORETICAL AND PRACTICAL ASPECTS. *International Journal of Conservation Science*, *11*(1).
6. Nocca, F., 2017. The role of cultural heritage in sustainable development: Multidimensional indicators as decision-making tools. *Sustainability*, *9*(10), p.1882.
7. Liritzis, I. and Korka, E., 2019. Archaeometry's role in cultural heritage sustainability and development. *Sustainability*, *11*(7), p.1972.
8. Hirsenberger, H., Ranogajec, J., Vucetic, S., Lalic, B. and Gracanin, D., 2019. Collaborative projects in cultural heritage conservation–management challenges and risks. *Journal of Cultural Heritage*, 37,
9. Nocca, F., 2017. The role of cultural heritage in sustainable development: Multidimensional indicators as decision-making tools. *Sustainability*, 9(10), p.1882.
10. McCandlish, A. and McPherson, G., 2021. Promoting tangible and intangible hidden cultural heritage: local communities influencing civic decision-making and international cultural policy. *International journal of cultural policy*, 27(5), pp.683-698.

3.2.1

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

INTEGRATING THE PRINCIPLES OF STRATEGIC HUMAN CAPITAL AND STRATEGIC HUMAN RESOURCE MANAGEMENT TO IMPROVE ORGANISATIONAL PERFORMANCE

Prof. Dr. Manju Shree Raman
Department of Management, Faculty of Business & Economics Debre Tabor University, Ethiopia
manjushreesha@gmail.com

Dr. Vijayalakshmi N.S
Assistant professor and head of department of economics, Nehru Memorial College Sullia, dakshin Kannada, Karnataka 574327, drvijayalakshmins@gmail.com

Shagun Sood
Research scholar, Central University of Himachal Pradesh Dharamshala, India,
shagun.sood4@gmail.com

Mohammad Chand Jamali
Assistant Professor, Department of Health and Medical Sciences Khawarizmi International College, 25669, Al Ain, Abu Dhabi, United Arab Emirates,
mjamali68@gmail.com

Mohammed Abu Shohada
Assistant Professor/ Program Leader- Health Management, Department of Health and Medical Sciences Khawarizmi International College, 25669, Abu Dhabi, United Arab Emirates,
mohammed.abushohada@khawarizmi.com

ABSTRACT

Strategic HRM policies are essential in improvement of performances of organisations. The aim of this study is to integrate the principles of SHC and SHRM that have enough potential in improving the performance of an organisation. Different objectives and research questions along with support of other articles are mentioned to support the importance of SHRM. The importance includes improvement of workplace environment, leadership and the strategy of business functions. Data indicates almost 47% of licensed large-sized companies globally use an effective SHRM strategy. Systematic review of six articles based on primary analysis of data regarding SHRM is selected along with Prisma Boolean selection strategy. Three themes are presented based on the outcome of articles to support the importance of green HRM and innovation for performance development. Limitations include non-availability of more data as well as absence of primary data in this research. Future aspect indicates use of this study as a good secondary source for future research.

Keywords: *Strategic HRM, strategic human capital, innovation, Organizational performances, Green HRM, employee motivation, Competitive advantages*

INTRODUCTION

Strategic human resource management (SHRM) indicates the strategy of formulation and execution of human resources by modification of policies and practices for improving employee competencies and behaviour. SHRM is an important aspect in any organisation that supports the improvement of the performances of employees and organisation. This study will provide complete details about the concept of SHRM and strategic human capital (SHC) for the improvement of performance of a company. A systematic review of articles and discussion of the articles regarding SHRM, limitations and future scope will be discussed properly to identify the strategic process of HRM in organisations.

RESEARCH OBJECTIVES

The aim of this research is "***To integrate the principles of SHC and SHRM that have enough potential in improving the performance of an organisation***".

Objectives

RO 1: To determine the principles of SHC and SHRM for improvement of organisational performances

RO2: To identify advantages for the implementation of principles of SHC and SHRM for improvement of organisational performances

RO3: To analyse the issues regarding the implementation of principles of SHC and SHRM for improvement of organisational performances

RO4: To recommend solutions to the issues regarding implementation of principles of SHC and SHRM for improvement of organisational performances

Research questions

RQ 1: What are the principles of SHC and SHRM for improvement of organisational performances?

RQ 2: What are the advantages of the implementation of principles of SHC and SHRM for the improvement of organisational performances?

RQ 3: What are the issues regarding implementation of principles of SHC and SHRM for improvement of organisational performances?

RQ 4: What are the recommended solutions to the issues regarding implementation of principles of SHC and SHRM for the improvement of organisational performances?

BACKGROUND

SHRM is an important aspect in any organisation that supports performance improvement with effective implementation of strategic planning by the HRM department in an organisation. Recent statistical data mentioned in the below graph suggest that almost 47% of licensed large-sized companies globally use an effective SHRM strategy for improvement of performance to maintain competitive advantage (Statista, 2022a).

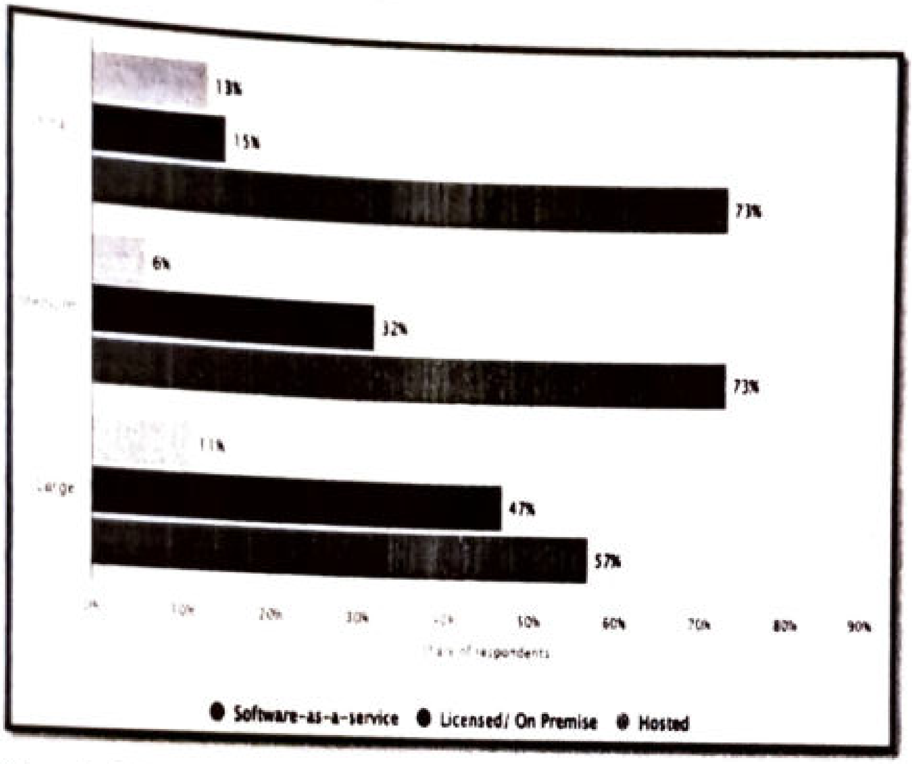


Figure 1: SHRM practices in companies

(Source: Statista, 2022a)

HRM is effective in bridging the corresponding gap between the strategic objectives of a company with the performance of employees. Innovation management is important in organisations as SHRM supports this open innovation process (Engelsberger et al. 2022). Therefore, SHRM and SHC are two essential aspects that support organisational competitiveness position development with the help of innovation and unique strategy.

LITERATURE REVIEW

Principles of SHC and SHRM

SHRM has different principles using which performance of an organisation can be possible. According to Nocker&Sena (2019), analytics of talent of staff can be termed as an important aspect and part of principle in SHRM management. Other principles of SHRM understand the goals of companies, evaluating HRM, forecasting, planning implementation, building a capable workforce and review of peace to determine the position in markets. In contrast, Shrouf et al. (2020) have opined that HRM people are those who map the job planning to improve performance.

Advantages and strategies of implementation of SHC and SHRM

Advantages that are mainly associated with SHRM and SJHC are management of exceptional culture in an organisation, increases productivity, improves the loyalty of its customers and focuses mainly on corporate goals. According to Elsbach&Stigliani (2018), Organisational culture in an organisation includes different aspects such as norms, values, and different assumptions. Proper strategy implementation by the HRM department helps in building true leaders for an organisation that supports performance improvement and employee motivation in organisations.

Issues regarding SHC and SHRM implementation and effective strategies for organisational performance improvement

Strategic issues that are associated with the SHRM are management of quality of leadership, management of change business, an improper strategy of workforce and lack of innovation due to improper HRM policies. According to Sha& Khan (2019), effective HRM practices include planning for rewards, performance management and even training arrangement for staff. Lack of technology-based strategy management in HRM is termed as an issue in modern day business. Therefore, planning is important through which identification of weaknesses in HRM strategies can easily be identified. Leadership style is beneficial to improve the HRM strategies in any organisation for performance improvement.

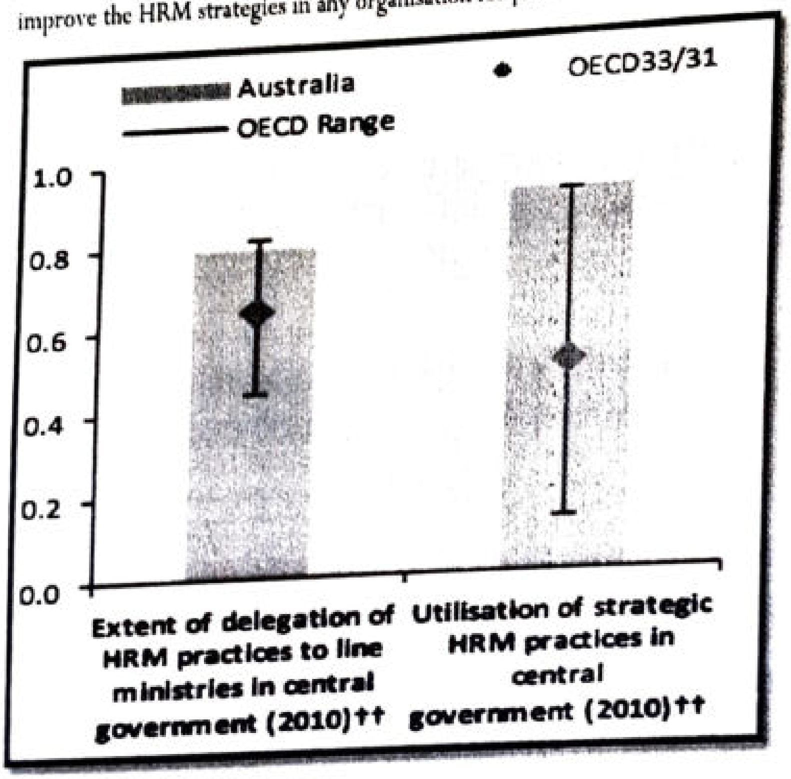


Figure 2: HRM performances of OECD and Australia

(Source: Oecd, 2020)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

METHODS

Descriptive design is followed here for an analysis of data effectively regarding SHRM and SCH for improvement of performance. Descriptive designs are beneficial in providing a comprehensive summary of the events in a research study (Roberts et al. 2019). Therefore, the presence of flexibility in research and effective strategic tool usage advantages in using this design has helped in the identification of the importance of SHRM and SHC for performance development of organisations.

Secondary collection of data has been performed based on systematic literature selection as per the mentioned topic. Total of 6 articles related to the SHRM and SCH are chosen for analysis of the content to determine the importance of the SHTM and SHC for the improvement of the receptive performance of an organisation. Data is collected using a Boolean table by considering keywords along with a selection of articles based on Prisma calculations. Secondary data is collected generally from published articles, datasheets, different government websites and others to collect a mass of information (Ngozwana, 2018). These secondary data are analysed using the thematic analysis model based on the theme codes that are generated from the article analysis. However, ethical aspects are properly maintained here for the safety of data as well as information for any misuse for commercial purposes.

Boolean table

KEYWORDS	OPERATOR	KEYWORDS	OPERATOR	KEYWORDS
Human resources	AND	Performance development	AND	HRM strategy improvement
Strategic management	OR	Competitive advantage	AND	Strategic competitive performance
Staff motivation	AND	Productivity improvement	AND	Staff performance development

Table 1: Boolean table

(Source: Learner)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Prisma diagram

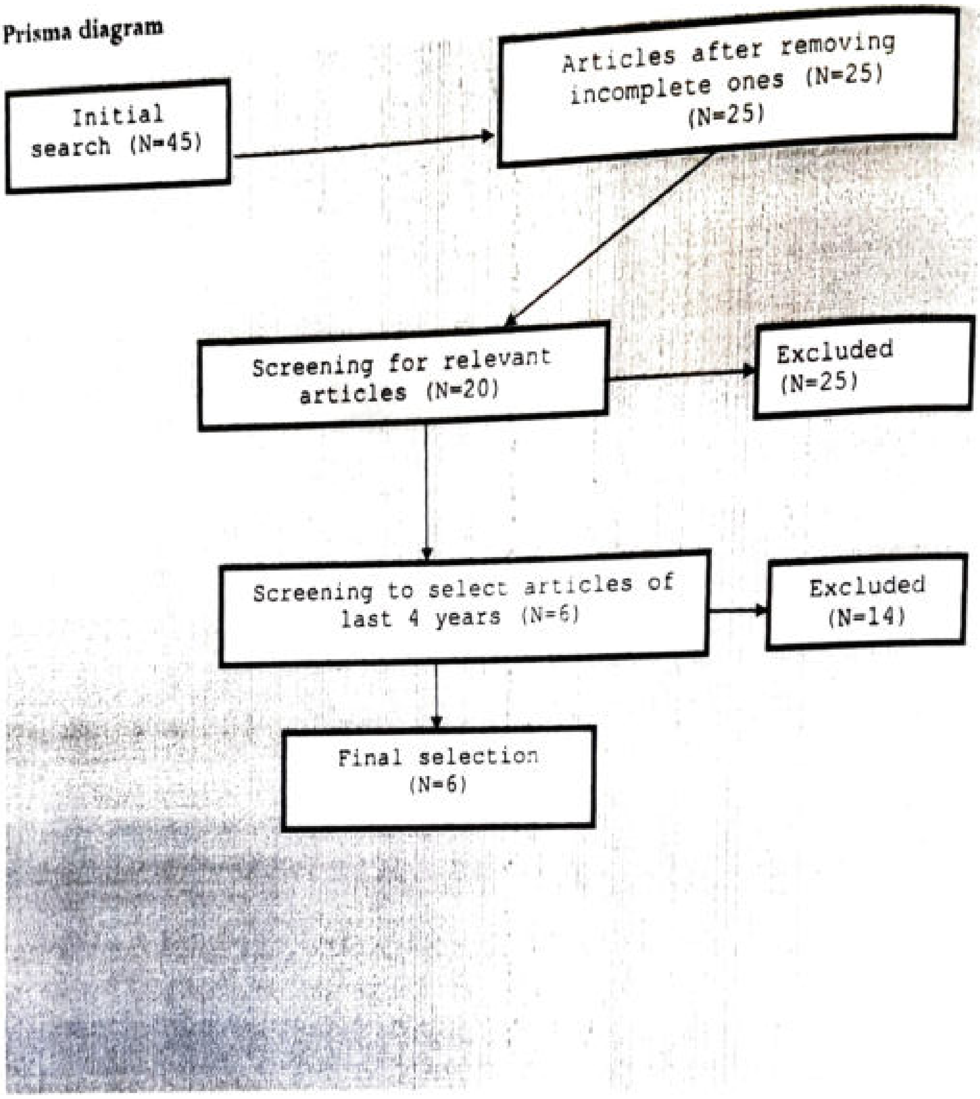


Figure 3: Prisma diagram

(Source: Learner)

RESULT AND ANALYSIS

Quality review

Authors	Study design	Number of resources or samples	Measured outcomes	Results	Quality review
Jiang &Messersmith (2018)	Cross-sectional, time-lagged and longitudinal	183 empirical studies of the primary database of EBSCO and Web of Science	Multilevel approach to employee performance improvement	Better employee performance using effective SHRM strategy and performance improvement	This article provides the details of the importance of SHRM and SHC for improving the performance of employees
Herd et al. (2018)	AI-based design is selected for survey and primary data collection	Primary data of SHRD alignment index with management if 93 factors analysis and 12 practitioner subject-matter experts	Initial development of employee performances and improvisation in SHRM strategies	The result indicates the initial exploratory strategy of scaling in determining the effectiveness of SHRM in organisational performance improvement	SHRD implementation for the determination of employee perspective to analyse the influence of SHRM on performance improvement

Singh et al. (2020)	Eco-designing strategy is utilised in this article for the analysis of data	669 manufacturing sectors in UAE are taken for collection of primary data regarding SHME and green innovation for competitive performances	A concept about green innovation for maintaining a competitive position in business using effective SHRM strategies	Understanding the concept of GTFL and GHRM practices for maintaining innovative business	A detailed perforce evaluation of companies in UAE indicates the importance of effective SHRM strategies for implementing a green strategy for business innovation
Yong et al. (2019)	Correlational design is used here to determine the green intellectual strategy of HRM	Sample size for this research is 661 large firms that are manufacturers based in Malaysia with 649 total questionnaire	An effective strategy of HRM to maintain a competitive position in a competitive market such as Malaysia	A 15 item scale and use of 7 points Likert scale are used for the analysis of data of the HRM strategies in those companies in Malaysia	This article has provided the strategy of HRM through which a better performance improvement for maintaining a competitive e development organisation can be achieved as mentioned

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Yin et al. (2019)	A longitudinal design is used in this research for determining the causal relationship	HR managers of different companies in China are chosen for this primary survey that includes 343 questionnaires among which 112 are returned and 99 are considered usable survey	Employer employment as well as strategy and improvement of performance using attractive HRM strategies	Result indicates the task-independent strategy of employee empowerment using HRM strategies in organisations	The use of HRM strategies in organisations helps in the improvement of employee power that increases productivity to super performance development in companies
Aburumman et al. (2020)	A quantitative style of design is granted here for research progress	Total number sample includes 21090 employees in 25 Jordanian banks for maintaining survey	Employee performances are dependent on the workplace environment for which HTM practice is dependent	The result indicates that improper HRM practices decrease the level of motivation of employees in those banks	Employee satisfaction is an important aspect that supports the growth of performance for an organisation

Table 2: Quality review

(Source: Learner)

Data extraction

Author name	Publication year	Study design	Data extraction process
Jiang &Messersmith (2018)	2018	Cross-sectional, time-lagged and longitudinal	The details regarding the empirical studies are presented properly to use in the current study
Herd et al. (2018)	2018	AI-based design	The information related to AI are well organised

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Singh et al. (2020)	2020	Eco-designing strategy	It has information related to the manufacturing sectors in UAE
Yong et al. (2019)	2019	Correlational design strategy	This article was helpful to know the 661 large firms in Malaysia
Yin et al. (2019)	2019	Longitudinal design strategy	The strategies of HR managers in China are explained properly to collect the data related to the study
Aburumman et al. (2020)	2020	Quantitative design strategy	The details of the design strategy have been explained properly by referring to the Jordanian banks

Table 3: Data extraction

(Source: Learner)

Thematic coding

Author	Code	Theme
Jiang &Messersmith (2018)	***Human resource, meta-review, firm performance, Sustainable competitive advantage***	*Theme 1: Effective HRM practices in organisations help in the improvement of firm performance and competitive position*
Herd et al. (2018)	***Strategic goals, economic uncertainty, employee development organisation level approach***	
Singh et al. (2020)	***Structural modelling of the equation, green HRM policies, leadership, innovation***	*Theme 2: Green environmental performances can be an important aspect of business for which an effective SHRM strategy is necessary*

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Yong et al. (2019)	*Green intellectual capital, Employee motivation, cleaner production, environmental responsibility*	
Yin et al. (2019)	***Employee empowerment, organisational behaviour, human asset, employee productivity***	*Theme 3: Effective SHRM strategy is important to improve employee productivity, reduction of turnover and teamwork within an organisation*
Aburumman et al. (2020)	***Employee turnover, career satisfaction, teamwork, employment security***	

Table 4: Thematic coding

(Source: Learner)

THEMATIC ANALYSIS

Theme 1: Effective HRM practices in organisations help in improvement of firm performance and competitive position

Effective practice of HRM is necessary to improve the performance of a firm which helps in improving the competitive position. HRM studies are based on research designs that are performed a long time ago to determine their importance of it in organisational performance improvement. AI-based technology usage for planning in HRM strategy can be helpful to improve the performance level of organisations.

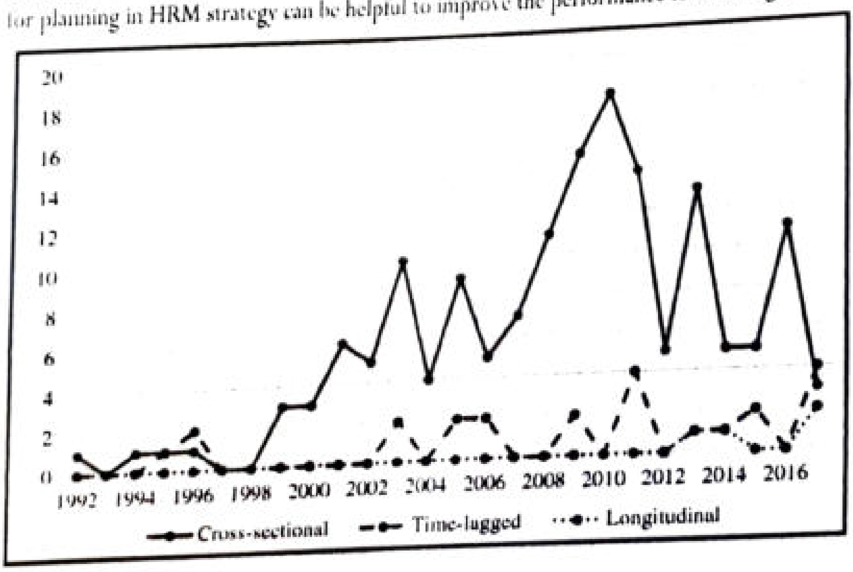


Figure 4: SHRM performance

(Source: Jiang &Messersmith, 2018)

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

Strategic HRM performance mentioned in the above graph supports the innovative idea generation from leaders using which performances can easily be improved. Strategic HRM practice has a direct relationship with the development of human capital that supports the increase of sustainability in performance (Hamadamin&Atan, 2019). Therefore, it can be determined that this theme is an essential one to understand the importance of SHRM and SHC to improve organisational performance along with management of competitive position.

Theme 2: Green environmental performances can be an important aspect of business for which an effective SHRM strategy is necessary

Green environmental performances are essential for the development of the business as it helps in improving the CSR ranking. Green HRM practices play an important role in maintaining linkages between transformational leadership and innovative environmental performances (Yong et al. 2019). Research model-based HRM strategy understanding and its application are important in modern days.

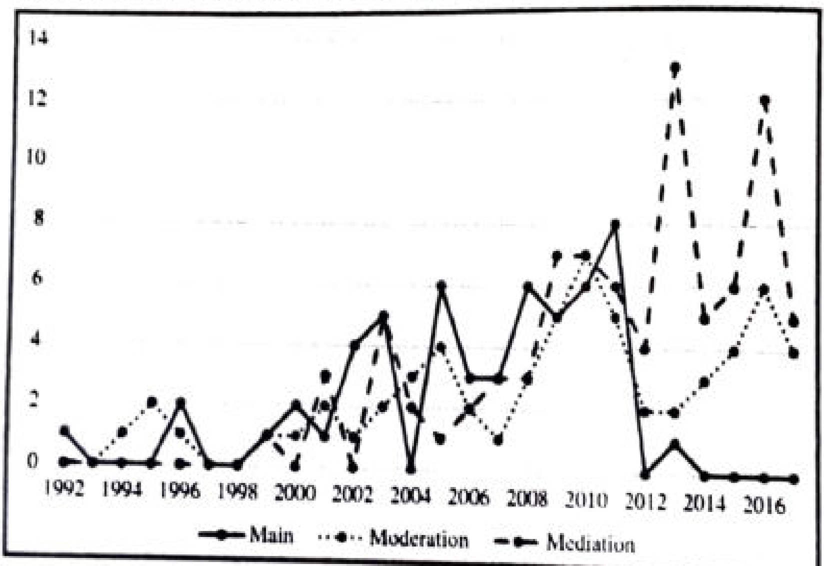


Figure 5: SHRM model-based study

(Source: Jiang &Messersmith, 2018)

Strategic HRM model-based planning mentioned in the above graph supports the management of green performance by improving business functions. Strategic HRM practices generally focus on the relationship between system and individual which is handled by HR (Thudaa et al. 2019). Therefore, green HRM practices can be helpful to eliminate barriers to organisational performance development in any organisation.

Theme 3: Effective SHRM strategy is important to improve employee productivity, reduction of turnover and teamwork within an organisation

An effective strategy of SHRM is beneficial to empower the employees to support employee productivity as well as reduce the turnover rate of employees in an organisation. The data indicates that task independence empowerment practices for increasing employee performance indicate high task interdependence is higher

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

than low task interdependence (Yin et al. 2019).

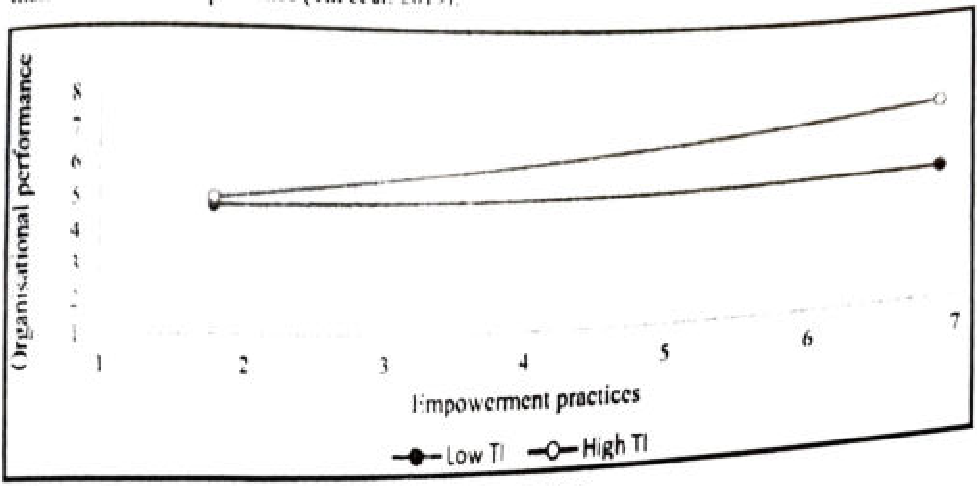


Figure 6: High and low task interdependence in SHRM

(Source: Yin et al. 2019)

A high rate of employee turnover can be termed as an important aspect through which organisations lose their capital (De Winne et al. 2019). Therefore, it is obvious that strategic HRM performances can be beneficial for attracting skilled employees to remain intact within an existing organisation for a longer time. This theme is sufficient enough in answering the effectiveness of the engagement of a skilled workforce to manage teamwork and performance within an organisation.

DISCUSSION

The first theme is based on the effective strategy in HRM practices in firms to improve the performance for maintaining competitive positions. People associated with the SHRM and SHC practices improve their planning innovatively to increase productivity. Recent data indicates that almost 88% of companies in UK have applied time and the respective attendance workforce management as a plan of SHRM (Statista, 2022b).

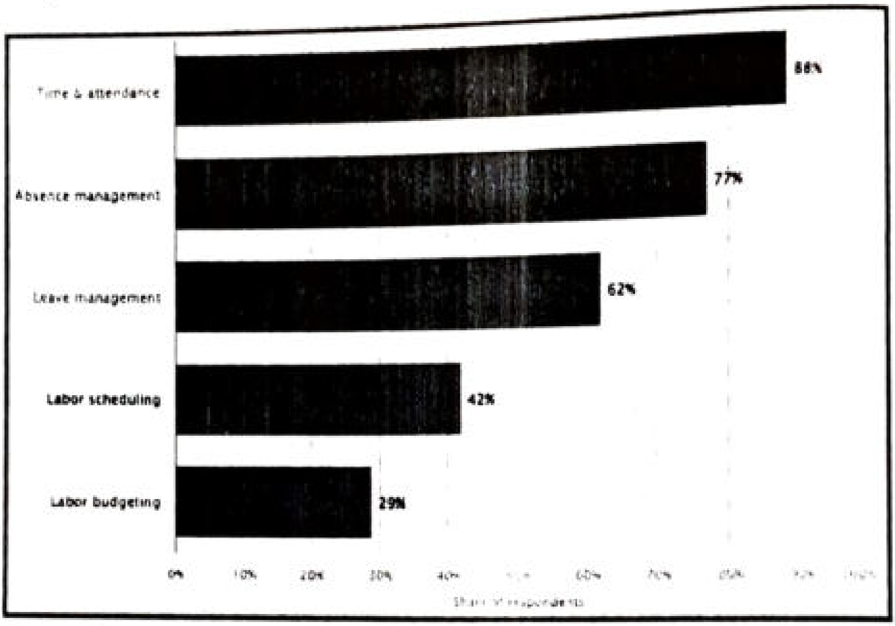


Figure 7: Workforce management in SHRM

(Source: Statista, 2022b)

The second theme is based on the green HRM strategy that indicates skilled employee management and engagement of them with organisations are effective to maintain sustainable performance in HRM practice. Sustainable or green HRM policies help in the determination of employee performance to understand the influence of HRM policies (Manzoor et al. 2019).

The theme there is dependent on employee performance development and innovation strategy of HRM. Recent data suggest that a survey is conducted to determine the challenges of SHRM that shows that new employees and good monitoring are the challenges (Statista, 2022c). Effective planning needs to be accurate enough for improvement of the HRM strategies in organisations for performance improvement.

CONCLUSION

A complete analysis of the SHRM and SHC is provided in this study to determine the importance of HRM strategies in organisational performance development. Employee motivation and performance development are the essential aspects of HRM policies that help in the improvement of productivity. A systematic collection of data and a Prisma Boolean process of systematic review strategies are selected here. Discussion is made based on articles that have used primary data for research to maintain accuracy. The thematic analysis supports the proper analysis of the objectives of this study. Based on the analysis, limitations and future scope are provided in this study.

LIMITATION

Since primary data is not collected in this study, authenticity management is a limitation in this study. Further, only six articles are selected, which causes the limitation of information collection as more articles can be utilised for wider knowledge. Amberg&McGaughey (2019) have opined that SHRM helps in providing emphasis on capital development as well as increases the firm's capabilities in terms of human

Manager - The British Journal of Administrative Management
ISSN - 1746 1278
Volume 58 Special Issue 01 April 2022

capital. Therefore, detailed management is necessary, which is a serious limitation in this study due to the lack of vast data collection.

FUTURE SCOPE

All data are collected from articles that use primary data as the source. SHRM is beneficial in maintaining green business functions that support competitive advantages (Elsbach&Stigliani, 2018). Therefore, this study can be used as an authentic source in future for research conduction on this topic. Further, this study can be used as a secondary source for the collection of important concepts of SHRM and SHC to improve organisational performance.

REFERENCE LIST

Journals

- Amberg, J. J., &McGaughey, S. L. (2019).Strategic human resource management and inertia in the corporate entrepreneurship of a multinational enterprise. *The International Journal of Human Resource Management*, 30(5), 759-793. https://doi.org/10.1080/09585192.2016.1192051
- De Winne, S., Marescaux, E., Sels, L., Van Beveren, I., &Vanormelingen, S. (2019). The impact of employee turnover and turnover volatility on labor productivity: a flexible non-linear approach. *The International Journal of Human Resource Management*, 30(21), 3049-3079. https://doi.org/10.1080/09585192.2018.1449129
- Elsbach, K. D., &Stigliani, I. (2018). Design thinking and organizational culture: A review and framework for future research. *Journal of Management*, 44(6), 2274-2306.https://doi.org/10.1177/0149206317744252
- Engelsberger, A., Halvorsen, B., Cavanagh, J., & Bartram, T. (2022). Human resources management and open innovation: the role of open innovation mindset. *Asia Pacific Journal of Human Resources*, 60(1), 194-215.https://doi.org/10.1111/1744-7941.12281
- Hamadamin, H. H., &Atan, T. (2019). The impact of strategic human resource management practices on competitive advantage sustainability: The mediation of human capital development and employee commitment. *Sustainability*, 11(20), 5782.https://doi.org/10.3390/su11205782
- Manzoor, F., Wei, L., Bányai, T., Nurunnabi, M., &Subhan, Q. A. (2019). An examination of sustainable HRM practices on job performance: An application of training as a moderator. *Sustainability*, 11(8), 2263.https://doi.org/10.3390/su11082263
- Ngozwana, N. (2018). Ethical dilemmas in qualitative research methodology: Researcher's reflections. *International Journal of Educational Methodology*, 4(1), 19-28.https://doi.org/10.12973/ijem.4.1.19
- Nocker, M., &Sena, V. (2019). Big data and human resources management: The rise of talent analytics. *Social Sciences*, 8(10), 273.https://doi.org/10.3390/socsci8100273
- Roberts, K., Dowell, A., &Nie, J. B. (2019).Attempting rigour and replicability in thematic analysis of qualitative research data; a case study of codebook development. *BMC medical research methodology*, 19(1), 1-8. https://doi.org/10.1186/s12874-019-0707-y
- Shah, A. U., & Khan, M. I. (2019). HRM-Performance Perspectives: An overview of Theoratical Challenges and Prospects. *Engineering Economics*, 30(3), 382-393.https://doi.org/10.5755/j01.ee.30.3.9550
- Shrouf, H., Al-Qudah, S., Khawaldeh, K., Obeidat, A., &Rawashdeh, A. (2020). A study on

relationship between human resources and strategic performance: The mediating role of productivity. *Management Science Letters, 10*(13), 3189-3196. 10.5267/j.msl.2020.5.002

- Thudaa, A., Sarib, J., &Maharanic, A. (2019).Employees Perception of Human Capital Practices, Employee's Productivity, and Company Performance. *Integrated Journal of Business and Economics, 15*, 240-250. 10.33019/ijbe.v3i3.188

Websites

- Oecd, (2020). *OECD Human Resources*. https://www.oecd.org/gov/pem/OECD%20HRM%20Profile%20-%20Australia.pdf
- Statista, (2022a).*Human Resource Management Systems (HRMS) distribution worldwide in 2019, by organizational size*, https://www.statista.com/statistics/1085422/hrms-distribution-organizational-size-worldwide/
- Statista, (2022b).*Share of organizations using workforce management applications worldwide in 2019, by type*. https://www.statista.com/statistics/1085485/workforce-management-applications-type-worldwide/
- Statista (2022c).*Leading challenges with onboarding according to HR worldwide in 2018*, https://www.statista.com/statistics/950216/onboarding-challenges-hr-worldwide/

Thematic coding

- Jiang, K., &Messersmith, J. (2018). On the shoulders of giants: A meta-review of strategic human resource management. *The International Journal of Human Resource Management, 29*(1), 6-33.https://doi.org/10.1080/09585192.2017.1384930
- Herd, A. M., Shuck, B. M., &Githens, R. P. (2018). Strategic human resource development alignment from the employee's perspective: Initial development and proposition testing of a measure. *Performance Improvement Quarterly, 31*(3), 269-291.https://doi.org/10.1002/piq.21266
- Singh, S. K., Del Giudice, M., Chierici, R., &Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change, 150*, 119762. https://doi.org/10.1016/j.techfore.2019.119762
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., &Fawehinmi, O. (2019).Nexus between green intellectual capital and green human resource management. *Journal of cleaner production, 215*, 364-374. https://doi.org/10.1016/j.jclepro.2018.12.306
- Yin, Y., Wang, Y., & Lu, Y. (2019). Antecedents and outcomes of employee empowerment practices: A theoretical extension with empirical evidence. *Human Resource Management Journal, 29*(4), 564-584.https://doi.org/10.1111/1748-8583.12243
- Aburumman, O., Salleh, A., Omar, K., &Abadi, M. (2020).The impact of human resource management practices and career satisfaction on employee's turnover intention. *Management Science Letters, 10*(3), 641

Scopus Indexed

3.2.1

ECS Transactions

The Electrochemical Society
Advancing solid state & electrochemical science & technology

ISSN 1938-5862

Impact of Social Media Marketing on Organizational Performance: A Case Study of Amazon India

To cite this article: Venkata Kandi *et al* 2022 *ECS Trans.* **107** 12749

PRINCIPAL
NEHRU MEMORIAL COLLEGE
SULLIA, D.K. - 574 327

ECS Transactions, 107 (1) 12749-12764 (2022)
10.1149/10701.12749ecst ©The Electrochemical Society

Impact of Social Media Marketing on Organizational Performance- A Case Study of Amazon India

V. S. Prasad Kandi [a], B. Sakthimala [b], G. Sivakumar [c], Vijayalakshmi N.S [d]

[a] KL Business School, Koneru Lakshmaiah Education Foundation, Andhra Pradesh, kandi.vsp@gmail.com
[b] Department of Business Administration, Marudhar Kesari Jain College for Women, Vaniyambadi, sakthi.lbk@gmail.com
[c] Department of management, Sri Ramakrishna college of arts and science, Coimbatore, sivakumarparks@gmail.com
[d] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com

With the intention of identifying how social media marketing can improve organizational performance, this research has focused on Amazon India. Through secondary data, different social media marketing strategies of Amazon are hereby identified at first. Then primary data is collected by sharing a survey questionnaire with one hundred random consumers of Amazon. From their responses, it was found that Amazon is using different tactics in different social media channels such as following different topical festivals of India and creating emotional ads. These social media ads are helping the organization to engage with the consumers and draw them to their e-commerce site and almost ninety consumers stated that they buy something whenever they are re-directed to Amazon's site through a social media ad.

Keywords: social media marketing, amazon strategy, negative impacts.

Introduction

In The world of marketing, social media marketing has acquired a special position due to its effectiveness and capability to cultivate better results (1). Several companies are there are investing heavily in social media marketing while some companies are still not sure whether they should cut investment from traditional marketing to boost social media marketing or not. Now, existing research works show that social media marketing can help an organization to engage with its consumers in a better manner however, traditional media can do the same (2). Therefore, the question is why companies should follow social media marketing instead of traditional marketing or any other digital marketing such as SEO.

On the other hand, very research works have focused on a particular company to find out how social media marketing is improving the performance of that company by improving its financial performance (3). If there is no concrete evidence that social media marketing can improve organizational performance then it is obvious that small companies, even large companies will not invest in it heavily (4). Based on this research gap this particular research work is developed. This research work has focused on Amazon, the leading online retailer around the world. Amazon is one of those companies that focus more on social media marketing than any other marketing tactic. Initially, the social media marketing tactics of Amazon are identified and it is analyzed how Amazon is engaging with its customers through social media marketing by collecting secondary data. Later primary data is collected from one hundred random Amazon consumers.

Everything is done based on some research objectives that are hereby mentioned below.

- RQ1: To find out the social media marketing strategies of Amazon India
- RQ2: To identify which social media site of Amazon India is mostly followed by its consumers
- RQ3: To analyze what consumers like about Amazon India's promotions
- RQ4: To identify how social media marketing is aiding Amazon India's organizational performance

Concept of Social Media Marketing

The concept of social media marketing means using social media platforms and social networks to promote an organization's products and/or services (5). The concept of social media marketing allows business organizations to engage with their existing and potential consumers regardless of their gender, culture, religion, nationality and physical condition.

Facebook, Instagram, Twitter, Pinterest, LinkedIn and Snapchat are some major social media platforms that business organizations use to connect with their existing and potential consumers. However, some companies are also investing heavily in YouTube by creating short ads that are shown before any mainstream video on YouTube (6).

Benefits of social media marketing:

The biggest benefit of social media marketing is the reach that it provides to the consumers (7). In 2020, there were over 3bn social media users, which means an organization, can engage with these many people instantly. In India, there are 518mn Facebook users as per data showed in 2020. It means, Amazon actually can engage with these many Indians with one post on Facebook or Instagram or Twitter, or any other social media platform.

Disadvantages of social media marketing:

As social media posts created by an organization can see people from different nations, religions and cultures, it can also quickly create customer backlash (8). For example, in 2018 Amazon faced serious customer backlash from Indian consumers for displaying a distorted map of Jammu and Kashmir. This became viral in India and Amazon's brand image was hampered severely. Later Amazon spokesman apologized for this. Therefore, a simple mistake on social media platforms can become viral in minutes and can destroy the brand reputation of an organization.

Social Media Marketing of Amazon India

Amazon on Facebook India:

Amazon openly shares sales days on Facebook India including Freedom sales, BookBazaar Salem Apni Dukak Sale, Wardrobe Refresh Sale and others. Amazon's 10million Indian followers on Facebook see this information and react according to it (9).

Amazon mainly uses Facebook to share exciting offers and discounts to attract Indian Facebook users to its website. Freedom Sales and Amazon's Wardrobe Refresh Sale in India happed this year and relevant information was shared with the Indian Facebook users through Amazon India's Facebook platform (9).

Through Facebook India, Amazon also celebrates topical promotions such as Doctors Day, Mothers Day, Fathers Day, Raksha Bandhan, Holi, Diwali and many more (9). Amazon shares these festivals with simple messages that help the organization to engage with the consumers.

Amazon does not directly promote its products through these promotions however, seeing these promotions automatically motivates Indian consumers to go to the Amazon site and to look for what new products Amazon has added during these festivals. It increases website traffic (9).

Figure 1: Fathers Day Promotion by Amazon in India (1)

Through Amazon Facebook, the organization also encourages and assists those who run small businesses and have become inspiring entrepreneurs. For example, the image below displays Monika Agarwal who owns Swara Creation and Amazon are telling her story (9). Through Amazon, Monika sells modern fashion accessories.

It not only inspires other business owners to sell their products on Amazon but also encourages buyers to go to Amazon to check their products thus increasing website traffic (9). This is another social media strategy of Amazon, through which it engages with its existing and potential Indian consumers.

Figure 2: Amazon Stories from Indian Small Businesses (2)

Amazon on Instagram India:

Amazon has used Instagram India mainly for interviews conducted with different famous Indian artists from different backgrounds. With 2.8m followers on Instagram India, Amazon's strategy here is almost similar to Facebook India; except for company news and updates (9). For example, recently Amazon promoted two activities on Instagram India such as Prime Day Promotion and Amazon HandMade.

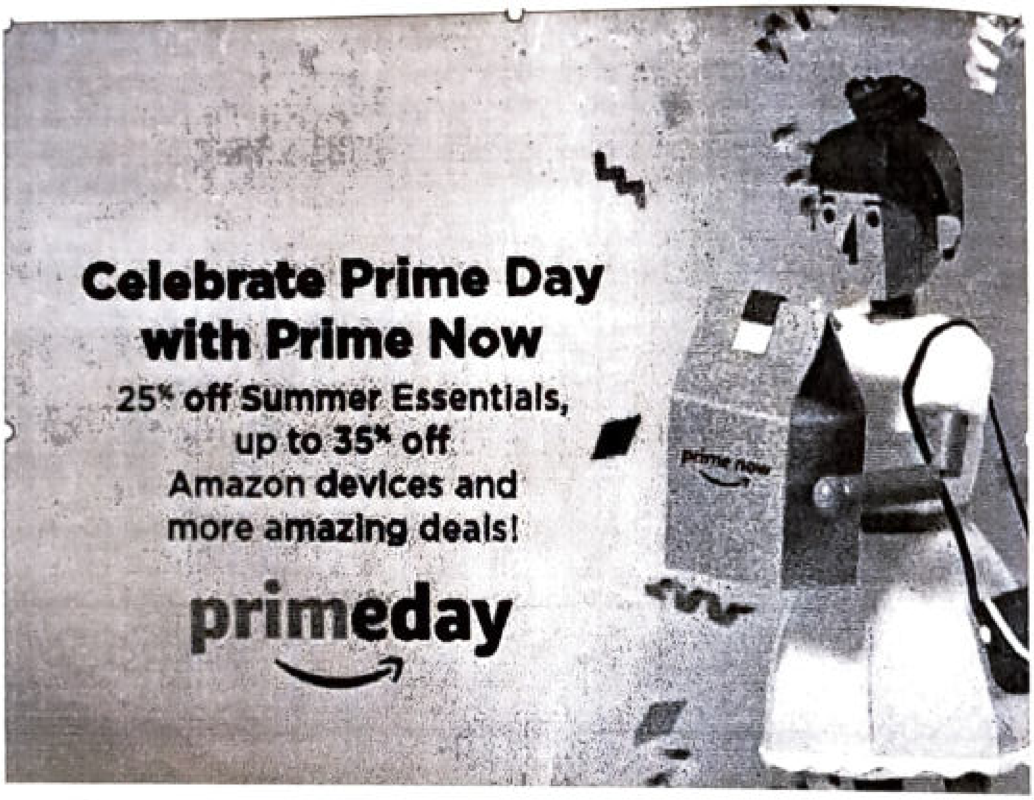


Figure 3: Amazon Prime Day Promotion (3)

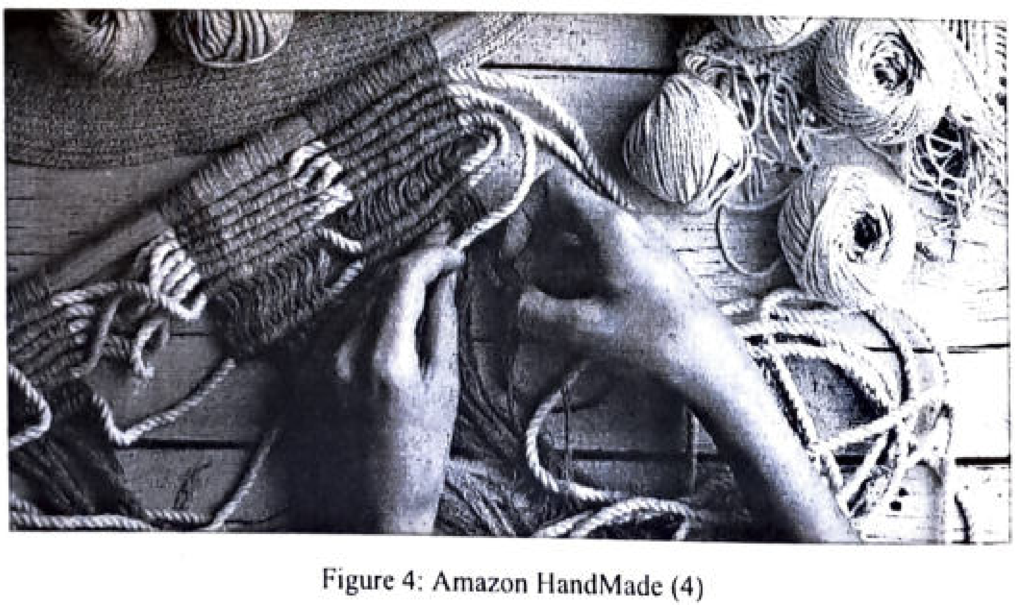


Figure 4: Amazon HandMade (4)

Amazon India recently collaborated with 14 stand-up comedians to promote their sales day (figure 3). The caption was "your 10-minute breather is here. Enjoy your #AmazonPrimeDay shopping with 14 comedians keeping your company every hour. #Discoverjoy, this seemed to be interesting and it attracted a lot of Indian consumers to the Amazon India website. Through @AmazonHandMade Instagram profile Amazon celebrated businesses that are owned by women in India. The goal was to encourage other women of India to open their own businesses. It actually motivated a lot of Indian women to open their own businesses and sell their products on Amazon. Therefore, through Instagram, Amazon is attracting individual buyers (B2C) and existing and new business owners (B2B).

Amazon on Twitter India:

Amazon India's Twitter approach is completely different compared to its approach on Facebook and Instagram. It ensures that over 2mn Indian Twitter followers remain engaged and for that the organization users different types of content (9). It also uses customer-acquiring contests, users several accounts and participants in different trends. Some of Amazon's Twitter activities through which it engages with consumers are hereby shown below.

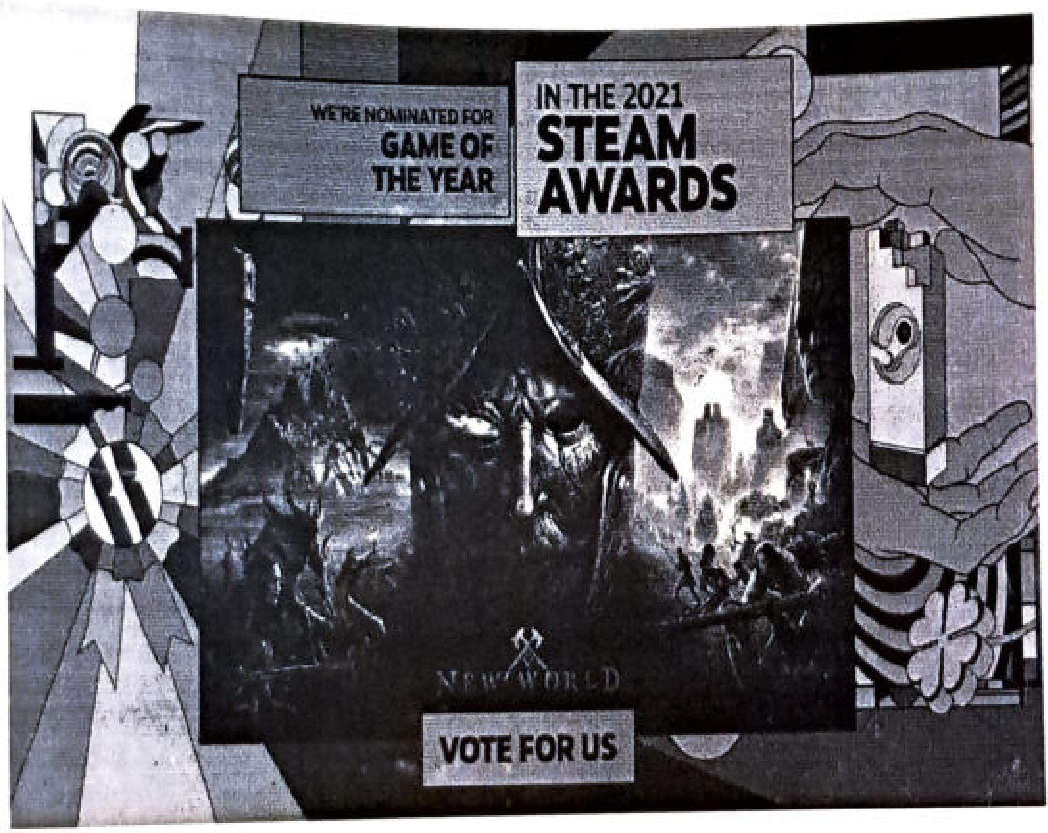


Figure 5: Amazon's Twitter Activities (5)

Amazon on YouTube India:

Amazon India's approach to YouTube India is to hook people immediately. For example, its recent campaign #MomBeAGirlAgain revolves around a mother-son relation. These campaigns are very attractive and redirect users or viewers to Amazon India's website (9). These emotional ads then motivate consumers to buy something for their sons or mothers.

Figure 6: #MomBeAGirlAgain Campaign of Amazon in India (6)

Amazon on Pinterest India:

On Pinterest India, Amazon directly promotes its products by creating a collage of its best and most popular products in several thematic lifestyle buckers such as for wedding planning, for home, for office, for kitchen, etc. These interesting and attractive promotions encourage people to visit Amazon India's e-commerce website.

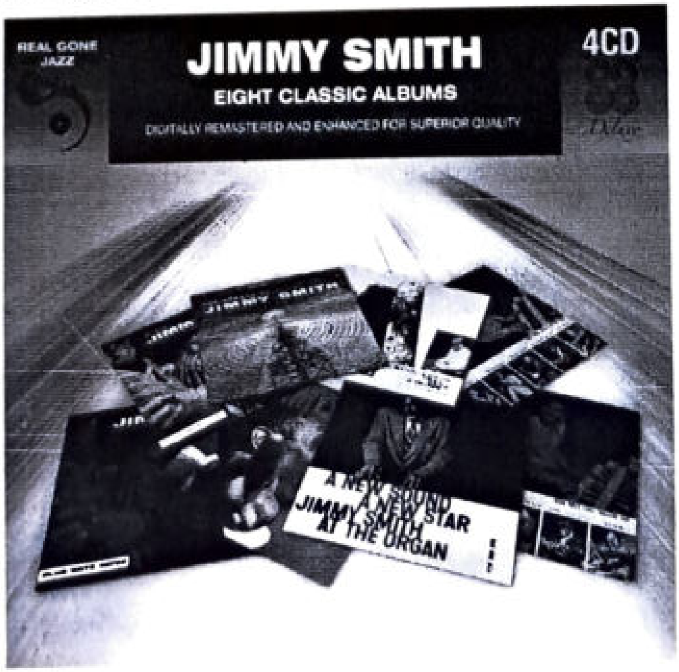


Figure 7: Amazon on Pinterest India (7)

Search Engine Marketing:

In the year of 2017, Amazon spent over $10bn for its digital marketing activities. Now, Amazon spends $451million on search engine marketing. Amazon spends so much attention on social media marketing however, still 31% of its website traffic comes from paid search, which means, social media marketing is responsible for Amazon's almost 70% website traffic (9). It shows, how much Amazon depends on its social media marketing.

From the above analysis, research objective 1 is fulfilled as from the above analysis it is found how Amazon is using social media for marketing its brand, product and services.

Research Methodology

In order to identify which research methods would be followed in this research, the concept of research onion is followed here. Following the research onion, this research has followed positivism research philosophy, deductive approach, quantitative strategy, mono-method, cross-sectional time-horizon and primary data collection method.

While collecting primary data, the probability-sampling method is followed here. Normally, in research two types of sampling methods can be used such as probability sampling and non-probability sampling. In probability sampling, every individual from a particular population has the chance of being selected in a research work. On the other hand, in non-probability sampling, research picks individuals who are then questioned to acquire relevant data. This research has followed a stratified probability sampling method. First of all, the population is divided into two areas; people who are Amazon consumers and people who are not Amazon consumers. From the population who buy from Amazon, randomly one hundred individuals are selected.

As this research has followed the primary data collection method, ethics played a very important role in it. To maintain ethics, this research has followed The Data Protection Act 2018. Following this act, it is ensured that names, contact details and other personal information of the participants are kept classified and will not be shared with any third-party organization in any condition.

The participants were selected randomly and they were given full liberty to quit their participation at any point in time. They were not forced to take part in the research. Research questions did not include any personal questions and it was tried that questions are related to Amazon's social media marketing strategy. Some personal questions are asked such as income level however, participants were given full liberty to skip the question if they wanted to do so.

Fortunately, all the participants took their time and completed the questionnaire. As a result, this research got one hundred completed responses from the participants. This research work will only be used for academic purposes. Before publishing the research, consent will be acquired from all the participants who took part here.

How Social Media Marketing increasing sales of Amazon India'

TABLE I. Demographic Information

Demographic Information			
Gender	Male	45	100
	Female	55	100
Age	18-25 years	39	100
	26-30 years	20	100
	31-35 years	30	100
	Over 35 years	11	100
Income Rate (Monthly)	Below INR 10,000	14	100
	10,000-25,000	35	100
	25,000-50,000	40	100
	Over 50,000	11	100

From the table-1 above, it can be seen that most of the participants (55) are male while 45 are female. On the other hand, the highest numbers (39) of participants are young Indians; aged 18-25, and the next higher numbers of participants are from the age group of 31-35 years old. Only 11 participants are from the age group of 35+ where the rest of the 20 are from the age group of 26-30. In terms of income rate, most of the participants (40) are from the income rate INR25, 000-50,000. Next higher numbers of participants are from the income rate of 10,000-25,000. Only 11 are from the income rate of over 50,000 and only 14 are from income rate of Below INR 10,000. It shows, quite a diverse group of participants took part in this research. It is good for the research as a diverse group of participants means a diverse type of response, which would help this research to reach to a proper and expected solution. Graphical representation of the demographic data is shown in Appendix 1, 2 and 3.

TABLE II. Amazon's Social Media Marketing and Relevant Response from Participants

Amazon's Social Media Marketing and Relevant Response from Participants			
How long you are shopping from Amazon.	Less than one year	12	100
	1-2 Years	24	100
	2-5 years	48	100
	Over 5 years	16	100
What motivates you to buy from Amazon?	Social media	68	100
	Traditional media	12	100
	Word of Mouth	5	100
	SEO	5	100
	Others	10	100
Which social media of Amazon do you	Facebook	18	100
	Instagram	22	100

follow the most.	Twitter	32	100
	Pinterest	18	100
	YouTube	5	100
	Others	5	100
What do you like the most in Amazon's social media promotions/campaigns	Sale Day Promotions	12	100
	Topical Promotions	18	100
	Highlighting Amazon Stories	10	100
	Prime Day Promotion	15	100
	Women Empowerment (Amazon HandMade)	20	100
	Engaging with followers through contests by using different accounts	20	100
	Emotional content such as #MomBeAGirlAgain	15	100
Do you believe that the different social media activities of Amazon motivate you to visit the site and buy something every time you visit it; compared to other marketing channels?	Strongly Agree	56	100
	Agree	34	100
	Disagree	2	100
	Strongly disagree	8	100

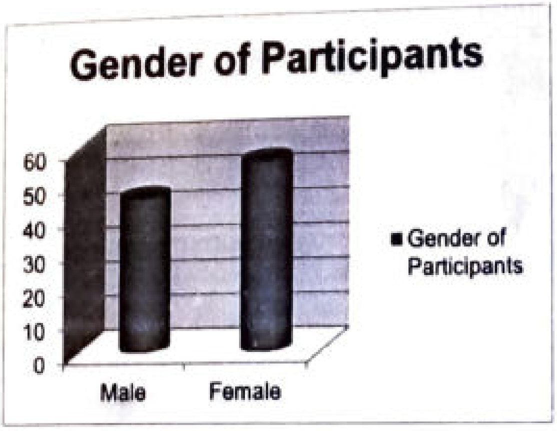


Figure 8: Gender of participants

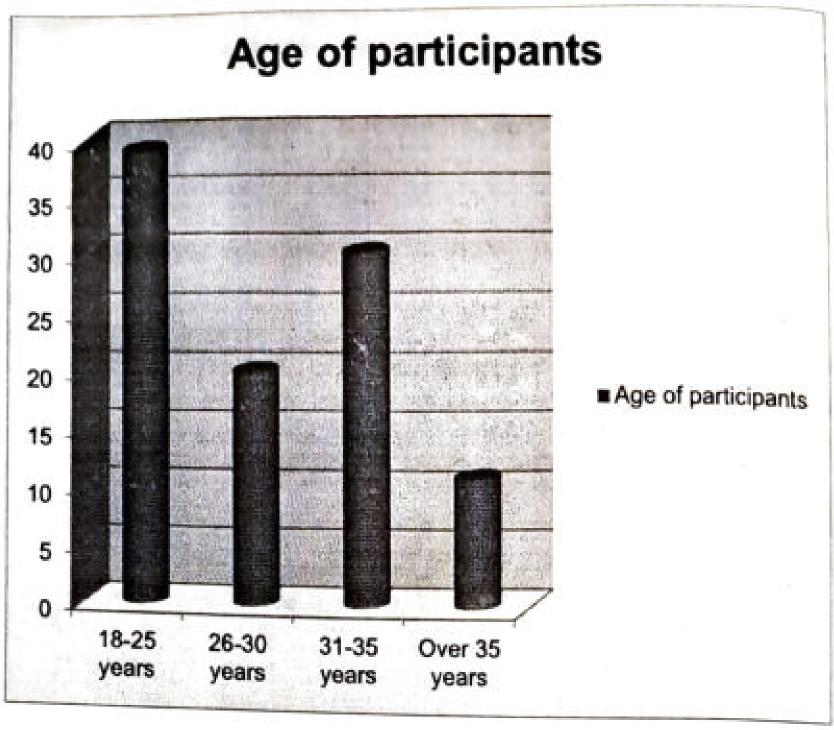


Figure 9: Age of participants

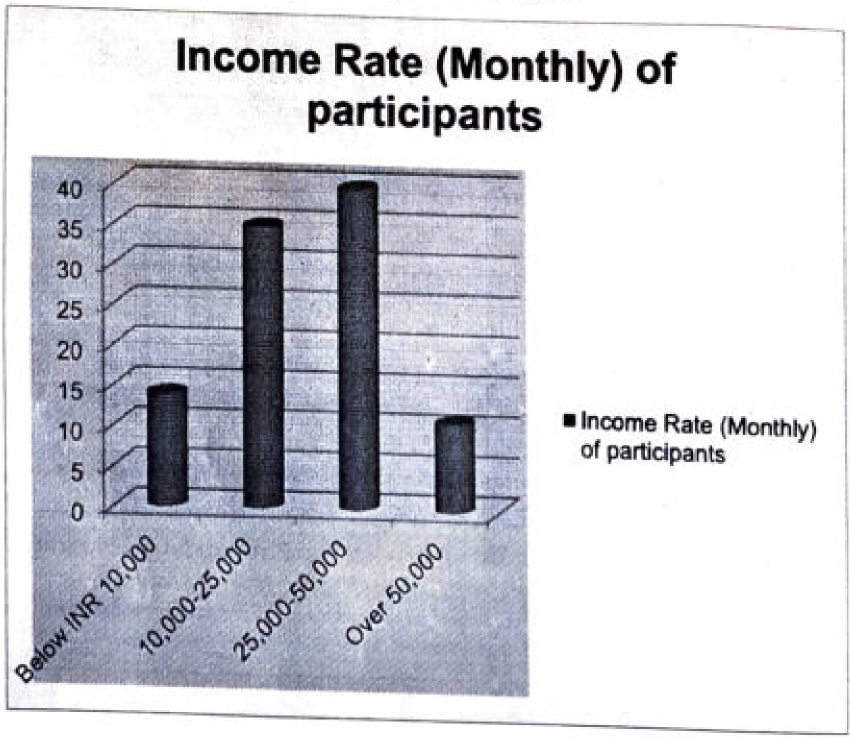


Figure 10: Income Rate (Monthly) of participants

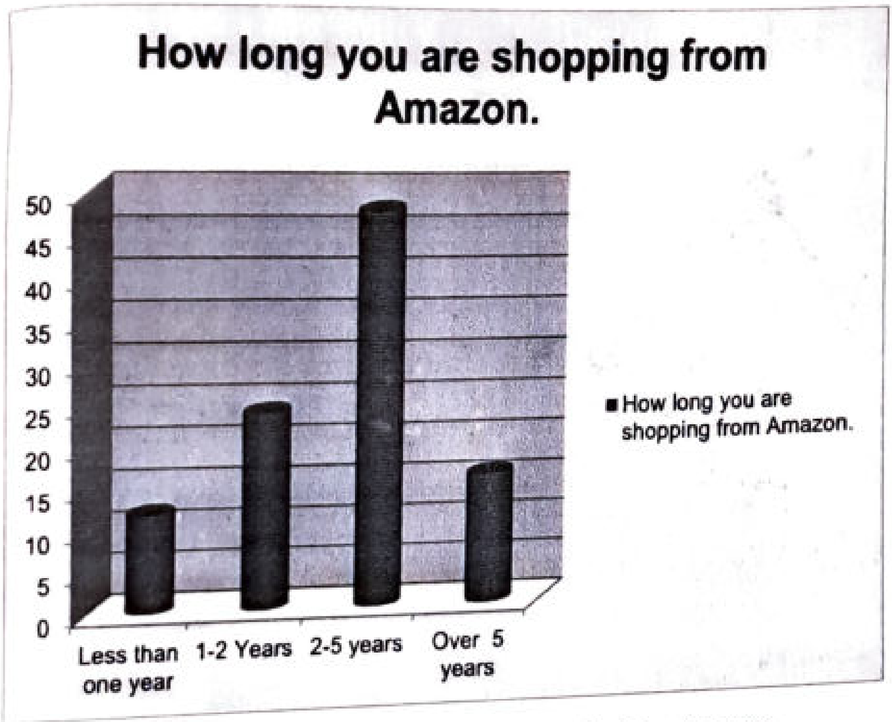


Figure 11: How long you are shopping from Amazon.

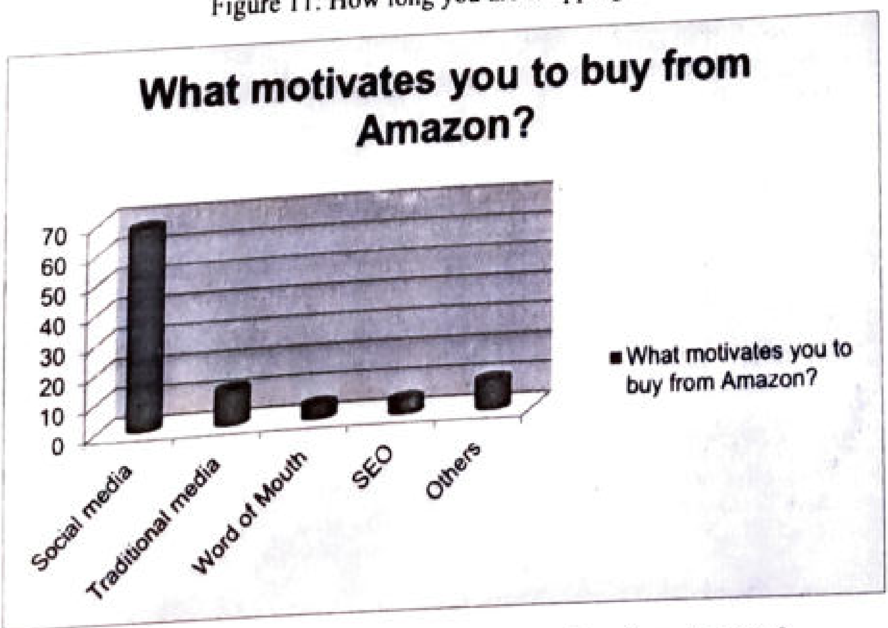


Figure 12: What motivates you to buy from Amazon?

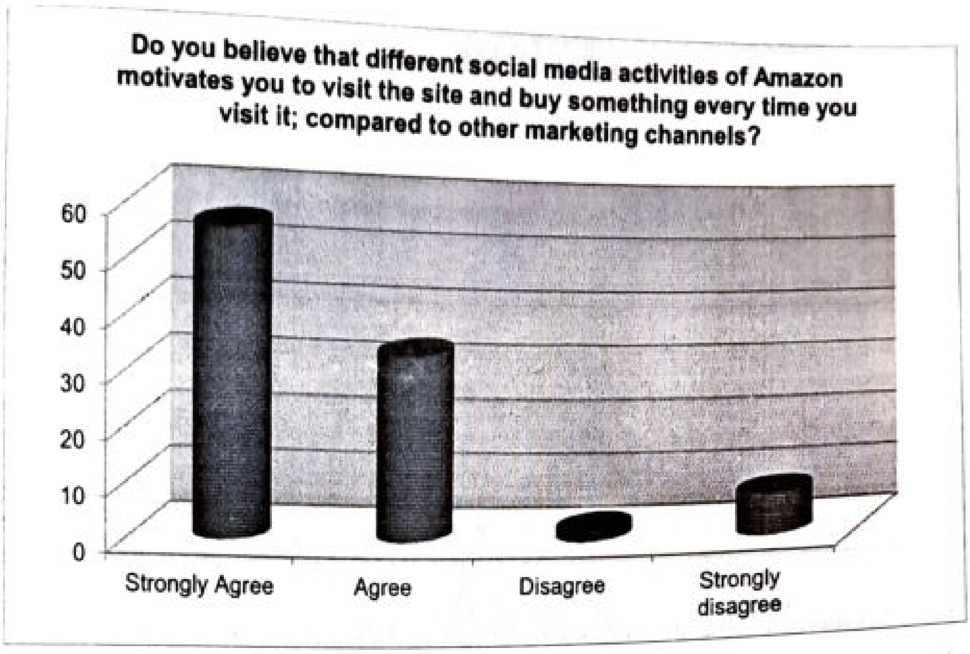


Figure 15: Different social media activities of Amazon motivate you to visit the site and buy something every time you visit it; compared to other marketing channels.

It is quite satisfying to find that most of the participants (48) are buying from Amazon for 2-5 years, as they along with 16 participants (buying from Amazon for over 5 years) will be able to provide in-depth information about how social media strategy of Amazon has encouraged this long time to buy from it. While answering what motivated participants to buy from Amazon, it was not surprising to see that 68 participants stated that social media sites have motivated them to buy from Amazon. Traditional media got only 12 votes while SEO and word of mouth got 5 votes. From this data, it is clear why Amazon invests heavily in social media marketing. Now, most importantly, it is found that 18 participants follow Amazon on Facebook, 22 follow Amazon on Instagram, 32 follow it on Twitter (Fulfills research objective 2) and 1 follow it on Pinterest. Only 5 follow it on YouTube and 5 follow it on other platforms; maybe Snapchat. Almost equal numbers of participants among 100 are following Amazon in any one of the most popular social media platforms, which makes it easier for the organization to engage with them through different contents and information. Now, when asked what they like about Amazon's social media promotions most of them talked about women empowerment and engaging with followers (Fulfills research objective 3). Women empowerment has suddenly become a major concept in different industries in India as the Indian Government through different policies is also promoting women empowerment. Therefore, according to 20 participants, whenever they see content shared by Amazon that includes something related to women empowerment, they visit the organization. On the other hand, today, most of the Indian online consumers are millennials or Gen Z. These people love to buy from companies that communicate with them frequently and hear their voices, demands, complaints and suggestions. As a result, 20 participants stated that they buy from Amazon as the organization engages with them frequently, which is Amazon's Twitter activity. On the other hand, 15 participants talked about Prime Day Promotion and 15 talked about emotional content. Besides, 18 participants talked about topical promotions as during those periods they get to buy customized and different products from Amazon. Only 12 talked about sale day promotion and 10 talked about highlighting Amazon stories. Now, the answers to the last question clearly show that 90 participants either strongly agreed or just agreed that compared to traditional media they are redirected to Amazon's site more by social media campaigns and these campaigns also motivate them to buy something from the organization. Therefore, it is clear that social media marketing is increasing website traffic to Amazon and its motivating consumers to buy from the organization, which is increasing its profits that in turn increasing its organizational performance. Graphical representations of these questions are displayed in Appendix.

Analysis

Overall, from the above table, it is found that participants are closely following social media posts and promotions of Amazon India on different social media channels. The participants also agreed that some of the particular social media promotions and activities encourage them to buy from the organization. It definitely increases the sales and revenue of the organization. Therefore, it is proved that the social media platforms of Amazon India are attracting consumers to its website and are encouraging them to buy from the organization. Therefore, social media marketing is having a positive impact on the organizational performance of Amazon, which is financial growth/profitability.

Conclusion

In the end, it can be concluded that participants, who are the consumers of Amazon are directly connected with the organization through different social media platforms such as Facebook, Instagram, Twitter and others. Now, Amazon uses these social media platforms for different reasons such as for engaging with consumers, promote products and campaigns, empowering women and sharing special discount offers. As the consumers of Amazon are deeply connected with the organization through these social media platforms, they see those promotions and go to the Amazon e-commerce. It automatically increases the website traffic of the organization and when website traffic increases chances of sales are also increased (Fulfills objective 4). Therefore, through the social media channels of Amazon, the organization is indirectly increasing sales and revenue which is increasing its organizational performance in India.

Future Scope of the Research

The biggest limitation of the research is to follow quantitative data only. The chances are high that the data was biased and information provided by the participants are influenced by their friends or family members. To eliminate this, it was required to conduct interviews with some managers of Amazon or it was required to conduct the research with more participants such as five hundred or thousand. Besides, due to lack of word count, it was also not possible to analyze the data in a detailed manner. In the future, all these research limitations can be eliminated by collecting data from more participants and conducting interviews with managers of the organization.

References

1. Κασσινού, O.X., Social media marketing and organizational performance, (2019).
2. Parveen, F., Jaafar, N.I. and Ainin, S., Social media usage and organizational performance: Re()flections of Malaysian social media managers. *Telematics and informatics*, *32*, 67(2015).
3. Parveen, F., Jaafar, N.I. and Ainin, S., *Management Decision*, 5, 20(2016).
4. Jue, A.L., Marr, J.A. and Kassotakis, M.E., *Social media at work: How networking tools propel organizational performance*. John Wiley & Sons, p. 20, London(2009).
5. Garcia-Morales, V.J., Martin-Rojas, R. and Lardón-López, M.E., *Baltic Journal of Management*, 10, 52(2018).
6. Icha, O., *J Internet Bank Commer*, 2, 2(2015).
7. Aral, S., Dellarocas, C. and Godes, D., *Information systems research*, *24*, 3(2013).
8. Ahmad, S.Z., Bakar, A.R.A. and Ahmad, N., *International Journal of Entrepreneurial Behavior & Research*, 8, 65(2019).
9. Shastri, A., *Marketing Strategy of Amazon - A Case, 9, 20*(2021). https://iide.co/case-studies/amazon-marketing-strategy/.

Scopus Indexed

3.2.1

ECS Transactions

The Electrochemical Society

ISSN - 1938-5862

Impact of Transformational Leadership on Organizational Performance Through Employee Motivation

To cite this article: Korakod Tongkachok Sr. *et al* 2022 *ECS Trans.* **107** 12873

ECS Transactions, 107 (1) 12873-12886 (2022)
10.1149/10701.12873ecst ©The Electrochemical Society

Impact of Transformational Leadership on Organizational Performance Through Employee Motivation

Korakod Tongkachok [a], Shaifali Garg [b], B.Sakthimala [c], Vijayalakshmi N.S [d]

[a] Faculty of Law, Thaksin University, Thailand, tokorakod@tsu.ac.th
[b] Institute of business management, GLA University, shefali.garg@gla.ac.in
[c] Department of Business Administration, Marudhar Kesari Jain College for Women, Vaniyambadi, sakthi.lbk@gmail.com
[d] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com

In order to find out how transformational leadership can increase organizational performance through employee motivation, this research focused on one of the well-renowned transformational leaders called as Jeff Bezos. From secondary data, it was found that Jeff Bezos is responsible for implementation of several programs AWS Grow Our Own Talent, Surge2IT, UXDR Apprenticeship Program and Amazon Technical Academy. These programs are the reasons that employees are motivated and are performing beyond expectation. From primary data it was found that employees love the way Jezz allows them to take part in decision making program and to follow innovation ways of working. After than when the financial performance of the organization for past 5 years is analyzed, only growth is found. It means, these programs are motivating employees, motivating employees are performing better and it is increasing organizational performance.
Keywords: Transformational leader, employees, organizational performance.

Introduction

There is no doubt that leaders play a major in success or failure of an organization (1). For example, where leaders like Steve Jobs or Mark Zuckerberg ensured success of Apple and Facebook, leaders like Martin Winterkorn caused failure of Volkswagen through the famous "Cheating Emission" Scandal. It shows good leadership can trigger success where poor leadership can affect organizational success. However, a debate is there always that raises questions regarding which is the best leadership style for organizational success (2). There are different types of leadership styles such as autocratic leadership, democratic leadership, transformational leadership, laissez-faire leadership, transactional leadership, and participative leadership style (4). Time to time different authors have supported and vouched for different leadership styles for improved organizational performance. For example, it is stated that autocratic leadership is useful in small companies. On the other hand, democratic leadership is considered as useful as it can collect valuable insights from employees at the time of decision-making (5). Transactional leadership is proved useful in creating a fair and highly productive workplace. However, the purpose of this research is to focus on transformational leadership. Similar to other leadership styles, there are research works that have focused on transformational leadership and how it improves organizational performance.

However, a major catalyst or variable is ignored that is employee motivation. Almost none of the research works focused on how these leadership styles including transformational leadership improves employee motivation while enhancing organizational performance. In today's business world where consumer preferences and buying behavior and changing frequently, business organizations are also required to change accordingly and transformational leadership is the only leadership style that supports and motivates change (6). Now, the question is how while motivating changes transformational leaders motivate employees that further improve employee performance and organizational performance. Due to lack of answer to this question, this research paper decided to eliminate this research gap by collecting information about how Jeff Bezos, one of the most renowned transformational leaders is motivating employees. Further, this research paper will identify how that employee motivation is influencing performance of Amazon by collecting their reviews about their work experience in Amazon.

Based on the above discussion and present literature gap this research has focused on the below research objectives.

- To find out last five year's organizational performance of Amazon
- To find out how Jeff Bezos follows transformational leadership
- To analyze how transformational leadership of Jeff Bezos is triggering employee motivation
- To identify how employee motivation is playing a mediator role between transformational leadership of Jeff Bezos and Amazon's organizational performance

Concept of Transformational Leadership

Transformational leadership is considered as a theory of leadership where a leader works with different teams or subordinates to facilitate change through influence, inspiration and executing the change in tandem with committed employees of a group. James Macgregor Burns first introduced the concept of transformational leadership in 1978 in his book called "Leadership." He defined transformational leadership as a "method through which leaders and their subordinates raise one another to higher levels of morality and motivation" (7). The concept of transformational leadership stands on four components such as idealize influence, inspirational motivation, individualized consideration and intellectual stimulation.

In terms of idealized influence, it means transformational leaders act as role models for their subordinates. This also states that leaders "walk the talk" that triggers admiration among the subordinates for that leader (8). According to this concept, a transformational leader injects the qualities that he/she wants in his/her subordinates. This concept helps leaders to become trustworthy to their subordinates.

The second component connected to transformational leadership is inspirational motivation through which transformational leaders motivates their subordinates through their unique vision. Idealized influence and inspirational motivation are responsible for increasing productivity of the transformational leaders. Under this concept, the role of a transformational leader is to convince their followers with simple and easy-to-understand words.

Under individualized consideration, transformational leaders demonstrate authentic concern for the requirements and feeling of subordinates. By providing personal attention to the followers, transformational leaders acquire trust from their subordinates (9). For example, transformational leaders identify issues of a particular team member while working in a group. Based on that issue, that team member is then provided with training by that transformational leader to improve that team member's skills and competences. In this manner, that team member starts trusting that transformational leader.

The fourth component of transformational leadership is intellectual stimulation. Through this component, transformational leaders challenge their subordinates to think in a creative and innovative manner (10). Transformational leaders motivate their followers to challenge the status quo. Some criticize transformational leaders, as they are soft however; the fact is this type of leaders constantly challenges their subordinates to perform at a higher level.

If Big Five Personality test is considered, then it can be found that transformational leaders include traits such as extraversion, openness, agreeableness and conscientiousness.

Concept of Organizational Performance

If the concept of organizational performance is considered, then existing literature divides it into areas such as financial performance, product market performance and shareholder return. However, there are arguments regarding this. Along with all these organizational performance criteria, concepts such as social performance are also considered in terms of organizational performance.

However, sometimes, performance of an organization completely considered based on whether that organization is able to make profits or not. If an organization is not making profits and is not generating revenues then it is considered that the organization is not accomplishing positive performance. For this particular research paper, Focus is mostly given on financial performance of Amazon while analyzing its overall performance. Financial performance of Amazon's last five year is considered in this research paper.

Concept of Employee Motivation

Employee motivation simply means the enthusiasm, commitment and creativity that employees ring to the organization regularly while performing their daily activities. The word motivation is derived from the Latin word "movere" which means movement (11). Employee motivation can be categorized into two areas that are intrinsic motivation and extrinsic motivation.

Intrinsic motivation means an individual is being motivated from within. It means an employee due to his/her personal beliefs, honor and desire to become successful performs in a motivated manner. Extrinsic motivation means an employee is motivated by external factors such as incentives, bonus, promotion, rewards and other rewards. There are different theories and models regarding employee motivation such as Maslow's Hierarchy of Needs.

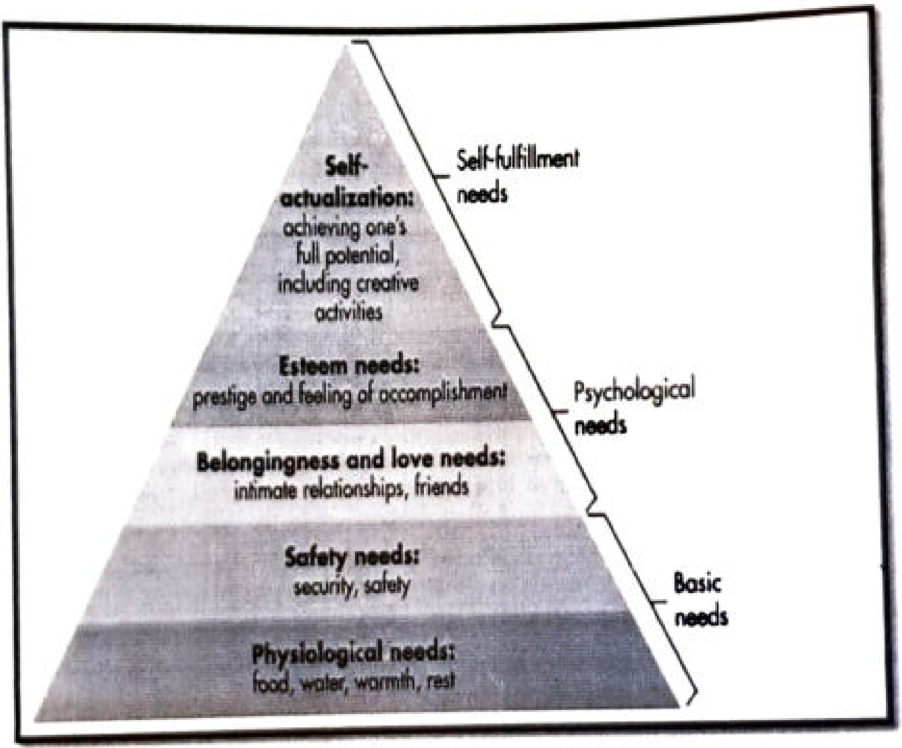


Figure 1: Maslow's Hierarchy of Needs (11)

Figure above displays diagram of Maslow's Hierarchy of Needs that includes five components such as self-actualization, esteem needs, belongingness and love need, safety needs and physiological needs. Physiological needs are considered as biological requirement of employees that include but not limited to things that they need for survival such as food, drink, shelter, clothing and sleep (12). Once physiological needs are fulfilled then employees opt for safety needs such as emotional security, financial security and job security. When physiological needs and safety needs are fulfilled, employees look for love and belongingness need in a workplace. In a workplace, if teamwork is promoted and factors such as friendship, intimacy, trust and acceptance are there then belongingness and love need of employees and fulfilled (13). Esteem needs of employees include dignity, accomplishment, independence and desire for reputation of respect from colleagues. Last but not the least; self-actualization needs include an employee's needs connected to personal growth and higher level of working experience (14). If all these needs are fulfilled then an employee feels motivated while working in an organization.

Research Method

Mostly, this research collected secondary data from journals, articles, books and websites to fulfill first three objectives. However, fulfill the fourth objective, this research collected primary data from 65 random employees of Amazon. However, 15 incomplete responses were found and therefore, 50 complete responses were considered in this research work. While collecting primary data this research followed random sampling method and followed Data Protection Act 2018.

Impact of transformational leadership on organizational performance through employee motivation

Transformational leadership of Jeff Bezos

According to (7) some common principles of transformational leadership are simplification, motivation, facilitation, innovation, mobilization, preparation and determination.

If Jeff Bezos is considered in terms of motivation, he always works hard to get people on-board. He always provides personal attention to the employees and love to create personalized solution to employee problems which is similar to individualized consideration component of transformational leadership. Jeff Bezos implemented a unique vision in the workplace called as "work hard, have fun and make history." This vision is injected in every employee organization and Jeff Bezos himself follow this motto to motivate his employees to do the same. It shows Jeff Bezos also follows idealized influence.

In terms of facilitation, Jeff Bezos strongly focuses on training and development of its employees. For example, Jeff Bezos has decided to invest $1.2bn by the year of 2025 to train more than 300,000 of its U.S employees. This plan is called as up-skilling 2025. Besides, the organization under the command of Jeff Bezos is also providing full college tuition fees for frontline employees.

If mobilization is considered then it can be stated that transformational leaders empower other leaders and subordinates when facing turmoil situations. Jeff Bezos strongly trusts his subordinate called Jeff Wilke who is famous on Amazon for his cerebral and impatient management style. In this manner, Jeff Bezos is putting his trust on these subordinates, which is helping those employees to put their trust on Jeff. Not only that, Jeff is also continuously challenging those subordinates to perform their tasks in a creative manner that is similar to intellectual stimulation component of transformational leadership.

If Innovation is considered then it is Jeff Bezos that ensured that Amazon could present itself as a highly innovative organization in the industries where it operates. Amazon Prime, Prime Now, Prime Air, One-Click Purchase, Alexa and Kindle are only some examples of innovation that Jeff Bezos instilled in the organization. Through these innovative ideas, Jeff complete changed Amazon's performance and activities; connected with changing consumer trends. In this manner, Jeff Bezos connected mission, vision and goals of the organization with consumer trends and preferences. This entire analysis fulfills the second objective developed in introduction, "To find out how Jeff Bezos follows transformational leadership."

Employee Motivation in Amazon

One of the biggest strategies through which Amazon motivates its employees is its Amazon Career Choice Option. Through this option, the organization is paying 95% of up to $12,000 tuition fees of its employees (15). It is only allowing employees to learn new skills but is also helping them to secure their job and acquiring career growth in Amazon. Besides, Amazon is also investing in courses such as aircraft mechanics, computer-aid design, machine tool technologies and medical lab technologies of its employees. Then there is Amazon Upskilling Program that is already mentioned above. As part of Upskilling 2025, Amazon continues to launch new training opportunities and expand on existing programs for employees across the U.S., including (15), AWS Grow Our Own Talent: It provides on-job-training and placement chances to Amazon workers with non-traditional backgrounds (15).

Surge2IT: It is developed to provide assistance to entry level IT workers across the organization's operation network. It helps those employees to opt for higher-paying technical roles in the organization (15).

UXDR Apprenticeship Program: This program includes instructor-led training and practical experience throughout one year (15). This training program is responsible for offering employees the chance to learn and establish new skills on different teams across Amazon that include Prime Video, Alexa, AWS and Amazon Fashion.

Amazon Technical Academy: It is simply a training and job-placement program, which allows non-technical employees of the organization to learn technical skills and competencies (15). Through this, Amazon employees from non-technical background can thrive in software engineering careers.

These training programs allow Amazon employees to acquire job security that is relevant to security needs of Maslow's Hierarchy of needs; that in turn is motivating employees to work for Amazon (15). Jeff Bezos develops all these programs with the help of its subordinates and different stakeholders. Therefore, through these programs, Jeff Bezos is triggering employee motivation in Amazon.

Along with these programs, Amazon is providing $15 per hour wage, which is double the national minimum wage (15). Amazon is also allowing its employees to buy Amazon stock through financial counseling and estate planning services. The higher amount of wage is fulfilling physiological needs of the employees. Then there is Amazon Care that is 24/ medical service for Amazon employees (15). It is a virtual clinic, through which employees can get nurses to visit them in their home for taking care of them or their family members. Then there is Childcare program through which Amazon employees have access to two million caregivers. Amazon also offers twenty weeks of parental leave to birth mothers and six weeks for parents who adopt.

Through these programs that are the brainchild of transformational leader, Amazon is trying to motivate its employees.

Last Five Year's Financial Performance of Amazon

In 2020, Amazon made a profit of $26.9bn, which is considered as higher than past 3 years.

In the year of 2019, Amazon made a profit of $24.7bn. This was due to the fact that its net sales increased by 44% and reached to $108bn.

In the year of 2018, the profit of Amazon was $22.6bn, which was up by 35% from the previous year, which means, in 2017 the organization made profit of $16.36bn (17).

In the year of 2016, Amazon's revenue was $136bn and its net income increased by almost 300% (16).

Therefore, it can be seen that year by year, Amazon has only made increased profits since the past 5 years. Therefore, a relationship can be developed that states Amazon is continuously improving its performance due to the fact that its employees' performance is improving regularly as they are feeling motivated because of different strategies of Amazon. It fulfills the objective that higher motivation of Amazon's employees is increasing its performance. Now, whether transformational leadership is responsible for employee motivation in Amazon or not; primary data is collected and displayed below.

TABLE I. Impact of transformational leadership on Amazon's financial performance via employee motivation

Questions	Options	Responses	Total number of employees
What is your age?	18-20	8	50
	21-25	12	50
	26-35	15	50
	Over 35	15	50

What is our gender?	Male	34	50
	Female	16	50
How Long are You working in Amazon?	Less than one year	17	50
	1-5 years	23	50
	6-10 years	5	50
	Over 10 years	5	50
Are you familiar with the concept of transformational leadership?	Yes	49	50
	No	1	50
Do you think Jeff Bezos follows transformational leadership?	Yes	46	50
	No	2	50
	May Be	2	50
Do you think transformational leadership is motivating you to perform better in Amazon?	Yes	39	50
	No	2	50
	May Be	9	50
What parts of Jeff Bezon's transformational leadership is motivating you?	Focusing on employee training and development	8	50
	Motivating employees to think and act innovatively	8	50
	Bringing regular changes in employee benefits	9	50
	Leading through unique vision	11	50
	Allowing and motivating employee participation in decision making	14	50

Graphical representations of the answers of the participants that are showcased in the table above are shown through appendix 1, appendix 2, appendix 3, appendix 4, appendix 5, appendix 6 and appendix 7. If the most important questions are analyzed then it can be found that most of the participants are familiar with transformational leadership style and most of the believe that Jeff follow this leadership style. Most importantly, 39 participants stated that leadership style of Jeff is motivating them to perform in a better manner. It fulfills another objective "To identify how employee motivation is playing a mediator role between transformational leadership of Jeff Bezos and Amazon's organizational performance" as participants are being motivated by Jeff's transformational leadership style which is improving their performance. Therefore, it can be concluded that employee motivation, through transformational leadership is improving employee performance, which is automatically increased organizational performance of Amazon. Most of the participants (11 and 11) like how Jeff leads through vision and how he motivates employees to take part in decision-making process.

Conclusion

In the end, it can be concluded that transformational leadership style of Jeff Bezos is triggering employee motivation in Amazon, the leading online retailer around the world. Now, those motivated employees are working harder and working to improve their performance on a daily basis. This improved performance of the employees is helping Amazon to increase its profitability and revenue generation from past 5 years. While other retailers are struggling to maintain profit, though mediating role of employee motivation, Jeff Bezos through his transformational leadership is ensuring higher profits for Amazon.

Future scope of the research

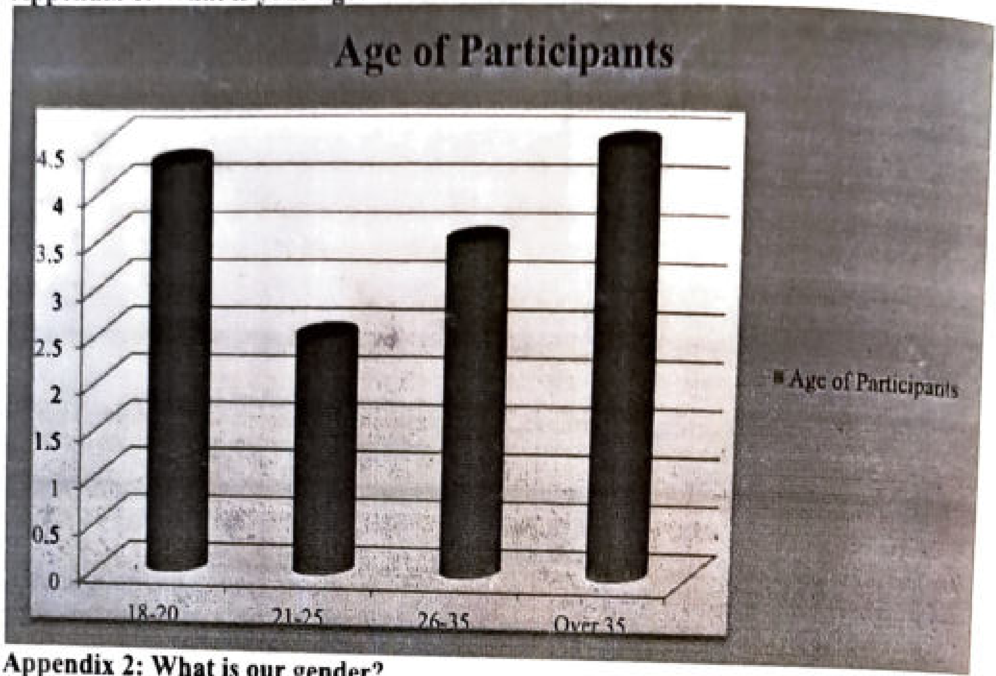
Due to lack of time and word count, it was possible to collect data from only 50 completed responses. Considering the topic, it was required to collect at least 500 responses. It was also required to collect qualitative data through conducting interviews with Jeff Bezos. Therefore, in the future, this research can be conducted again by eliminating these limitations.

References

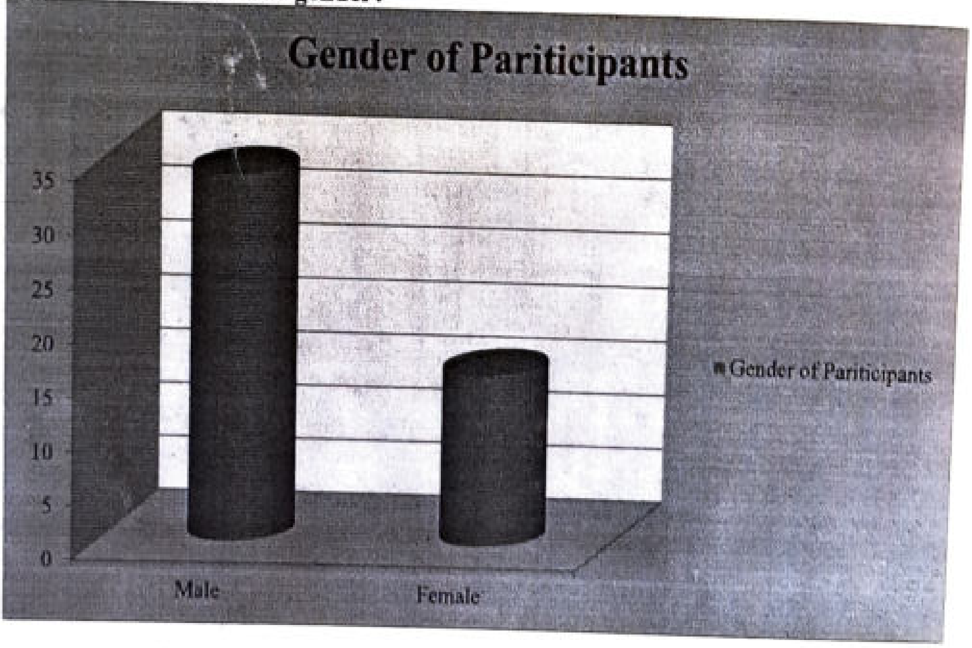
1. Schneider, K.T., Wesselmann, E.D. and DeSouza, E.R., Confronting subtle workplace mistreatment: The importance of leaders as allies. *Frontiers in Psychology*, *8*, p.1051, (2017).
2. Caldwell, C., Lakota virtues and leadership principles: insights and applications for ethical leaders. *Journal of Management Development*, (2017).
3. Hickman, L. and Akdere, M., Effective leadership development in information technology: Building transformational and emergent leaders. *Industrial and Commercial Training*, (2018).
4. Chestnut, B., *The 9 types of leadership: mastering the art of people in the 21st century workplace*. Simon and Schuster, (2017).
5. Kilicoglu, D., Understanding Democratic and Distributed Leadership: How Democratic Leadership of School Principals Related to Distributed Leadership in Schools?. *Educational policy analysis and strategic research*, *13*(3), pp.6-23, (2018).
6. Anderson, M., Transformational leadership in education: A review of existing literature. *International Social Science Review*, *93*(1), p.4, (2017).
7. Arthur, C.A., Bastardoz, N. and Eklund, R., Transformational leadership in sport: Current status and future directions. *Current Opinion in Psychology*, *16*, pp.78-83, (2017).

8. Hansbrough, T.K. and Schyns, B., The appeal of transformational leadership. *Journal of Leadership Studies*, *12*(3), pp.19-32, (2018).
9. Harb, B. and Sidani, D., Transformational leadership for organizational change in the Lebanese public sector. *Problems and Perspectives in Management*, *17*(2), pp.205-216, (2019).
10. Lee, Y.D. and Kuo, C.T., PRINCIPALS'TRANSFORMATIONAL LEADERSHIP AND TEACHERS'WORK MOTIVATION: EVIDENCE FROM ELEMENTARY SCHOOLS IN TAIWAN. *International Journal of Organizational Innovation*, *1*(3), (2019).
11. MADAN, S., MOVING FROM EMPLOYEE SATISFACTION TO EMPLOYEE ENGAGEMENT. *CLEAR International Journal of Research in Commerce & Management*, *8*(6), (2017).
12. Oved, O., Rethinking the place of love needs in Maslow's hierarchy of needs. *Society*, *54*(6), pp.537-538, (2017).
13. Hopper, E., Maslow's Hierarchy of Needs Explained. *ThoughtCo. ThoughtCo*, *24*, (2020).
14. Guo, J., Weng, D., Zhang, Z., Liu, Y. and Wang, Y., March. Evaluation of Maslows Hierarchy of Needs on Long-Term Use of HMDs–A Case Study of Office Environment. In *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 948-949). IEEE, (2019).
15. aboutamazon.com, *Our Upskilling 2025 programs*. [online] US About Amazon. Available at: <https://www.aboutamazon.com/news/workplace/our-upskilling-2025-programs> [Accessed 23 September 2021], (2020).
16. digitalcommerce360.com, *Amazon grows sales 27% in 2016 and is increasingly profitable*. [online] Digital Commerce 360. Available at: <https://www.digitalcommerce360.com/2017/02/02/amazon-grows-sales-27-2016-increasingly-profitable/> [Accessed 23 September 2021], (2017).
17. digitalcommerce360.com, *Amazon sales, Amazon revenue and Amazon annual profits*. [online] Digital Commerce 360. Available at: <https://www.digitalcommerce360.com/article/amazon-sales/> [Accessed 23 September 2021], (2018).

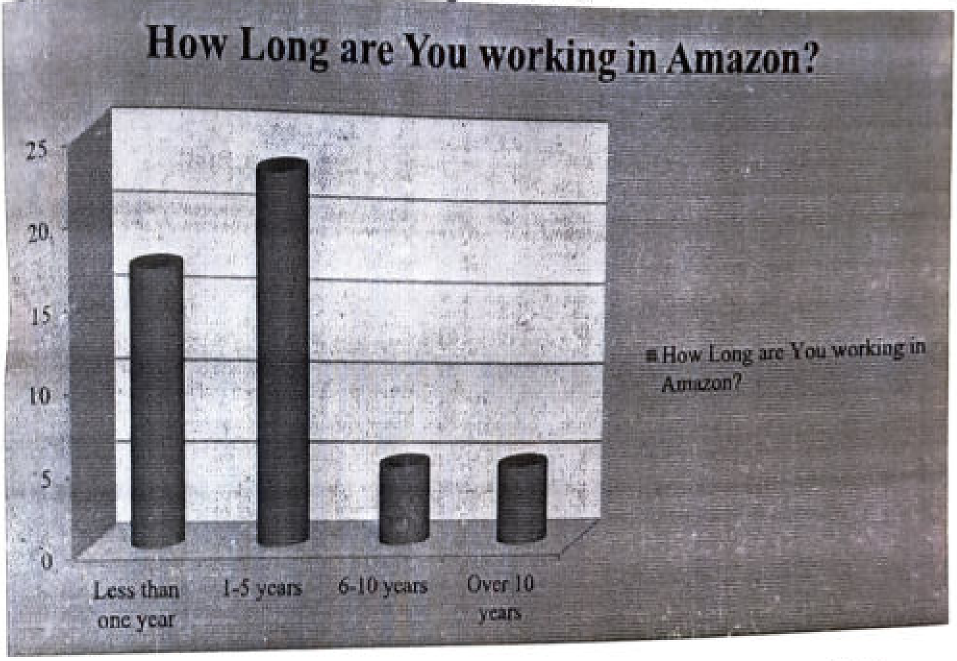
Appendix 1: What is your age?



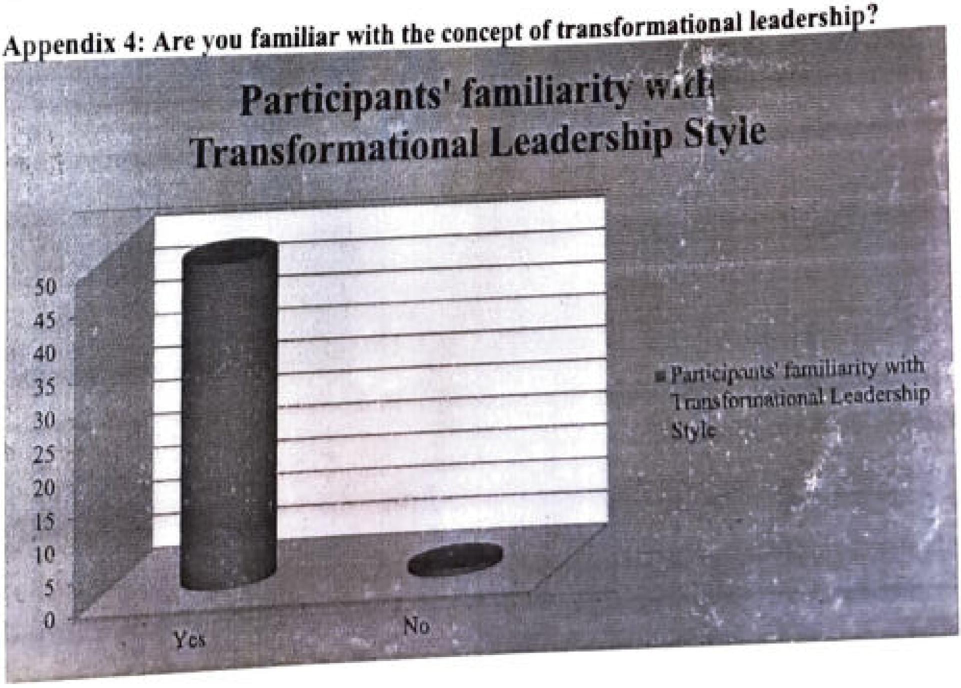
Appendix 2: What is our gender?



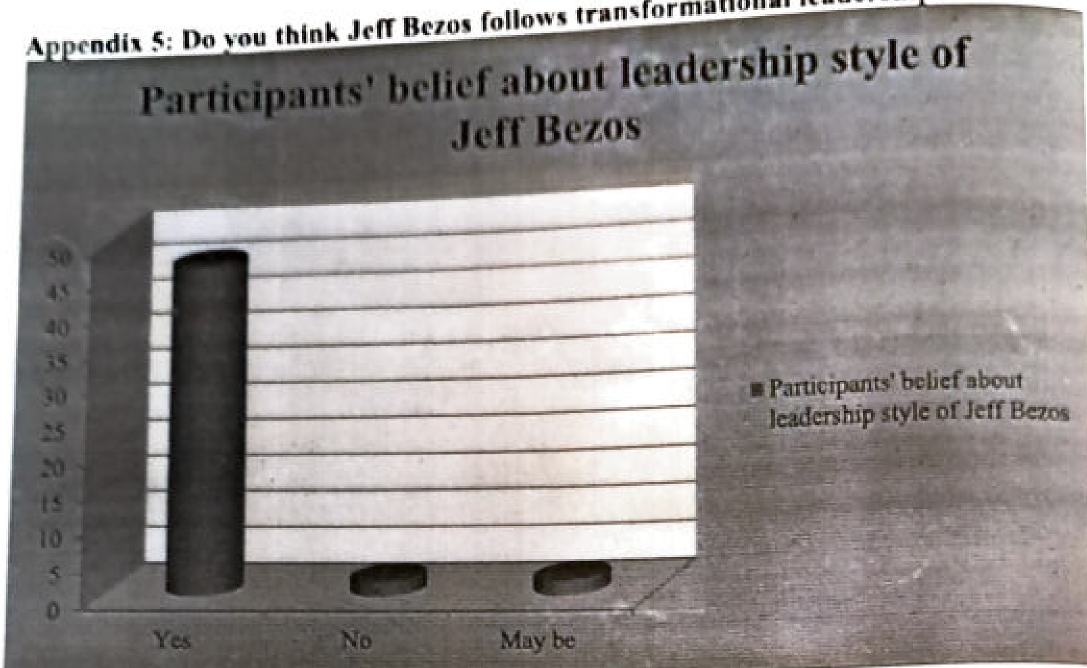
Appendix 3: How long are you working in Amazon?



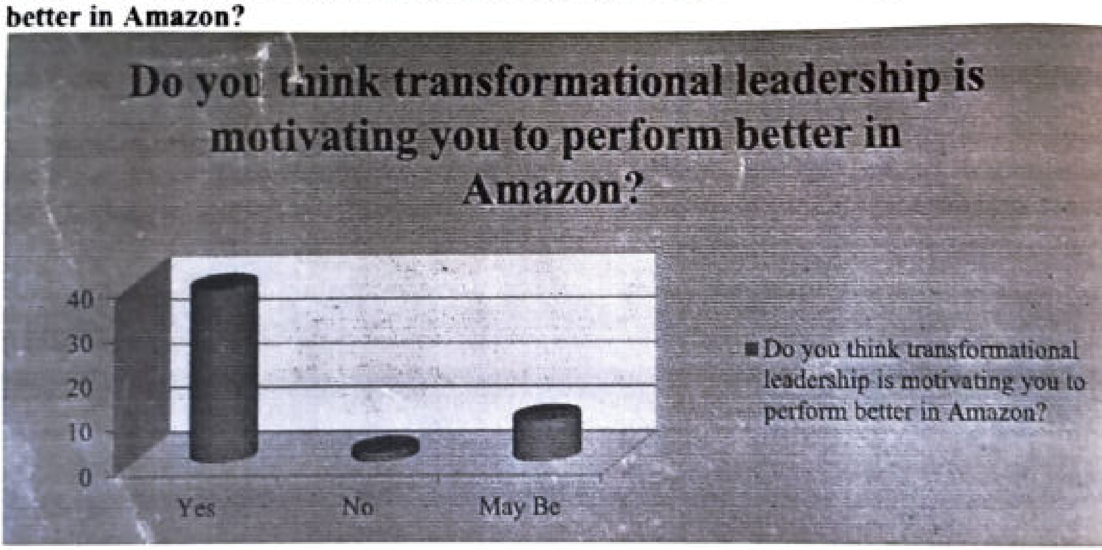
Appendix 4: Are you familiar with the concept of transformational leadership?



Appendix 5: Do you think Jeff Bezos follows transformational leadership?



Appendix 6: Do you think transformational leadership is motivating you to perform better in Amazon?



Appendix 7: What parts of Jeff Bezon's transformational leadership is motivating you?

3.2.1

ECS Transactions

The Electrochemical Society

ISSN- 1938-5862

Effect of E-Learning on the Academic Achievement of Students

ECS Transactions, 107 (1) 9957-9966 (2022)
10.1149/10701.9957ecst ©The Electrochemical Society

Effect of E-Learning on the Academic Achievement of Students

Keerthi Kumar N[a], Shaifali Garg[b], Vijayalakshmi N.S[c], Korakod Tongkachok[d]

[a] Department of Mechanical Engineering, BMS Institute of Technology and Management, Bangalore, keerthikumarn@bmsit.in
[b] Institute of business management, GLA University, shefali.garg@gla.ac.in
[c] Department of Economics, Nehru Memorial College, Sullia, drvijayalakshmins@gmail.com
[d] Faculty of Law, Thaksin University, Thailand, tokorakod@tsu.ac.th

E-learning has become one of the most debated concepts in today's global education industry. While some speak in favour of e-learning, others criticize e-learning and state that it cannot cultivate better results compared to traditional learning. In today's Covid situation, e-learning has become necessary for universities around the world, this research has once again focused on this topic to identify whether e-learning can positively influence the performance of students or not. While identifying the same, three factors are selected that are technical competency, e-learning standards and e-learning infrastructure. After collecting data and information from existing empirical research works, it was found that e-learning can cultivate positive results in terms of student's performance in different universities and classes. However, it was found that for that positive performance, technical competency must be high and the standard of materials shared through e-learning must be effective enough. In terms of infrastructure, contradictory results are found as one research work stated that it is not vital for improved performance while the other stated that it is important for better academic performance. Overall, this research identified that e-learning can increase academic performance with the right tools and techniques implemented with it.

Keywords: e-learning, ICT infrastructure, information and communication technology, inductive research approach.

Introduction

Information and communication technologies, vastly known as ICTs are providing significant opportunities for online education and training. According to Suresh *et al.* (1), e-learning can facilitate collaboration and creativity for individuals and organizations. However, Rasheed *et al.* (2) raised questions that e-learning can be problematic for students as the absence of a traditional school/class alike environment can affect their concentration and learning process. On this topic, several scholars and researchers have provided different comments and judgments. Where some supported e-learning in not only schools but also in higher education studies is required for better knowledge sharing, some has strongly countered it by saying e-learning cannot provide proper education and it would further affect the performance of the students. Based on this controversy, this research intends to identify where e-learning is capable of improving the performance of the students or not.

After the spread of Covid-19, lockdowns have become a regular part of the lives of residents living in different nations across the world. In this situation, implementing e-learning has become necessary instead of a luxury. Universities and schools around the world are now forced to conduct online classes to ensure education remains uninterrupted during lockdowns (3). Even, online exams are now conducted to maintain the efficiency of the education systems around the world (4). In this situation, the argument and counterarguments related to e-learning are again triggered. Now, until now online classes or e-learning has not created any problem for the students or their parents as today's digital technologies have made it easier to connect with anyone using laptops or even smartphones. The question is whether e-learning is improving the performance of the students or not? If the answer to this question is found then even small universities in underdeveloped nations that are currently wondering whether to implement e-learning or not will be able to take the right decision regarding it. Besides, De-Marcos *et al.* (5) has presented some major challenges as he stated that the success of e-learning depends on several factors such as technical competency, the standard of e-learning service and reliable infrastructure. Therefore, this research will also identify whether the absence of these factors would actually influence the performance of the students during e-learning or not.

This research aims to discover out whether e-learning can improve the performance of students or not. While following this aim, this research will also focus on some other factors connected to e-learning such as technical competency, the standard of e-learning and reliable infrastructure.

- To identify the impact of e-learning on the performance of students
- To analyze the impact of technical competency (in e-learning) on the performance of the students
- To analyze the impact of e-learning standards on the performance of the students
- To analyze the impact of reliable infrastructure (of e-learning) on the performance of students
- What is the impact of e-learning on the performance of students?
- What is the impact of technical competency (in e-learning) on the performance of the students?
- How of e-learning standards influence the performance of the students?
- How reliable infrastructure (of e-learning) can influence the performance of students?

Structure of the Research

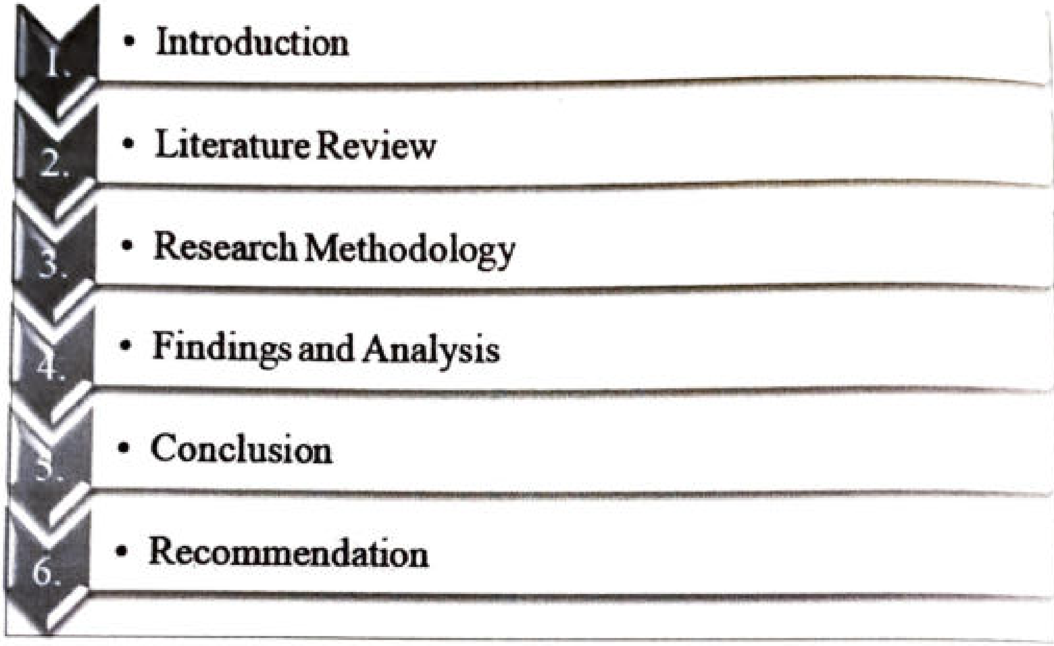


Figure 1: Research Horizons

Literature Review

Concept of e-learning

E-learning is considered as a method dependent on technology, association and supervision which bestow upon the students the capability to learn through the internet and facilitate their learning. According to Jimenez (6), e-learning utilizes telecommunications technology to acquire information to accomplish all the relevant reaching and learning objectives. On the other hand, Islam (7) has defined e-learning as the attainment of the distributed knowledge using electronic devices. Overall, e-learning means using different systems such as computers, the internet, multimedia disks, virtual newscasts, smartphones and others to provide education. It allows students to acquire education while staying at home.

When there was no internet, distance learning-related courses were offered to ensure students can acquire particular skills and competencies. For example; during the 1840s, Isaac Pitman taught his students shorthand through correspondence. In the year of 1924, a testing machine was first launched that helped students to evaluate themselves. In the year of 1954, BF Skinner who was a professor at Harvard introduced a teaching machine that allowed educational organizations to administer programmed directions to their students. The initial computer-based training system was invented during the 1960s. This was called a computer-based training program. It was also known as PLATO-Programmed logic for Automated Teaching Operations. This was introduced for the students of Illinois University, however; later several other educational organizations started to use it.

With the introduction of computers and the internet, e-learning tools and methods were evolved significantly in the late 20th century. The very first MAC that was introduced during the 1980s allowed people to acquire personal computers. It made it easier for them to learn different subjects or to acquire particular skills from their homes. During the early 1990s, numbers of educational institutes began to distribute courses online only that brought education to many people who would not beforehand have been able to be present at college due to geological issues or time constraints (8). During the 2000s, business organizations started to use the concept of e-learning to train their employees. Seeing the benefits of e-learning such as cost-effective, more fun, elimination of boundaries and zero restrictions, several well-renowned universities around the world has started to provide online studies for a student sitting in other nations or continents. E-learning can be performed using different methods and strategies. Some of those methods are hereby mentioned below.

- E-learning through face-to-face communication
- E-learning where tutor is not present or communication with tutor is not applied. This type of e-learning is known as self-learning.
- E-learning method where tutor is not physically present but is guiding the student through e-communication known as asynchronous
- E-learning process where tutor is virtually present for example through video call and communication with the student is taking place, known as synchronous
- E-learning with presence of tutor and with the presence of e-communication (known as blended/hybrid synchronous)

Impact of e-learning on the performance of the students

In terms of the impact of e-learning on the performance of students, different researchers have provided different views. For instance, according to Tan and Shao (9) e-learning minimizes the capability of the students in terms of what is being trained or delivered. They also stated that there are some significant dissimilarities between normal face-to-face learning and e-learning as face-to-face learning allows students to grasp any concept in a better manner. Similar views were presented by Kokoç and Altun (4). Through their research, they identified that online education or teaching negatively impacts on academic performance of the students. On the other hand, Aboderin (10) provided opposite views and stated that using video conferences and telecommunication services for k-12 academic students can cultivate effective results. He conducted a quantitative study and identified that in terms of outcomes, there is not much difference between e-learning activities and traditional face-to-face methods. Kumari *et al.* (11) have also argued in the favour of e-learning and stated that e-learning can have an affirmative impact on the academic performance of the students. Tawafak *et al.* (12)

identified that students who e-learn can accomplish the same level of performance equal to face-to-face teaching methods.

Despite the fact that these research works provide some valuable insight about e-learning and its impact on the performance of the students, most of these research works completely depended on the collection of secondary data. Even, most of the research works did not even consider collecting information from previous empirical studies. Besides, all these research works only focused on finding whether e-learning provides positive performance or negative performance and failed to provide reasons for that. For example, if research identifies that e-learning provides positive performance then why? On the other hand, if e-learning provides negative performance then why? These are the research gaps that must be eliminated to reach a suitable research outcome.

Barriers to e-learning

Existing literature states some major points that display that e-learning despite being a phenomenal concept is not without challenges, for example, as mentioned by Misopoulos *et al.* (13) using advanced technologies cannot guarantee expected results or benefits from e-learning. They stated that the triumph of e-learning completely depends on the motivation of the tutor and the learner or the motivation of the learner only (in terms of self-learning). However, Tawafak *et al.* (14) criticized this view and stated that learner motivation is also required in face-to-face learning as without motivation even traditional learning approaches cannot cultivate expected results. Vanitha *et al.* (15) stated that the major issue with e-learning is the absence of a classroom environment that can de-motivate learners. Barriers to e-learning are most significant in developing nations such as India. In countries like India, due to high familiarity with the traditional education environment, parents do not trust the e-learning process. On the other hand, guideline related to online courses or programs in India was developed in 2018, only three years ago. The guideline is known as UGC Regulations 2018. As a result, it is still a new format for educational organizations and students. On the other hand, to ensure uninterrupted e-learning classes, high bandwidth internet is required which is not present in most of the rural areas of India that is preventing students from rural areas to acquire the benefits of e-learning.

Research Methodology

Research Philosophy

Among different research philosophies such as positivism, realism, objectivism, constructivism, pragmatism and Interpretivism, this research has followed positivism research philosophy. Positivism research philosophy is used in research works where research questions and/or hypotheses are created to reach the desired outcome (16). On the other hand, positivism can be used in research works where existing theories or concepts can be used. In this particular research work, research questions are developed regarding e-learning. Besides, existing theories, concepts and knowledge about e-learning are enough to meet research objectives and aims developed here. That is why; it was decided to follow positivism philosophy.

Research Approach

Inductive and deductive are two types of research approaches. The inductive research approach is used in research works where the goal is to create new theories following a particular topic. On the other hand, the deductive approach that is connected to positivism helps researchers to use existing theories and concepts to meet research objectives (17). In this research, to find out the impact of e-learning on the performance of students, following and analyzing existing concepts of e-learning is enough and thus development of new theories is not required. That is why; the deductive approach is followed in this research work.

Research Strategy

Some useful and effective research strategies that can be used in research work are experiment, survey, case study, action research, grounded theory, ethnography and archival research. This research has followed the archival method due to lack of time and Covid.

Research choice

Three types of research choices are mono-method, mixed-method and multi-method. The mixed-method means collecting both qualitative and quantitative data to meet research aims and objectives. In the mono method, either quantitative or qualitative data is acquired. In the multi-method, both qualitative and quantitative data is collected however, a researcher only focuses on only one type of data for analysis purposes. This research has followed qualitative data as statistics and findings from other empirical research works are collected to meet the objectives developed above.

Time-horizons

Cross-sectional and longitudinal are two-time horizon methods. In a cross-sectional time, horizon, it is possible to collect both qualitative data and quantitative data. This method mainly assists a researcher to observe and analyze the attitudes of a group of people. On the other hand, the longitudinal method helps a researcher to use the qualitative method and quantitative method to analyze events and behavior for a longer amount of time.

This research has followed a cross-sectional time horizon. First of all, due to lack of time, it was not possible to research for a long time. On the other hand, through the cross-sectional method, it was possible to analyze the behavior of the students in terms of using e-learning methods.

Techniques and procedures

This research has followed the secondary data collection method instead of the primary data collection process. For a better collection of reliable data, conducting primary analysis was necessary. However, due to Covid, it was not possible to conduct face-to-face interviews. Due to a lack of time and expertise, it was not possible to create a questionnaire to collect quantitative data from a large sample size. In terms of secondary data,

Analysis and Discussion

Impact of technical competency, e-learning standards and reliable infrastructure:

Franklin and Nahari (18) conducted an empirical study in the King Khalid University that is a famous public university located in Abha, Saudi Arabia. This research intended to find out how e-learning can boost the academic purpose of the students of the King Khalid University. While performing empirical research, data was collected from 163 respondents. A total of 8 hypotheses were developed in this research work where the focus was given on factors such as technical skill, real-time lecture, recorded lecture, collaborative methods, online support, quality standards, reliable infrastructure and acceptance for online teaching and their impact on academic performance (19). The collected data were analyzed in three steps. In the first step, exploratory factor analysis was performed to assess the variability of the items. The second step included the evaluation of the reliability of the data using Cronbach's alpha. In the third step, structural equation modeling was performed using AMOS and the maximum likelihood was selected as a process of parameter estimation (19). After analyzing the collected data, hypotheses 1, 2, 3, 4 and 9 were rejected. However, hypotheses such as acceptance for online teaching and technical competence were accepted. It means the research shows that acceptance of students or their parents in terms of online teaching and technical competency of the teachers and the students influence academic performance. From the literature review, it was found that in developing nations like India, online teaching or e-learning is a new concept and therefore, acceptance is low. Besides, as it is a comparatively new concept, tutors aged above 50 who are not good at handling advanced technologies are not completely competent in handling technologies needed for e-learning. Therefore, in these nations, e-learning might have issues while ensuring positive academic performance. From this research, it is found that e-learning can ensure effective academic performance however, these factors (acceptance for online teaching and technical competence) must be present. Surprisingly, this study stated that e-learning infrastructure cannot influence academic performance in e-learning.

Another research was conducted at Strathmore University located in Kenya. In this research, information was collected from 50 students through survey questionnaires. From the responses, it was found that 61% of the participants approved that e-learning is capable of better teaching, idea gathering and learning. On the other hand, 63% of the participants stated that e-learning helped them to accomplish course objectives (19). However, participants raised questions regarding the materials that were provided. For

example, 53% of the participants stated that e-learning could not provide practical knowledge (19). Now, from this, it can be considered that e-learning is capable of ensuring better academic performance however, shared material and its quality provides a major impact on it. It means, e-learning standard if poor can affect performance, however, if strong can cultivate better academic performance.
Another research was conducted by Zolochevskaya *et al.* (20) where data was collected from 150 studies conducted by Russian educational institutes. The acquired data revealed that the absence of effective ICT facilities could significantly affect the learning and performance of the students to a considerable degree. It means if a university does not have a proper ICT infrastructure, then it will not improve the academic performance of the students.

Conclusion

The reason of this research study was to discover out whether e-learning can advance the academic performance of students or not. Besides, this research also intended to identify whether technical competency, e-learning standard and infrastructure can influence performance or not. By collecting existing information from some of the empirical results, interesting outcomes were found. For example, one study confirmed that technical competency can influence academic performance in e-learning. However, this study also stated that infrastructure should not affect e-learning. However, later another study mentioned that ICT infrastructure, if good, can ensure good academic performance only. Therefore, contradictory results were found in terms of infrastructure. Another research confirmed that e-learning standards such as shared materials have a direct impact on performance.

A major limitation of this research was not collecting primary data from a particular university and its students. In the future, this research can be conducted again by collecting responses from students from a particular or from different Indian universities.

Recommendation

From the entire research works, based on the findings, the following recommendations can be provided to the universities that already have e-learning facilities and to the universities that are planning to introduce e-learning facilities in the future.

- Despite the fact that contradictory findings were there regarding e-learning infrastructure; it is recommended that universities should develop effective, secure and easy-to-use ICT infrastructure so that learning through online portals can become easier for the students.
- The focus of the universities should be to share practical knowledge with the students at the time of e-learning as sharing theoretical knowledge only will not cultivate better performance.

- In terms of technical competency, teachers must be provided with proper and in-detailed training so that they can operate all the features regarding e-learning technology to provide better knowledge to the students. Every university that has or is planning to introduce e-learning must have a small technical team that would train and guide teachers and also students to use e-learning tools in an effective manner.

References

1. Suresh, M., Vishnu Priya, V. and Gayathri, R., Effect of e-learning on academic performance of undergraduate students. *Drug Invention Today*, *10*(9), (2018).

2. Rasheed, H.M.W., He, Y., Khalid, J., Khizar, H.M.U. and Sharif, S., The relationship between e□learning and academic performance of students. *Journal of Public Affairs*, p.e2492, (2020).

3. Ramdani, Y., Mohamed, W.H.S.W. and Syam, N.K., E-Learning and Academic Performance during COVID-19: The Case of Teaching Integral Calculus. *International Journal of Education and Practice*, *9*(2), pp.424-439, (2021).

4. Kokoç, M. and Altun, A., Effects of learner interaction with learning dashboards on academic performance in an e-learning environment. *Behaviour & Information Technology*, *40*(2), pp.161-175, (2021).

5. De-Marcos, L., García-López, E., García-Cabot, A., Medina-Merodio, J.A., Domínguez, A., Martínez-Herráiz, J.J. and Diez-Folledo, T., Social network analysis of a gamified e-learning course: Small-world phenomenon and network metrics as predictors of academic performance. *Computers in Human Behavior*, *60*, pp.312-321, (2016).

6. Jimenez, E., Contextualized-E-Learning Resource A Tool for Stronger Academic Platform. *Jimenez, EC (2020). Contextualized E-Learning Resource: A Tool for Stronger Academic Platform. International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, *4*(2), pp.110-116, (2020).

7. Islam, A.N., E-learning system use and its outcomes: Moderating role of perceived compatibility. *Telematics and Informatics*, *33*(1), pp.48-55, (2016).

8. Puška, E., Ejubović, A., Đalić, N. and Puška, A., Examination of influence of e-learning on academic success on the example of Bosnia and Herzegovina. *Education and Information Technologies*, *26*(2), pp.1977-1994, (2021).

9. Tan, M. and Shao, P., Prediction of student dropout in e-Learning program through the use of machine learning method. *International journal of emerging technologies in learning*, *10*(1), (2015).

10. Aboderin, O.S., A multidisciplinary study on the relationship between ICT literacy levels and academic performance of e-learners in an e-learning setting. *Journal of Management & Administration, 2019*(1), pp.1-23, (2019).

11. Kumari, P., Jain, P.K. and Pamula, R., March. An efficient use of ensemble methods to predict students academic performance. In *2018 4th International Conference on Recent Advances in Information Technology (RAIT)* (pp. 1-6). IEEE, (2018).

12. Tawafak, R.M., AlSideir, A., Alfarsi, G., Al-Nuaimi, M.N., Malik, S.I. and Jabbar, J., E-learning vs. traditional learning for learners satisfaction. *E-learning, 29*(3), pp.388-397, (2019).

13. Misopoulos, F., Argyropoulou, M. and Tzavara, D., Exploring the factors affecting student academic performance in online programs: A literature review. *On the line*, pp.235-250, (2018).

14. Tawafak, R.M., Romli, A.B. and Arshah, R.B.A., February. E-learning Model for Students' Satisfaction in Higher Education Universities. In *2019 International Conference on Fourth Industrial Revolution (ICFIR)* (pp. 1-6). IEEE, (2019).

15. Vanitha, V., Krishnan, P. and Elakkiya, R., Collaborative optimization algorithm for learning path construction in E-learning. *Computers & Electrical Engineering, 77*, pp.325-338, (2019).

16. Alharahsheh, H.H. and Pius, A., A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), pp.39-43, (2020).

17. Azungah, T., Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*, (2018).

18. Franklin, U.E. and Nahari, A.A., The Impact of e-learning on academic performance: preliminary examination of King Khalid University. *DEVELOPMENT*, *7*(1), (2018).

19. Neema-Abooki, P. and Kitawi, A.K., Impact of E-Learning Strategy on Students' Academic Performance at Strathmore University, Kenya. *Makerere Journal of Higher Education*, *6*(1), pp.99-108, (2014).

20. Zolochevskaya, E.Y., Zubanova, S.G., Fedorova, N.V. and Sivakova, Y.E., Education policy: the impact of e-learning on academic performance. In *E3S Web of Conferences* (Vol. 244, p. 11024). EDP Sciences, (2021).