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**REPOSITIONING NIGERIA UNIVERSITY EDUCATION FOR PEACE AND NATIONAL SECURITY****Dr. Nzokurum Joy C.<sup>1</sup> and Agala Humphrey O.<sup>2</sup>**<sup>1</sup>Department of Educational Management, Faculty of Education, University of Port Harcourt, Nigeria<sup>2</sup>Department of Economics, Faculty of Social Sciences, Ignatius Ajuru University of Education, Nigeria**ABSTRACT**

*This paper examined repositioning Nigeria university education for peace and national security. A descriptive survey design was adopted for the study. The population of the study consisted of 2,585 lecturers of three (3) public universities in Rivers State. The sample size of 259 representing 10% was drawn from the population and the stratified sampling technique was used to identify the sample size. The instrument titled: 'Repositioning Nigeria University Education for Peace and National Security Questionnaire'(RNUEPNSQ) was used. The instrument items were designed and validated by the researcher. The internal consistency was 0.82 using pearson moment correlation coefficient (r) to calculate the results. The finding revealed among others that the possible ways the university can be repositioned for peace and national security include: promotion of peace and security studies; harmonizing the minds of educated citizens on equality of humans in societal disorder; sanitizing the minds of students on avoiding being used by politicians in achieving their selfish aims; discouraging all forms of cult violence; refine the university system from all forms of corruption, bribery, nepotism and other vices; university body should partner with the security agencies for intelligence gathering; promoting quality education for industrial relevance and skills empowerment; teaching of nation building approaches and intervention to help curb/prevent security challenges; opening of more colleges/ universities for the armed forces. Based on the finding, the researcher recommended that the government of Nigeria should invest more on education instead spending so much on security by acquiring armory.*

*Keywords: University Education, Peace, National Security.*

**INTRODUCTION**

Nigeria as a nation is reported to be blessed by enormous human and natural resources. It is thought that the exploitation and utilization of these resources will no doubt enhance the development of the Nigerian nation but in spite of the exploitation, sales and generation of revenues, and other forms of utilization of these resources, Nigerian nation is bedevilled by serious crises of development. Fundamental to the emergence of the modern state is the need to cooperatively exploit the productive potentials available to a sovereign people towards the attainment of a qualitative standard of living. In the opinion of Aristotle in Nzelibe, Amobi and Emejulu (1996), the state originates for the sake of life and continues to exist for the sake of the best life. The state is usually assisted in this direction by a government. Wilson (1936) clearly asserts that government is the instrument of the state (and so for the people) by means of which the purpose of the state are sought to be realized.

There has been the tendency right from independence to view peace and national security in Nigeria as an exclusive domain of the coercive agencies of the government. In assessing security arrangements, greater focus has away been on internal security. In this respect, the main thrust of security was to suppress and repress the Nigeria people. This approach to national security is premised on the fact that security is always seen not from its causes but from its effects. Hence security has always come to be viewed from the criminality of the people and not what turns them into criminals. The usual answer to the crime level is to equip the coercive agencies, that is, the police and the military to deal squarely with the phenomenon. In the process the security becomes militarize.

Inability to use the appropriate tools in analyzing Nigeria's national security problems right from the colonial period till date is the reason for the difficulties in our national security. It is on this premise that this paper is looking out for how the educational system can support the effort of security agencies. This paper will focus on the thoughtful theme of "repositioning University Education" for a worthwhile goal of attaining peace and national security. Firstly, the word "repositioning" means to change or adjust the position of something, in an attempt to make it clearer. For instance, if you reposition a camera, you adjust it again to make the image clearer and better. The word reposition could also mean to change the emphasis or direction of something. This implies to concentrate attention or efforts on something different (an alternative) from the old approach or set of ideas used.

Therefore, to 'reposition university education' means to change or adjust the emphasis or direction of learning from what it is; to a different approach that will lead to the attainment of worthy goals which will enhance peace and progress. Thinking in the direction of the concept to 'reposition university education'; it means that the

current education system lacks what it takes to address the insecurity concerns of the nation and thus, must be adjusted or changed in terms of approach and content to meet the present needs of the society it serves. It is against this backdrop, that this paper seeks to explore the topic “repositioning university education for peace and national security.

The University education is simply education at the tertiary level of learning. It is where the highest form of learning occurs, which is geared towards meeting societal needs. The university is a community of scholars and students engaged in a complex task of learning, to which humanity looks up for overall human progress (Robert-Okah & Worlu, 2013). This definition tells us that human progress (i.e. proffering solution to man’s problems) is one major preoccupation of the university. On the otherhand, Okeke as cited in Orikpe (2013) defined education “as a process by which individuals are assisted formally through proper direction and guidance to develop their capacities for their own benefit and that of the society.” He added that education is geared towards developing the individuals for them to live effectively and efficiently in the society and to contribute to its advancement and upliftment.

Hence, through education the behaviour patterns of the citizens could be changed in the desired direction. In other words, with sound education people will start to understand and appreciate one another better and try to restore the dignity of man. Hence, we have to recognize the role education plays in equipping individuals with requisite knowledge and skills for survival and societal progress.

Oyibe and Oketa (2012) added that “education is a social process whereby the individual acquires skills and knowledge for successful living in a society”. Ogoh as cited in Ikwumelu, Oyibe and Eluu (2016) viewed education as the acquisition of knowledge for the benefit of the individual and society. It is a powerful phenomenon that influences man from day one to the last day. It also emphasizes knowledge, understanding and overall development of an individual and the society. Based on this development, the goals of education as stated in the National Policy of Education as cited in Ezeh (2017) are:

1. A free and democratic society
2. A just and egalitarian society
3. A united, strong and self-reliant nation
4. A great and dynamic economy
5. A land full of bright opportunities for all citizens.

Education is a veritable tool for social change, national integration and development. It is important to underscore that education is employed to shape politics, culture, family, economy among others. As the society is dynamic, and constantly changing and growing, education must follow suit. However, these noble goals of education cannot be achieved under a condition of insecurity.

#### **STATEMENT OF THE PROBLEM**

Nigeria is intermittently unsettled by sporadic ethnic and religious conflict leading to loss of human lives and valuable property. These armed conflicts are recorded because Nigeria is ethnically heterogeneous, and the three ethnic groups with different religion such as Christianity, Islam and African Traditional Religion (ATR) are constantly struggling for supremacy. All these have cast a spell of mutual suspicious and fear on Nigerians leading to accusation of marginalization against one another, a situation that has bred tension and insecurity that are threatening the continuity of just inaugurated Nigeria Seventh Republic.

Despite the internecine civil war which should have served sufficient lesson for non-recourse to violence as instrument for settling disputes, violence has continued to be employed in Nigeria as a tool for seeking redress from oppression and perceived alienation from the mainstream of politics and the economy, (Udoka, 2000). Indeed, these problems have become intractable and have rendered all proffered solutions insignificant. And these call for peace education instead of the use of barrel of gun and military strategies that have been without any hope for non-future occurrence.

The most perturbing phenomenon is that religion which preaches peace, and love, and therefore should be a powerful instrument for enhancing national security through conflict resolution in Nigerian states has itself become one of the major causes of conflict that result to insecurity in Nigeria. In support of the above assertion, Onwudiwe (2007) is of the view that, as at now, all the instruments devised after the Nigerian Civil War of 1967-1970 to return peace and cooperative living among Nigerians appear to have failed, creating an inciting atmosphere that another major conflict could occur and that may lead to the disintegration of our dear country Nigeria.

Recently, the emergence of hostage-taking, kidnapping and bombing activities by Islamic sectarian popularly known as Boko Haram, Bandith and Fulani Herdsmen revealed that all is not well with Nigeria in terms of security of lives and property. Though, this perplexing atmosphere currently hovering over Nigeria as earlier mentioned shows that Nigeria is not at peace or secured. It is our belief that repositioning of university education in the line of how to maintain peace and national security into Nigerian school curricula will help to defuse tension in the country and usher in a period of unparalleled peace and conflict-free society.

### **PURPOSE OF THE STUDY**

The aim of this study is to examine repositioning of Nigeria university education for peace and national security. Specifically the objectives of the study seek to:

1. Ascertain the fundamental root causes of insecurity in Nigeria.
2. Identify the consequences of insecurity to the Nigeria nations.
3. Determine possible ways the university can be repositioned for peace and national security.

### **RESEARCH QUESTIONS**

The following research questions guided this study:

1. What are the fundamental root causes of insecurity in Nigeria?
2. What are the consequences of insecurity to the Nigeria nation?
3. What possible ways can the university be repositioned for peace and national security?

### **RESEARCH HYPOTHESES**

**H<sub>01</sub>**. There is no significant difference between mean score rating of federal and state universities lecturers on the fundamental root causes of insecurity in Nigeria.

**H<sub>02</sub>**. There is no significant difference between mean score rating of male and female universities lecturers on the consequences of insecurity to the Nigeria nation.

**H<sub>03</sub>**. There is no significant difference between mean score rating of male and female universities lecturers on the possible ways the university can be repositioned for peace and national security.

### **METHODOLOGY**

Descriptive survey design was employed in the study. According to Nwankwo (2013), descriptive survey is a design in which the researcher collects data from the large sample, drawn from a given population and describes certain feature of the sample as they are at the time of study and which are of interest to the researcher without manipulating any independent variables of the study. The study sought the opinion of university lecturers on the repositioning of Nigeria university education for peace and national security. The population of this study was made up of all the three (3) public universities in Rivers State which are University of Port Harcourt (UPH) comprising twelve (12) faculties with one thousand four hundred and seventy-two (1472) lecturers (1151 males and 321 females); Rivers State University (RSU) comprising seven (7) faculties with six hundred and seventy four (674) lecturers (391 males and 203 females) and Ignatius Ajuru University of Education (IAUE) comprising six (6) faculties with four hundred and thirty-nine (439) teaching staff (319 males and 120 females). The total numbers of respondents were two thousand five hundred and eighty-five academic staff (2585) from all the three (3) public universities under study.

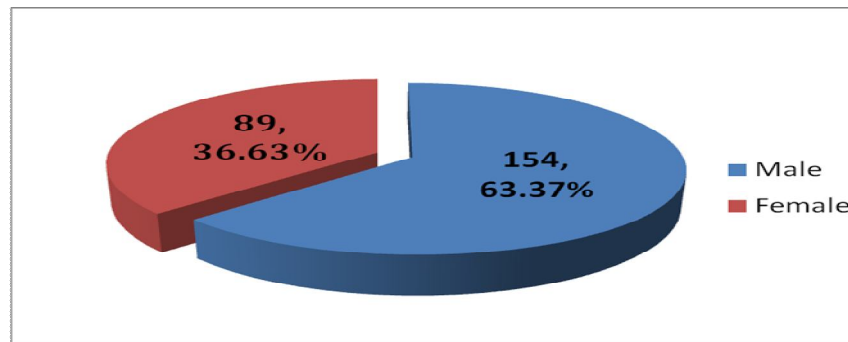
The sample size for this study was two hundred and fifty-nine (259) representing 10% of the entire population of academic staff of the public universities. Kpee (2015) considered such percentage appropriate to serve as an acceptable sample for a population running into thousands. The sample size comprised of 163 male and 96 female academic staff drawn using the proportionate stratified random sampling technique. This ensured that all members of the population are given equal opportunity of being selected. The instrument used titled 'Repositioning Nigeria University Education for Peace and National Security Questionnaire' (RNUEPNSQ). The instrument was structured with a four point modified Likert rating scale of Strongly agree (SA), Agree (A), Disagree (D) and Strongly disagree (SD) to elicit information from the respondents, and was validated. Using test-retest method, the reliability test was calculated with Person's Product Moment Correlation, which yielded an index of 0.82. Mean scores and standard deviation were used to answer the research questions, and z-test to test the hypotheses at 0.05 alpha significant level.

**RESULTS**

As part of data collection efforts, the researcher designed and distributed questionnaire items, which were given to 259 (i.e. 163 male and 96 female) respondents in the public universities in Rivers State. Two hundred and forty three (243) copies were retrieved and found suitable for analysis resulting in 94 percent response rate.

**Table-4.1.0: Distribution of Respondents by their Gender**

S/No	Status	Frequency	Percentage (%)
1	MALE	154	63.37
2	FEMALE	89	36.63
	<b>TOTAL</b>	<b>243</b>	<b>100</b>



From the above table and pie chart, 154 of the respondents were male academic staff representing 63.37% while the remaining 89 were female academic staff in the universities representing 36.63% of the total respondents.

**Research Question One:** What are the fundamental root causes of insecurity in Nigeria?

**Table 1: Weighted Mean and Rank Order Scores of Male and Female Respondents on the fundamental root causes of insecurity in Nigeria.**

S/N	Fundamental Root Causes of Insecurity in Nigeria	Male (n=154)		Female (n=89)		Mean set (x <sub>1</sub> x <sub>2</sub> )	Rank Order	Remark
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>			
1	Persistent poverty/unemployment.	3.30	0.67	3.31	1.76	3.31	2 <sup>nd</sup>	Agreed
2	Hunger and sudden rise in food prices.	2.90	1.11	2.91	1.13	2.91	5 <sup>th</sup>	Agreed
3	Lack of access to basic health care.	2.98	0.90	3.01	0.91	2.99	4 <sup>th</sup>	Agreed
4	Environmental degradation and resource depletion.	2.85	0.89	2.81	0.86	2.83	6 <sup>th</sup>	Agreed
5	Physical violence in all its forms.	2.66	1.08	2.66	1.09	2.66	8 <sup>th</sup>	Agreed
6	Inter-ethnic, religious and other identity-based tensions.	3.32	0.70	3.31	1.72	3.32	1 <sup>st</sup>	Agreed
7	Lack of rule of law and justice.	2.69	0.88	2.67	0.89	2.76	7 <sup>th</sup>	Agreed
8	Human rights violations	3.37	1.19	3.17	0.86	3.27	3 <sup>rd</sup>	Agreed
<b>Aggregate Mean/ Standard Deviation</b>		<b>24.07</b>	<b>7.42</b>	<b>23.85</b>	<b>9.22</b>	<b>23.96</b>		
<b>Average Mean/ Standard Deviation</b>		<b>3.01</b>	<b>0.92</b>	<b>2.98</b>	<b>1.15</b>	<b>2.99</b>		

Data on Table 1 show that all items (1-8) had weighted mean scores above the criterion mean of 2.50 and were adjudged on the fundamental root causes of insecurity in Nigeria. In summary, with an aggregate weighted mean of 2.99 which is above the criterion mean of 2.50, the respondents agreed that the fundamental root causes of insecurity in Nigeria include: persistent poverty/unemployment; hunger and sudden rise in food prices; lack of access to basic health care, environmental degradation and resource depletion; physical violence in all its forms; inter-ethnic, religious and other identity-based tensions; lack of rule of law and justice; and human rights violations. On the ranking, item 6 ranked first, followed by item 1 as second, item 8 as third, item 3 as fourth, item 2 as fifth, item 4 as sixth, item 7 as seventh and item 5 as eighth.

**Research Question Two:** What are the consequences of insecurity to the Nigeria nation?

**Table-2: Weighted Mean and Rank Order Scores of Male and Female Respondents on the consequences of insecurity to the Nigeria nation.**

S/N	Consequences of Insecurity to the Nigeria Nation.	Male (n=154)		Female (n=89)		Mean set ( $x_1x_2$ )	Rank Order	Remark
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>			
9	Insecurity drives foreign investors away from the state.	2.60	0.97	2.63	0.96	2.62	5 <sup>th</sup>	Agreed
10	It retards progress of economic activities.	2.56	1.11	2.66	1.19	2.61	6 <sup>th</sup>	Agreed
11	Rise in total capital outflow of both labour and investment outflow.	3.03	0.67	3.00	0.91	3.02	1 <sup>st</sup>	Agreed
12	Money meant for development is diverted to meet the cost of violence.	2.62	0.89	2.72	0.84	2.67	4 <sup>th</sup>	Agreed
13	Tourism potentials of the state are threatened.	2.58	1.18	2.87	1.09	2.73	3 <sup>rd</sup>	Agreed
14	Insecurity comes with devastating effect on psychological health of individual.	2.82	0.97	2.86	1.79	2.84	2 <sup>nd</sup>	Agreed
<b>Aggregate Mean/ Standard Deviation</b>		<b>16.21</b>	<b>5.79</b>	<b>16.74</b>	<b>4.99</b>	<b>16.48</b>		
<b>Average Mean/ Standard Deviation</b>		<b>2.70</b>	<b>0.97</b>	<b>2.79</b>	<b>1.13</b>	<b>2.75</b>		

Data on Table 2 show that all items (9-14) had weighted mean scores above the criterion mean of 2.50 and were adjudged on the consequences of insecurity to the Nigeria nation. In summary, with an aggregate weighted mean of 2.75 which is above the criterion mean of 2.50, the respondents agreed that the consequences of insecurity to the Nigeria nation include: driving away of foreign investors from the state; retardation of economic activities progress; rise in total capital outflow of both labour and investment outflow; diversion of money meant for development to meet the cost of violence, threat to tourism potentials of the state; and devastating effect on psychological health of individual. On the ranking, item 11 ranked first, followed by item 14 as second, item 13 as third, item 12 as fourth, item 9 as fifth and item 10 as sixth.

**Research Question Three:** What possible ways can the university be repositioned for peace and national security?

**Table-3: Weighted Mean and Rank Order Scores of Male and Female Respondents on the fundamental root causes of insecurity in Nigeria.**

S/N	Fundamental Root Causes of Insecurity in Nigeria	Male (n=154)		Female (n=89)		Mean set ( $x_1x_2$ )	Rank Order	Remark
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>			
15	Promotion of peace and security studies.	3.25	0.65	3.21	1.75	3.23	5 <sup>th</sup>	Agreed
16	Harmonizing the minds of educated citizens on equality of humans in societal disorder.	3.10	0.78	3.00	1.79	3.05	7 <sup>th</sup>	Agreed
17	Sanitizing the minds of students on avoiding being used by politicians in achieving their selfish aims.	2.69	1.07	2.59	1.09	2.64	9 <sup>th</sup>	Agreed
18	Discouraging all forms of cult violence.	3.32	0.70	3.31	1.72	3.32	1 <sup>st</sup>	Agreed
19	Refine the university system from all forms of corruption, bribery, nepotism and other vices.	3.16	0.81	2.99	1.04	3.08	6 <sup>th</sup>	Agreed

20	University body should partner with the security agencies for intelligence gathering.	3.33	0.88	3.23	1.87	3.28	4 <sup>th</sup>	Agreed
21	Promoting quality education for industrial relevance and skills empowerment.	2.90	1.01	2.97	1.19	2.95	8 <sup>th</sup>	Agreed
22	Teaching of nation building approaches and intervention to help curb/prevent security challenges.	3.39	0.66	3.19	1.68	3.29	3 <sup>rd</sup>	Agreed
23	Opening of more colleges/universities for the armed forces.	3.30	0.67	3.31	1.76	3.31	2 <sup>nd</sup>	Agreed
<b>Aggregate Mean/ Standard Deviation</b>		<b>28.44</b>	<b>7.23</b>	<b>27.80</b>	<b>13.89</b>	<b>28.12</b>		
<b>Average Mean/ Standard Deviation</b>		<b>3.16</b>	<b>0.80</b>	<b>3.09</b>	<b>1.54</b>	<b>3.12</b>		

Data on Table 3 show that all items (15-23) had weighted mean scores above the criterion mean of 2.50 and were adjudged on the possible ways the university can be repositioned for peace and national security. In summary, with an aggregate weighted mean of 3.12 which is above the criterion mean of 2.50, the respondents agreed that the possible ways the university can be repositioned for peace and national security include: promotion of peace and security studies; harmonizing the minds of educated citizens on equality of humans in societal disorder; sanitizing the minds of students on avoiding being used by politicians in achieving their selfish aims; discouraging all forms of cult violence; refine the university system from all forms of corruption, bribery, nepotism and other vices; university body should partner with the security agencies for intelligence gathering; promoting quality education for industrial relevance and skills empowerment; teaching of nation building approaches and intervention to help curb/prevent security challenges; opening of more colleges/universities for the armed forces. On the ranking, item 18 ranked first, followed by item 23 as second, item 22 as third, item 20 as fourth, item 15 as fifth, item 19 as sixth, item 16 as seventh, item 21 as eighth and item 17 as ninth.

**TEST OF HYPOTHESES**

**Ho<sub>1</sub>:** There is no significant difference between mean score rating of federal and state universities lecturers on the fundamental root causes of insecurity in Nigeria.

**Table-4: z-test Analysis on the Difference between the Mean Scores of Federal and State universities lecturers on the fundamental root causes of insecurity in Nigeria.**

	GROUP	N	Mean	Std. Deviation	Df	Zcal	Zcrit	Sig. (2-tailed)	Level of Sig.	Decision
Fundamental root causes of insecurity in Nigeria.	<b>Federal</b>	126	3.05	0.81	2	-0.538	±1.960	0.290	0.05	Ho <sub>1</sub> Accepted
	<b>State</b>	117	3.11	0.92	241					
<b>TOTAL</b>		<b>243</b>			<b>243</b>					

Table 4 showed that federal lecturers have mean and standard deviation scores of 3.05 and 0.81 while state lecturers have mean and standard deviation scores of 3.11 and 0.92 respectively. With a degree of freedom of 241 at an alpha level of 0.05, the calculated z-value of -0.538 is lesser than the critical z-value of -1.960. Therefore, the null hypothesis was accepted. By implications, there is no significant difference between the mean ratings of federal and state universities lecturers on the fundamental root causes of insecurity in Nigeria.

**Ho<sub>2</sub>.** There is no significant difference between mean score rating of male and female universities lecturers on the consequences of insecurity to the Nigeria nation.

**Table-5: z-test Analysis on the Difference in the Mean Scores of male and female lecturers on the consequences of insecurity to the Nigeria nation**

	GROUP	N	Mean	Std. Deviation	Df	Zcal	Zcrit	Sig. (2-tailed)	Level of Sig.	Decision
Consequences of insecurity to the Nigeria nation	<b>Male</b>	154	2.70	0.97	2	-0.628	±1.960	0.290	0.05	H0 <sub>1</sub> Accepted
	<b>Female</b>	89	2.79	1.13	241					
<b>TOTAL</b>		<b>243</b>			<b>243</b>					

Table 5 showed male lecturers have mean and standard deviation scores of 2.70 and 0.97 while female lecturers have mean and standard deviation scores of 2.79 and 1.13 respectively. With a degree of freedom of 241 at an alpha level of 0.05, the calculated z-value of -0.628 is lesser than the critical z-value of -1.960. Therefore, the null hypothesis was accepted. By implications, there is no significant difference between the mean ratings of male and female lecturers on the consequences of insecurity to the Nigeria nation.

**H0<sub>3</sub>.** There is no significant difference between mean score rating of male and female universities lecturers on the possible ways the university can be repositioned for peace and national security.

**Table-6: z-test Analysis on the Difference in the Mean Scores of male and female lecturers on the possible ways the university can be repositioned for peace and national security.**

	GROUP	N	Mean	Std. Deviation	Df	Zcal	Zcrit	Sig. (2-tailed)	Level of Sig.	Decision
Possible ways the university can be repositioned for peace and national security	<b>Male</b>	154	3.16	0.80	2	0.399	±1.960	0.290	0.05	H01 Accepted
					241					
	<b>Female</b>	89	3.09	1.54						
<b>TOTAL</b>		243			243					

Table 6 showed male lecturers have mean and standard deviation scores of 3.16 and 0.80 while female lecturers have mean and standard deviation scores of 3.09 and 1.54 respectively. With a degree of freedom of 241 at an alpha level of 0.05, the calculated z-value of 0.399 is lesser than the critical z-value of 1.960. Therefore, the null hypothesis was accepted. By implications, there is no significant difference between the mean ratings of male and female lecturers on the possible ways the university can be repositioned for peace and national security.

**DISCUSSION OF FINDINGS**

The findings of this study revealed that the fundamental root causes of insecurity in Nigeria include: persistent poverty/unemployment; hunger and sudden rise in food prices; lack of access to basic health care, environmental degradation and resource depletion; physical violence in all its forms; inter-ethnic, religious and other identity-based tensions; lack of rule of law and justice; and human rights violations. The test of hypothesis one showed that there is no significant difference between the mean ratings of federal and state universities lecturers on the fundamental root causes of insecurity in Nigeria. In line with the finding of Ikwumelu, Oyibe and Eluu (2016); and United Nations (2016) that stated that the root causes of insecurity are economic insecurity (i.e. Persistent poverty, unemployment, lack of access to credit and other economic opportunities); Food insecurity (i.e. hunger, famine, sudden rise in food prices); health insecurity (i.e. epidemics, malnutrition, poor sanitation, lack of access to basic health care); environmental insecurity (i.e. environmental degradation, resource depletion, natural disasters); personal insecurity (i.e. physical violence in all its forms, human trafficking, child labour); community insecurity (i.e. inter-ethnic, religious and other identity-based tensions, crime, terrorism); and political insecurity (i.e. political repression, human rights violations, lack of rule of law and justice).

The findings also revealed that, the consequences of insecurity to the Nigeria nation include: driving away of foreign investors from the state; retardation of economic activities progress; rise in total capital outflow of both labour and investment outflow; diversion of money meant for development to meet the cost of violence, threat to tourism potentials of the state; and devastating effect on psychological health of individual. The test of hypothesis two showed that, there is no significant difference between the mean ratings of male and female lecturers on the consequences of insecurity to the Nigeria nation. In agreement with the findings, Ambulacra (2005) stated that the problem to insecurity have a very damaging consequences of giving signals to the rest of the international community that Nigeria is not safe and secured place and as such, not sustainable to economic investments and activities. According to him, insecurity in the lands diverts money supposedly meant for development to meet the cost of violence. Likely investors would usually demand for country risk insurance. Most often, large sums of money are spent by Individuals and government on one form of security outfit or another. Ambulacra further noted that insecurity has the devastating effect/impacts on the psychological health of individual and the state as a whole. When an individual feels unsafe such state of security may also affect his productivity.

The findings finally revealed that, the possible ways the university can be repositioned for peace and national security include: promotion of peace and security studies; harmonizing the minds of educated citizens on equality of humans in societal disorder; sanitizing the minds of students on avoiding being used by politicians in achieving their selfish aims; discouraging all forms of cult violence; refine the university system from all forms

of corruption, bribery, nepotism and other vices; university body should partner with the security agencies for intelligence gathering; promoting quality education for industrial relevance and skills empowerment; teaching of nation building approaches and intervention to help curb/prevent security challenges; opening of more colleges/ universities for the armed forces. The test of hypothesis three showed that, there is no significant difference between the mean ratings of male and female lecturers on the possible ways the university can be repositioned for peace and national security.

The finding is in consonance with the finding, Obayan (2014) stated that education has been seen as a vehicle for economic, social-cultural and political development of nations and individual. Supporting the above, Azikwe as cited in Joshua, Ibietan and Azuh (2016) noted that changes most often are effected through the educational system of a country and as such the university as a citadel of learning, with the onus proffering solution to every day human problems through research can do the following, as a way to curb the menace of insecurity; promote peace and security studies. This include: harmonizing the minds of educated citizens on equality of humans in societal disorder, sanitizing the minds of students on avoiding being used by politicians in achieving their selfish aims and discouraging all forms of cult violence, refining the university system from all forms of corruption, bribery, nepotism and other vices, partner with the security agencies for intelligence gathering and opening of more colleges or universities for the armed forces, promoting quality education for industrial relevance and skills empowerment as well as teaching of Nation building approaches and intervention to help curb and prevent security challenges.

### **CONCLUSION**

In order to save the succeeding generations from the scourge of war, to reaffirm faith in the dignity and worth of the human person and in the equal rights of men and women, to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standard of living. Repositioning Nigeria university education as an integral part of the work of the United Nations will be the viable instrument for achieving above state objectives. As stated by Ogoh (2008) it cannot be an overstatement to assert that national security is a holistic concept, which can be assessed by evaluating the state of critical variables already highlighted. Nations are not secured with emphasis on military might or powers alone. That human security is an attack on the chief evil affecting the development of the common man.

### **RECOMMENDATIONS**

**Based on the above discussion, the following recommendations are made.**

1. The government of Nigeria should invest more on education instead spending so much on security by acquiring armory.
2. Government should direct more of the fund spend on maintaining security through military tactics and strategies to provide those things that cause insecurity, for instance: unemployment, hunger, deprivation and illiteracy.
3. University education should inculcate a security consciousness/awareness culture among the citizenry.
4. The university should enlighten the people through the relevant school subject that law enforcement/security operatives are partners in progress, and not enemies or government agents assigned to harass law-abiding citizens.
5. Qualified consultants from educational institutions and universities should be involved in the drawing up of relevant syllabi for the various courses to make police officers and other security agencies meet the current need of the force.

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**A REVIEW ON IMPACT OF ORGANISATIONAL CHANGES ON EMPLOYEES STRESS AND LEADERSHIP BEHAVIOUR**

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**ABSTRACT**

*The most common causes of stress among the organization as a whole and employees is change in the environment at the workplace. If the views of employees are not taken into consideration while implementing change, then they have a tendency of responding naturally and immediately. However, when the top management as well as employees are of the same thoughts and goals then the team work together to bring about smooth and advantageous change. Change in either one or more of the organizational characteristics viz, physical conditions, job demands, culture, structure or leadership leads to resistance to change by their workforce and development of stress. The current study is a review of literature of leadership behaviour and, employees stress within an organization. Leadership types as well as employees stress has been studied in relation with organizational changes.*

*Keywords: Employee stress, Leadership behaviour, Organization changes*

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**1. INTRODUCTION**

Change is inevitable in organizations whether small or big. It had been extensively studied in the areas of management studies. The reason behind this is a constant emphasis on improvement (Sikdar and Payyazhi 2014). New concepts like six sigma and total quality management are occupying space in new age organisations. This leads to introduction of change and its efficient management (Vora 2013).

Any change in an organization be it small or big, can only happen through efficient management. If the change is managed properly, then areas like decision making, quality, management, and cost can be efficiently improved (van Hoek et al. 2010). It leads to a continuous effect on the other departments of the organizations as well as total improvements (Christiansen and Claus 2015). Though, if not properly managed, opposite effect can be observed. If organizations, do not succeed in the proper management of change they are liable to lose many resources like finances, efforts and time. Not only this, it becomes difficult for them to return to their original state (Simoes and Esposito 2014).

If the type of outcome expected is known prior, then effective management of change can take place. In the book named “organization development and change” by Cummings and Worley (2014) four major types of organizational change processes have been identified as follows:

1. Human process interventions
2. Techno-structural interventions
3. Human resource management interventions
4. Strategic interventions

Change in the organization takes place for various reasons. Some of the reasons are financial reasons, concerns, acquisition or merger, expansion of markets, accommodation of growth or little shift in the business model. The reason might be anything but change can mostly be very difficult for the workers and create havoc in their lives. It is essential for the managers to think cautiously about the results of the implemented changes on the organization and the stress development on the employees before the announcement of changes.

Many organizations in today’s world work hard to bring about changes to improve their competitive edge to survive in competitive corporate world (Higgs & Rowland, 2005). Such continuous and never-ending changes have lot of stress on the organizations as well as on individuals (McHugh, 1997; Vakola & Nikolaou, 2005). Precisely, organizations reorganize, downsize and implement new human resource management systems and information in order to bring about change. To be true, these changes prove to be stressful to the employees (Eby, et al., 2000; Elrod & Tippett, 2002; Jaskyte, 2003; Vakola & Nikolaou, 2005) because such changes in the organization create doubt, uncertainty and fear, (Jackson, & Rothmann, 2006) as a result of which these changes are resisted, avoided, and devalued (Oreg, 2003).

The foremost measure taken by many organizations to achieve cost-cutting is to cut the salaries and reduce benefits of the employees. If this measure is taken then many employees think of leaving the present

organization for the new employment. The changes in organization particularly downsizing leads to division of employees in either of the two groups. One group of employees is composed of such people who wish to have control on their fate. The other group thinks of quitting the organization before any change takes place. The group that wishes to take control of their fate, strive hard to enhance their efficiency, finish their task before deadline and thrive in the changes to save their job and try everything to impress their managers. The rest of the employees sail through the changes by ignoring them. Such employees waste their time in lengthy lunch breaks, arriving late and leaving early from the office, not only this, they sometimes remain absent from the office. When changes occur in the organization, they avoid coming to office or search for new jobs applying for increased sick leaves (Hannah Wickford 2019).

Today, stress is an unavoidable aspect of day to day life and has negative affect on body and mind. Selye in 1993 differentiated good stress from bad stress by labelling them as eustress or stress of fulfilment distress and distress. Upon consideration of the advantageous effects of stress on human lives, Selye put forward the theory of enhancing the constituents of eustress and not bothering about stress. Even though it has been proposed that stress can be motivating and adapting in people lives, however, many examinations reveal that job stress poses negative effects. There are very few studies that eustress helps in motivating the employees to adapt to the change of the organization. Only few researches suggest that job stress creates positive effect on self-esteem, self-confidence, physical health, mental health and commitment towards the organization (Werbel, 1983). Additional studies on the role of eustress from change in organisation is not well written.

## **2. ROLE AND CONCEPT OF LEADERSHIP**

Literature related with the organizational change discusses leadership widely. The way in which any person leads other people is termed as leadership. The quality of service is majorly determined by the employees. When requirements and expectations are crystal clear to the employees, they tend to give better performance. However, proper job and task are allocated to the employees by the leaders. Different leaders use different approaches to allocated job and task. Leaders have the capacity to impact the organizational efficiency positively by having an influential effect on their team. In particular, they have influence on their follower within the organization. Hence, the understanding the nature of transformational and transactional styles of leadership is very significant. Presently, formulation of a team and workflow is considered very important by the organizations to enhance the efficacy of performance of their departments. In order to attain this, the role, of, leadership is, of utmost significance within any company. By understanding the references and expectations of the team members, best performing teams can be formed. Moreover, each member is required to have clear-cut roles, responsibilities and duties in their respective departments.

In general, transactional leadership is based on the system of rewarding the followers in order to motivate them. However, such type of approach to motivate is not a long lasting one. While in transformational leadership, the approach used is to improvise the way in which team members collaborate with each other (Keegan et al., 2004; Bass and Avolio J., 1990; Pearce, 1981). Each member is considered as an important part of organization by the transformational leaders.

These types of leaders inspire and encourage the followers to keep the goals of the organization above their personal interests and goals. These are always energetic and enthusiastic.

It has been evident that employees are engaged in an exchange relationship with the organization as well as their immediate supervisor (Stinglhamber & Vandenberghe, 2003). Most of the times, the immediate supervisor is the most prominent person with respect to an individual's performance, because employees usually consider actions taken by agents of the organization as actions taken by the organization itself (Livinson, 1965). Therefore, the supervisor should be able to directly influence the behaviour of the subordinates because the attitude of the leader determines the attitude of the followers.

In the literature available presently, transformational leadership has been considered from the monitoring or transactional types of leadership. Burns (1978) and Bass (1985) put forward the difference between transformational leaders and transactional leaders for the first time. Precisely, Bass and Avolio (1994) identified four behaviours associated with transformational leaders: (a) having an idealized influence by which the leaders set a role model for the followers (b) provide inspirational motivation by involving delivery of an inspiring, clear, and appealing vision to subordinates (c) stimulating intellectually the followers' creativity by inquiring assumptions and challenging the existing state of affairs; and (d) considering individual requirements and attending and supporting them in person.

The essence of transformational leadership is to arouse team work spirit, to reframe tense events into opportunities of development, and to inspire the followers to observe difficult circumstances as meaningful

encounters which are necessary in order to develop one's personal and professional skills (Sosik, et al., 2000). Moreover, transformational leaders emphasize the significance of interest of everybody. This helps in evoking higher levels of needs in the followers and to motivate them in identifying a long term vision which is beyond their personal interest (Judge & Bono, 2000).

### **3. LITERATURE REVIEW**

Alharbi (2018) carried out a study in the Kingdom of Saudi Arabia. The study explored and determined the influence of behaviours of the leadership on the organisational change procedure in hospitals and other healthcare organizations. 272 employees from these organizations from the region of Al-Qassim participated in the study to provide the primary data. A self-administered questionnaire was used to study various behaviours such as change, relations and task related behaviours and their effect on change in organization of hospitals. SPSS software was used to analyse the cross-sectional data. The relation between behaviour of the leadership and change in the organization were found to be significant and positive. The results of this study were found to be positively significant because it can provide the supervisors and leaders a deep understanding of practices and attitudes needed for improving the performance of hospitals during the implementation of change.

Rawal et al. (2018) know the reason of stress among lecturer & the ways/ techniques to cope with stress generated at work place & its impact on them. The study also focuses on employee's behaviour and attitudes towards productivity which gets affected due to stress in organization. The research method used is purely on secondary data analysis by referring various research papers & journals of this nature, findings & suggestions are made based on grounded theory approach.

Harshana PVS (2018) reviewed the idea of work-related stress, work related stress models and demonstrating how it effect on effectiveness and performance of the organization. Be that as it may, since not all the job-related stress has negative effect it may act as a morale booster of the employees too. These should be taken into consideration by the top-level management in order to increase job performance while reducing the work-related stress.

Al-Malki et al. (2018) presented a review on the different styles of leadership and their effectiveness in building of teams within the organization. Precisely, they tried to study the literature in the areas of task performance by focusing the styles of leadership. They have reviewed both styles and types of with respect to productivity of the organization as well as role ambiguity and role stressors. They proposed that leaders positively influence the task performance of the team members and eventually impact the efficacy of the organization. Moreover, this review studied the fundamentals of role stressors like role conflict and role ambiguity. These role stressors are considered as the reasons behind poor job satisfaction performance. By studying the nature and important sources of role stressors, it helps the organizations in controlling the management of role stressors. Additionally, the relationship between job cooperation and job performance was determined to be slightly controversial in the paper. Consequently, the understanding of the characteristics of different styles of leadership and the assessment of their impact on determining different problems within the organization.

Raza et al (2017) carried out a study whether employee turnover intention is dependent on change interventions They also studied increase in employee turnover intention on the basis of change interventions. In addition, employee stress functions as a mediator was also tested. 162 employees of various administrative levels of a huge public organization were enrolled in the study. It was found that employee turnover intention had a positive correlation with human processes, human resources, strategic and techno structural interventions. At the end, limitations of the study and directions for further studies were provided.

Zondi (2016) investigated the organisational change strategies adopted by a non-profit pharmaceutical company based in Pinetown, South Africa. The organisation was faced with operational inefficiencies and a declining financial position that prompted the leaders to embark on an organisational change strategy to address the problems. It was revealed that there are three chief strategies in this study of change of organisation namely, behavioural, and turnaround. The particular strategies used were organisational culture change, the restructuring of divisions and sales growth strategy. The study showed that the implementation of changes affected negatively in boosting the morale of the employees. The major factors affecting this lack of morale were high job insecurity, lack of role clarity, confusion over desired behaviours and lack of employee participation in the planning of the change strategy. Around 50% of members of the study accepted that they were putting in more efforts and showed commitment towards the organization after the implementation of changes. It means change positively affected the performance. The study recommended that low morale of employees can be addressed by increasing positive communication with them to carry out planning and execution of changes. Change within organisation have impact on planning and progression of career plan, therefore organization should encourage the committed employees.

Kansal et al. (2016) presented study at Maruti to examine the effect of change on the performance of employees. In the recent years, an important aspect of change management has been researched, discussed and reported frequently. It has been proved that change is important on the basis of forecasted internal as well as external pressures of the environment. Change is inevitable for companies those wish to face the competition and to survive themselves in this competitive world. Some of the questions faced by organizations are regarding the time of implementation of change and the utmost need of that change required in the organization. The period of adoption of the change and result of the adopted change are to be considered. Also, impact of change on the employees and their perspectives are also important. With the implementation of positive attitude viewpoint and practice helps in enhancing service, performance and quality within the organization. The attitude and performance of the employees are impacted positively with change. Maruti also has implemented changes in the organization to provide advantages to the company.

Chaddha (2016) analysed the impact of the restructuring strategies on morale of employees of the organisation by measuring the change in factors that affect employee morale, pre and post restructuring.

Chou. P (2015) conducted an empirical search to investigate the relationship between behaviour support of the employees and transformational style of leadership for bringing in positive change in the organization. It helps in understanding in the details of supportive attitude and behaviour of employees towards organizational change. 448 people from Taiwan were employed for analysing the mechanism of transformational leadership and its influence in the change in the organization.

Mangundjaya et al. (2015) identified the role of leadership and employee condition on reaction to organizational change. This study was conducted at state-owned organizations with 539 respondents. The results showed that job satisfaction act as mediator between change leadership and individual readiness for change and commitment to change, and employee engagement was not significantly correlated with commitment to change. This research is important for organizational change management in order to plan and implement changes more effectively.

Samuel (2015) expanded the prospects and boundaries of understanding and knowledge of the work-related stress through the investigation of the impact of organisation culture and stress on member obligation in the organization. The study was based on the closure of the gap between employee commitment, organisational culture and workplace stress. Even though there has been extensive research on the fundamentals of stress and culture, but not much work has been done to study the inter-relation between commitment, organisational culture and workplace stress. In this study such inter-relation was studied at 'Test Development Division of the National Examination Council (NECO), Lagos, Nigeria'. Questionnaire based survey was carried out to collect data. The results indicated that there was a hierarchy among the departments that was non-supportive. Also, very less time was given to the employees to finish the task. The results of assessing job commitment among the employees suggested that they were not satisfied with the reward method of pleasing. Moreover, it was found that employee commitment, organisational culture and workplace stress were significant. It was suggested that it is the need of the hour to improve the organisational commitment of the employees, the culture orientation of the departments and reduce the stress levels of the employees.

Memon (2014) performed a review of literature to propose an innovative model which uses integrated approach to explain the relationship of leadership types with the performance of the employee. In this model, the role of gender, culture and communication were considered to have moderating and mediating role.

Zareen Husain (2013) recognized and discusses the importance of effective communication while managing the process of change in the organizations. The study reviewed the literature associated with interrelation of effective communication and change in the organization. Discussion was also made on the planning and execution of strategies of change by the employees through effective communication. The aims and needs of communication required at every stage of process of change were also identified in this study. Additionally, several intentions and advantages of proper communication among the members were also discussed.

Ahmed, Z.U et al. (2013) carried out a study in Pakistan's banking sector to analyse the effect of change within organization on the performance of the employees. In this examination, data was obtained by using primary and secondary techniques of data collection. The primary data was collected with help of questionnaires. The variables taken in this study were tolerance to change, employee development, procedural justice, communication and leadership. 252 respondents were employed in the study. Hence, SPSS software was used to analyse the data on the basis of descriptive statistics and correlation techniques of. It was indicated in the results that change within the organization impacted the performance of the employees in Pakistan's banking sector. It was also suggested that future research is required in several other sectors by enhancing factors of change of organization so as to observe complete impact of change of the organization towards performance of employee.

Nordin N (2011) examined that the organizational change readiness is influenced by the relationships of leadership behaviour, emotional intelligence, and organizational commitment. 169 members of Universiti Teknologi MARA (UiTM) took part in this examination. The selection was made on the basis of branch and chief campuses throughout Malaysia. The research showed that 44% of variance in terms of readiness for change was shown by transactional leadership behaviour, emotional intelligence, and organizational commitment. The practicality of these studies were discussed with respect to readiness for change background.

Bamberger et al. (2012) studied the available literature with respect to the effects of change in the organisation on the mental health. Different search platforms such as Web of Knowledge, PsychInfo and PUBMED combining MeSH search terms of outcome and exposure. The inclusion criterion consisted of data originally collected with respect to change with an outcome as mental health. Cross-sectional as well as longitudinal studies were performed. Out of 17 studies 11 showed a relation between change in organization and mental health problems. The longitudinal studies showed less prominent association. On the basis of the present research, it could not be proved that there was a positive and ample relation of change in organization and increased mental health issues. Further studies are required to study long term effects along with analyses of colleagues.

Tavakoli M (2010) suggested a model of organizational change that views the stress as a mediator between organizational change and resistance to change. This model suggests that resistance and stress are not the necessary responses to change in the organisation. On the contrary, the treatment given to the employees during the change decides their resistance or stress. According to this model, while implementing change, organizations must reduce resistance and adverse stress, and increase good stress and eventually good health of the employees.

Srinivas Subbarao (2012) analysed the impact of globalisation on organisational change in the jute industry and the measures taken by the jute industry to overcome from it. Dahl (2010) analysed the inter-relationship of change in organization and health of its employees. The negative impacts of change at the employee level were examined. Moreover, the manner in which employees react and respond to change at organization level were also taken into consideration. The hypothesis of the study was: distress is caused by increased level of change. The hypothesis was tested by enrolling 92,860 workers of 1,517 of the largest Danish companies. An all-inclusive panel data set of prescriptions of stress-dependent medication was gathered. The study revealed that the prescriptions of stress- dependent medication increased for the workers working in organizations which implement change, more specifically where there are multi-dimensional and simultaneous broad changes. Consequently, it was stated that changes in the organization showed association with stress related health issues of the employees. Further exploration was carried out to study these effects at various levels of the management and companies from several sectors and various sizes.

Herold et al. in 2008 and Liu in 2010 change in leadership is dependent on particular changes in the vision, enlistment, empowerment, monitor and help with personal adaptation (Herold, 2008; Liu, 2010). Additionally, it was also mentioned by Liu that there are majorly two factors in the leadership change namely, 1) Change of leaders behaviour of selling, which means action that tries for the promotion of change while non-freezing state, and 2) Change of leaders behaviour of change implementation, means action that tries to change in forward direction and results in the implementation success.

Rafferty and Griffin (2006) stated that there are three different characteristics of change namely, the planning, frequency and impact of change. They used R. S. Lazarus and S. Folkman's, 1984 cognitive phenomenological model of stress and coping so as to suggest that change features are responsible for the employee's acceptance of instability associated with change, satisfaction in their job and eventually intentions of turnover. When the cross sectional study was repeated, the obtained results indicated that perceptions of change of individuals 1 month before studying the attitudes of employees in successive years that there was moderate to strong correlation among 3 perceptions of change while they were differentially related to outcomes. The study focused on significance of systematic consideration of individual's personal understanding of change.

Shalley, Zhou et al. (2004) explained employees apply creativity to improve and develop their individual policies, practices and procedures for the development of products or services by proposing their unique and fruitful ideas which result in the improvement of organization in totality. This helps the organization in adapting well with the external and environmental organizational changes and competing with others in the market by reverting to the opportunities. Thus, leadership has a positive and significant impact on the performance of the employee as well as the organization.

An employee's idea of environmental and organizational events i.e., organizational change and meaning in relation with it and is directly related to job-related stress. (cf. Sosik & Godshalk, 2000; McCauley, 1987; Schuler, 1980). The employees generate meaning of these events which is influenced by other members such as immediate supervisor (Sosik & Godshalk, 2000; Kram and Hall, 1989; Simircich and Morgan, 1982). Definitely, supervisors provide feedback and information to followers and have an important role to play for structuring and designing the work atmosphere (Griffin, Patterson & West, 2001). They also control the influential rewards that recognize the employee's individual value (Doby & Caplan, 1995). It can be stated that supportive attitude of the employee for the organizational change is determined by the cordial interaction among employees and their immediate supervisor.

### 3. CONCLUSION

All institutions of private and public sector require organisational change to improve their image and functioning. There is a continuous change in the environmental conditions which the managers should be able to understand and adapt to them. The managers should be able to cope up with new conditions. Leadership behaviour in organisational change is of utmost importance because it guides to support the organizational change critically. The procedure of change sometimes becomes difficult and sometimes impossible if the organization lacks proper leadership. There have been several studies that suggest that negative behaviour towards change results in the stress caused by organizational change. It also states that organizational change is dependent upon the employees' support and acceptance. Therefore, it can be understood that the most significant factors affecting the organizational change and its management are dependent on personal behaviours.

The present literature review provides information regarding the role of leadership and its diversity. It also states that many areas of literature are yet to be explored which might be crucial for the success of the organization. In addition, further research is required to come up with new theories of leadership and to determine their influence to curb the role stressors. Trait theory is considered as one of the most significant theories of leadership. On the basis of this particular theory, further research can direct the importance of precise leadership properties which can be helpful in improving the cooperation and job performance.

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**APPLICATION OF COGNITIVE BEHAVIOUR THERAPY IN MANAGEMENT OF HYPOCHONDRIASIS: A CASE STUDY**

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**ABSTRACT**

*Hypochondriasis or hypochondria is a condition in which a person is inordinately worried about having a serious illness. Hypochondriacs become unduly alarmed about any physical or psychological symptoms they detect, no matter how minor the symptom may be, and are convinced that they have, or are about to be diagnosed with, a serious illness. Hypochondriasis often characterized by fears that minor bodily or mental symptoms may indicate a serious illness, constant self-examination and self-diagnosis, and a preoccupation with one's body. One of the widely used psychological treatments for hypochondriacal disorder is cognitive behavior therapy. CBT addresses the cognitive distortions and focuses on modifying the behavior of the person. The following is the case of 25 years old, CA part III student with chief complaints of palpitation, excessive concern about physical illness, irritability, disturbed sleep and mild depressive features. These complaints were addressed using various techniques from CBT over 3 months in 15 sessions. Follow up was done. Hypochondriasis complaints were reduced following development insight into nature of illness. Findings suggest improvement in patient's psychological well being, level of depression & anxiety after management. He was able to manage his routine and activities well.*

*Keywords: Hypochondriasis, CBT, Management*

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**INTRODUCTION**

Hypochondriasis is an excessive disease belongs to a morbid preoccupation with one's health. In general medical practice, hypochondriasis occurs in three to fourteen per cent of patients, especially adolescents. Hypochondriasis or hypochondria is a condition in which a person is inordinately worried about having a serious illness.

Hypochondriasis become unduly alarmed about any physical or psychological symptoms they detect, no matter how minor the symptom may be, and are convinced that they have, or are about to be diagnosed with, a serious illness. Hypochondriasis often characterized by fears that minor bodily or mental symptoms may indicate a serious illness, constant self-examination and self-diagnosis, and a preoccupation with one's body. Many individuals with hypochondriasis express doubt and disbelief in the doctors' diagnosis, and report that doctors' reassurance about an absence of a serious medical condition is unconvincing, or short-lasting. Additionally, many hypochondriacs experience elevated blood pressure, stress, and anxiety in the presence of doctors or while occupying a medical facility, a condition known as "white coat syndrome". Many hypochondriacs require constant reassurance, either from doctors, family, or friends, and the disorder can become a debilitating challenge for the individual with hypochondriasis, as well as his or her family and friends. Some hypochondriacal individuals completely avoid any reminder of illness, whereas others frequently visit medical facilities, sometimes obsessively. One of the widely used psychological treatments for hypochondriacal disorder is cognitive behavior therapy. CBT addresses the cognitive distortions and focuses on modifying the behavior of the person.

**MEASURES****Clinical Interview**

Clinical Interview use to be conducted that the client can be evaluated or he/she can reveal important information regarding his/her current condition in own words. Through the clinical interview details about the client's past and current strengths and weaknesses can be gathered It is very important to understand the client via his/her verbal and non-verbal responses and here clinical interview presents importance.

**Beck Depression Inventory**

In Beck depression inventory obtained score was 29 which suggest mild level of depression in the patient. Elevated scores indicate low mood, pessimism, sense of failure, guilt feelings, crying spells, work difficulty, insomnia, fatigability, decreased libido and loss of health.

**Sinha Anxiety Scale**

This scale contains a number of statements dealing with certain samples of behaviour and situations that most people experience at one time or another. All the statements are having two options true and false and are based on usual modes of behavior..

**CASE HISTORY**

Mr. A., 25 years old male, Hindu, Hindi speaking unmarried, a student of C.A final year, was presented with symptoms of anxiousness, palpitation, disturbed sleep, excessive concerned about physical illness, irritability, features of depressive symptoms, and repetitive visits to doctors. He was maintaining well before 6 months, and gradually symptoms started with his excessive concern about his physical health. He was having feelings that he is suffering from cancer and having regular consult with doctor, after testing there was not any positive finding, but he was not satisfied with doctor's report. After few days again he consulted to another doctor for the same, and report was the same again. His family members were being disturbed and irritating that after many assurances he was not convinced. He use to became more anxious when other members of his family making him sure that there is not any problem accept your thinking. His feelings of anxiousness and irritability would to be on high and aggressive behaviour use to be seen when he was being stop to having a consult to another doctor. He started doubt and not believing in the doctors' diagnosis. He started to read about the cancer and so many consultations to doctors without any permission from his parents. With these all, he was maintaining his other daily activities and attaining the classes regularly. After, nearly 2 months he started to say that, I am being thin and must have suffering from AIDS or will be suffer from that. He again started to make arguments with his family members about his new concern of feeling. He again consulted with other doctors, and having not any positive findings made him worry more. He started to be alone and less sharing of his feelings. In this way he started to internalize his thoughts and some time out-bursts with family and other consulting members. Due to his frequent consults, doctor suggested him to have a consult to any psychiatric hospital or any psychologist.

**THERAPEUTIC PACKAGE**

1. Psycho-education
2. Supportive Psychotherapy-Externalization of interest
3. Behavior therapy strategies- Relaxation
4. Cognitive Therapy
5. Stress management

Total, there were 24 sessions conducted, each session was of 45 minutes. Sessions were scheduled on weekly basis.

**Psychological Intervention**

All though it was somewhat tough to have a good rapport with him at very first sessions because of his distrust with white coat. But during very first sessions good rapport was established with the client. The intervention started with psycho-educational. In psycho-educational session he was acknowledged about nature and the severity of the illness, causes of illness, treatment approach and prognosis of the illness. During the psycho-educational session it was in focus to motivating him to be continuing for the planned sessions. After motivational session it was found that he was self-motivated to participate in the therapy and was still motivated to be regular in between the sessions and also to follow all the instructions given to him. In the next phase of therapy, supportive psychotherapy was used to support the client's ego defense mechanism and at the same time externalization of his interest in the form of exploring the new places and regularity in his study was done. Cognitive strategies and relaxation techniques were also used to address his depressive symptoms, anxiousness and irritability. Client's negative thoughts were assessed which was very significance to find out the cognitive errors, to modify the depressive cognitions. During cognitive therapy session he was taught to challenge the negative thought by logical reasoning. Technique such as examining the evidence and inducing dissonance were used. To find out erroneous, illogical cognitions and to modify such maladaptive cognitions and replace them with more adaptive thoughts cognitive restructuring was used.

Gradually the conflicts and relational difficulties between the client and family members were managed and for this family member were called to have psycho-educational session. The depressive thoughts were challenged which helped him to modify his depressive cognition. After that the therapy sessions were concluded with a debriefing when he expressed so much confidence that he could manage everything well. We took nearly seven months to finish the therapy sessions. He was called for follow-up after one month, at that time re-assessment was done when he came to clinic.

Significant improvement was found during post-assessment in his positive mood and self-esteem. He was maintaining his daily routine and activities approximately as before the illness, reduction in anger and irritability was found. He was maintaining his all business as prior.

### **DISCUSSION AND CONCLUSION**

Nearly 50% improvement was found regarding his anxiety and worries about his health concern during very first six sessions. He reported that his personal relationship was coming on line due to his less anxiety. This improvement was found due to therapeutic relationship and psycho-education regarding his problem. This made his agreement to further therapeutic sessions. During another sixteen sessions cognitive sessions led him significantly more improvement in his thinking and psycho-somatic concerns. This was in agreement with the study conducted by Speckens *et al.* patients' therapy was taken from six to 16 individual sessions and cognitive behaviour therapy was administered, and result revealed significantly more improvement in their problem psychosomatic concerns than individuals with simple medical service. The other study of Lidbeck J. with eight group sessions of cognitive behaviour therapy found greater to control situation in decreasing somatic indications and hypochondriacal concerns. In an another case study Shilpi Aggarwal and Prashant Srivastava reported that cognitive therapy and behavioural therapy was very helpful in management to patient with hypochondriasis. In these studies, major improvements were observed after treatment as well as six months later.

### **FUTURE PLANS**

Relapse is one of the most important issues in psychiatric set-up. As future plan it can be suggested that step for relapse prevention can be taken to enhance his coping strategies and to restore his affected socio-occupational functioning. Interpersonal relationships can be strengthened for his better adjustment and daily functioning.

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**COMPARATIVE STUDY OF THEORY OF MIND IN PATIENT WITH SCHIZOPHRENIA AND OBSESSIVE COMPULSSIVE DISORDER**

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**ABSTRACT**

*Background: The term theory of mind (ToM) refers to the capacity to infer one's own and other's mental state. It involves understanding of another person's knowledge, beliefs, emotions, and intentions and using that understanding to navigate social situations. Social functioning has been found to be impaired in patients with Schizophrenia and Obsessive-Compulsive Disorder (OCD). Author's Objective was to compare ToM abilities of patients with Schizophrenia and Obsessive-Compulsive Disorder (OCD) and to investigate the relationship among their clinical features and ToM abilities. Methodology: The total number of 60 sample were selected, consisting of 30 patients with schizophrenia and 30 patients with OCD as per ICD-10 DCR were compared according to their performances on ToM tasks (including attribution task, false belief-I & II, deception task- I & II). PANSS and Y-BOCS checklist were used as a screening tool to select the sample. The Result reveals that the patients with schizophrenia performed significantly poor than the patient with Obsessive-Compulsive Disorder on false belief-I and deception task-I. PANSS negative symptoms were significantly and negatively correlated with performance on attribution task and false belief-II task and Y-BOCS scores were significantly and negatively correlated with performance on attribution task, false belief-II and deception task-II. Conclusion: It was concluded that the patients with OCD group have performed relatively better on ToM tasks than patients with schizophrenia and the clinical feature of both the group is significantly and negatively correlated with some of the ToM tasks.*

*Keywords: Theory of mind, Schizophrenia, Obsessive-Compulsive Disorder, PANSS, Y-BOCS*

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**INTRODUCTION**

Theory of Mind (ToM) refers to the ability to judge the mental states of self and others (Premack, 1978). ToM is an important domain of social cognition and has the strongest association with community functioning, compared with other cognitive functions (Fett et al., 2011).

Psychologist use this term 'Theory of Mind' to denote the everyday ability to attribute mental states to other people and to thereby interpret, explain, and predict their behavior. Theory of mind concerns our ability, not simply to have beliefs as such, but to have beliefs about mental states, including the recursive ability to have beliefs about beliefs.

**THEORY OF MIND AND SCHIZOPHRENIA**

Twenty-five years ago Simon Baron-Cohen proposed that children with Autism had a core deficit in "theory of mind" or the ability to accurately assess the thoughts and feelings of another person. During the last two decades of the 20th century, the concept was adopted to explain behavioral symptoms in autistic spectrum disorders (Baron-Cohen, Leslie, & Frith, 1985) and schizophrenia (Frith, 1992). Since its inception the cognitive deficits was thought as a one of marker of schizophrenia, although it was evaluated and now it is conceptualized as cognitive deficits as in chronic Schizophrenia

Generally, the symptoms of Schizophrenia can be divided into positive symptoms: delusions, hallucinations, thought disorder and disorganized behavior and negative symptoms: loss of interest in everyday activities, appearing to lack emotion, reduced ability to plan or carry out activities, neglect of personal hygiene, social withdrawal and loss of motivation. Frith (1992) proposed that the positive and negative symptoms have influence on the rate of metalizing of self and other. In case of patient having predominantly negative symptoms does not show the capacity in Theory of Mind. And the patients having predominantly positive symptoms are unable to monitor their mental states. These patients suffer from a feeling that they are being controlled by extraterrestrials, that their life is controlled by voice-commenting hallucinations, that they are unable to rule their own live and consequently they lose their ability to make conclusions about others' mental states, because they are convinced that they are being stalked.

Another concept is the Hardy-Bayle's concept of impaired Theory of Mind in relation to disorganized thought, language, and communication in schizophrenia. They proposed that the deficient expressing of the knowledge of Theory of Mind is caused by decreased ability to decide and plan. The Language disorganization disrupts the

ability to monitor own mental states and the ability to correctly integrate the information following from the context of the situation. It is too presumed that a disruption of the creation of attributes about own mental states decreases the quality of attributes about the others.

In initial studies it was reported that people with paranoid symptoms performed more poorly on both first and second order theory of mind tasks than those with passivity symptoms (Corcoran et al., 1995). Frith & Corcoran (1996) found that both patients with positive and negative symptoms performed more poorly on first and second order theory of mind tasks than patients with passivity symptoms. Doody et al. (1998) and Drury et al. (1998), however, found only second order ToM deficits, and these were associated with positive and negative symptoms as well as with general symptom clusters.

### **THEORY OF MIND AND OBSESSIVE COMPULSIVE DISORDER**

In Obsessive Compulsive Disorder (OCD), distressing thought and compulsive acts makes individual so much preoccupied in his/her thought so that he or she cannot have healthy thought and behavior. It has been explained the fundamental role of anxiety, cognitive functions and a range of executive functions of the brain in the occurrence of the symptoms of this disorder. Results from neuropsychiatric studies indicate that there has been deficiency in some cognitive functions in patients having OCD. Therefore, a number of strong neuropsychiatric basics have been proposed for OCD disorder, including executive function as of the most important ones.

Impairment in social functioning has been widely described in obsessive-compulsive disorder (OCD). However, several aspects of social cognition, such as theory of mind (ToM), have not been substantially investigated in this context. Liu et al., 2017 examined cognitive and affective ToM in 40 OCD patients and it found that the second-order affective ToM is selectively impaired in OCD patient and it was ToM performance in OCD does not correlate with clinical characteristics.

Misir E., Bora E., Akdede B.B., (Feb, 2018), concluded in their study that the patients with OCD showed significant deficits in both aspects of ToM. ToM performances of patients showed a significant positive correlation with neuro-cognitive functions. ToM-reasoning impairment of patients was significantly related to the severity of OCD symptoms and poor insight ( $p = 0.026$  and  $p = 0.045$ , respectively). On the other hand, general cognitive factor ( $t = 3.146$ ;  $p = 0.04$ ) was found to be the only significant predictor of ToM-reasoning in OCD patients.

Recent theories of obsessive-compulsive disorder (OCD) emphasize the importance of cognitive contents (beliefs and appraisals) and cognitive processes in the etiology and maintenance of OCD.

### **OBJECTIVE**

1. To assess the theory of mind in patients with Schizophrenia and OCD patients.
2. To assess the correlation among ToM tasks and clinical variables in patient with Schizophrenia and OCD.

It would be **hypothesized** that there would be no significant difference on Theory of Mind tasks in patients with Schizophrenia and OCD patients and also no significant correlation would be found among ToM tasks and clinical variables in patient with Schizophrenia and OCD.

### **TOOLS**

#### **Socio-Demographic and Clinical Data Sheet**

It is a semi-structured Performa especially designed for the study. It contains information about the socio-demographic variables like age, sex, marital status, education, occupation, domicile, and religion of the subjects. It also includes clinical information about diagnosis like age of onset, mode of onset, course of illness, total duration of illness.

#### **Positive and Negative Syndrome Scale (PANSS)**

Kay et al. (1987) developed PANSS. It includes 30 items on three sub scales: 7 items covering positive symptoms, 7 items covering negative symptoms and 16 items for general psychopathology. Each is scored on a seven-point scale ranging from 1 to 7, and the score ranges from 30 (no symptom) to 210 (very severe psychopathology).

#### **Yale- Brown Obsessive Compulsive Scale (Y-BOCS)**

Goodman et al. (1989) developed Yale- Brown Obsessive Compulsive Scale (Y-BOCS). The core portion of the Y-BOCS is a clinician rated 10 item scale, item rated on a five point scale from 0 to 4 (total range 0 to 40) with separate subtest for severity of obsessions (sum of items 1 through 5) and compulsions (sum of items 6 through 10). The internal consistency has been found to be from 0.69 to 0.89 and internal reliability ranging from 0.93 to 0.97.

**Theory of Mind Task**

A battery of Theory of Mind Task was used.

- a. Attribution of intention task- designed by Sarfati et al., 1997
- b. False belief task- developed by Wimmer and Perner (1983), Baron-Cohen(1985), Leslie& U. Frith (1986,89) and
- c. Deception task - used by Frith and Corcoran (1996)

**PROCEDURE**

Hospital based cross sectional study had been designed for the present study. The total number of sample was 60. It consists of 30 patients with schizophrenia and 30 patients with OCD as per ICD-10 DCR (WHO, 1992) criterion were selected by using the Positive and Negative Syndrome Scale (PANSS) for schizophrenia patients and by Yale-Brown Obsessive Compulsive Scale (Y-BOCS check list) for OCD patients as a screening tool. The subjects were selected by purposive sampling technique. After selecting the sample the consent with the patient was taken and then the assessment of selected samples was done by using PANSS, Y-BOCS and Theory of Mind Task (A) - False Belief Task (FB), (B) - Deception Task (DT), (C)- The Attribution of Intention Task.

**STATISTICAL ANALYSIS**

The statistical analysis has been done by help of the statistical package for social science-16.0 (SPSS-16.0). Data was analyzed by applying t-test and Pearson’s correlation. T-test was used to measure the significance of difference between patient with Schizophrenia and patient with OCD on ToM task, PANSS, and Y-BOCS. Pearson’s correlation was used to measure the relation of ToM tasks with clinical variables of Schizophrenia and OCD.

**RESULT**

**Table-1: Comparison of patient with OCD and Schizophrenia group on Theory of Mind Tasks by using t-test.**

Subjects Variables	GROUPS		T	df	P
	OCD (30) Mean ± SD	Schizophrenia (30) Mean ± SD			
Attribution task	12.96±2.00	10.20±2.60	4.60	58	.452
False belief-I	3.86±.434	3.26±.691	4.02	58	.000***
False belief-II	2.96±1.03	2.56±.817	1.66	58	.562
Deception task-I	3.83±.530	3.10±.758	4.33	58	.053*
Deception task-II	1.96±1.03	1.56±1.00	1.51	58	.504
Total ToM	25.73±3.26	20.60±4.46	5.08	58	.100

\*p<0.05, \*\*\*p<0.001

**Table-2: Correlation of ToM Tasks with sub-scales of PANSS**

Variables		PANSS – sub-scales		
		PANSSP	PANSSN	PANSSGPS
Sub-scale of ToM Task	Attribution task	-.247	-.564**	-.368*
	False belief-I	-.175	-.332	-.113
	False belief-II	-.294	-.545**	-.368*
	Deception task-I	-.382*	-.257	-.195
	Deception task-II	.040	-.332	.027
	ToM Total	-.236	-.608**	-.306

(\*p<.05, \*\*p<.01)

**Table-3: Correlation of ToM Tasks with sub-scales of Y-BOCS**

Variables		Y-BOCS sub-scales		
		Y-BOCSOB	Y-BOCSO	Y-BOCSTO
Sub-scale of ToM Task	Attribution task	-.589**	-.471**	-.583**
	False belief-I	.185	.007	.093
	False belief-II	-.563**	-.462*	-.565**
	Deception task-I	.036	-.079	-.033
	Deception task-II	-.596**	-.496**	-.603**
	ToM Total	-.623**	-.538**	-.643**

(\*p<.05, \*\*p<.01)

## DISCUSSION

In the present study the presence or absence of ToM impairment among patients of Schizophrenia and OCD was investigated. Findings provide evidence that patients with both group schizophrenia and OCD had difficulties in appreciating what is going on in the mind of other people. Pattern of result establishes significant difference between the both groups on the performance of false belief-I and deception task-I, which reveals that patients of OCD group performed significantly better on these first order ToM task than the patients of schizophrenic group on  $p < .001$  and  $p < .05$  level respectively. However, data revealed that patients of both the groups similarly performed poor on higher order ToM tasks. This finding is consistent with the study conducted by Firth and Corcoran (1996) performance of the Schizophrenia group was impaired on both first order and second order tasks but other studies (Doody et al., 1998; Drury et al., 1998) have indicated that alteration in ToM in schizophrenia are more pronounced on second order task in which a character has a false belief about the belief. (Tulaci et al., 2018) found in their study that patients with OCD had poorer ToM abilities than healthy controls. The patients having poor insight were significantly lower in all ToM scores, which reveal that the patient on higher side of severity performed poorer on ToM tasks. It is also evident that schizophrenia patients' as well as OCD patients' performance on first order false belief task deception task was better than their performance on second order false belief and deception task. Data also indicates relatively poor performance on deception task than false belief task by patients of both the groups.

In the present study we also investigated the association between the clinical variables of Schizophrenia and OCD with the Theory of Mind tasks. Correlation coefficient was computed, which obtained a significant negative correlation between first order deception task and positive symptom of Schizophrenia on  $p < 0.05$  level, attribution task and higher order false belief task with negative symptoms and general psychopathology of Schizophrenia on  $p < 0.05$ . And also found the high negative correlation between total ToM and negative symptoms of Schizophrenia on  $p < 0.01$  level. Thus, the finding reveals that the patients with schizophrenia, who is having the predominant negative symptoms, performed poorly on ToM tasks or having poor ToM ability which is consistent with the study of Corcoran et al. (1995) and Corcoran and Firth (1996), reported that Schizophrenics who have overt negative sign suffer from ToM deficit. Langdon et al. (1997) showed that higher rates of negative symptoms support the hypothesis that poverty symptoms reflect an inability to manipulate symbolic representation i.e. inferring mental state terms; impaired meta-representation was not correlated however positive symptoms. Rabinowitz et al. (2012) found in their study that negative symptoms have a greater impact on functioning than positive symptoms. In a recent study by Bliksted et al. (2016) found that patients with first-episode schizophrenia, high levels of negative symptoms were associated with poor social cognition while the effect of positive symptoms on social cognition was mediated by the presence of negative symptoms.

The result of the present study is consistent with the above findings, thereafter it has been predicted that the performance of schizophrenic subjects on ToM task would be hierarchically formed such that schizophrenics with positive or negative symptoms were expected to perform worst on the theory of mind tasks, this can be understood by the fact that persons with negative or positive behavioral signs avoid exposure to people, isolate themselves from society due to certain skill deficits and thus reinforce their social naivety which interfere with their inference of other's mental state.

On the basis of findings we found that there is highly significant negative relationship among obsession and compulsion with attribution of intention task on  $p < 0.05$  level, second order false belief and deception tasks on  $p < 0.01$  level. And also found the highly significant negative correlation among total ToM with obsession, compulsion and total Y-BOCS scores on  $p < 0.05$  level. Thus, the finding reveals that the patients with OCD, who is having the predominant obsession or compulsion similarly performed poor on ToM tasks or having poor ToM ability. The above findings are supported by Misir, E; Bora, E; Akdede, B; (2018) found in their study that patients with OCD showed significant deficits in both aspects of ToM ability (affective and cognitive). ToM-reasoning impairment of patient was significantly related to the severity of OCD symptoms and poor insight.

## CONCLUSION

It was concluded that the patients with OCD group have performed relatively better on ToM tasks than patients with schizophrenia and the clinical feature of both the group is significantly and negatively correlated with some of the ToM tasks.

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**DEPRESSION AND SUICIDAL IDEATION AMONG SCHOOL GOING ADOLESCENTS DOES GENDER MATTERS?**

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**ABSTRACT**

*Depression is a common mental disorder that present with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or self-worth, disturbed sleep and appetite and poor concentration. Moreover, depression often comes with symptoms of anxiety. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide. The present study was conducted to examine the gender difference on depression and suicidal ideation among school going adolescents. The sample for the present study consists of 100 school going adolescents. They were selected through stratified random technique. Participants were chosen from schools of Ranchi. A total of 100 school going adolescents studying in class 8<sup>th</sup> from the schools of Ranchi, Jharkhand between the ages group of 13 to 15 years were taken. Out of 100 students, 50 adolescent boys and 50 adolescent girls were selected for the study. Participants were assessed by Reynolds Adolescent Depression Scale-2 and Suicidal Ideation Questionnaire. There were significant difference between depression and suicidal ideation among male and female school going adolescents. Result revealed that boys and girls differ significantly on the level of depression and suicidal ideation. Girls exhibited more depressive feature and suicidal tendency than boys. Variables like self-esteem, mastery and coping had been found to be stronger in boys than girls.*

*Keywords: Depression, Suicidal Ideation, Adolescents*

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**INTRODUCTION**

Depression is a common mental disorder that present with depressed mood, low level of interest or pleasure, decreased energy, feelings of guilt or self-worth, disturbed sleep and appetite and poor concentration. Moreover, depression often comes with symptoms of anxiety. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide. Adolescence, the transition between childhood and adulthood, is a stressful period of life characterized by discernible physical, mental, emotional, social and behavioral changes. Adolescence has to cope, not only with changes in their physical appearance, but also with associated emotional changes and emerging and compelling sex urges and the eagerness for opposite sex. As a result of changes in this age, they become vulnerable to many forms of trouble and they become vulnerable to behavioral problems, drug and substance abuse, stress and depression etc. Depression and related symptoms are one of the most prevalent psychiatrist disorders in adolescence. Depression is expressed not only as a single symptom (sad mood) but as a cluster of symptoms. Suicidal ideation is a serious problem in this generation. Suicidal ideation is defined as thoughts, ideas, and the desire to commit suicide, being a frequent behavior among adolescents. Students experience great pressure from social developmental transitions and are at high risk of suicide. Suicidal ideation has been reported to be an important suicide risk factor. Suicidal ideation is generally associated with depression and other mood disorders. The causes of suicidal ideation are multifactorial, including factors related to biological, psychological, cognitive, school, family, and social risk domains. Rudatsikira et al. (2007) estimated the prevalence and associated factors of suicidal ideation among school-going adolescents using the data from the Global School –Based Health Survey conducted in 2004 in Guyana. Of the 1197 respondents, 18.4% (14.9% males and 21.6% females) reported having seriously considered committing suicide. Males were less likely to seriously consider committing suicide than females. World Health Organization (WHO) estimates that nearly 900 000 people worldwide die from suicide every year, about in India 170 000. It was reported that about 16 percent of students between classes 9-12 in India had seriously considered suicide. Ghosh (2017), examine the difference in suicidal ideation between boy and girl students of Ranchi. The respondents comprised of 200 school students (100 boys and 100 girls) studying in class X belonging to high and low socio-economic group selected randomly from different high schools of Ranchi town. In her study she found a significantly difference among boys and girls on the level of Suicidal Ideation. Girls exhibited more suicide tendency than boys. Low socio-economic status group showed higher suicide tendency than high socio-economic status group.

**MATERIAL & METHODS**

**OBJECTIVE**

The aim of the study was to examine the gender difference on depression and suicidal ideation among school going adolescents.

It would be **hypothesized** that there would be no significant difference on depression and suicidal ideation among school going adolescents (boys & girls).

**Participants**

Participants were selected from schools of Ranchi, studying in class 8<sup>th</sup> between the ages group of 13 to 15 years. Total sample size was 100, fifty boys and fifty girls. Their consent was taken.

**TOOLS**

**Reynolds Adolescent Depression Scale-2**

It was developed by Reynolds in 1987 and RADS-2 (Reynolds, 2002) represents an update of RADS. It was constructed as a screening measure to evaluate broad domains of depressive symptomatology and its severity in adolescents. The 30 RADS-2 items yield scores on four subscales: Dysphoric Mood, Anhedonia/ Negative Affect, Negative Self Evaluation and Somatic Complains. Internal consistency reliability coefficient of the RADS-2 depression total scale is .93 and for subscales ranging from .80 to .87. The test-retest reliability coefficient of RADS-2 depression total scale is .85, and for subscales from .77 to .84. The criterion-related validity for RADS-2 depression total is .82 and for subscales ranging from .54 to .79.

**Suicidal Ideation Questionnaire (SIQ)**

The SIQ measures one aspect of suicidal behavioral- suicidal ideation. The SIQ is designed to provide a reliable and valid estimate of an individual’s current level of suicidal ideation, ranging from mild to severe, and is developed by Reynolds (1988). The SIQ (senior high school version) consists of 30 items and the respondent rate the SIQ items on a seven point scale which assess the frequency with which the suicidal cognition occurs. Reliability of SIQ by grade was uniformly high and ranging from .936 to .974 and validity is ranging from .61 to .69. A raw score of 41 or approximately 84<sup>th</sup> percentile and above is considered as clinical cutoff score on SIQ.

**Procedure**

The Reynolds Adolescent Depression Scale-2 and Suicidal Ideation Questionnaire was administered to both groups with instructions to complete all questions honestly and not to discuss the questions with fellow students. Scoring was done according to the respective scoring system.

**Statistical Analysis**

Statistical analysis was done using the Statistical Package for Social Sciences (SPSS version 21). Chi-square was used to see the level of significance difference. Correlation was done for finding the relationships among variables.

**Result**

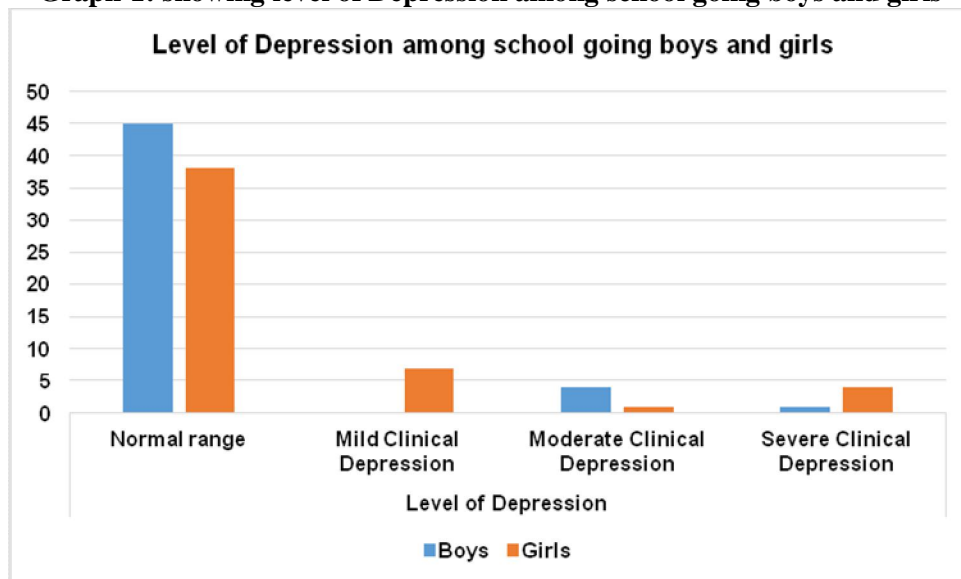
Through the analysis of collected data it was found that there were significant difference between depression and suicidal ideation among boys and girls school going adolescents. Result revealed that boys and girls differ significantly on the level of depression and suicidal ideation. Girls exhibited more depressive feature and suicidal tendency than boys. The result has been presented through statistical table at below.

**Table-1: Comparison of level of depression and suicidal ideation among adolescent boys and girls**

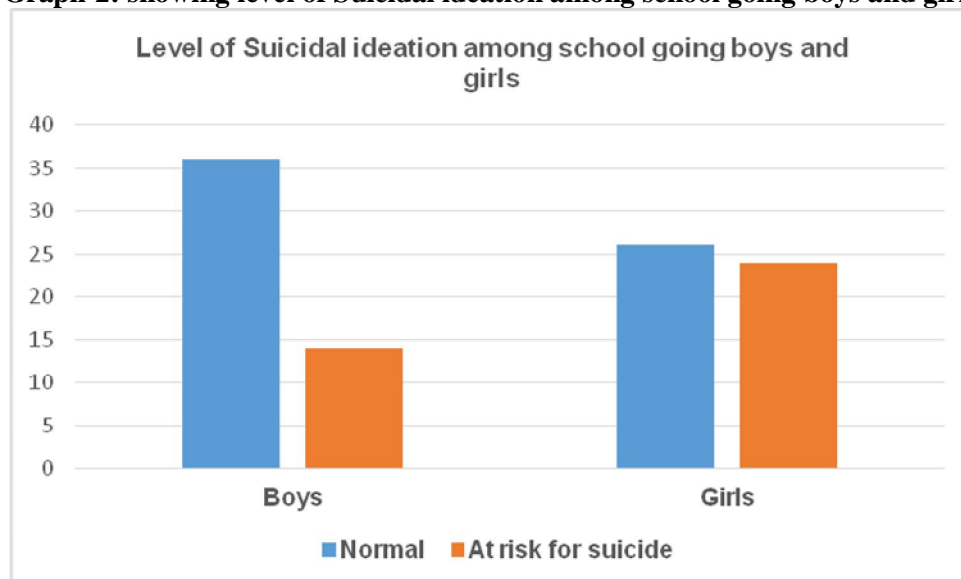
Variables		Sex				$\chi^2$
		Boys	Girls	Boys	Girls	
		Frequency	Percentage %	Frequency	Percentage %	
Level of Depression	Normal range	45	90.0%	38	76.0%	11.20**
	Mild Clinical Depression	0	.0%	7	14.0%	
	Moderate Clinical Depression	4	8.0%	1	2.0%	
	Severe Clinical Depression	1	2.0%	4	8.0%	
Level of Suicidal Ideation	Non Clinical	36	72.0%	26	52.0%	4.24*
	At Risk	14	28.0%	24	48.0%	

Table 1 shows the comparison of level of depression and level of suicidal ideation among boys and girls. The chi-square was used for the analysis. It was found that there was significant difference at the level of depression and suicidal ideation among boys and girls.

**Graph-1: showing level of Depression among school going boys and girls**



**Graph-2: showing level of Suicidal ideation among school going boys and girls**



**Table-2: Correlation between RADS and SIQ among adolescent boys and girls**

	Suicidal Ideation among Boys (N=50)	Suicidal Ideation among Girls (N=50)
Dysphoric Mood	.585**	.467**
Anhedonia/Negative Affect	.400**	.453**
Negative Self Evaluation	.583**	.719**
Somatic Complaints	.568**	.419**
Depression Total Score	.703**	.705**

Table 2 shows the correlation between suicidal ideation and different domains of depression among boys and girls. Result shows that suicidal ideation is significant positively correlated with dysphoric mood, negative affect, negative self –evaluation, somatic complaints and depression.

**DISCUSSION**

This study included 100 participants, 50 boys and 50 girls. They were selected from schools of Ranchi studying in class 8<sup>th</sup> between the ages group of 13 to 15 years.

Result of this study shows that 8% boys having moderate depression and 2% boys having severe depression whereas 14% girls having mild depression, 2% girls having moderate depression and 4% girls having severe depression. It was found that while 48% of girls had higher risk of suicidal ideation, while 28% of boys adolescents had higher risk of suicidal ideation. It was found in this study that there were significant difference between depression and suicidal ideation among boys and girls. Girls exhibited more depressive feature and suicidal tendency than boys. The study by Jha et al. (2017) in Bihar also found that prevalence of depression was significantly higher among girls (55.1%) than boys (45.8%). Similar finding are reported by Sagar et al. (2012) that 18.5% of the depressed children from National Capital Region and from neighboring states of Uttar Pradesh, Bihar and Haryana reported hopelessness behavior and hopelessness may lead to self-injurious behavior. Some other studies have revealed that there are relation between depression and suicidal ideation. This study supports to the findings of Mohanraj and Subbaiah (2010), were they revealed that there is a higher prevalence (62%) of depression among girls than boys (40.5%). Studies that had tried to explain these gender differences had reported that psychosocial resources like self-esteem, mastery, responsiveness to stressors and parental interactions influence psychological health in adolescents. Variables like self-esteem, mastery and coping had been found to be stronger in boys than girls. These variables are very important to handling the life issues and in return low level of chances to have stress and depression. Thus, it was explaining their better ability to cope with depression and having a better adjustment.

### CONCLUSION

Mental health is one of the most neglected aspects of our society. There is a need to increase awareness about depression among teachers and parents to identify and help depressed adolescents in the school. A significant number of school-going adolescent girls were suffering from depression and suicidal ideation, which reflects the need for reinforcement and strengthening of school-based mental health screening programs. Parents, teachers, and mental health professionals should work as a team to deal with the problem in a more effective way.

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**TO DEVELOP TQM MODEL APPLICABLE TO SMALL SCALE INDUSTRIES IN SOUTH GUJARAT REGION: A REVIEW****Dr. Jignesh G. Vagharia**

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**ABSTRACT**

*As the century started, the creation of the global market, international orientations of management that sweeps national boundaries, introduction of new technologies and shift towards customer focused strategies, make the competition stronger than ever. The criteria for success in this global, internationally-oriented market have been changing rapidly. In order to expand business, enter new markets and set realistic, competitive long-term objectives, excellence has become an imperative. Detailed study of various Quality improvement techniques like ISO 9000, Quality Circle, Statistical Process Control (SPC), Zero Defect, Total Quality Control, ISO 9000, Reengineering, Benchmarking, JIT, Six Sigma, Lean manufacturing, Lean manufacturing, Quality Awards for adoption for SMEs etc. are implemented for LSI in India and adopted for SSIs in developed countries. Explore the quality requirements of SSIs like engineering/Textile Industries and cost of quality. Determine the constraints in meeting the quality requirements. Identity the factors for achieving good quality in SSIs. Integrating various Quality improvement techniques to evolve a TQM Model implementation for SSIs in south Gujarat Region.*

*Keywords: TQM, Quality, SSI, Quality improvement for SSI, TQM for textile industry, LSI*

**1. INTRODUCTION**

Management's effort has been directed towards discovering what makes a company excellent. To achieve excellence, companies must develop a corporate culture of treating people as their most important asset and provide a consistent level of high quality products and services in every market in which they operate. For creating such an environment since about 1980, wide variety of approaches, such as Quality Circle, Statistical Process Control (SPC), Zero Defect, Total Quality Control, ISO 9000, Reengineering, Benchmarking, JIT, Malcolm Baldrige National Quality Award criteria, Six Sigma, Lean manufacturing, Total Quality Management etc. have come. Such environment has supported the wide acceptance of TQM, incorporating ISO 9000, which emerged as a challenging and marketable philosophy. Many would agree that the TQM movement started in Japan, (The term TQM come from TQC it was coined by A.V.Freignbaum, 1983, Japan) and, if this is the case, it will be worthwhile to understand the quality revolution happening there at some stage.

Total Quality Management is an approach to the art of management that originated in Japanese industry and has become steadily more popular in the West since the early 1980's. Total Quality is a description of the culture, attitude and organization of a company that aims to provide, and continue to provide, its customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with things being done right first time, and defects and waste eradicated from operations. Surveys by consulting firms have found that only 20-36% of companies that have undertaken TQM have achieved either significant or even tangible improvements in quality, productivity, competitiveness or financial return. As a result many people are sceptical about TQM. However, when you look at successful companies you find a much higher percentage of successful TQM implementation. Important aspects of TQM include customer-driven quality, top management leadership and commitment, continuous improvement, fast response, actions based on facts, employee participation, and a TQM culture.

**Table-1: Various Quality Improvement Programme.**

Sr.	Tool/Activity	Session
1	EIS	Employee Involvement Scheme
2	VOU	Speak Out Session
3	5S	Workplace Management System
4	Six Sigma	Reduction in Defects
5	Quality Circle	Improvement Team
6	TPM	Total Productive Maintenance
7	ISO-9000	ISO Quality management System
8	ISO 14000	Environment System
9	OHSAS 18000	Occupational Health & safety mgt. System
10	ILO Guidelines	Health Safety

11	TQM	Total Quality Management
12	P D C A Cycle	Plan-Do-Check-Act
13	Behavioral	Soft Skills (Presentation, Leadership etc...)

## 2. THEORETICAL BACKGROUND OF TQM

TQM provides the overall concept that fosters continuous improvement in an organization. The TQM philosophy stresses a systematic, integrated, consistent, organization-wide perspective involving everyone and everything. It focuses primarily on total satisfaction for both the internal and external customers, within a management environment that seeks continuous improvement of all systems and processes. TQM emphasizes use of all people, usually in multifunctional teams, to bring about improvement from within the organization. It stresses optimal life cycle costs and uses measurement within a disciplined methodology in achieving improvements. The key aspects of TQM are the prevention of defects and emphasis on quality in design. TQM is a necessity. It is a journey. It will never end. It makes Japanese industry a miracle. It is the way to survive and succeed. What does it entail, then? TQM is the totally integrated effort for gaining competitive advantage by continuously improving every facet of an organization's activities.

### 2.1 What is TQM?

If we look at the meaning of each word, TQM can be defined as:

**Total** – everyone associated with the company is involved in continuous improvement (including its customers and suppliers if feasible),

**Quality** – customers' expressed and implied requirements are met fully (*ISO standards*), 'Fitness for use' by *Juran* and 'conformance to requirements' by *Crosby*, *American Society for Quality (ASQ) define Quality as: 'Quality as totality of features and characteristics of a product or service that bears on its ability to satisfy given needs'*

**Management** – executives are fully committed. Ideally, everyone in the organization should be committed. However, according to Deming's (1986) research, some 94 per cent of the problems in quality are caused by management and the system they create. Therefore, commitment by management should come before that of the front-line workers. Totality of managing quality implies that everyone, including the front-line workers, should be involved in the process. Thus the above definition of TQM is a good balance between the ideal and the real world.

### 2.2 Various Definitions of TQM:

TQM is the application of quantitative methods of human resources too improves the materials and services, supplies to an organization, all the process within an organization and the degrees to which the needs of the customers are at present and in future. (*U.S.A. Department of defense*)

TQM is an integrated organizational approach in delighting both external and internal customers by meeting their expectations on a continuous basis through everyone involved with the organizational working on continuous improvement in all products, services and procedures along with proper problem solving methodology.

TQM is fundamental effective system for integrating continuous quality improvement efforts of people at all levels in an organization, to deliver products and services which ensure customer satisfaction.

Total quality management (TQM) is a management philosophy that seeks to integrate all organizational functions (marketing, finance, design, engineering and production, customer service, etc.) to focus on meeting customer needs and organizational objectives. - *Courtesy: S. P. Ghiya, Deputy General Manager, Quality Control- Process Plant Equipment Larsen & Toubro Limited, Hazira ,Surat. Dec 2009*

### 2.3 Philosophy of TQM:

"TQM is not a SYSTEM, but a REQUIREMENT"

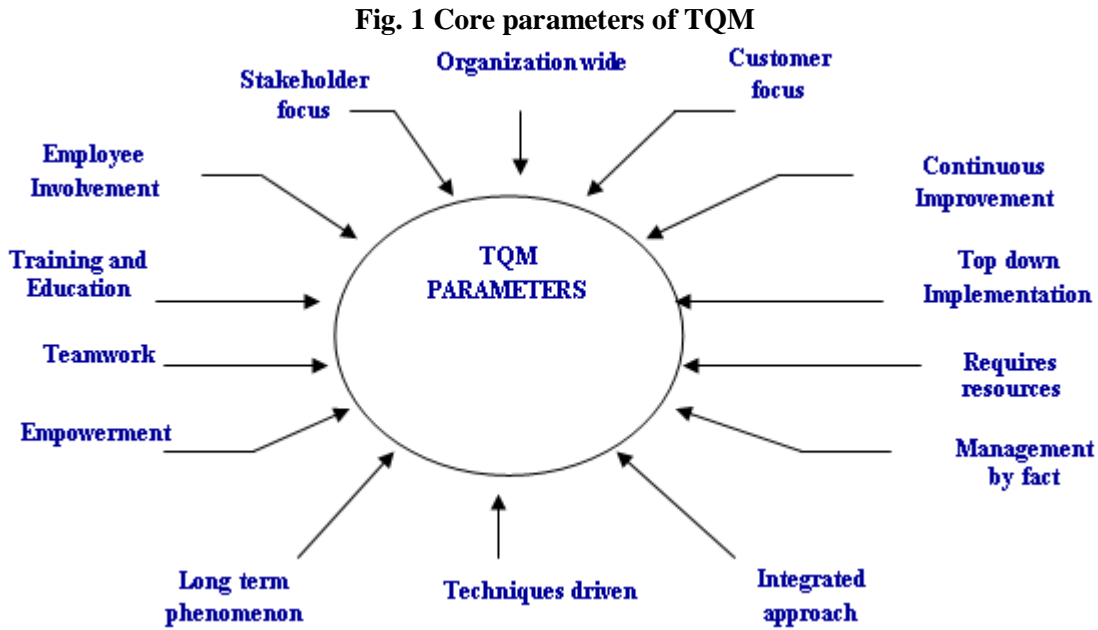
"TQM is not a PROCESS, but it is LIFE of a process"

"TQM is not a SYSTEM to be implemented, but a CULTURE to be developed"

"There cannot be a CERTIFICATE for TQM, but CONTINUOUS IMPROVEMENT certifies it"

"TQM cannot be implemented by FORCE, but by HEART"

2.4 Core parameters of TQM



2.5 Comparison Between Traditional management & TQM

One interesting rule of thumb in quality is called the 1-10-100 Rule. If someone produces defective work and rectifies it immediately, it only costs him another equal effort to do so. If it has slipped to his internal customers and he wants to rectify it then, it will cost 10 times more effort. If, unfortunately, it has passed on to the external customer, then he has to pay around 100-fold in order to get the error rectified and the adverse consequences that follow. The rule is also the basis of the widely known “just in time” logistic system. In its strictest sense, all goods/services supplied have to be 100 per cent right first time. This is particularly significant for the service industries as most of their work directly deals with external customers. They have less chance to rework internally. So quality is compulsory for survival.

**Table-2: Comparison Between Traditional management & TQM**

Traditional management	TQM Comparison
Looks for " Quick fix "	Adopts a new Management policy
Fire fights	Uses Structured, disciplined operating methodology
Operates the same old way	Advocates breakthrough thinking using small innovations.
Randomly adopts improvement efforts	"Sets example" through leadership
Focuses on short term.	Stresses on long term, continuous improvement
Inspects for errors	Prevents errors & emphasizes quality of design
Decides using opinions	Decides using facts
Throws resources at a task	Uses people as primary means to add value
Motivated by profit	Focuses on customer satisfaction
Relies on programs	A new way of life

3. DEFINITION OF SMES

SMEs will be as defined in RPCD which is reproduced below:

At present, a small scale industrial unit is an undertaking in which investment in plant and machinery, does not exceed Rs.1 crore, except in respect of certain specified items under hosiery, hand tools, drugs and pharmaceuticals, stationery items and sports goods, where this investment limit has been enhanced to Rs. 5 crore.

A comprehensive legislation which would enable the paradigm shift from small scale industry to small and medium enterprises is under consideration of Parliament. Pending enactment of the above legislation, current SSI/ tiny industries definition may continue. Units with investment in plant and machinery in excess of SSI limit and up to Rs. 10 crore may be treated as Medium Enterprises (ME). "

Looking to the above criteria it would preferred to go for SSI like Engineering Industries, Textile industries And Textile Manufacturing industries.

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#### 4. NEED OF TQM A LITERATURE SURVEY

Wakchaure V. D. et. al., [24] mentioned that Use of TQM practices improves JIT performance through process variance reduction and reduced rework time, thereby providing the levels of quality that allow production to proceed with minimum safety stock inventory while remaining on schedule.

Hongyi S. et. al., [8] noted that the speed of new product development (NPD) has been a key factor in a firm's degree of competitiveness, the tools and philosophy of total quality management have a positive influence on the speed of NPD.

Samuel K. Ho, [31] observed that the Integrated Lean TQM Model shown some evidence to help organizations to overcome the damages caused by the financial tsunami, followed by oil crisis in world.

Kumar R. et. al., [1] found for Indian industries that customer focus must be the prime objective for various industries to achieve total quality management. All the factors must be used systematically to achieve total quality management (TQM) and it can be done efficiently by using a model having four phases to implement TQM.

Khanna V.K., [28] mentioned that the study of papers reveals that 5 "S" (Structurize, Systematize, Sweeping, Standardize and Self-discipline) performance has a direct bearing on the performance of TQM journey. The high 5 "S" index in "Large" category of organization has resulted in high-TQM index in comparison to "Medium" and "Small" organizations. The weakest link is "Small" category, which has a direct bearing on the overall performance of TQM.

White G.R.T. et al., [5] establish that through the correct development of the QMS the company was able to generate bottom-line savings and business performance enhancement. It shows that when the QMS is developed as part of a coherent initiative, lasting performance improvements are achieved.

Colurcio M., [4] mentioned that TQM is shown to be an effective enabler of knowledge generation.

Poropat A. and Kellett J., [30] observed that the Underlying philosophy of TQM has several non-trivial parallels with the ideas of Zen Buddhism, one of the major spiritual traditions which informs much of Japanese culture.

Mandal P. et. al. [13] the findings indicate that there is an upward trend in the implementation of QMP (Quality Management Practices) in all the functional areas such as manufacturing, HRM, marketing, finance and administration and R&D in India.

Laszlo G. P., [17] found that the fundamental principle of a cost-effective quality improvement programmed is that not all cost reduction projects improve quality, but all good quality improvement projects reduce costs.

Kumar M.R. and Sankaran S., [14] evacuated that the common theme between the Japanese and the Indian culture is harmony among group members and respect for superiors, Japan has exploited this cultural trait for TQM implementation. The problem with the Indians is that their group affiliation is not work based; it is based on ethnic consideration of "own-others".

Srivastava R.L. et at., [15] observed that the organizations concerned with customer satisfaction, the pro-active business orientation and participatory orientation focus are particularly important, as these provide the greatest positive influence.

Pinho J. C., [16] observed that there is positive link between TQM and customer orientation as well as for the impact of customer orientation on innovation.

#### 5. CONCLUSION

Generally Large scale Industries (LSI) having their own QA-QC department and they are following ISO 9000, Q.C., (SPC), Zero Defect, TQM, TPM, JIT, Six Sigma, Lean manufacturing, etc. and they can afford any new quality Improvement technique. On the contrary, SSI are manufacturing most of the parts of product (Sometimes whole product as per LSI's Specification) of LSI but not having require quality consciousness nor they can afford. They are operated by past experience and thumb rule at the cost of quality. Quality is an important determining criteria for small businesses as it is for large business houses. And customer's changing demands and the need for stringent cost management in fluctuating environments make TQM a practice of paramount importance for every enterprise, big or small. So, we try to study & develop any Generalized TQM Model for SSI.

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**E-GOVERNMENT IMPLEMENTATION SUCCESS: AN EMPIRICAL ASSESSMENT**

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**ABSTARCT**

*The aim of this study is to assess the effectiveness of project implementation in the domain of e-government. For this purpose, the proposed framework was validated and the associated constructs supported the hypotheses. The illustration also shows that how the use of the framework may assist government agencies in defining the effectiveness evaluation criteria for e-government services evaluation. The analysis provides descriptive statistics of Indian e-district service from the citizens' perspective. Each construct was assessed by means of exploratory factor analysis. Subsequently, regression analysis technique was applied for hypotheses testing.*

*Keywords: E-Government, G2C, E-District, Regression Analysis*

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**1. ITRODUCTION**

In all the e-government performance evaluation models presented in the literature, it has been identified that the use of different sets of indicators and different weights assigned to these leads to variable conclusions about the performances of the countries evaluated. In reviewing the literature, we found that empirical studies are lacking in India, which can provide a complete framework for evaluating the provision of e-government services. Therefore, in the present study; the author is trying to identify the dimensions and related associated elements responsible for evaluating the effectiveness of the e-government service. Existing studies with different scales and hypotheses by different researchers were carefully examined during the literature review and this helped the concomitance of the proposed study.

**2. LITERATURE REVIEW**

A study based on the theoretical approach to IS success in examining e-government from the point of view of government employees in Serbia D. Stefanovic (2016) revealed seven constructs, namely, System Quality (SQ), Quality of Information (IQ), Quality of Service (SQ), Intent of Use, User Satisfaction (US), Net Benefits (NB) and Demographic Conditions (DC). They defined the E-Gov system as an IS in the WWW environment. Their results demonstrate that quality dimensions such as System Quality (SQ), Quality of Information (IQ), and Quality of Service (QS) have had a positive impact on the intended use / use of the E-Gov system. However, only SQ had a significant impact in the User Satisfaction (US). Both the intention of use / use and that of User Satisfaction (US) were discovered as the important prognostic factor for net benefits. However, DC was not statistically significant. A similar study also used the D & M model to assess citizen to government (G2C) in Taiwan (Wang and Liao, 2008). Its search model consists of six variables, which are the quality of the system, the quality of the information, the quality of the service, the use, the satisfaction of the user and the perceived net benefit. Their results indicated that all variables were valid and statistically significant except Quality of System (Wang and Liao, 2008). Other studies have found that the quality of information has positively influenced perceived utility (PU) in the Gambia GA system (Lin, Fofanah and Liang, 2011). However, the quality of the system was not significant towards the PU. In contrast, Rana et al. (2013), proposed a model based on successful SI models and validated eight success measures that include information quality, perceived quality of the system, user satisfaction, intent to use, the complexity, facilitating conditions (CF) and perceived trust (PT). The results revealed the eight variables and their relationship was statistically significant.

Similar studies on the government's online tax system have considered almost similar constructions, such as system quality, information quality, service quality, perceived usefulness, usage, user satisfaction, perceived net benefits and trust in the E-Gov websites (Floropoulos et al., 2010; Chen et al., 2015). The impact of individual characteristics on the use of the system has been examined and found statistically significant (Khayunand V., Ractham P., 2011). Another study (Chen et al., 2015) introduced three trusted backgrounds: trust in technology, trust in government and previous experience. The results show that these three backgrounds directly influenced the trust in the E-Gov websites. The quality of the information was more significant due to the perceived usefulness and user satisfaction, therefore, the increase in perceived net benefits. However, a previous study could not find any significant relationship between system quality and user satisfaction (Floropoulos et al., 2010). The results of another study were also consistent with previous findings on the relationship between quality dimensions and user satisfaction and the use of the system, thus improving the net benefits (Jang C. L. 2010).

Few other studies have also considered trust as a measure of success for digital or e-government systems (Lean et al., 2009; Weerakkody, 2016). There was a significant relationship between system quality and trust, as well as user confidence and satisfaction (Weerakkody 2016). Furthermore, the positive relationship between trust and intention to use was also confirmed (Lean et al., 2009). Another study introduced two backgrounds of trust on the E-government (EG) website: trust in government (TG) and trust in technology (TT) (Teo et al., 2008). Their results indicated that only the TG is significantly associated with the general trust in the E-Gov website, and other reports from trust in the E-Gov website to quality dimensions (quality of the system, quality of information and quality of service. ) were considered positive. Based on the literature review, previous researchers have argued that personalization could have an impact on trust (Kanaan et al., 2016).

A study on client empowerment and E-Gov considered three factors: personalization (PR), trust, client empowerment (CEMP) (Alshibly H. and Chiong R. 2015). The results revealed that all relationships were statistically significant. Furthermore, a conceptual framework was developed based on the dominant logic of the service to evaluate the success of EG (Sterrenberg G. 2017). As a result, this study proposed personalization as a dependent measure that can be considered a net advantage in the IS perspective.

Several other factors have also been found from previous studies such as personal innovation, belief, attitude, subjective norm, image, culture, cost, behavioral intention and perceived ease of use (Lean et al., 2009); Danila R. and Abdullah A. 2014; Weerakkody 2016). Other studies in the context of Malaysia have also found other factors such as legislation and policy, continuity intention, cooperation, cultural awareness, confirmation, government commitment, etc. (Othman et al., 2012, Punitha et al., 2015). However, these measures have been studied mainly in the context of the acceptance or adoption of non-integrated services focused on a single approach.

**3. PROPOSED CONCEPTUAL FRAMEWORK**

This study proposes a comprehensive multidimensional framework which suggests E-government service delivery dimensions: system quality, information quality, service quality, Perceived Effectiveness dimensions: Efficiency, Reliability, Openness, Responsiveness and citizen’s trust dimensions: Security & Privacy, Trust in E-government, Trust in the Internet and E-Satisfaction as an antecedent of implementation success of e-government project.

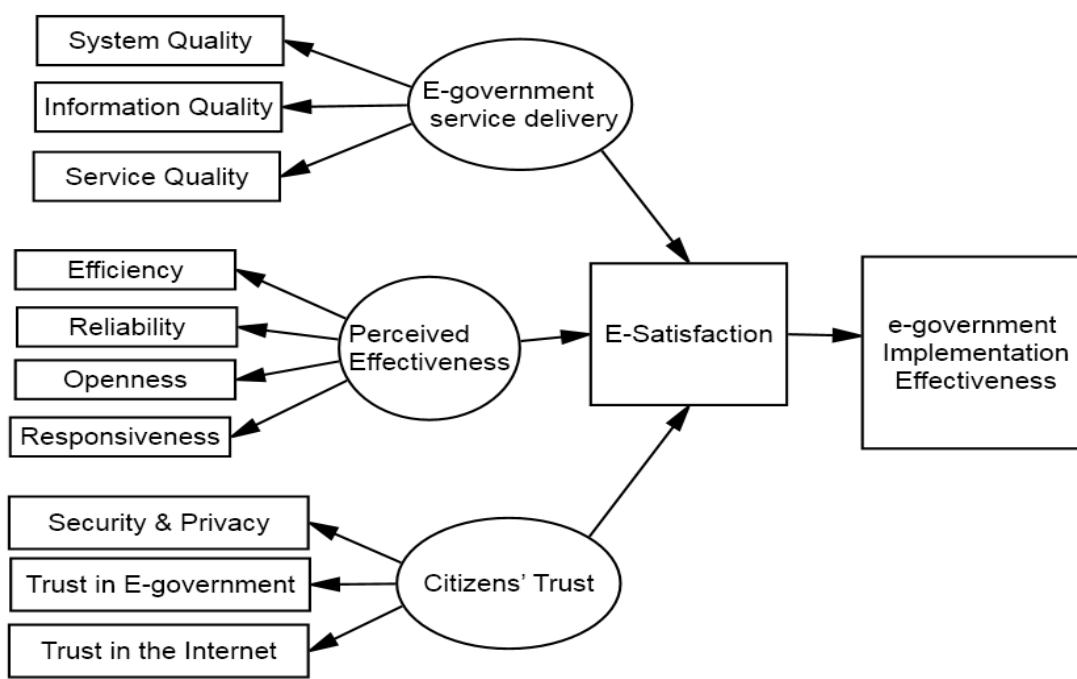


Figure-1: comprehensive framework for assessing e-government implementation effectiveness

**4. DATA ANALYSIS**

**4.1 Participants Profile and Sample size**

In order to develop and evaluate the framework to determine the effectiveness of e- government e-district service, the questionnaire was design and distributed to 560 common service centers. From 560 questionnaires distributed, 511 responses were received and used for all consequent analysis. 49 questionnaires were discarded due to incomplete and unanswered submission. Obtained 93.63% response rate is considered a very good response rate within the field of IS research (Hala Al- Khatib, 2013).

**4.2 Respondents Demographic Analysis**

Survey Data have been analyzed using SPSS 22.0 (Statistical Package for Social Sciences). The frequency analysis of demographic profile of respondents has been presented to understand the usage pattern of select e-government services by different demographic groups.

As it is seen in Table 1 that most of the respondents are Male (60.2%) and the representation of the females is 39.8%. The age group analysis shows that the respondents mostly belonged to age group of 31-40 years (37.8%) and 20-30 Years (36.8%). Very few were above belonging to the age group of 41-50 years (19.6%). And the respondents belonging to the age group of 51-60 years (5.9%) were the lowest in number.

Education status of the respondents has been reflected in five different categories such as Schooling/10th, Diploma/ 10+2, Bachelor Degree, Master Degree and Professional Education. 42.9% of the total respondents were graduate followed by the Diploma/ 10+2 as qualification of 18.8% of total respondents. The respondents with Master Degree and Schooling/10th as their qualification were 17.6% and 16.8% respectively. The respondents with Professional Education were lowest as 3.9%.

**Table-1: Respondents Demographic Analysis**

		Frequency	Percent	Cumulative Percent
Gender Profile	Male	438	85.7	85.7
	Female	73	14.3	100.0
	Total	511	100.0	
Age profile	20-30 years	188	36.8	36.8
	31-40 years	193	37.8	74.6
	41-50 years	100	19.6	94.1
	51-60 years	30	5.9	100.0
	Total	511	100.0	
Educational background	Schooling/10th	86	16.8	16.8
	Diploma/ 10+2	96	18.8	35.6
	Bachelor Degree	219	42.9	78.5
	Master Degree	90	17.6	96.1
	Professional Education	20	3.9	100.0
	Total	511	100.0	
computer skill	certificate course in Computer	265	51.9	51.9
	Diploma in Computer	184	36.0	87.9
	Graduate in computer	35	6.8	94.7
	Master Degree in Computer/IT	11	2.2	96.9
	Advance Diploma in Computer/IT	16	3.1	100.0
	Total	511	100.0	

The computer education was separately analysed to assess the computer skill of the respondents. Table 1 explain that 51.9% of the total respondents had done certificate course in Computer, 36% respondents had Diploma in Computer and 3.1% had Advance Diploma in Computer/IT to enhance their computer skills along with their traditional academic qualification. There were only 3.9% of respondents with Bachelor and 2.2% of respondents were Master Degree holders in computer application.

**4.3 Factor Analysis**

The “EFA (Exploratory Factor Analysis) was performed using PCA (Principal Component Analysis) method” for conforming constructs. According to Hair et al. (1998), “factor loading greater than 0.30 is considered to meet the minimal level; loading of 0.40 is considered more important; if the loading are 0.50 or greater, it is considered very significant”. For this research, a factor loading of 0.50 has been used as cut off point.

“The results of factor analysis are presented in Table 2 KMO Values ranging from 0.5 to 1.0, generally indicate that a factor analysis is useful for the data. Bartlett’s test of sphericity indicates how related are the items of the variable. The significance level gives the result of the test. Very small values (less than .05) indicate that there are probably significant relationships among the variables. A value higher than about .10 or so may indicate that the data are not suitable for factor analysis. The results of these two tests indicate that factor analysis is suited for the data collected. Finally, three items with loadings less than 0.5 were dropped, thus confirming forty nine items for the final analysis”.

Table-2: Results of Exploratory Factor Analysis

Macro Variable	Micro Variable	Factor loadings	KMO Measure of Sample Adequacy (>0.5)	Bartlett's Test of Sphericity		Items confirmed	Items dropped	Cum % of loading
				Chi Square	Sig. (<.10)			
E-government service delivery (3)	System Quality -1	.889	.720	846.199	.000	5	0	53.234
	System Quality -2	.753						
	System Quality -3	.645						
	System Quality -4	.471						
	System Quality -5	.817						
	Information Quality -1	.759	.719	391.704	.000	4	1	43.395
	Information Quality -2	.788						
	Information Quality -3	.086						
	Information Quality -4	.735						
	Information Quality -5	.653						
	Service Quality- 1	.268	.732	1207.120	.000	3	1	65.931
	Service Quality -2	.900						
	Service Quality -3	.927						
Service Quality -4	.947							
Perceived Effectiveness (4)	Efficiency -1	.873	.711	694.360	.000	4	0	60.753
	Efficiency -2	.860						
	Efficiency -3	.754						
	Efficiency -4	.600						
	Reliability -1	.732	.660	4946.655	.000	5	0	79.429
	Reliability -2	.933						
	Reliability -3	.917						
	Reliability -4	.932						
	Reliability -5	.925	.783	1615.536	.000	4	0	80.430
	Openness -1	.933						
	Openness -2	.896						
	Openness -3	.898						
	Openness -4	.859	.733	1083.738	.000	5	0	58.945
	Responsiveness -1	.734						
	Responsiveness -2	.756						
	Responsiveness -3	.634						
	Responsiveness -4	.923						
Responsiveness -5	.764	.843	1027.201	.000	5	0	62.553	
Security & Privacy -1	.834							
Security & Privacy -2	.846							
Security & Privacy -3	.752							
Security & Privacy -4	.832							
Security & Privacy -5	.774							
Trust In E-Gov -1	.846							
Trust In E-Gov -2	.718							
Trust In E-Gov -3	.782							
Trust In E-Gov -4	.810							
Trust In E-Gov -5	.793							
Trust In Internet	Trust In Internet -1	.879	.583	382.883	.000	3	0	63.008
	Trust In Internet -2	.592						
	Trust In Internet -3	.876						
E-Satisfaction	E-Satisfaction -1	.727	.801	627.439	.000	5	0	53.111
	E-Satisfaction -2	.674						
	E-Satisfaction -3	.798						
	E-Satisfaction -4	.718						
	E-Satisfaction -5	.722						
Implementation Success Of E-Government Project	ISEGP -1	.726	.790	1989.268	.000	4	0	79.096
	ISEGP -2	.962						
	ISEGP -3	.902						
	ISEGP -4	.947						

**4.4 Reliability Analysis**

“Chronbach Alpha has been computed to ascertain the reliability of the questionnaire thus establishing its internal consistencies”. Nunally and Bernstein (1994) state that “allowable alpha value can be somewhat lower for new scales, suggesting the use of minimum alpha value of 0.60; otherwise, an alpha value of 0.70 is often considered the criterion for internally consistent established scale”. The study has adopted a cut off value of Cronbach’s alpha as 0.7.

Table 3: Results of Reliability test					
	Macro Variable	Cronbach Alpha		Micro Variable	Cronbach Alpha
1	E-government service delivery (EGSD)	.917	1	System Quality (SYSQ)	.767
			2	Information Quality (INFQ)	.717
			3	Service Quality (SERQ)	.920
2	Perceived Effectiveness (PEFF)	.965	1	Efficiency (EFCY)	.771
			2	Reliability (RLBT)	.935
			3	Openness (OPNS)	.917
			4	Responsiveness (RSPN)	.824
3	Citizen’s Trust (CTST)	.936	1	Security & Privacy (S&P)	.867
			2	Trust In E-Government (TGOV)	.849
			3	Trust In Internet (TINT)	.687
<b>Outcome Variables</b>					
4	E-Satisfaction (ESFN)	.779			
5	Implementation Success Of E-Government Project (ISEGP)	.907			
<b>Over all Reliability of the Questionnaire</b>					0.984

The Cronbach’s alpha values in table 3 “are within the acceptable range that is more than the cut off value of 0.7. The overall Cronbach’s alpha value of the questionnaire is quite high, being 0.975, which indicates that the research instrument used is adequately reliable”.

**4.5 Correlation Analysis**

Results of correlation analysis of independent variables suggest that there is significant correlation among all of the variables. All the ten variables considered correlate significantly with the entire variable. Amongst the three Factors of “E-government service delivery”, four factors of “Perceived Effectiveness” and three factors of “citizen’s trust”, all the ten independent variables have significant relationship with each other (Refer Table 4). The highest level of correlation (0.942) is between “Trust in E-government” and “Reliability” and the lowest significant relationship is between “Trust in the Internet” and “information quality” (0.592).

**Table-4: Correlations of independent variables**

	SYSQ	INFQ	SERQ	EFCY	RLBT	OPNS	RSPN	SCPY	TGOV	TINT
SYSQ	1									
INFQ	.691**	1								
SERQ	.892**	.807**	1							
EFCY	.840**	.787**	.911**	1						
RLBT	.808**	.781**	.873**	.782**	1					
OPNS	.897**	.802**	.940**	.901**	.919**	1				
RSPN	.790**	.793**	.872**	.814**	.929**	.893**	1			
SCPY	.800**	.800**	.891**	.832**	.900**	.915**	.881**	1		
TGOV	.811**	.751**	.871**	.793**	.942**	.915**	.845**	.886**	1	
TINT	.696**	.592**	.769**	.652**	.817**	.784**	.729**	.807**	.806**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**4.5 Regression Analysis**

Stepwise regression analysis is undertaken to establish the predictor-criterion relationship among the dependent and independent variables. In continuation of correlation, regression analysis (step-wise) was carried out to test hypothesis of relations to identify whether dependent variable i.e. “Implementation success of e-government project” is explained by identified independent variables.

**4.5.1 E-government Service Delivery as Dependent Variable**

Table 5a and 5.b revealed by step-wise regression analysis that three factors “Service Quality (SERQ), Information Quality (INFQ), and System Quality (SYSQ)” are significant predictors of “E-government Service Delivery (EGSD)”, In Table 5.9a, R square at 0.998 indicates that these three variables are able to explain “E-government Service Delivery” to the extent of 99.8 percent. “The ANOVA values for the regression model are shown in Table 5b indicating validation at 95 percent confidence level.” The coefficient summary as shown in Table 5c gives beta values of “Service Quality (SERQ), Information Quality (INFQ), and System Quality (SYSQ)” Factors as 0.425, 0.322 and 0.323 respectively, which are fairly representative of their impact on “E-government Service Delivery”.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.973 <sup>a</sup>	.946	.946	.17181
2	.988 <sup>b</sup>	.976	.976	.11369
3	.999 <sup>c</sup>	.998	.998	.03614
a. Predictors: (Constant), SERQ				
b. Predictors: (Constant), SERQ, INFQ				
c. Predictors: (Constant), SERQ, INFQ, SYSQ				

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	263.741	1	263.741	8934.884	.000 <sup>b</sup>
	Residual	15.025	509	.030		
	Total	278.766	510			
2	Regression	272.200	2	136.100	10530.357	.000 <sup>c</sup>
	Residual	6.566	508	.013		
	Total	278.766	510			
3	Regression	278.104	3	92.701	70979.590	.000 <sup>d</sup>
	Residual	.662	507	.001		
	Total	278.766	510			
a. Dependent Variable: EGSD						
b. Predictors: (Constant), SERQ						
c. Predictors: (Constant), SERQ, INFQ						
d. Predictors: (Constant), SERQ, INFQ, SYSQ						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.684	.023		29.127	.000
	SERQ	.766	.008	.973	94.525	.000
2	(Constant)	.314	.021		14.748	.000
	SERQ	.578	.009	.734	63.619	.000
	INFQ	.308	.012	.295	25.583	.000
3	(Constant)	.007	.008		.872	.383
	SERQ	.334	.005	.425	72.170	.000
	INFQ	.336	.004	.322	87.199	.000
	SYSQ	.328	.005	.323	67.233	.000
a. Dependent Variable: EGSD						

Among the three E-government Service Delivery Factors, “Service Quality (SERQ)” with beta value of 0.425 has been perceived to be the most critical significant predictor of E-government Service Delivery (EGSD) followed by System Quality (SYSQ) and Information Quality (INFQ) with beta values as 0.323, and 0.322 respectively.

4.5.2 Perceived Effectiveness as Dependent Variable

Table 6a and 6b revealed by step-wise regression analysis that four factors “Openness (OPNS), Responsiveness (RSPN), Efficiency (EFCY), and Reliability (RLBT)” are significant predictors of “Perceived Effectiveness”,

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976 <sup>a</sup>	.953	.953	.17590
2	.992 <sup>b</sup>	.985	.984	.10097
3	.995 <sup>c</sup>	.991	.990	.07914
4	.999 <sup>d</sup>	.997	.997	.04437
a. Predictors: (Constant), OPNS				
b. Predictors: (Constant), OPNS, RSPN				
c. Predictors: (Constant), OPNS, RSPN, EFCY				
d. Predictors: (Constant), OPNS, RSPN, EFCY, RLBT				

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	319.299	1	319.299	10319.078	.000 <sup>b</sup>
	Residual	15.750	509	.031		
	Total	335.048	510			
2	Regression	329.870	2	164.935	16178.963	.000 <sup>c</sup>
	Residual	5.179	508	.010		
	Total	335.048	510			
3	Regression	331.873	3	110.624	17662.375	.000 <sup>d</sup>
	Residual	3.175	507	.006		
	Total	335.048	510			
4	Regression	334.052	4	83.513	42418.950	.000 <sup>e</sup>
	Residual	.996	506	.002		
	Total	335.048	510			
a. Dependent Variable: PEFF						
b. Predictors: (Constant), OPNS						
c. Predictors: (Constant), OPNS, RSPN						
d. Predictors: (Constant), OPNS, RSPN, EFCY						
e. Predictors: (Constant), OPNS, RSPN, EFCY, RLBT						
<b>Table 6c Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.382	.024		15.867	.000
	OPNS	.859	.008	.976	101.583	.000
2	(Constant)	.086	.017		5.162	.000
	OPNS	.548	.011	.623	50.812	.000
	RSPN	.426	.013	.395	32.202	.000
3	(Constant)	-.006	.014		-.434	.665
	OPNS	.412	.011	.469	36.272	.000
	RSPN	.418	.010	.388	40.267	.000
	EFCY	.175	.010	.179	17.884	.000
4	(Constant)	.001	.008		.090	.929
	OPNS	.245	.008	.279	30.258	.000
	RSPN	.253	.008	.235	33.173	.000
	EFCY	.249	.006	.255	42.140	.000
	RLBT	.253	.008	.280	33.271	.000
a. Dependent Variable: PEFF						

In Table 6a, R square at 0.997 indicates that these four variables are able to explain “Perceived Effectiveness” to the extent of 99.7 percent. “The ANOVA values for the regression model are shown in Table 6b indicating

validation at 95 percent confidence level”. The coefficient summary as shown in Table 6c gives beta values of “Openness (OPNS), Responsiveness (RSPN), Efficiency (EFCY), and Reliability (RLBT)” factors as 0.279, 0.235, 0.255 and 0.280 respectively, which are fairly representative of their impact on “Perceived Effectiveness”.

Among the four Perceived Effectiveness Factors, “Reliability (RLBT)” with beta value of 0.280 has been perceived to be the most critical significant predictor of Perceived Effectiveness of e-government services followed by Openness (OPNS), Efficiency (EFCY) and Responsiveness (RSPN) with beta values as 0.279, 0.255 and 0.235 respectively.

**4.5.3 Citizen’s Trust as Dependent Variable**

Table 7a and 7b revealed by step-wise regression analysis that three factors “Security & Privacy (SCPY), Trust in Internet (TINT), and Trust in E-government (TGOV)” are significant predictors of “Citizen’s Trust”. In Table 7a, R square at 0.985 indicates that these three variables are able to explain “Citizen’s Trust” to the extent of 98.5 percent. “The ANOVA values for the regression model are shown in Table 7b indicating validation at 95 percent confidence level”. The coefficient summary as shown in Table 7c gives beta values of “Security & Privacy (SCPY), Trust in Internet (TINT), and Trust in E-government (TGOV)” factors as 0.380, 0.338 and 0.335 respectively, which are fairly representative of their impact on “Citizen’s Trust” on e-government project.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 <sup>a</sup>	.901	.900	.23187
2	.982 <sup>b</sup>	.963	.963	.14064
3	.992 <sup>c</sup>	.985	.985	.09068
a. Predictors: (Constant), SCPY				
b. Predictors: (Constant), SCPY, TINT				
c. Predictors: (Constant), SCPY, TINT, TGOV				

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	247.787	1	247.787	4608.884	.000 <sup>b</sup>
	Residual	27.365	509	.054		
	Total	275.152	510			
2	Regression	265.104	2	132.552	6701.756	.000 <sup>c</sup>
	Residual	10.048	508	.020		
	Total	275.152	510			
3	Regression	270.983	3	90.328	10984.454	.000 <sup>d</sup>
	Residual	4.169	507	.008		
	Total	275.152	510			
a. Dependent Variable: CTRST						
b. Predictors: (Constant), SCPY						
c. Predictors: (Constant), SCPY, TINT						
d. Predictors: (Constant), SCPY, TINT, TGOV						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.310	.036		8.566	.000
	SCPY	.891	.013	.949	67.889	.000
2	(Constant)	.092	.023		3.965	.000
	SCPY	.569	.013	.606	42.229	.000
	TINT	.403	.014	.425	29.590	.000
3	(Constant)	.023	.015		1.487	.138
	SCPY	.357	.012	.380	30.285	.000
	TINT	.321	.009	.338	34.426	.000

	TGOV	.316	.012	.335	26.737	.000
a. Dependent Variable: CTRST						

Among the three Citizen’s Trust Factors, “Security & Privacy (SCPY)” with beta value of 0.380 has been perceived to be the most critical significant predictor of Citizen’s Trust on e-government services followed by Trust in Internet (TINT), and Trust in E-government (TGOV) with beta values as 0.338 and 0.335 respectively.

**4.5.4 E-satisfaction as Dependent Variable**

Table 8a and 8b revealed by step-wise regression analysis that three factors “Perceived Effectiveness (PEFF), Citizens’ Trust (CTRST), and E-government Service Delivery (EGSD)” are significant predictors of “E-satisfaction” from e-government project. In Table 8a, R square at 0.733 indicates that these three variables are able to explain “E-satisfaction” to the extent of 73.3 percent. “The ANOVA values for the regression model are shown in Table 8b indicating validation at 95 percent confidence level”. The coefficient summary as shown in Table 8c gives beta values of “Perceived Effectiveness (PEFF), Citizens’ Trust (CTRST), and E-government Service Delivery (EGSD)” factors as 0.235, 0.300 and 0.344 respectively, which are fairly representative of their impact on “E-satisfaction” from e-government project.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842 <sup>a</sup>	.709	.709	.38119
2	.850 <sup>b</sup>	.722	.721	.37315
3	.856 <sup>c</sup>	.733	.731	.36600
a. Predictors: (Constant), PEFF				
b. Predictors: (Constant), PEFF, CTRST				
c. Predictors: (Constant), PEFF, CTRST, EGSD				

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	180.309	1	180.309	1240.882	.000 <sup>b</sup>
	Residual	73.961	509	.145		
	Total	254.271	510			
2	Regression	183.537	2	91.768	659.068	.000 <sup>c</sup>
	Residual	70.734	508	.139		
	Total	254.271	510			
3	Regression	186.353	3	62.118	463.708	.000 <sup>d</sup>
	Residual	67.917	507	.134		
	Total	254.271	510			
a. Dependent Variable: ESN						
b. Predictors: (Constant), PEFF						
c. Predictors: (Constant), PEFF, CTRST						
d. Predictors: (Constant), PEFF, CTRST, EGSD						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.688	.059		11.730	.000
	PEFF	.734	.021	.842	35.226	.000
2	(Constant)	.571	.062		9.175	.000
	PEFF	.484	.056	.556	8.689	.000
	CTRST	.297	.062	.308	4.815	.000
3	(Constant)	.428	.069		6.244	.000
	PEFF	.205	.082	.235	2.506	.013
	CTRST	.289	.060	.300	4.779	.000
	EGSD	.329	.072	.344	4.585	.000
a. Dependent Variable: ESN						

Among the three Factors of "E-satisfaction" from e-government project, "E-government Service Delivery (EGSD)" with beta value of 0.344 has been perceived to be the most critical significant predictor of E-satisfaction" from e-government project followed by Citizens' Trust (CTRST) and Perceived Effectiveness (PEFF) with beta values as 0.300 and 0.235 respectively.

**4.5.5 Implementation Success of E-Government Project as Dependent Variable**

Table 9a and 9b revealed by step-wise regression analysis that "E-satisfaction" from e-government project is an antecedent and a significant predictor of success of implemented E-Government Project. In Table 9a, R square at 0.711 indicates that "E-satisfaction" from e-government project is able to explain success of implemented E-Government Project to the extent of 71.1 percent. "The ANOVA values for the regression model are shown in Table 9b indicating validation at 95 percent confidence level". The coefficient summary as shown in Table 9c gives beta value of "E-satisfaction" as 0.843, which is fairly representative of its impact on success of implemented E-Government Project.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843 <sup>a</sup>	.711	.710	.44324

a. Predictors: (Constant), ESN

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	245.934	1	245.934	1251.806	.000 <sup>b</sup>
	Residual	100.000	509	.196		
	Total	345.934	510			

a. Dependent Variable: ISEGP  
b. Predictors: (Constant), ESN

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.131	.077		1.706	.089
	ESFN	.983	.028	.843	35.381	.000

a. Dependent Variable: ISEGP

**5. RESULTS OF HYPOTHESES TESTING**

In the conceptual research framework, fourteen hypotheses were initially proposed and all of them as shown in table 10 have been accepted.

**Table 510 Summary of the Hypotheses Test Results**

Hy. No.	Independent Variables	to	Dependent Variables	R-Square	Beta Coefficient	t-value	Sig Value	Status of Hypotheses
H1	System Quality (SYSQ)	→	E-government Service Delivery (EGSD)	0.998	0.323	67.233	0.000	Accepted
H2	Information Quality (INFQ)	→	E-government Service Delivery (EGSD)		0.322	87.199	0.000	Accepted
H3	Service Quality (SERQ)	→	E-government Service Delivery (EGSD)		0.425	72.170	0.000	Accepted
H4	Efficiency (EFF)	→	Perceived Effectiveness (PEFF)	0.997	0.255	42.140	0.000	Accepted
H5	Reliability (RLBT)	→	Perceived Effectiveness (PEFF)		0.280	33.271	0.000	Accepted
H6	Openness (OPNS)	→	Perceived Effectiveness		0.279	30.258	0.000	Accepted

			(PEFF)					
H7	Responsiveness (RSPN)	→	Perceived Effectiveness (PEFF)	0.985	0.235	33.173	0.000	Accepted
H8	Security & Privacy (SCPY)	→	Citizens' Trust (CTRST)		.380	30.285	0.000	Accepted
H9	Trust in E-government (TGOV)	→	Citizens' Trust (CTRST)		.335	26.737	0.000	Accepted
H10	Trust in the Internet (TINT)	→	Citizens' Trust (CTRST)		.338	34.426	0.000	Accepted
H11	Perceived E-government service delivery (EGSD)	→	E-satisfaction in e-government services (ESFN)	0.733	.344	4.585	0.000	Accepted
H12	Perceived Effectiveness (PEFF)	→	E-satisfaction in e-government services (ESFN)		.235	2.506	0.000	Accepted
H13	Citizens' Trust (CTRST)	→	E-satisfaction in e-government services (ESFN)		.300	4.779	0.000	Accepted
H14	E-satisfaction in e-government services (ESFN)	→	Implementation Success of E-Government Project (ISEGP)	0.711	.843	35.381	0.000	Accepted

**6. CONCLUSION**

This chapter provides an overview of the empirical survey conducted as a part of this research. Besides discussing the basic research framework adopted for the survey method, details on questionnaire design, pretesting, administration and validation; and sample design are presented. Results of reliability test (Cronbach alpha) and construct validation test using exploratory factor analysis are also reported. Hypotheses testing have been done and research models have been validated.

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**IMPACT OF GENDER ROLES, MENTORING AND FAMILY SUPPORT ON CAREER ADVANCEMENT OF WOMEN IN IT SECTOR: A LITERATURE REVIEW AND RESEARCH AGENDA****Shikha Arora<sup>1</sup> and Dr. Abhinav Priyadarshi Tripathi<sup>2</sup>**<sup>1</sup>Research Scholar, AMU & Assistant Professor, Department of Management Studies, Institute of Technology and Science, Ghaziabad<sup>2</sup>Associate Professor, Institute of Management and Science, Ghaziabad**ABSTRACT**

*Number of women employed in IT sector is on the rise although they are underrepresented in the technical side as compared to support and administrative side of this sector. There has been an increase in the number of women entering the IT workforce but this percentage decreases as they move up the corporate ladder. There is still a long way to go before they move from periphery to the centre. This paper focuses on the key aspects of Gender roles, Mentoring and Family Support and how an interplay of these factors influences the career advancement prospects of women in IT sector. A systematic review of these factors is presented with a view to understand the path of career progression of women in this sector and present a research agenda for the future.*

*Keywords: Women, Career, Career Advancement, Gender roles, Mentoring, Family Support*

**INTRODUCTION**

Hall (1996) describes a career as a vertical progression with growing income, power, status and security. Career is viewed as a series of work experiences that a person goes through during the tenure of his work and it is generally perceived as a sequence of stages depicting the “passage” from one life phase to another (Callanan and Greenhaus 1999).

Earlier Careers were typically viewed and defined in terms of a relationship of an individual with its employing organization in a linear manner.

The organizations as well as the working environment has been radically transformed owing to certain factors like increased globalization, technological advancement, increased participation of women in workplace, dual career couples and workforce diversity (Coovert, 1995; Freeman, Soete, & Efendioglu, 1995; Howard, 1995; Rosenthal, 1995). These changes have led the organizations to adopt flexible structures corroding the rigid hierarchies to cope up with the challenges posed by this dynamic environment.

These changes have resulted in the emergence of new types of career contracts such as career resilience (Waterman, Waterman and Collard., 1994), the boundary less career (Kotter, 1995; Arthur and Rousseau, 1996), the post-corporate career (Peiper and Baruch, 1997) and the protean career (Hall and Moss, 1998).

Career advancement opportunities are very important for ambitious employees as they enter into a profession.

Career advancement can be taken to mean one or more of the following: an increase in the scope or level of responsibility, greater authority, a raise in salary and/or an increase in benefits, and a move to a higher level within a hierarchical structure (Whitely, Dougherty, and Dreher, 1991). There are many factors that may facilitate or impede one’s career prospects, which can be broadly divided into two main groups: situational attributes and personal attributes (Tharenou, Latimer and Conroy, 1994).

Callanan and Greenhaus (1999) defined organizational career advancement as an objective assessment of an employee's career movement, either via hierarchical advancement or horizontal mobility.

**FACTORS INFLUENCING CAREER ADVANCEMENT OF WOMEN IN IT SECTOR**

There are fundamental differences in the career progression of men and women. According to Wirth (2001), there are invisible barriers for career advancement of women. Even after being well educated, they are pushed into a narrow range of opportunities characterized by lower pay, less challenge and responsibility and few opportunities for advancement. A miniscule percentage is able to climb the corporate ladder but most of them remain at the lower and the middle level.

The EC’s Report on Women active in the information and communications technology (ICT) sector observed that for every 1000 women in the EU with a degree, only 29 specialise in an ICT-related subject (as compared to 95 for men) and only 0.4 per cent will work in the ICT sector (Briken, K., Chillas, S., & Krzywdzinski, M. 2017)

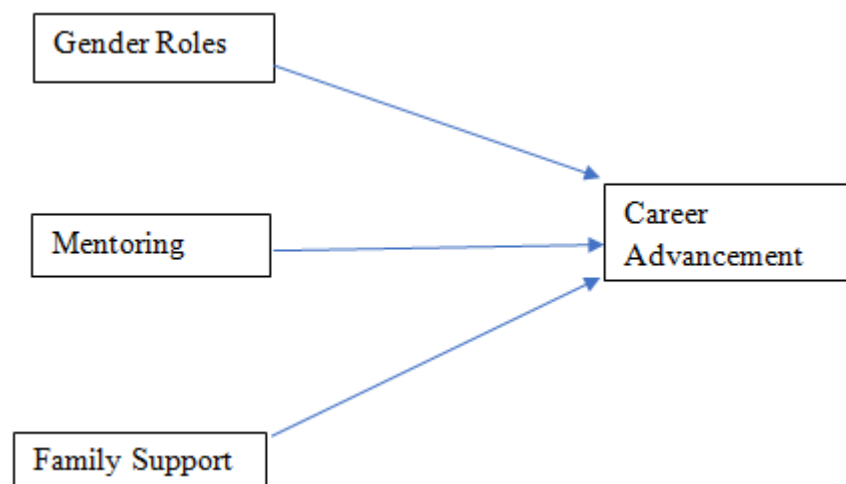
Career advancement is influenced by several factors that include: Job performance; Contextual performance; Gender; Characteristics of human capital; Mentors, networking and commitment to development; Commitment

to career development and career orientations; Satisfaction with the psychological contract; Selection criteria and methods; Organizational technology; Human resource planning; Organizational restructuring (Munjuri, 2011) concepts, which emphasize the continuous adaptation of the organization and careers to a competitive environment.

A study on assessing the influence of human capital and social capital on career advancement of women at four levels of management in Australian banking industry revealed that human capital explains most of the advancement at all levels.

Considering the changing paradigm of Career Advancement, the various factors that influence progression of careers at workplace can be studied at the societal level, organizational level and individual level.

This paper is focused on review of existing literature on the important dimensions of Gender Roles, Mentoring and Family Support as the crucial factors influencing the career progression of women.



### GENDER ROLES AND CAREER

Women are underrepresented in senior management positions both in the public and private sectors globally (ILO, 2009). Women are less likely to occupy senior management and leadership positions in private sector companies (Powell, 1999; and Lyness and Heilman, 2006), and this is also the scenario in organized private sector in India (Patel and Parmentier, 2005).

Acker (1990) argued that organization structure is not gender neutral rather gender bias or disparities are so deeply rooted in the organization policies, documents and practices that it becomes a subtle part integrated with the organization structure itself.

Organizational structure is gendered therefore instead of gender neutrality, there is gender disparity. In fact, the gendered nature is deeply ingrained in the organizational structure, processes, contracts and thinking. This gendered nature is veiled behind the hierarchical structure and jobs but masculinity is all pervasive and runs through the organizational processes overlooking women and contributing to gender biased practices and maintenance of gender inequality in organizations Acker J (1990). Organizational structures act as barriers (Acker, 1990) encouraging gender-biased practices among group members related to promotions and performance evaluations.

Employees in an organization are selected based on a good fit for the organizational culture. Focus on having “good fits” and maintaining uniform cultures create a kind of inertia which leads to classification of tasks or jobs in terms of masculine or exclusionary (Carrillo and Gromb 2006, 744). It is therefore generally seen that men tend to get placed in key positions and women are largely employed at positions which are low-paying, less prestigious and offer little scope of promoting to key roles.

Existing societal norms determine gender roles defined for males and females in terms of roles, responsibilities and expectations. India is a patriarchal society. The masculine and feminine characteristics shaping up roles, attitude and behavior are largely derived and influenced from the socio-cultural setting.

Gender bias against women arises out of cultural stereotypes rather than hostility (Górska, A. 2017). In this socio-cultural aspect, men are seen in dominant roles and women are more accepted in subordinate roles within the social and organizational culture (Kulkarni, 2002; and Naqvi, 2011).

In the existing literature, Schein, Mueller, Lituchy and Liu (1996) explained the existence of a psychological barrier which hinders the career advancement of women; the ‘think manager–think male’ perception. It is therefore a well-accepted assumption that men possess the required skills and abilities for leadership and strategic roles in organizations.

Heilman (2001) proposed that the dearth of women at the upper levels of management is primarily an outcome of the gender stereotypes and the behavioural expectations they create about women. Despite being equally competent, women are not able to advance in their careers at par with men because their evaluation of performance is largely influenced by the gender bias.

Gender stereotyping and the phenomenon of biased evaluation they create becomes a major barrier that hinders the women from progressing to the top levels of management.

Sex role stereotyping described as the “Think Manager-Think male” is prevalent and it is perceived that successful managers exhibit characteristics, attitudes and temperaments that are associated with men in a global context. (Brenner, O. C., Tomkiewicz, J., & Schein, V. E. (1989; Schein et al. 1996).

The preferences based on Gender differences in terms of hope of success and self-efficacy is also seen from the choice of education and career being pursued by men and women. Females preference for courses and careers focusing on communication/human interaction (versus physical science and/or technology), myths about women’s lack of aptitude for the technical trades and ‘nerd’ stereotypes inhibit girls from engaging in technology, engineering and computer sciences. Cukier (2009)

Preconceived notions about masculinity and femininity determine the ways of interaction and evaluation of individuals at workplace. A 2012 study noted that while considering identical resumes for the position of lab manager, scientists of both sexes rated male applicants as more competent and employable than female applicants possessing the same qualifications and experience. Further male candidates were offered higher salary and offered more career mentoring as compared to female candidates (Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. 2012).

Internationally, several studies have examined cultural bias and gender stereotyping in the advanced technology sectors. Xia and Kleiner (2001) talked about youth-oriented hiring practices (where experience is not a valued asset), disregard for women and a major increase in age and sexism complaints lodged with the US Equal Employment Opportunity Commission. Likewise, Simard et al. (2008) described the technology sector as “masculine, white, and heterosexual, associated with hard programming, obsessive behavior, and extensive working hours.”

Simard et al. (2008) discussed the industry practices that undermine the ability of women to occupy leadership positions such as gender discriminations in hiring, promotion and evaluation practices (including salary levels) across all the levels in the organizations.

Sex-role differences are inculcated into the self-concepts of men and women defining the stereotypical metaphor of masculine and feminine characteristics. Masculine characteristics are positively valued more often than feminine characteristics, particularly in context of work. Positively valued masculine characteristics involve skills and competence required for leadership roles whereas positive feminine characteristics are associated with soft – warmth expressiveness (Broverman, I. K., Vogel, S. R., Broverman, D. M., Clarkson, F. E., & Rosenkrantz, P. S. 1972).

Several studies have examined the various factors that influence the career growth and advancement of women. Women remain stressed due to their work overload or under load (Budhwar *et al.*, 2005).

The existing literature discusses the presence of preconceived notions about women such as they are not competent as managers or leaders, gender stereotypes, lack of support structures to facilitate their advancement, dealing with male egos at work, discriminatory practices limiting women’s access to network of power and authority leave them dissatisfied (Budhwar *et al.*, 2005).

Men and women differ in terms of whether they generally influence or get influenced. Men are perceived to be more influential and women are perceived to be influenced. The different set of role expectations from men and women is derived from stereotypic sex differences. Presence of men in high status roles in organizations gives them the right to make demands and presence of women in lower status roles are expected to fulfil those demands. But in case of equal formal status also, the gender-based differences have been found due to the hierarchical social structures in which men enjoy higher status. This leads to different expectations about male and female behaviour, which in turn influences social interaction in ways that encourage behaviour confirming the expectancies owing to masculine and feminine stereotype in hierarchical social setting (Eagly, A. H. 1983).

Women are required to work much harder as compared to their male counterparts to secure leadership positions in organization. With the growing levels of women enrolling for higher education, a large number of women enter into the organizations, but the career of women does not progress at the same pace as that of men (Wirth 2001).

In a longitudinal study based on in-depth interviews of females and males to ascertain the attitude to promotion, it was found that gender stereotyping of the managerial role continues to persist and negatively influences the career advancement of women. It was inferred that the potential of female workforce is underutilized in the senior managerial positions (Wood, G. 2008).

Though there has been a significant increase in the proportion of women managers at workplace, a good manager is still perceived as largely masculine (Powell, G. N., Butterfield, D. A., & Parent, J. D. 2002)

Study by Powell (1999) indicates that despite attaining the highest levels of education, women are still assumed to be more suited in the role of a follower and characteristics of men are associated with the leadership. Participation of women in engineering and technology sector are also affected by the gendered perceptions.

Bartol and Aspray (2006) noted that women perceive the IT workplace environment as dominated by men and is not welcoming to women. McCracken (2000) reported that turnover of women is high if they find that the workplace culture is male dominated and not conducive to career growth and advancement of women.

### **MENTORING AND NETWORKING**

Mentoring is an interpersonal relationship that is believed to influence the career advancement of individuals. Role of a mentor is crucial in career development and is associated with various career outcomes for the proteges as well as the mentors.

According to Kram (1985), a mentor is an experienced, productive manager who relates well to a less-experienced employee and facilitates his or her personal development for the benefit of the individual as well as that of the organization.

Most of the definitions of Mentoring are derived from the Kram (1985) conceptualisation of Mentoring.

Bozeman and Feeney (2007) defined the term Mentoring as “a process for the informal transmission of knowledge, social capital, and psycho-social support perceived by the recipient as relevant to work, career or professional development; mentoring entails informal communication, usually face-to-face and over a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom or experience (the mentor), to a person who is perceived to have less (the protégé).”

As per the literature review, Mentoring is related with two kind of outcomes one is career related and the other is psychosocial aspect. (Kram 1983; Noe 1988; Ragins 1999)

Career focused mentoring comprises of mentors sponsoring their protégés for career growth and promotion, coaching them on specific issues, providing challenging projects and highlighting their contribution in organisations, and is aimed at achieving a hierarchical progress for proteges (Allen et al. 2004; Kram 1985; Ragins 1997; Ragins & Cotton 1999; Wanberg, Welsh & Hezlett 2003). On the other hand, Psychosocial support focuses primarily on achieving the emotional well-being and personal growth of the proteges by facilitating greater social acceptance, counselling them and acting as role model (Allen et al. 2004; Kram 1985; Ragins 1997; Ragins & Cotton 1999; Wanberg, Welsh & Hezlett 2003). On both the dimensions, it was found that the career related mentoring with specific action plan, challenges and growth opportunities was more related to career advancement of women. The psycho social aspect is negatively related to career advancement of women. (Tharenou 2005) This was shown in a longitudinal study of 3220 Australians, mainly from the public sector and finance and business service industry.

The outcomes associated with formal and informal mentoring programs have been studied extensively but a vast majority of mentoring literature pays attention to the objective dimensions like salary, promotion and growth opportunities. There are few studies that concentrate on the other intrinsic aspects like relationship of mentoring with job involvement, commitment and turnover intention. Research Study by Craig, Allen, Reid, Riemenschneider and Armstrong (2016) focuses on these intrinsic aspects and explores the linkage between psychosocial mentoring and career outcomes. The Study emphasizes and supports that emotions play a vital role and employees experiencing positive mentoring events demonstrate a higher level of affective commitment leading to reduced turnover intention.

The study further supports the hypothesis that psychosocial mentoring is strongly related to affective commitment as compared to career mentoring.

Study by Ensher, Thomas and Murphy (2001) utilized a different classification of mentoring relationships comprising of three categories of mentors, namely, traditional mentor, peer mentor and step ahead mentor. This study examined the effectiveness of different types of mentors on protégés' satisfaction with their mentors, jobs, and perceived career success. The study was conducted on 142 participants who were ethnically diverse and were involved in informal mentoring relationship. Study concluded that out of the three types of mentoring relationships, traditional mentors played a significant role in comparison of peer and step-ahead mentors in providing vocational and role modelling support. It was also found that Vocational support was very important predictor of protégés' job satisfaction and perceived career success.

Mentoring has been studied as a reciprocal relationship involving positive objective and subjective outcomes such as salary, promotion and career mobility of the protégé and a sense of fulfilment, satisfaction, pride and better support networks for the mentor (Ghosh, R., & Reio Jr, T. G. 2013). Career Mentoring was found to be more related to career success of the mentor and, psychosocial mentoring was found to be more related to intrinsic and subjective career outcomes like organizational commitment and job performance.

Few research studies have explored the dysfunctional aspects of mentoring and discussed the negative experiences of the proteges with the mentors (Scandura 1998; Eby and Allen, 2002).

In the earlier studies the role of mentoring in women's career is not clearly defined. This is because women's career advancement is not as smooth and defined as that of men. The journey of career growth and development for women is characterized by career breaks, interruptions caused by family responsibilities that a woman has to fulfil. Several studies in this area support that women having a mentor experience more job satisfaction and career success than women who do not have a mentor (Riley, S., & Wrench, D. 1985).

Several studies have investigated the gender differences in establishing and developing mentoring relationships (Ragins, 2007; Wanberg, Welsh, & Hezlett, 2003). It has been found that when it comes to having access to mentoring, women face number of obstacles to get a mentor as compared to men. These barriers comprise of lack of access to information networks, tokenism, stereotyping, reliance on inappropriate power basis, difficulties faced in building and maintaining cross gender relationships (Noe, 1988). Ragins and Sundstrom (1989) describe individual, interpersonal, organizational, and societal barriers that prevent women from developing mentoring relationships.

Presence and support of a mentor has been frequently cited as one of the factors responsible for career success of women (Ragins, Townsend, & Mattis, 1998).

However, women face various obstacles which hinder access to developmental relationships as they generally enjoy less power in organizations as compared to men (Ragins, 1999). Studies show that mentors choose proteges based on potential for growth and performance. Intuitively mentors invest in those proteges who engage in proactive career behaviour, exhibit career advancement expectations and stand out for their skills and talent. (Singh, R., Ragins, B. R., & Tharenou, P. 2009).

Ragins and Cotton (1999) examined the effects of formal and informal mentoring relationship and the impact of gender composition of mentoring relationship on the career outcomes of the proteges. This study involved 352 female and 257 male proteges. Informal mentoring relationships were found to be far more influential as compared to formal mentoring relationships. Proteges of informal mentors perceived their mentors as more effective and received better career outcomes like more compensation in comparison to formally mentored proteges.

The study supported the findings of the earlier researches indicating that the social interaction for women in cross-gender mentoring relationships is less as compared to mentoring relationship involving female mentor and female protégé. Female proteges in cross-gender relationships may be reluctant to get involved in after-work, social activities with their male mentors because of the perceived sexual context of male-female relationships. (Clawson & Kram, 1984; Hurley 1996).

An important challenge faced by women in formal cross-gender mentoring relationships is to develop an appropriate level of intimacy in the relationship. Clawson and Kram (1984) explained this struggle as the "developmental dilemma." Getting close enough in the mentoring relationship to be open and develop trust with one another but maintaining enough distance at the same time becomes intricate for women in cross-gender mentorship.

The Interpersonal comfort is greater in same gender mentoring relationships as compared to cross-gender mentorships (Allen, Day, Lentz 2005).

There is extensive research that has focused on the impact of gender composition on mentoring relationships and outcomes (Ragins, 1997, 1999; Ragins & Cotton, 1993). It has been examined how this dyadic gender composition of the mentor relationship influences mentoring. There is some evidence that same-gender mentorships are characterized by more career support and psychosocial mentoring and stronger relationship quality than cross gender mentorships (Thomas 1990).

Although the presence of a mentor appears beneficial for all employees, it may be particularly required for females because of the additional barriers and obstacles to career advancement they encounter (Wanberg et al., 2003).

However, because women generally have less power within organizations than do men, it has been suggested that women may not have equal access to developmental relationships (Ragins, 1999). There are inconsistencies in the various researches conducted so it is difficult to make a conclusive statement concerning the gender differences in mentoring relationships and the extent to which they influence the career and psychosocial outcomes for the proteges.

Another important aspect in this context is the issue of who is likely to be a mentor. Lack of female mentors in organizations has been a matter of concern in mentoring and gender research (e.g., Ragins, 1999).

There is a shortage of female mentors as there is a reduced number of women in leadership roles as compared to men. The proverbial old boys network continues to flourish adversely affecting the access of women to information and networks, making it essential for women to get the support of senior men for their career advancement.

### **FAMILY SUPPORT**

Societal Expectations and Family responsibilities influence the career decisions and the career advancement of women to a great extent. In terms of family responsibilities, several dimensions have been explored in the existing literature. Women are considered to be primary care-takers of family responsibilities. Children's responsibility affects the career advancement of women, Career trade-offs, putting career ahead of family leads to social disapproval and rejection, Inability to exploit full potential are the several consequences for women as they fulfil their family responsibility.

Decisions pertaining to education as well as choice of career for women are primarily shaped by their families and upon marriage their spouses play a vital role in their career choices. Although well-educated and competent women in India have progressed to an extent and created a distinct identity for themselves but there are societal and family factors which women have to face irrespective of their competence and professional position. These forces continuously put the burden of fulfilling multiple role expectations which can derail women's careers.

There was an interesting finding in terms of impact of family structure on career advancement of women, respondents in joint families agree more strongly in comparison with nuclear families that commitment to family responsibility obstructs their career advancement. (Buddhapriya, 2009)

Another interesting dimension which emerged from the study by Cross, C., & Linehan, M. (2006) was existence of phenomenon of Self-imposed glass ceiling. The study was based on qualitative research involving interviews of 20 women employees at middle and upper level working in Technology sector in Ireland. It was found that women employees analyse the costs and benefits of moving to the next higher level. If they move to the next higher level, they feel it will lead to working 24\*7 and it will ultimately conflict with their primary role of taking care of the family. So, they remain at their present position where they can work comfortably managing the work-related responsibilities and responsibilities of the family as well.

The study by Subramaniam, Arumugam & Abu Baker Akeel (2013) conducted on 466 women employees working in Malaysian government linked companies found that family related factors impact the career progression of women. In case of dual career couples' women still have to take care of the family responsibilities largely. These additional responsibilities pose major challenges to women as they continue to struggle for managing both their career and family.

### **CONCLUSION AND WAY FORWARD**

A paucity of competent women is often cited as the main reason behind the underrepresentation of women at top management levels. A major factor that is contributing to the dwindling number of women at upper levels is the leakage in the pipeline at career advancement stage. The disproportionate number of women at the positions of power leads to lack of mentors for junior IT women professionals and becomes an obstacle to the attainment of higher ambitions. (Ragins & Sundstorm, 1989).

Women are still regarded as the primary caretakers of household and children responsibilities. There are several phases of life that a woman goes through like marriage and child birth. Employers may expect them to contribute during these crucial phases of their life and may not offer them the opportunities for career advancement. Some women may find motherhood and family roles more rewarding as they perceive inequitable treatment at the workplace. All these factors may strengthen the stereotype of women being more committed to family than the career.

Further research needs to be undertaken in this area as there are very few studies on career advancement of women in IT sector. All the factors are required to be empirically studied by developing appropriate measures to fit the IT sector.

An understanding of the interplay of these factors and their implications on the career advancement of women can provide a direction to enhance the meaningful participation of women in this leading-edge industry.

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**ROLE OF E-LEARNING IN TEACHER EDUCATION PROGRAMME**

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**ABSTRACT**

*E-learning is playing an increasingly important role in supporting the educational growth of any nation. It also offers opportunities for developing nations to enhance their educational development. Worldwide there is growing demand for teachers who have the skills to prepare students to be successful in a technology-infused, knowledge-based society. E-learning can play a critical role in preparing a new generation of teachers, as well as upgrading the skills of the existing teaching force to use 21st century tools and pedagogies for learning. The present paper discuss the importance of including e-learning for teacher development as part of a national strategy for educational development; its role in helping to meet the quantitative and qualitative demand for teachers; and the essential conditions that must be met for effective use of e-learning for teacher development.*

*Keywords: Teacher education, teacher development, effective teaching method, ICT, e-learning, e-content.*

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**INTRODUCTION**

The role of teacher education as a process of nation building is universally recognized. Its objective is man making and producing enlightened citizens. "In Indian thinking, a human being is a positive asset and a precious national resource, which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism". It hardly needs stressing that stereotyped instructional approaches are not conducive to realize this goal. "India's political and social life is passing through a phase which poses the danger of erosion to long accepted values. The goals of secularism, socialism and professional ethics are coming under increasing strain".

To make teachers aware of this menace, teacher education needs to devise new strategies for enabling teachers to address this task.

**EMERGING TREND IN TEACHER EDUCATION**

Teachers serve education, which is an effective instrument of man making. The teachers learn this art through pre-service teacher education programme. It is with the objectives of raising the professional status of teachers, developing among them greater commitment to society, their students and their profession, increasing their professional competencies and performance skills and empowering them to face new challenges that the National Council for Teacher Education has brought forth this document.

The improvement of educational provision in every country is greatly dependent on the efficiency of teachers' education. This efficiency in turn, depends on the knowledge and skills obtained during their education on a first level, on the accumulation of their professional experience, its practical application and its interaction with the educational context on a second level, and on the potential offered to the teacher during his/her professional career to adapt to the new developments so that they are able to be constantly updated, improved and modernized.

Up to this day, there has not been (or when there is one, it is not sufficient) a teacher training system, able to offer the teachers the chance to renew their knowledge, to improve their professional skills and to modernize their teaching methods in line with the new scientific and constantly changing social factors.

It is therefore, important to establish a system of teacher training procedures that covers the existing need, in an organized, qualitative, scientifically consistent and continual as well as flexible way. It seems obvious that urgent measures need to be taken to:

- Introduce effective changes in the teacher education curriculum, particularly with a view to providing a powerful orientation towards value-education, which has been the main subject of our present report;
- Suggest a rational duration for pre-service and in-service teacher training programmes;
- Suggest effective methods of evaluation of trainees; and
- Suggest measures for the maintenance of standards of teacher education and to meet various deficiencies and avoid evils which are prevalent in the field of teacher education.

An additional challenge is that 21st century life, work, and education bring different demands. 21st century citizens, students, and teachers need to:

- Have the skills to address ongoing change and globalization;
- Have the skills to be self-reliant and independent; and
- Be able to obtain knowledge on their own and know what to do with that knowledge to create value for their communities and organizations.

Four categories of e-learning emerge within the dimensions of content and communication including:

**1. Accessing information repositories for learning:** There are vast resources available on the Web to support teaching and learning. Many universities are making their course material available to others and there is a growing movement to the development and sharing of open educational resources. Google and the French government have announced major initiatives to digitize millions of books and make them available on the Web. Despite these important efforts there is a lack of local and culturally appropriate content in digital form for many indigenous and marginalized peoples across the globe.

**2. Participating in courses via the Web:** There has been exponential growth in the offering of online courses and degree programs by higher education institutions. At present there are approx. 60,000 courses listed on Web. There is increased global exchange of virtual courses and programs among universities. There has also been rapid growth in online teacher education courses and degree programs to address educational development needs of rural, isolated communities. The Web has the potential to provide professional development opportunities for existing teachers and to be an important resource in the preparation of new teachers.

**3. Blended learning:** This involves the use of the Web with regular classroom-based learning. In a blended learning environment, students use online resources and tools and also meet face-to-face on campus as members of the same class or program. Types of blended learning activities include:

- integration of Web-based resources and tools in one's teaching;
- production of Web pages for one's classroom; and
- use of online follow-on forums, discussions, and collaborative activities.

**4. Networked Communities:** This involves the development of virtual communities of practice and knowledge-building communities among teacher educators and preservice and inservice teachers. The new online environments and tools for collaboration enable teachers to work together to solve problems and share knowledge, expertise, and materials. They may also work online to co-construct knowledge, content, and learning materials and resources. It often serves as an effective means of supporting teachers and other experts in developing local culturally and linguistically relevant content. **Essential Conditions:** Although e-learning may represent a powerful tool to support teacher development, successful implementation of this mode of learning requires careful planning and consideration of a number of important factors. These include:

- Shared Vision;
- Access to resources of e-learning;
- Skilled Teacher Educators;
- Collegial support and Professional Development;
- Technical Support;
- Content Standards and Curriculum Resources;
- Student-Centered Teaching;
- Evaluation of implementation of e-system;
- Support Policies and follow up.

**Shared Vision:** When any new educational innovation is implemented, problems arise when there is a lack of understanding and commitment to the goals and implementation of the innovation. The infusion of e-learning into teacher development is an innovation that represents a significant change from current practices. Such a change cannot be accomplished without the full support and understanding of policy-makers, ministry officials, university administrators, teacher educators, school administrators, teacher training agency staff, telecommunications companies, and other stakeholders.

**Access to resources of e-learning:** In order for e-learning to be a viable means of supporting and enhancing teacher development teacher educators, trainers, and pre-service and in-service teachers must have access to hardware, connectivity, and high-quality culturally relevant software. Access to such resources represents necessary but not sufficient conditions for the successful use of e-learning as an effective means of teacher development. Access to hardware and connectivity have presented the greatest challenges to developing countries because of the high costs of equipment and the lack of telecommunications infrastructure to support the use of e-learning in rural or remote areas. There are several important technological developments and trends that will make e-learning an increasingly more attractive and feasible possibility. The increasing capabilities of hardware have made computing power increasingly affordable, and there are efforts underway to make computers more affordable to developing countries.

Although connectivity remains a major challenge for developing countries, there are remarkable changes that are taking place in this arena also. The advent of wireless technologies has resulted in an explosion of growth in the use of wireless communication devices in developing nations.

As noted by The Secretary-General of the United Nations:

Wireless technologies have a key role to play everywhere, but especially in developing countries and countries with economies in transition. With considerable speed and without enormous investments, WIFI can facilitate access to knowledge and information, for example by making use of unlicensed radio spectrum to deliver cheap and fast Internet access. Indeed, it is precisely in places where no infrastructure exists that WIFI can be particularly effective, helping countries to leapfrog generations of telecommunications technology and infrastructure and empower their people. (Annan, 2003) It is clear that the lower cost of hardware and the remarkable gains in wireless technology present new opportunities for developing countries to explore and pilot the use of e-learning to accelerate educational development.

**Skilled Teacher Educators:** For e-learning to be an effective teacher development tool, it is essential that teacher trainers, teacher educators, and faculty who teach general education courses are themselves skilled in and model the use of e-learning in their own teaching practices. They must be able to integrate online resources into their courses, demonstrate ways the Internet may be used to provide or enrich learning opportunities, and help build online communities of practice. Teacher educators and trainers must also model culturally relevant pedagogical strategies that are based on the growing body of knowledge about how people learn. Mentor and supervising teachers must also be skilled in the use of e-learning so that they can model its use to enhance the learning of their students.

**Collegial Support and Professional Development:** Teacher education faculty, university faculty teaching general education courses, teacher trainers, and supervising teachers need high quality professional development. To achieve the best results, professional development should be rigorous and sustained over time. The mastery of e-learning and technology integration requires repeated cycles of professional development that keep pace with advances in technology and research.

Collegial support is also key in learning the use of the new tools and resources that e-learning can provide. Online communities of teacher educators, teachers, and student teachers can be powerful tools for supporting ongoing professional development. Providing online access to colleagues who use the same technology, participate in the same professional development activities, or use the same pedagogical approach can be of enormous benefit to teachers. Online communities can also support colleagues who teach the same subject matter or work with similar groups of students. Lastly, networked communities can provide pre-service or in-service teacher's access to colleagues with advanced expertise, who can contribute to the collective knowledge of the professional community. Sharing problems and successes via discussion groups can give members the confidence to reflect on their own teaching practices and those of their institutions.

**Technical Support:** Teacher educators and pre-service and in-service teachers will need timely technical assistance and support as they learn to apply e-learning in their teaching practices. The teacher educator or mentor teacher should be focused on the teaching-learning process, not on maintaining or repairing hardware, software, or networks. When technology failures occur and are not quickly addressed, teacher education faculty may feel anxious about using e-learning in their instruction. Over time, the lack of technical support may seriously degrade or reduce the use of e-learning in teacher development.

**Content Standards and Curriculum Resources:** Teacher educators must be knowledgeable in the content and standards of their discipline so that they can help pre-service teachers use e-learning in powerful and meaningful ways in the context of teaching the curriculum. Effective Internet resources must be identified and

strategic matches made with the prescribed curricula. Much of the educational content currently on the Web is in English and reflects a Western European cultural perspective. An essential condition for the effective use of e-learning is that there must be access to high quality, culturally relevant content. Although it may not provide such content, the Web can be a powerful tool for teacher educators, teachers, and others to develop and share content that meets the cultural, linguistic, and educational needs of their nation's educational system.

**Student-Centered Learning:** Much has been learned from an extensive body of research over the years about how people learn. E-learning is most effective as an enhancement to the teaching-learning process when coupled with contemporary and culturally responsive pedagogical strategies. Student centered learning results from the effective synthesis of content and pedagogical and technology knowledge and skills. Knowledge of pedagogical strategies is important, but it alone is not sufficient to effectively apply e-learning. It must be coupled with content knowledge. Student-centered learning requires that teachers understand the many faceted relationships between content, pedagogy, and technology to harness the power of e-learning to create engaging and more responsive learning environments.

**Evaluation of implementation of e-system:** The successful implementation of e-learning for teacher development requires continual assessment and evaluation of all aspects of the implementation. The ongoing assessment will provide data:

- on the effects of e-learning on teaching and learning outcomes;
- needed to enable policy-makers, ministries of education staff, university administrators, teacher training agencies, schools, and others to monitor progress toward the achievement of the vision and goals for e-learning in teacher development; and
- to identify problems or difficulties encountered so that they can be quickly addressed to reduce their impact on the implementation process.

**Support Policies and follow up:** The use of e-learning for teacher development provides an opportunity for policy-makers and administrators to carefully consider existing policies to determine the extent to which they support or impede the successful use of e-learning. Policies related to accreditation, standards, budget allocations, and personnel decisions in teacher development programmes should support the use of e-learning. Policies for merit, tenure, and promotion should reward the innovative and effective uses of e-learning for teacher development. Policies related to the security of computer networks and the appropriate use of e-learning tools and resources may need to be established or updated to support the implementation. Policies related to hiring practices should include guidelines describing the desired technology skills of new employees.

Recognition of each of the conditions essential for the effective use of e-learning for teacher development will be helpful in guiding the planning and implementation process. Although it will not be possible to meet all of the conditions in the early phases of the implementation process, they will continue to serve as a reminder and guideline of what is needed and what must be addressed over time, so that the vision and goals for e-learning can be achieved.

## CONCLUSION

In my view, teacher education rather than teacher training - needs to change in the near future. Some experts say it is too late to begin the changes, as we need new competencies in teaching right now. However, if teacher education in India follows its best tradition, and it remains practical, flexible and child-centered, there is a hope that the next generation of learners will get the support and skills they need in life during their schooling years from their own teachers. The need of a generation of teachers who aim to develop learners instead of teaching them, who help their pupils to become independent (learning to learn), who provide students with motivation and interest for life-long learning and urge them to become autonomous learners, is essential in the education of the future. The responsibility of governments, higher education institutions, and mostly teacher educators both in pre-and in-service education, is huge. If we are to use e-learning in an educationally appropriate and effective way we need to ensure that the technology does not drive the learning experience. It is certain that e learning systems will not replace good teachers and e-learning will not totally replace face-to-face education. The use of e-learning for teacher development, however, raises important issues for governments and academic institutions related to policies, funding, instructional practices, research needs, technical infrastructure, and support.

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**IMPACT OF GLOBALIZATION ON QUALITY EDUCATION IN SIKKIM**

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**ABSTRACT**

*Globalization is basically a perceived set of changes that include the shaping of new, global forms in culture, the media and technologies of communication that nations have to accept and follow in order to be able to embrace global competition and respond positively (Carnoy, 1999; Van Damm, 2001). The impact of globalization in education system of a state is immense. In the context of Sikkim, globalization, there is a need of preparing global citizens who can complete with the highly competitive world. There has been sudden increase in the demands for learning English language, growing popularity of international schools and need for curriculum restructuring and inclusion of ICTs since last few decades. There is an immediate need on good quality education among the students. The main purpose of the study is to examine impact of globalization on quality education in Sikkim. The present study is a descriptive type. The study is based on secondary data. The study is analyzed and interpreted with the help of content analysis. The data are mainly collected from the census reports of the government, Ph.D thesis, articles of different journals.*

*Keywords: Impact, Globalization, Quality Education, Sikkim.*

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**1. INTRODUCTION**

Globalization is mainly the process of increasing level of interdependence among the countries in number of ways such as free flow of goods and services, free movement of labour, different doctoral and political openness. Globalization is primarily a perceived set of changes that include the shaping of new, global forms in culture, the media and technologies of communication that nations have to accept and follow in order to be able to embrace global competition and respond positively (Carnoy, 1999; Van Damm, 2001). The impact of globalization in education system of a state is immense. In the context of Sikkim, globalization, there is a need of preparing global citizens who can complete with the highly competitive world. There is rapid increase in the demands for learning English language, growing popularity of international schools and need for curriculum restructuring and inclusion of ICTs. There is an immediate need on good quality education among the students. Besides the basic needs of education such as to enable children develop their potentials, globalization has put an extra pressure on education system to create winners who can compete in the world. Globalization has affected many areas of human life, among which education is most important. Education is undergoing constant changes under the effect of globalization. The effects of globalization on education bring rapid changes in technology and communications are foreseeing changes within learning systems. Modern education provides individuals with a better chance of employment, leading to a better lifestyle, power and status. Globalization has a close relation with education. Education being an important place in shaping a society, globalization has to be connected with education and the global activities should have a deep impact on it. Globalization also creates the opportunities for new partnership in research and teaching with agencies and institutions across the world (Twiggs and Obligor, 1996) Globalization not only shapes economy or other intuitions but it affects school as well. Educational globalization means wider and broader educational opportunities for citizens (Lam, 2010). (Lam, 2010) further suggested that globalization of education enhances the diversity of learning chances to people globally, regardless of the difficulty of measuring the content, quality, and reliability of higher education beyond national boundaries. Educators are experiencing that the world of education, the nature of learners and learning is changing dramatically because of the development and wide availability of the new technologies in the global world (Lam, 2010). Globalization influences education significantly it follows that the role of education in economic and social transformation and change is vital. The speed of globalization has been accelerated greatly by information and communication technology. The increase in global trade and productivity, facilitation of business and industry expansion and enhancement of collaboration in education and research are attributed to information and communication technology. In the global era, institutions of higher learning cannot become the center of excellence without an integration of technology in their educational delivery and research (Tefera and Greign, 2010, Frand, 2000; Damasio and Damasio, 2007; Chinnammai, 2005).

**1.2. Statement of the Problem**

The purpose of the study is to examine the impact of globalization on education. Accordingly the problem of the present investigation may be stated as- "Impact of Globalization on Quality Education in Sikkim".

### 1.3. Objectives of the Study

The objectives are:

- i. To examine the impact of globalization on education, method of teaching, learning environment in Sikkim.
- ii. To examine the impact of globalization on educational institutions and women education in Sikkim

### 1.4. Research questions

- i. How is education, method of teaching, learning environment influenced by globalization?
- ii. How is educational institutions and women education influenced by globalization?

### 1.5. Delimitation of the Study

- The study will be confined to impact of globalization on education only.
- The study will be confined to the secondary data only.

## 2. REVIEW OF RELATED LITERATURE

**Ahmed, K and Abdethadi, S. (2014-2015)** conducted a study on **The Impact of Globalization on Education**. The objective of the study was how is education influenced by globalization? Result shows that i) the effects of globalization on education bring faster development in technology and communication are foreseeing changes within school systems across the world as ideas, values and knowledge, changing the roles of students and teachers and producing a shift in society from industrialization towards an information based society. ii) It gives quick developments in technology and communication are foreseeing changes the rise of a global society, driven by technology and communication development are shaping children the future citizens of the world into global citizens intelligent people with a broad range of skills and knowledge to apply to a competitive, information based society. iii) The nature of delivering education to students is being changed by the introduction of technology into the classroom is gradually giving way to a new form of electronic literacy, more programs and electronic form.

**Butucha, K.G. (2012)** conducted a study on **The Impact of Globalization on Higher Education Curriculum; Implications for Educational Practices**. The objectives of the study were i) To identify the impact of globalization on higher education curriculum. Findings reveal that globalization is complex system, involving a large number of integrated components operating together and characterized by constant changes. The nature of learners coming to our class in this digital era is entirely different. Globalization has brought the need for teaching intercultural skills. Curriculum of the higher education has changed due to globalization like educational programs and teaching materials are becoming available in electronic form and students are generating papers, assignments and projects in electronic form.

**Chinnammai, S. (2005)** conducted a study on **Effect of Globalization on Education and Culture**. The main objective of the study was to examine the effect of globalization on education and also about the impact of globalization on higher education, regulations, culture, allocation o operation funds etc. Results shows that i) the effect of globalization on education bring rapid developments in technology and communication are foreseeing changes within school systems across the world as ideas, values and knowledge, changing the role of student and teachers and producing a shift in society from industrialization towards information based society. ii) Due to globalization more programme and education materials are made available in electronic form, video projection screen, and books with storage device servers and CDRoms as well as the emergence of online digital libraries are now replacing blackboards. iii) Even exams and grades are gradually becoming available through electronic means and notebooks are starting to give way to laptops.

**Lam, Y.Y. (2010)** conducted a study on **Impact of Globalization on Higher Education : An Empirical Study of Educational Policy and Planning of Design Education in Hong Kong**. The paper focuses on the impact of globalization in the domain of higher education. Results shows that in this regard Carnoy and Rotten (2002) argued that globalization has impacts on higher education including a decrease in public funding strategic effects on the labor market, the quality of national educational systems and the adoption information technology to expand the quantity of education at a low cost. The university grants commission published 'Higher Education in Hong Kong in 1996'. It was also found that due to globalization the demand for post-secondary and higher education, especially for profession oriented courses/programmes, is increasing in Hong Kong.

## 3. DATA SOURCE AND METHODOLOGY

The study is exclusively based on secondary data. The data are mainly collected from the census reports of the government of India, Sikkim Human Development Report (2001, 2014), books, Ph.D thesis, and articles of different journals.

**4. EDUCATION IN SIKKIM**

Sikkim, a small, beautiful and 22<sup>nd</sup> state nested in the Himalayas is landlocked state bounded on three sides by the international borders Tibet, Bhutan and Nepal in the north-East, east and west respectively and south by the Darjeeling district of West Bengal. It has a total area of 7096sq kilometers with total population of 6,10,5772 persons (census: 2011). The social composition (ethnic group) of Sikkim are-Lepcha, Bhutia and Nepali.

Education in Sikkim for the most of the 17<sup>th</sup> century was the monastic type. Buddhist literature was read both at home and in the monastic schools. They imparted religious education for the preparation of young monks to priesthood. The modern education was started from 1880 by Christian Missionaries and the first primary schools seems to be those started by Finnish Missionaries started three primary school in Sikkim located Sang, Khamdong and Mangan in 1880. Four years later Scottish Missionaries started primary school at Rhenock, Sadam, Soreng and Turuk. Sikkim has a strong network of 781 government schools, 421 private schools, 71 monastic schools, 25 local body schools, 11 Sanskrit schools and three Islamic schools

**5. MAJOR FINDINGS**

Education in Sikkim is undergoing constant changes under the effect of globalization. The effects of globalization on education bring rapid changes in, learning environment, method of teaching, educational intuitions, Development of curriculum and reforms of Examination System, and Teacher and Teacher Training Institute. Which are as follows:

**i) Education**

Education in Sikkim for the most of the 17<sup>th</sup> century was the monastic type. The modern education was started from 1880 by Christian Missionaries and the first primary schools seems to be those started by Finnish Missionaries started three primary school in Sikkim located Sang, Khamdong and Mangan in 1880. Four years later Scottish Missionaries started primary school at Rhenock, Sadam, Soreng and Turuk.

**ii) Method of Teaching**

The introduction of technology is bringing new changes in the teaching practices. The traditional methods of delivering education to students are progressively giving way to a new form of electronic learning. More educational programme and teaching materials are becoming available in electronic form. Teachers are preparing materials in electronic form. And students are generating papers, assignment and projects in electronic form. Electronic materials such as video projection screens, books with more storage devices and CD ROMs as well as the emergence of e-learning and digital libraries are now substituting chalkboards. Even exams and grades are gradually becoming available through electronic means and notebooks are starting to give the way to laptops. By keeping in the view the state government has taken an initiative to provide computer facilities to the elementary level up to university level as well as state government also distributed laptops to all the students of senior secondary school and colleges going students and video projection screens to all the colleges. State project office has provided a set of SMART interactive white board system each to the following 36 junior high schools. A set of system consists of an interactive white board, projector with ceiling mount and desktop computer. The CPU of the desktop is connected to the projector which displays the content of the desktop to the interactive board. The teacher and students can interact through 'touch screen' mode (Annual report 2016-17).

**iii) Learning environment**

Globalization has brought about fundamental changes in the ways in which we teach and students learn. In the past the common method of learning and imparting the knowledge needed was from printed books and journals in libraries and from the lectures delivered in the classrooms. But, now students can log into virtual libraries, Google through the internet, use virtual spaces for connection, collaboration and group work, participate in e-learning and m-learning courses, and join online networks that can cover the entire globe. Interactive and collaborative learning has become a common exercise in the global era, and in this process the relations between learners and teachers have changed. Information communication technologies have shrunk the image of lecturers as being close to all-knowing to a facilitator of learning and a fellow learner. This leads to a need for a paradigm shift in thinking about teaching and learning. Teaching in information technology communication era is less about transferring knowledge and more about facilitating a learning process, and it requires teachers who are able to use different methods of instruction and conversant with various technologies to support instruction ( Tefera and Greign, 2010, Frand, 2000; Damasio and Damasio, 2007). Student can be examined through computer managed learning systems and do tutorial exercises on a computer rather than in classroom. Such development in education portray that there has been a shift from industrialization to information-based societies. Subsequently, technology is foreseeing a change in the education environment towards a reliance on electronic sources to deliver material. With such changes and the emergence of video

conferencing and the internet, the barriers of distance are being broken down at the rapid rate, due to the key aspect of globalization. Children and adults can now learn in a variety of ways and no longer have to be physically preset in an education institution in order to learn, a definite advantage of flexible delivery system. It allows for exploration of new areas of learning and thinking. The rapid growth of television services, with their immense influence as media of mass communication, has been very relevant in the technological shift.

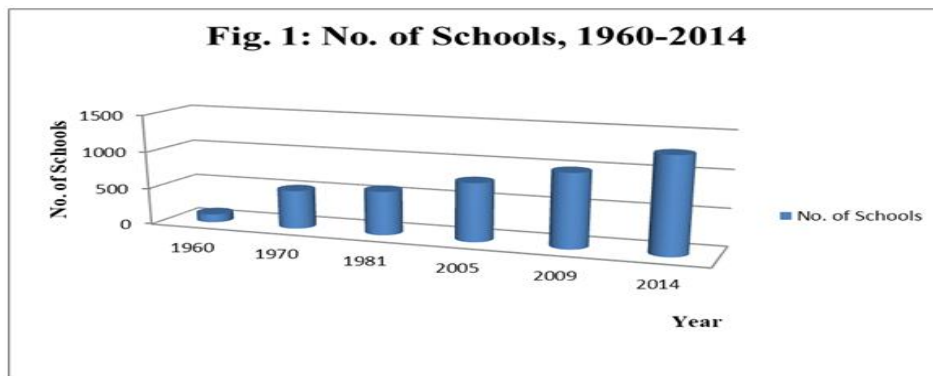
**iv) Educational institutions**

The educational institutions in Sikkim gradually increasing not only that state government has also taken different initiatives to improve the quality education by providing physical infrastructure, trained teachers and bring reforms in curriculum and examinations system.

**Table No-01: Number of Schools in Sikkim**

Year	No. of Schools
1960	110
1970	520
1981	588
2005	782
2009	988
2014	1278

Source: Dr. Dick B. Dewan, (2012), P- 242, HRDD, Government of Sikkim. Annual Report 2013-14, RMSA, HRDD, Government of Sikkim.

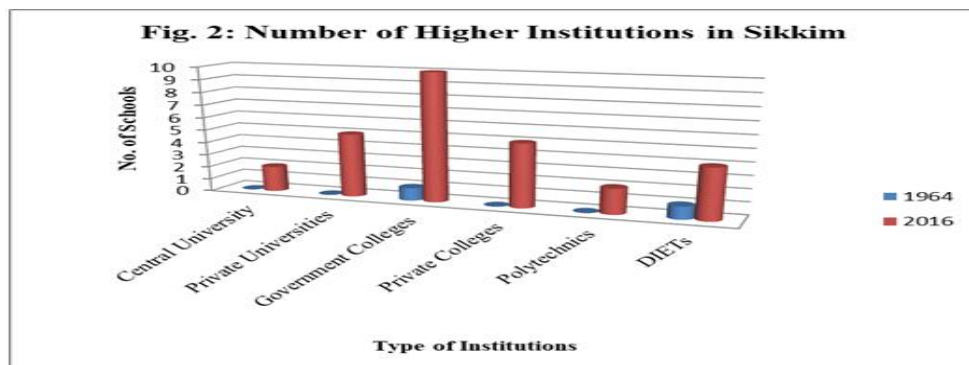


The above table shows the quantitative expansion of education in 1960 there are only 110 schools in Sikkim but with the increase of investment in education sector, there were 520 schools in 1970, 588 schools in 1981, 782 schools in 2005, 988 schools in 2009 and in the year 2014 there are total 1278 schools established in Sikkim.

**Table No-02: Number of Higher Institutions in Sikkim**

Types of institutions	1964	2016
Central University	-	02
Private Universities	-	05
Government Colleges	01	10
Private Colleges	-	05
Polytechnics	-	02
DIETs	01	04
<b>Total</b>	<b>02</b>	<b>28</b>

Source: RUSA, HRDD, Government of Sikkim.

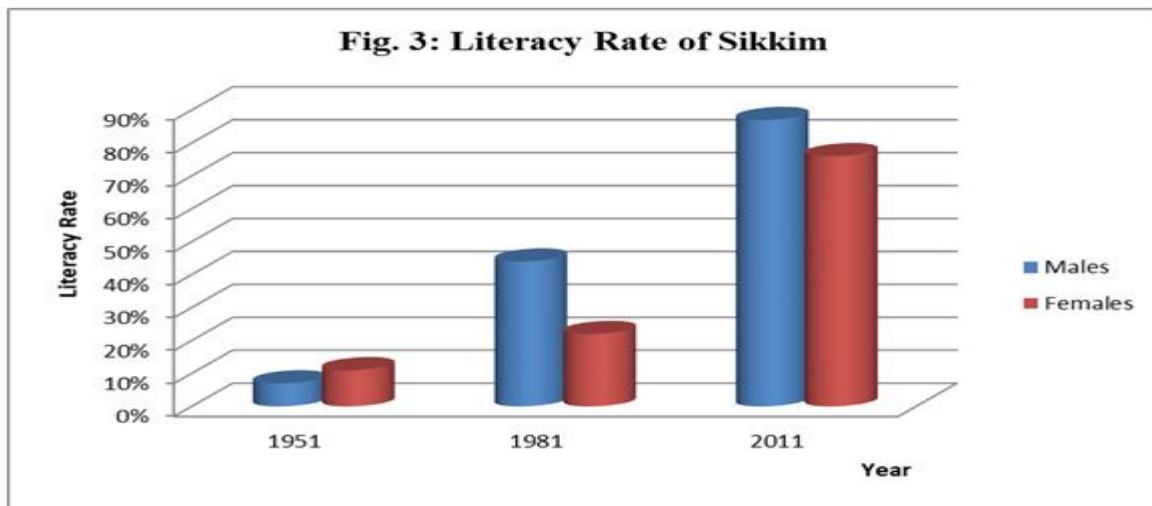


When we discuss about higher educational institutions in Sikkim there are only one State Institute of Higher Nyingma studies (SIHNS), Deorali in 1964 but by 2016 there are total 27 higher educational institutions out of these there are two central university, five private universities, 10 government colleges, 05 private colleges, 02 numbers of polytechnics and 02 number of District institute of educational training.

**Table-03: Literacy Rate of Sikkim, 1951, 1981 and 2011 % of population aged 7 and above**

Year	Males	Females	Total
1951	7%	11%	1%
1981	44%	22%	33%
2011	87%	76%	82

Source: Dr. Dick B. Dewan, (2012), P- 242, HRDD, Government of Sikkim. Annual Report 2013-14, RMSA, HRDD, Government of Sikkim.



In 1951, Sikkim had an overall literacy rate of less than 7%, with barely 11% of men and 1% of women who could read and write. In 1981, Sikkim had an overall literacy rate of less than 33% with barely 44% of men and 22% of women who could read and write. By 2011, the literacy rate had increased to 82% in 2011 with 87% of men and 76% of women who could read and write. The state government has become the first government to invest 20% of plan allocation for his sector. Education is free up to college level and there are host of free incentives available for the school children. The policy adopted by the state of Sikkim for education has seen an overall growth in the education sector. In comparison to other states, especially the north-Eastern Region, Sikkim is abled in various fields. There has been a tremendous improvement in access to schools, with different category of schools in every kilometer.

**v) Development of curriculum and reforms of Examination System.** Suitable curriculum to the modern development consolidation of Socially Useful Productive Work (S.U.P.W.), Work Experience, Moral Science and Value Education, consolidation of Craftsmen Training in the state, Programme on video based learning to teach mathematics and science was conducted during the year. Remedial classes were organized for students of secondary stage for preparing them for board examination. Installation of bio-metric machine was done at 50 sec/sr.sec. School in the first phase to enable the department to monitor the attendance enrolment on daily basis under the Project Shaala Darpan. For promotion of sports an Inter school boys football tournament was organized during the year in collaboration with sports and youth affairs department Under the project Girls empowerment an Inter school Girls’ football tournament was organized during the year in collaboration with sports and youth Affairs department Project on science and maths (RAA) Excursion trip within the state was organized for 1698 secondary level students to various engineering colleges. Excursion trip for 177 students to Kolkata i.e one student from each school was organized for toppers in class IX annual examination (Annual Report,2016-2017). Recently state government made mandatory that Saturday and Wednesday should be done co-curricular activities in all the schools. Saturday is considered as no-book day this day schools conducts two types of activities i) indoor –debate, quiz, art exhibition, science exhibition, handicraft, flower exhibition. ii) outdoor-volleyball, football, badminton. Regarding examination there are two types of evaluation was conducted that is formative evaluation (F1+F2+F3+F4) and each test contain 10 marks out of this 4 marks for written test and two activities carrying 3 marks each. Summative evaluation (S1+S2) and each test contain 30 marks each which include written test only. So formative evaluation contains total 40 marks and summative evaluation contains 60 marks.

**vi) Teacher and Teacher Training Institute:** Before the merger, due to lack of local qualified teachers, the recruitment of teachers in the State was done from different parts of India. But recently the scenario has started to change. The number of local educated youth is increasing in the State and to protect these educated people in service sectors, recruitment of teachers in government educational institutions are reserved for local people. Sometimes due to non-availability of local teachers, recruitment of non-local teachers is done on ad-hoc basis. Improvement in quality of education by strengthening teachers training institutes and organizing short term training programmes for school teachers. To impart quality education within the State, the Department of Human Resource has given first priority to the quality of teachers. Therefore measures have been taken to bring into operation the DIETs as well as to clear the huge backlog of untrained teachers of various levels. The primary teachers are provided CPE course and the graduate as well as post graduate teachers (P.G.T.) are provided B.Ed. course through IGNOU (Indira Gandhi National Open University). The number of teachers is increasing in-service training programmes are being provided to the teachers and to encourage the teachers to pursue professional courses, extra increment is being provided to them. Teacher's pupil ratio is improving reduction in the rate of school drop-outs. To impart quality education within the state, the H.R.D.D. is giving emphasis on the quality of teachers and to improve their quality, teachers are being provided C.P.E. (continuing professional education) and B.Ed courses. Not only that to improve the quality of education state government has taken an initiatives that all the in-service primary teachers, graduate teacher and post graduate teacher are provided training those who are not trained they usually attain the class on Saturday and Sunday and those who score below 45% marks in class X, XII and college they first sit for the exam and score above 45% then only he or she is allowed to join for the training like-DIET, B.Ed. Leadership training was conducted for 22 principals/H.Ms for 10 days. The training was conducted by resource person from NUEPA, New Delhi. 10 days in service teacher training was imparted to 418 numbers of teachers including H.Ms. The total fund sanctioned for the training was Rs. 12.54 lakh. 10 days in-service teachers training of 333 numbers of Science and mathematics teachers was conducted A short term in-service teacher training was conducted by District Project Office, South District, for teachers teaching in class I-VIII in South, West and East District (Annual Report, 2016-1017).

## 6. CONCLUSION

Globalization is primarily a perceived set of changes that include the shaping of new, global forms in culture, the media and technologies of communication that nations have to accept and follow in order to be able to embrace global competition and respond positively. Globalization is a process, which has affected many areas of human life, one of those being education. Education is undergoing constant changes under the effect of globalization. The effects of globalization on education bring rapid changes in technology and communications are foreseeing changes within learning systems. In today's environment, education provides individuals with a better chance of employment, which in turn leads to a better lifestyle, power and status. Globalization has a close relation with education. In the context of Sikkim, globalization influences in education due to this monastic education system was shifted to formal modern education and bring quality education by including information communication technology in education. With the help of this method of teaching has changed from traditional to technology based teaching. Teachers and students are using teaching materials in electronic form. It also influences on educational institutions which there was only 110 schools in 1960 but by 2014 it has increased to 1278 schools in Sikkim and higher education institution was only 01 in 1964 but by 2016 there were total 27 institutions in Sikkim. Globalization also influences on status of women education there are many initiatives like- different scholarship, reservation, different Act which was taken by the state government to protect and raise the status of women in Sikkim, Which directly influence the development of the Nation.

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**A STUDY ON CONSUMERS PERCEPTION TOWARDS SMART PHONE WITH SPECIAL REFERENCE TO BANGALORE**

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**ABSTRACT**

*Smart phone is the most important electronic device required by every individual for communication and for other usages. The growth of subscription of smartphone is high in India particularly Android software and Apple software operating systems are in huge demand*

*Mobile set is of various kinds particularly feature phone and smart phone. Public prefer smart phones because of its facility of Internet and social media features while they prefer feature phone because of its cost effectiveness.*

*Today, The Mobile phone Market is creating huge impact in Indian Economy. There are more than billion people in India who have subscribed to mobile phones. The market share captured by the mobile phone industry in India is \$ 28.5 billion in 2018 .This has made grounds for conducting study in this area to know its present and future aspects relating to it.*

*This study focuses on the views and consumer perception<sup>1</sup> of Bangalore towards Smart Phone. For this primary data is collected through the circulation of structured questionnaire designed in a way to collect information for satisfying objectives of the study. The past literature on these aspects has been reviewed for setting hypothesis. A sample size is chosen for obtaining views on features and brand preferences of smartphones. In which different income group people of male and female were randomly selected.*

*The data collected with different variables is analyzed on different aspects to come to conclusion of significance*

*Keywords: Smartphone, usage, consumer, Income level, Brand.*

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**INTRODUCTION**

Today, The Effective way of communication in the world is Mobile communication. The working pattern of human being has changed in entire world. There is no surprise to say that it is bound to happen part in life of every individual to fulfill their requirements. Sophisticated technology has given a sharp edge for making it demanding. Smart phones has more demand because of its features through which people are done many works with less efforts on time. Now a days smart phones are the voice of people. Presently, Total numbers of Mobile subscribers are more than one Billion. In the couple years the total number of smart phone users are more than the total number of feature phone users in India.

For security purpose it has become a security instrument for all specially for women. Because to effective communication, the borders amongst places of various regions in the world are eliminated. With the help of smart phones any one can in access with others. For security and safety, it is becoming noble for different people like teenagers, old age people, disabled, female, busy people to save time and communicate on time

Few years back in India, People were very less aware on smart phones but currently the scenario is different with the huge growth of Indian economy, people are more educated and aware on the telecom industry. The demand of smart phone is increasingly fast due to various features like what 'Sapp, Facebook, twitter, YouTube, video call, voice chat, text messages, etc. So that selling of smart phone will be around 20 Crores per year.

Youngster's and working people from urban area and semi urban area are purchasing smart phones mostly and very large sales volume is getting .But it is increasing fast in rural area too. Many companies which are producing and marketing variety of products and there are nearby 400 mobile hand set brands available in the Indian market But mobile consumers will have more than that option from coming year because of Make in India concept implemented by central government

The study focuses on the perception of consumers towards smart phone. As there are different smart phones available in the market by different smart companies providing various features? It gives a huge potentials to telecom industry

**OBJECTIVES**

1. To identify consumers perception towards smart phone
2. To Identify and analyzing highest preference among smart phone features of mobile hand set by the consumers.
3. To Identify the Brand preference offered by various companies for smart phone among different income level consumers.
4. To assess the overall scenario of Smart phone market

**HYPOTHESIS**

1. There is no association between the income level of consumer and the smart phone brand preferences
2. There is no association between the highest preferred smart phone feature and gender

**REVIEW LITERATURE**

Mahajan, Mishra & Cheatna while using kano model, studied 2008 that customer dissatisfaction and customer satisfaction in model handsets can be determined. Kano method is a engineering tool concept that was germinated to help design engineers better understand what customers require and not required. The model was examined on the consumer behavior & changing consumer preferences by separating changing trends in various market sectors.

Bhatt has mentioned 2008 in his research study which was on the PG students about usage of mobile handset, during the usage, the amount spend on smart phones , factors which can influence for buying the smartphone , health issues effect of the smartphone on the basis of primary data : It was also signaled that the usage and satisfaction level of smart phone users from company to company.

Consumer research organization and Market analysis signaled on the behavior of youngsters towards smart phones and enumerates the different pattern and arrive peculiarities gender wise. The research study indicated that majority of users perceive smart phone as technology that offers flexible and makes their life easier. A study 2005 was conducted on whole mobile history by Farley covered long duration from 1940`s to 2005 which describes that how mobile telephones for decades were not an active technology , it became the demanding, useful , effective and probably the important communication tool of public. The research study examined that mobile telephony s early and bulky beginnings, commercial mobile telephony started in 1946 . The cellular radio concept was published in 1974. But 1995 mobiles have become low cost , rich in features and used world wide.

Puneet Walia, Dr. Lalit Singla (2015)in their article title "Analysis of Factors Influencing Consumer Purchase Decision of Cellular Phones" have analyzed that various internal and external factors which affect consumers purchase decision on mobile phones. There are various studies conducted based on the analysis of factors influencing consumer purchase decision on cellular phones.

Prof. (Dr.)Sameer Sinha,Prof. Sunil Mishra (Feb 2016) in their article title "A Study on Consumers Perception towards Mobile Handset"(With Special reference to the Consumers of Bhopal City) have focused on the views and perception of consumers of Bhopal city towards mobile hand set.

Joshi Sujata ,Jog Yatin, Chirputkar Abhijit, Shrivastava Noopur and Doshi Ruchi(2016) in their article title "Factors Affecting Smartphone Purchase among Indian Youth: A Descriptive Analysis" have analyzed that to understand the factors that affect young college student's choice of purchasing smartphones. Five factors were identified which affect the choice of smartphones for young college students namely technology factors, hardware factors, financial factors, basic factors and branding factors. The main contribution of this study was examining the significance of technology and hardware factors on choice of young college student while purchasing a smartphone.

Dr. Parul Deshwal (2016) in their article title "online advertising and its impact on consumer behavior" has analyzed that the goal of advertisers is to make their ads more involving. Interactive advertising allows customers to become more involved because they initiate most of the action. Experiences during this interaction will drive brand attitudes. The purpose of this study is to analyze different types of online advertising and explore how online advertisements affect consumers purchasing behavior.

Prasad, (2016) in his article title “Attitude of Indian Customers towards Smartphones of Android and Windows Version” has analyzed that customer attitude model is being developed through the variable taken as service quality, service value and service involvement is being designed and validated through the empirical method of factor analysis .94% of the respondents have android mobile user which shows there is a high inclination towards android platform. Through the factor analysis it can be observed that the major factor responsible for selecting any brand of smartphones are “service” followed by “physical appearance”.

**RESEARCH METHODOLOGY**

The research study is conducted on consumers of smart phones in Bangalore city. The Total 150 sample size was chosen with various income group of female and male, out of this 117 respondents given proper response on the asking structured questionnaire. Structured questionnaire was prepared with pertinent questions according to the hypothesis and objectives of the research study for collecting primary data from respondents. Different aspects were covered in the questionnaire like smart phone features, different brands preferences offered by the companies, income level of consumers and genders.

A convenient random sampling was embraced for awning the entire market and using Income of consumer as the basis of selection. The classifying income levels are upper, upper middle, middle, middle lower, lower.

Secondary data has been collected from various journals, magazines, newspapers and internet to help and support the objectives to set the data analysis done

**DATA ANALYSIS & INTERPRETATION OF RESULT**

The scores provided by the respondents were fed into SPSS software (version 16)

**Respondent Profile**

Table-1: attempts to capture the respondents profile in term of Gender, Age, Education, occupation and family monthly Income

**Table-1: Demographic Details of Respondent**

Demographic variables		Frequency	Percentage
Gender	Male	82	70.1
	Female	35	29.9
Age	Bellow 25	64	54.7
	26-35	33	28.2
	36-45	19	16.2
	46-55	1	0.9
Education	school level	1	0.9
	Graduation	39	33.3
	PG level	56	47.9
	Professional	19	16.2
	others	2	1.7
occupation	Agriculture	2	1.7
	Self Employed	4	3.4
	Business Man	7	6.6
	Govt employee	2	1.7
	Private Employee	47	40.2
	Student	55	47
Family monthly income	less than Rs. 20,000	31	26.5
	Rs.20,001-30,000	29	24.8
	Rs.30,001- Rs.50,000	27	23.1
	Above Rs.50,001	30	25.6

Source: Primary Data

The respondents comprised of 70.1% male and 29.9 % female , 54.7 % with the age group bellow 25 ,28.2% with the age group 26 - 35, 16.2 % with the age group 36-45, 0.9% with the age group 46-55 . The respondents have educational qualification with 0.9 % school level, 33.3% Graduation, 47.9% PG level, 16.2 % Professional, 1.7% others. The Occupation of respondents are 1.7% Agriculture, 3.4% self-employee, 6.6 % Business Man, 1.7 % Government employee, 40.2 % Private employee, 47% Students . The family monthly Income of respondents are 26.5 % less than Rs. 20,000, 24.8 % Rs. 20,001 – 30,000, 23.1 % Rs. 30,001 – 50,000 , and 25.6% Above Rs.50,000.

**Reliability Statistics**

Reliability Statistics are made for the data collected from the online .The sampling reliability is ensured by doing through Cronbach`s Alpha reliability test, for this present study the reliability analysis score is 0.741 after considering 19 items from the structured questionnaire.

**Table-2: Independent Sample Test**

Independent Samples Test

	Levene's Test for Equality of		t-test for Equality of							
		Sig.	t	df	Sig. (2-tailed)	Mean Differen	Std. Error	95% Confidence Interval of the		
								Lower	Upper	
storage	Equal variances assumed						0.31465	-0.85707	0.38947	
	Equal variances not assumed		-0.743	64.216	0.46	-0.234	0.31484	-0.86272	0.39512	

The t- value in the Table 2 shows No significant relation between the Gender and Smart Phone feature storage  $p=.46 > .05$  . Hence Null hypothesis  $H_{01}$  is accepted.

**Table-3: Chi – Square Test**

Chi-Square Tests			
	VALUE	df	Asymp. Sig. (2-sided)
PEARSON CHI-SQUARE	25.985 <sup>a</sup>	18	.100
LIKELIHOOD RATION	27.014	18	.079
LINEAR-BY-LINEAR ASSOCIATION	.000	1	.991
N OF VALID CASES	117		

a. 20 cells (71.4%) have expected count less than 5. The minimum expected count is 1.15.

The Chi square value in the table 3 shows No significant relation between Income of customer and Brand preferences  $p=0.100 > .05$ . Hence Null Hypothesis  $H_{02}$  is accepted.

**Table-4: Smart phone features**

DESCRIPTIVE STATISTICS			
Features	MEAN	STD.DEVIATION	RANK
SCREEN SIZE	2.9402	1.38521	VII
CAMERA	3.1795	1.57904	VI
BATTER Y BACK	3.2479	1.65522	V
PROCESSOR	3.2735	1.50071	IV
TOUCH PERFORMANCE	3.2821	1.50772	III
SECURITY	3.2991	1.53277	II
STORAGE	3.3504	1.55539	I

The respondent’s preference from the table 4 implies that storage capacity in the smart phone ranks first followed by soft security. The least preference is given for the screen size by the respondent

**CONCLUSION**

The inference is that the preference of Brand is mostly associated with income level. The brand preference depends on the income level. Consumers in various income group prefer various brands. Specifically, consumers who provide to upper income level and upper middle income level prefer premium brands while consumers in middle income and lower income category prefer economy Brands.

The next inference is that different gender has no impact on the preference of product features in case of purchase decision of smartphone. The test of hypothesis in this case proves that there is no association between the highest preferred product feature and gender as the calculated value of chi square is much less than the critical value of Chi Square.

Based on these test of hypothesis and assumption in two various cases, it is tried to know the views and decisions of different genders and different income group of consumers for purchase and usage of smart phone which is currently a most important tool in every individuals life in the whole world

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MAN AND WOMAN IN *HALFWAY HOUSE* AND *WHO'S AFRAID OF VIRGINIA WOOLF*

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This paper is based on Cultural variation theory given by Shanqing Cao in his book- *The Variation Theory of Comparative Literature* published in March, 2014. There is an attempt of cross cultural/(civilization) study following the Chinese school, after the shortcomings of the French and American school who focused only on influence and analogy (parallel studies), this school talks about heterogeneity, that is, reconstructing the concept of world literature by crossing the wall between the eastern and western culture, establishing the connection between eastern and western literature, as we can establish ourselves in opposition, by comparison. In 1900 Ferdinand Brunetiere has observed "the history of Comparative Literature will sharpen in each one of us, French or English, or German the understanding of the most national characteristics of our great writers. We establish ourselves only in opposing; we are defined only by comparing ourselves to others; and we don't know ourselves when we know only ourselves." Hereby, "the comparison is to discover the differences out of similarities and the similarities out of differences of various literatures" (Cao). This study is transnational, translinguistic, cross cultural and based on thematology as well as influence. The texts chosen for comparison are the plays by Edward Albee's *Who's Afraid of Virginia Woolf* written in English in 1962 and Mohan Rakesh's *Aadhe Adhure* written in Hindi in 1968 and translated as *Halfway House* by Bindu Batra in English. Both of the plays belong to the tradition of Theatre of Absurd and have themes like existentialism, reality verses illusion focusing on the man-woman relationship. Of course they are similar in pointing out the absurdities of human life, the mundaness of their respective societies and also because of the influence of the American and European writers of theatre of absurd on India, they are different as well because of their cultural difference, thus the reception is different.

There was a decline in the social, economic, moral and cultural decline in both the societies in the sixties- the perpetuating complexities of modern life, especially after the first world war and more after the second world war, instigating complexities in the domestic, economic, social and political life of many nations including America and India. The plays of Edward Albee and Mohan Rakesh bring forth the sociological problems of their time. They provide the criticism of unfulfilling, incomplete nature of the bourgeois existence and pre occupation with the upper middle class. These plays are not about these families or its particular members but about the values which govern them and the class to which they belong to. There is an attack on the 'American Dream' and Indian ethos of the sixties, questioning the institution of marriage, that of family, and morality. It's about the class where all human bonds had been replaced by very mundane and materialistic compulsions, for instance, going to the parties, drinking, flirting in case of *Who's Afraid of Virginia Woolf* and filling the house with furniture and amenities in case of *Halfway House*. There is a constant attempt to fill a void created by the absence of love, happiness; they use illusion of keeping the family intact, living in a house not a home. The parable of modern existence and ideals of American and Indian societies in the 1960s find a common articulation in the playwright's concern with man-woman relationship and the theme of illusion verses reality. With the substantial theatrical force, they bring forth the pointlessness and absurdity of the human situation. Many writers talked about the influence of the American artists on the Indian theatre, like Rajkumar Gupta in his book *The Great Encounter: A Study of Indo-American Literature and Cultural Relations*. Gupta writes "... probably the American drama (especially...Edward Albee) has been the most powerful influence on English-language theatre in Bombay" (Gupta). Whenever the name of theatre of absurd is mentioned the names of these writers come along, there is a good possibility that when Rakesh was studying the American writers during his academic years, he was influenced by their mode, method and thus chose to incorporate these elements in his writings as well. The prologue of the play establishes the theme of existentialism and absurdity which is peculiar in the American play of Albee. Basu points towards the similarity in the man woman relationship of both the plays. He talks in the context of the man and woman of *Halfway House* and indicates by means of a question, "Do they share something... with the man and wife of Albee's *Who's Afraid of Virginia Woolf*... whatever the answer, they are tied together for ever by some incomprehensible destiny which makes them listlessly live in an absurd muckheap..." (Basu).

There are two main characters in both the plays- the husband and wife, other characters including one more couple and children, three in case of *Halfway House* and an imaginary son in case of *Who's Afraid of Virginia Woolf*. The husbands proved a failure in their lives. George is a professor in history in college, a well educated man, his wife Martha is a daughter of the president of college, she expected him to succeed her father and become the president. On the other hand, Mahendranath, a failed businessman, now sitting idle at home and

dependent on his wife Savitri as she is the sole bread earner in the family and also on his friend Juneja, for whom Savitri has no regard. These husbands failed the expectations of their wives, whether to upgrade their social position, or to 'man up', or to take responsibilities of their family. The couples are found to be quarreling all the time, dissatisfied with their lives, blaming each other for their misery. The reader or the audience feels no compassion or admiration for these characters. The husband- vulgar, unambitious, unworldly, beating the wife from time to time to get over his frustration. George throwing a book towards Martha, grab her by throat, abuses her constantly; Mahendranath beating Savitri all the time whose account is given by their daughter Binny. There is no regard for the wife as well, she is equally vulgar, over ambitious, flirting with men and humiliating the husband in front of people. Martha abuses George in front of guests, seduces Nick and didn't think for a moment before revealing their family secrets in front strangers just for fun, to take revenge on her husband; Savitri calls Mahendranath 'half a man', brings up his incapacities in front of their children, his friend Juneja as well as Jagmohan, her lover. The women are seen changing dresses to impress men: Martha wearing a new dress for Nick and Savitri wearing a festive saree when she goes out to meet Jagmohan. It puts up a question on their loyalty towards their husband and says a lot about their character, as they are not breaking up their marriage and chose to cheat on their husband instead. The thing that makes it complex is the husband indifference to it, even after knowing what the wife is doing turning a blind eye to it. The female characters differs as well, the woman in American play is a house wife, where as Rakesh is talking about a working woman. But what makes them look alike is their way of seeking marital happiness beyond conjugal relationship, in the men who possess the qualities that they aspired for in their husband and then ending up calling that everyman is the same and returning to the same place where they began from. The other couples are their mere reflection, be it Nick and Honey or Binny and Manoj.

These couples have been married for twenty three and twenty two years respectively, they have no love, no respect for each other. They have no sense of self and are constantly dependent on each other for their existence howsoever meaningless it would be. They enrage each other for fun, it has become their source of entertainment. The act of quarreling has been normalized, it's a part of their routine, it goes up even to the extent of violence, emotional as well as physical. There is indifference to the things that actually matter, no one is ready to face the reality. Serious topic of discussion cannot hold for long in these houses, they keep on sweeping the things under the carpet constantly and when reality is about to come into the forefront, they go silent, it frightens them. They are so used to live in illusions, they come up with irrational things to cover up reality. The very title of Albee's play actually means who's afraid of living life without false illusions. George and Martha making up an imaginary son and kills him for their pleasure, their behavior seems to be socially unacceptable, absurd. Playing games for humiliating each other. In Rakesh's play, the daughter Binny is seen to blame the 'air' of the house for her problems, her husband keeps on telling her that she has brought it from her house that's why they keep on fighting like her parents. Juneja calls the beating and humiliation by Mahendranath as his 'love' for Savitri, how ironic that is. Savitri is more interested in mending the house instead of mending her marriage. Her younger daughter is indulged in sexual conversations with her friend, a child of fourteen years, not getting proper parental attention, aggressive, like the other women in the house, Savitri turns her face away from her. The husband and wife both knew that their daughter's marriage is falling apart like their own but they don't want to initiate the conversation with her. Their son is a loafer, a college dropout, who's more interested in cutting the pictures of American actresses. Such state is heightened in case of Albee's play because the imaginary son that they have also turns out to be a loafer.

There is a satirical attack on the American and Indian myth of perfection of its ideals, families and its progress- the ideas like marriage is a romantic adventure based on love, understanding etc. Here the marriage is based on money, advances. There is an eagerness to use their contacts for improving their social conditions. George married Martha because of her father's social position, Nick is ready to sleep with the wives of his superiors for it, he also married Honey for her money. The situation is worse in case of Martha who openly expresses her wish to have an affair with Nick. In Rakesh's play, Savitri calls her pervert boss home to get her son a job, a man who keeps on scratching his groin in public spaces and forgets everything seeing a woman, she thinks high of him just because he makes more money; she looks forward to Jagmohan, a man with money, higher social status for saving her, to move out or to have an affair. Savitri also married Mahendranath seeing his money on the first place. There is also on the attack on the ideals by using the interplay of names. It's interesting to note the use of the names- George and Martha to critique the American values as these were the names of the president of America, George Washington and his wife. Rakesh calls her heroine Savitri, her character is very ironical to her name, Savitri is a figure in Indian mythology who fought Yama for the life of her husband, here she is the one who calls her own husband spineless and derives pleasure humiliating him.

The plays are comprised of small dialogues and one long speech by the women, which shows how disappointed they are from their marriage and the meaninglessness of their existence, calling up all men the same- "All people are all mind and nobody"(Albee), "All of you... every one of you..all alike! Exactly the same" (Rakesh). They always had the choice to walk away from their marriage, but they didn't just keep the idea of a family intact. Living the same fights again and again. The connection between the two couples is brought in light by many critics like Rajinder Nath in his commentary on *Halfway House*- "With an incisive scalpel Rakesh reposes the utter rottenness of the value-system which governs the middle class and with relentless logic he brings us to the point of utter despair. There is no single moment of respite in this intensively moving drama portraying the total hopelessness of this class. Its... brutal bickering...reminds you of Albee's *Who's Afraid of Virginia Woolf*" (Nath). The reception of these plays was similar in both the societies. On viewing the play one gets the feeling that the miserable condition of modern man is something inevitable and it is his destiny, the characters in the play are distinctively themselves and at the same time distinctively everybody else. The plays drive out the feeling of guilt, self-distrust and self-pity. The response is the kind of response evoked by a tragedy. On one hand, there is a reconciliation in the play of Albee, the woman finds her husband like everyone else and in spite of that she chooses him over Nick and accepts the reality, but on the other Savitri is left with nothing, she realizes the sameness of the people and she don't know what to do, where to go, her reality is far different from that of Martha. She's left shattered when Juneja shows her the reality, she doesn't know whether to face it or hide herself from it, she's seen shattered and Mahendranath entering the premises to go back to the same life where they begin with, their hope is lost. Even if they accept the reality, there is no escape for them. Martha and George are childless, their illusion is created out of that void of sterility, but Savitri and Mahendranath, they have three children and they turned their face away from them, their reality is lying there in front of them but none of them comes up to take the responsibility, all they do is running away from the circumstances only to come back to it.

The plays are similar and different all together. The man and the woman here are seeking their identities from each other, there is a close inter-dependence for their existence. It creates humour as well as disgust the way they talk and don't talk about the things. In spite of their different cultures, different languages, different contexts the two plays come closer to each other in building the larger nothing of human existence, that of existentialism, the pointlessness of the routine and having no escape from it. At times one accept the facts, the reality and moves on to find some solace in the acceptance as in case of *Who's Afraid of Virginia Woolf*, and on the other one continues to live in the same hell as in case of *Halfway House*. The times, the context can be different but what brings them together is the very human nature, we all are alike in one way or the other, similar and yet so different, one just need to broaden the perspective.

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**ACADEMIC STRESS AMONG SENIOR SECONDARY SCHOOL STUDENTS**

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**ABSTRACT**

*Stress is definitely a big word with even bigger impact; however this can be dealt with small changes that we bring in our day to day life. Stress is experienced by managers, financiers, government officials, administrators, politicians, house wives and is most prevalent amongst students nowadays. It is essential to identify the cause of the stress so that it can be addressed meticulously and efficient interventions can be outlined. Stress is always seen as subjective process and encompasses individual's personal analysis and counter to a threatening event. Stress can result in depression, anxiety and many other hazardous conditions. The rise in the number of workshops being conducted for Stress Management, various articles being published, research reports etc. is an implication of the escalation of stress related cases in the past few decades. This paper deals with the conceptual framework of the stress, aspects of stress, causes of academic stress amongst students and the ways to manage academic stress. It also presents review of literature on the topic.*

*Keywords: Stress and Academic Stress*

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**INTRODUCTION**

Education is a process to enlighten human for the attainment of leading quality life. It is a man making process to facilitate learning that accelerates the holistic development of body, mind and soul. Education, in its general sense, is a sort of learning that assists in transferring information, dexterity, habits, and accumulated experiences of a group of people from generation to generation through didacticism, training, teaching and investigation process. It provides the right- type of attitudes, values, adequate knowledge and essential skills. It is considered as both developer and depository of knowledge. In this era of knowledge, societal transformation and wealth generation are possible only through the process of education. In every society education means life both for individual as well as teachers. They will have aspirations (**Hooda and Devi, 2018**). Academic stress is defined as the anxiety and stress that comes from schooling and education (**Sonali, 2016**) which impose extra academic workload (**Awino J. O & Agolla J. E. (2008)**) upon students beyond their capacities and capabilities like- over expectations of parents, teachers, inadequate study facilities at school or home, inadequate teaching methods and lack of supportive environment etc. (**Sonali, 2016**). The high expectations of parents for their children to achieve higher grades and to perform better, is becoming a big burden which is unbearable for them to carry out anymore (**Deb et al., 2015**).

**STRESS**

Stress is a perception of emotional or physical tension. There are number of incidents in a person's life that leads to negative emotions like anger, frustration and nervousness that further develops stress in an individual. Stress is the body's reaction to challenge or demand. It can be positive at times; however prolonged stress can lead to severe health conditions.

**ASPECTS OF STRESS****Anxiety**

Anxiety is explained as the manner in which a person reacts or response to stress, accept and interpret. Thus, anxiety is an outcome of stress.. A good handler of stress is likely to experience no form of anxiety.

**Burnout**

Burnout refers to as soulless situation where a person loses the eagerness and motivation in continuing to a particular kind of studies or activity as a result of both external and internal factors. The skills and expertise is still active but the desire and the wellness to perform is dead in the person as such activity or studies become huge responsibility without any joy. Burnout destroys a person's motivation and may kill the initiative's at studies or school. The following are symptoms of burnout:

- Trouble sleeping due to worrying about studies
  - Getting into too much conflict
  - Bored with studies or activity
  - Feeling frustrated with studies
  - Studying very hard and accomplishing little
-

**Distress**

Distress is a moment of great pain sorrow, acute physical and mental suffering; Affliction, trouble (Dictionary.com 2016). It is as a result of an inability to handle or deal with a challenge or problem encountered in the performance of a specific activity or studies. Distress result in both emotional and physical pain. An example of emotional pain is sadness, resorting to drugs, violence, a low concentration at studies, low participation in social activities.

**Fear**

Fear is a common aspect of human emotion that is sentenced in our nervous system. Fear is a result of instinct in human that responses to sensed danger or unsafe. It protects and alerts us to an impending danger and that's help to prepare for this danger. It is a natural aspect of humans and in some cases it is very good because it can be a warning or a signal that cautions us to be very careful. However, it can be extremely dangerous to the life of a person. Fear can be mild or intense and it can be short term or last longer.

**Worry**

Worry is as a result of thinking about an existing problem. It is constant thinking and meditating of challenge or fear. Worry looks into what is likely to happen in the future as a result of the present situation, .it is a disturbing of one composer or peace of mind, worry causes distress to the mind and results in high blood pressure, headache, stomach disturbances and other physical discomforts.



Figure: Aspects of Stress

**Academic Stress**

Academic stress is defined as the anxiety and stress that comes from schooling and education which impose extra academic workload upon students beyond their capacities and capabilities like- over expectations of parents, teachers, inadequate study facilities at school or home, wrong teaching method, lack of supportive environment etc.

**CAUSES OF ACADEMIC STRESS****Academic Track**

The students belonging to either Central and State boardschools, learn all the basic subjects i.e. mathematics, natural sciences (physics, chemistry, biology), social sciences (history, geography, civics, economics), and languages. The result of 10th grade is considered to be an important one as it helps the students to decide their academic streams (science, commerce and arts) which they pursue in 11th and 12th grade. Thus the exposure to new and difficult concepts during the intermediate period exposes them to academic stress.

**College Admissions**

The students have a strong desire to get through the renowned professional educational institutes as they provide career in variety offields such as engineering, medicine, computer science, law, and other related fields. Hence getting admissions into these well-known colleges poses a lot of stress.

### Board Exams

The board exams are conducted once a year for a period of two weeks in the month of March. It is mandatory for the students to appear for each subject examination for hours and is required to answer the questions in great detail. If a student does not earn passing marks in all the exams, the chances of getting admission in good colleges become uncertain.

### Poor school Conditions

Students may be subject to poor working conditions. It would include bad lighting and ventilation, unhygienic sanitation facilities, excessive noise and dust, presence of toxic gases and fumes, inadequate safety measures, etc. All these unpleasant conditions create physiological and psychological imbalance in humans thereby causing academic stress.

### Entrance Exams

Entrance exams for getting admission in engineering, medical and other such fields are held only once a year usually in May or June on the scheduled date and time. These exams are conducted by a consortium of institutions (such as theater, or the All India Engineering Entrance Examination), or by individual institutions. Excellence in these exams provide career opportunities to the students and therefore getting through these entrance exams leads to great academic pressure on the students.

### Tuitions and Coaching Classes

In order to score good marks in board or any type of entrance exams the children join after school classes named tutorials. The goal of most tutorials is for the students to score well in the board or entrance exams and to gain admission to prestigious institutions. As a consequence, students are bound to devote extra time to attend coaching classes which further increase the academic burden.

### Social Comparison

It is a very common trend among the Indian parents to compare their child's academic ability with their own older children or with their wards' peers. Although the comparisons may begin in younger years, it intensifies in the high school and college admission years. This issue causes anxiety among the students to worry about their academic progress report.

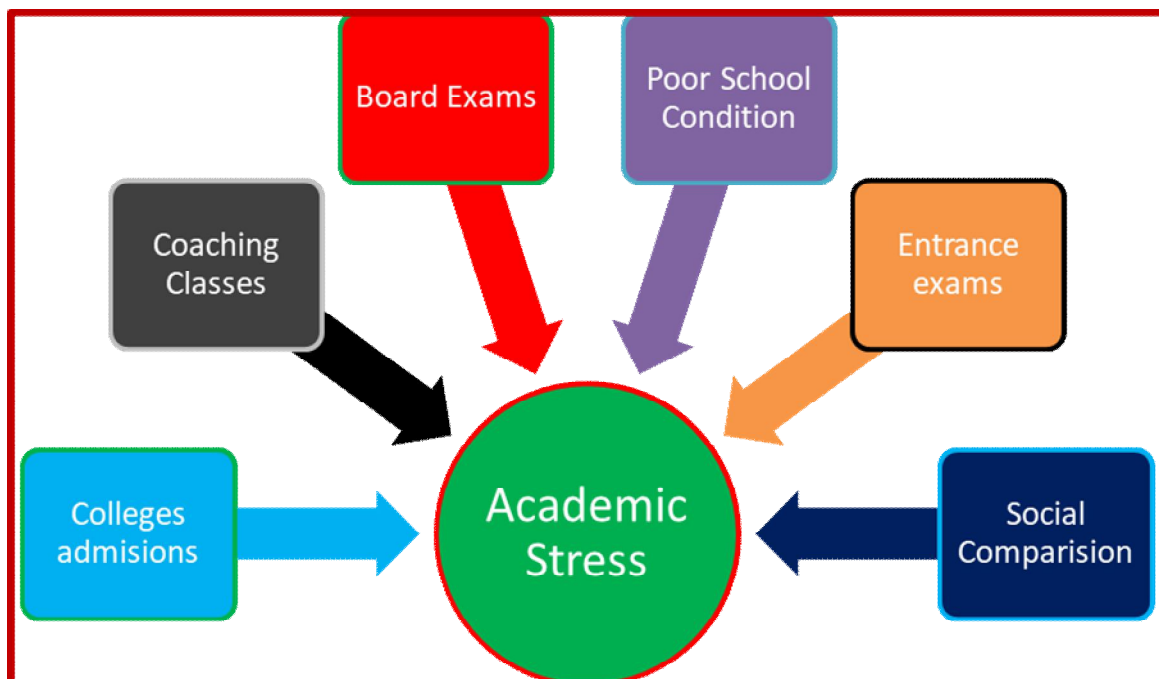


Figure: Causes of academic stress

### MANAGEMENT OF ACADEMIC STRESS

Management of academic stress is a crucial task as it requires major contributions of not only the students but also of their parents and counselors. Their respective roles are discussed below:

#### ROLE OF STUDENTS

**Set realistic goals:** Students must analyze their own strengths and weaknesses and accept these in a positive way and carry out their goals accordingly as this will help them in having realistic approach towards their goals.

**Manage academic work effectively:** It is necessary for the students to plan schedule for their everyday work as they have to complete a lot of course by the end of their sessions. This planning and management will help them to reduce stress and thereby complete work on the given time.

**Positive thinking:** Students must develop a positive attitude towards their lives as this will help them to perform well in every field without much fear and stress.

**Attend classes regularly:** Important tips, easy and short-cut methods of dealing with certain lessons, highlighting of the important points can be only learnt by attending classes regularly. These tricks not only make the students learn lessons easily but in turn help in reducing the burden of mugging up things.

**Discussing problems:** Students face many problems such as related to their academics, personal and social lives, so it is highly important that they find solutions to these problems by discussing them with their parents, teachers or peer friends.

**Get help from peer tutor:** In a class there may be some students who are highly intelligent in certain subjects and possess the quality of explaining difficult concepts and terms and thereby asking for help from such intellectual students can prove to be beneficial.

**Visualizations:** Students must visualize themselves performing well in a particular task which they find difficult to perform. This will surely help them to release stress.

**Sleep:** Students usually sleep very late in night as they believe in completing their task at the cost of their sleep and health. Proper sleep for at least eight hours is very essential for being mentally and physically healthy.

**Eat right:** Having nutritious food is in itself a stress buster as it helps in proper functioning of all the body organs including brain.

**Exercise:** Regular exercises like yoga, going for walk, breathing and muscular exercises provide relaxation to the students.

**Music:** It helps the students to be in calm and relaxed state as it provides relief from all the anxieties and troublesome events.

**Take help of a counselor:** In most of the schools there is a counseling cell which is competent enough in dealing with the several academic, personal and social issues of students' lives. This means that whenever the student faces such kind of problems which they feel that they unable to resolve through their own efforts, so in such a situation they are free to approach counselors.

## **ROLE OF PARENTS**

**Being Supportive:** Parents' constant support and motivation not only help their wards in achieving their goals but also prove to be vital source of relieving stress throughout their academic career. Encouraging parents are always able to help their children in facing challenges of their lives and thereby leading to a bright academic career.

**Realistic expectations:** Parents should understand their children potentials which include their strengths and weaknesses. This analysis will surely help parents in deciding what they wish their children to be in the near future and will have realistic expectations from their wards. On the other hand parents' unrealistic expectations will only lead to conflicts and uncertainty of academic career.

**Healthy communication:** It has been noticed a several of times that due to the busy schedule the parents are hardly able to take out time for their children, which in turn leads to the development of communication gap between the two of them. Therefore, the parents must fix a certain time during the day or during the weekends to spend a quality time with their children during which they will be able to sort out many of their children problems and hence provide a sigh of relieve to them.

**Teaching relaxation strategies:** Parents must encourage their children to engage themselves in various relaxation activities such as yoga, meditation, listening to music, exercises, etc. as these strategies will help children to remain physically and mentally fit.

**Paying attention to the wards' needs:** Parents must pay attention towards their wards' eating and sleeping habits. They should make it a point to provide healthy food to their children and should also forbid them to have junk food and include fruits and vegetables in their diets. Parents must also see to it that their wards sleep for at least eight hours daily.

**Showing positive attitude:** Parents should develop a positive attitude towards their children by praising them even for their smallest achievement as this appreciation will surely motivate their wards in excelling in difficult academic phase of their lives.

**Teaching children to overcome obstacles:** Parents must train children to tackle obstacles such as lack of fluency in language, health problems, financial instability, family problems or unhealthy friendship. They should make sure that their wards are aware of these major problems and deal with them effectively.

## CONCLUSIONS

The main source of stress for the students is the inadequacy of right support. There is a standard evaluation procedure which does not give enough scope to the students to experiment and push the boundaries to excel. There are many personal and social factors that lead to stress among students. Lack of clarity and unavailability of right career counselors lead to directionless goals, and even after graduating, students are clueless with their careers and are insecure regarding a job. The pressure of the studies in terms of academics, extra-curricular activities, assignments etc. has increased beyond comparison. Parents expect their children to be a part of rat race and outshine their competitors to enhance their own social status in the society. Running behind numbers is the new fad in this era of cut throat competition, sad reality but true.

Every child is different. Hence, it is important for the parents to make their children realize the importance of identification of their strengths and encourage them to pursue a career in the area of their ability. It is important to do what you love or love what you do. Managing the time effectively and ensuring that at least one physical exercise is done on daily basis can become deterrent to stress and improve the span of attention and hence become productive with academics.

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## ATTENDANCE SYSTEM BY USING DWT AND HOG FACE RECOGNITION TECHNIQUES

Lakshmipathi V<sup>1</sup> and Naveen Kumar R<sup>2</sup><sup>1</sup>Department of Computer Science, RCASC, Bangalore<sup>2</sup>Department of Electronics, RCASC, Bangalore**ABSTRACT**

Marking attendance in schools, colleges and offices are one of the major activities at education and corporate sector for measuring the performance of students and staffs. Moreover, a manual procedure to maintain attendance in an institution is one of the challenging parts of the student strength is high. There are quite a few face recognition systems efficiently working in several application fields. Only the developed countries are adopting this system in their institutions, but it is still in the rising stage in the Indian education system. In this paper, a simple face recognition technology is used to maintain the attendance system for limited datasets. The algorithm trained with a set of preloaded data of image samples of persons. The image is decomposed by using DWT to extract low-frequency sub-band of data set for recognition, for further process of HOG based face recognition technology is used to extract the feature of the low-frequency facial data. Each time the captured image compared with preloaded facial images HOG features and predicts the attendance.

*Keywords: Image processing, Face Detection method, Face recognition using HOG method,*

**I. INTRODUCTION**

Taking attendance in the schools and colleges are being a waste of time and effort for both the students and lecturers as well. Biometric system is the most prominent attendance system using in several educational institutions, but it needs the same procedure of manual attendance[1-3]. Each time a person needs to come to an office and to enter his biometric attendance. To make this procedure more easily and faster we can go for any new techniques, which are face recognition techniques. In this method person no need to go office, in his classroom itself take the attendance by captured pictures [4]. Face recognition technique is one of the fast-growing fields in computer science. It will become more efficient by achieving high accuracy and perfect recognition [5]. Even after several improvements in new technology, still, there is room for developments and needs for enhancing the performance. Based on the image we take security safety, attendances and sometimes it useful for decision also. Image detection and recognition systems reduce human efforts. An image capturing from the camera sometimes this is also a streaming video from a camera. A form that offline or online data, we capture the image after that applying the face detection techniques [6, 7]. Face detection is detecting the face location and presence of a face in images. In this face detection, we mostly see the nose, hair, ears, mouth, eyes and also the different pose of faces in images. There are many popular face detection techniques exist, few of them is the Viola-Jones Face Detection Algorithm, (LBP), Ada-Boost, SMQT Features, and SNOW Classifier Method, etc. After applying face detection techniques we detected the faces or objects in image and crop that image apply Face recognition technique [8-12]. In face recognition technique also different types are there, like face recognition by applying Hog features, Haar features, Machine learning, deep-learning, classification techniques some other tech. also used for recognition of the faces. Recognition of face we need training data sets. Instances taking camera capture now check that image to database Images. Face recognition of different peoples based on their related images of that person image we need to take images for before face recognition. In case if the image is not in the database then we store that image as a new person in the database. Next time the same image of that new image person appear in image and recognition the face or else taking as a new image and storing in database process is repeating [13].

The main hurdles in face detection and recognition are no effective techniques to extract facial features and maintaining accuracy even variations in facial expressions and at different poses, the maintenance of accuracy at noisy environment depends on the selection of suitable image classifiers. The Semi-Local Structure Patterns (SLSP) method is a novel algorithm proposed in [14] extracts the LBP and MCT feature on local regions are used to get good detection rate and it has operating capability even at noisy environments. The manual interventions in detection and registration of facial images at multi-view problem is overcome in [15] by training the face images and store them into a clusters and creating the corresponding distinctive points between pairs of face images in the presence of a large number of facial images is one of the key feature to increase the detection rates Another attempt done in [16] achieves fast and accurate detection and recognition procedure by hybridizing the efficient single-shot face detector technique and crystal loss procedure for verification and identifications, but it has the limitation of defining the descriptors with fixed range. But compared with the art of work this method, performance is enhanced. The problem during face detection is the differentiation between

facial skin artificial skins. In [17] an adoptive ad-hoc skin classifier effectively detects the face even the skin conditions are varied. Another method proposed in [18] uses classifiers to extract the DU-SURF method to identify local classification errors.

This paper is structured as follows: Section II elucidate the procedure of face recognition technique to mark an attendance using DWT and HOG method. The analysis of the proposed face recognition algorithm for some test data is described in section III and followed by a conclusion in section IV.

**II. PROPOSED TECHNIQUE**

The process flow of the proposed method for face recognition is as follows,

**1. Image Capture**

To capture the high-quality images the HD cameras are needed to be used to meet the accuracy. The algorithm can also have the option to feed the images from the video stream or by capturing images from the webcam manually. Doing the frame capture from the stream of video will give us results in less time but we won't be able to capture the face properly in case we lose light or something and if the face is not captured properly.

**2. Training data**

The captured images from the webcam or by HD camera are considered as the database. After capturing the several images we use to load and store those images to train the machine. We can store the data in the form of separate folders distinguishing each person from others. At least 100 to 50 captures of each person for getting a higher percentage of accuracy and meet the purpose of work.

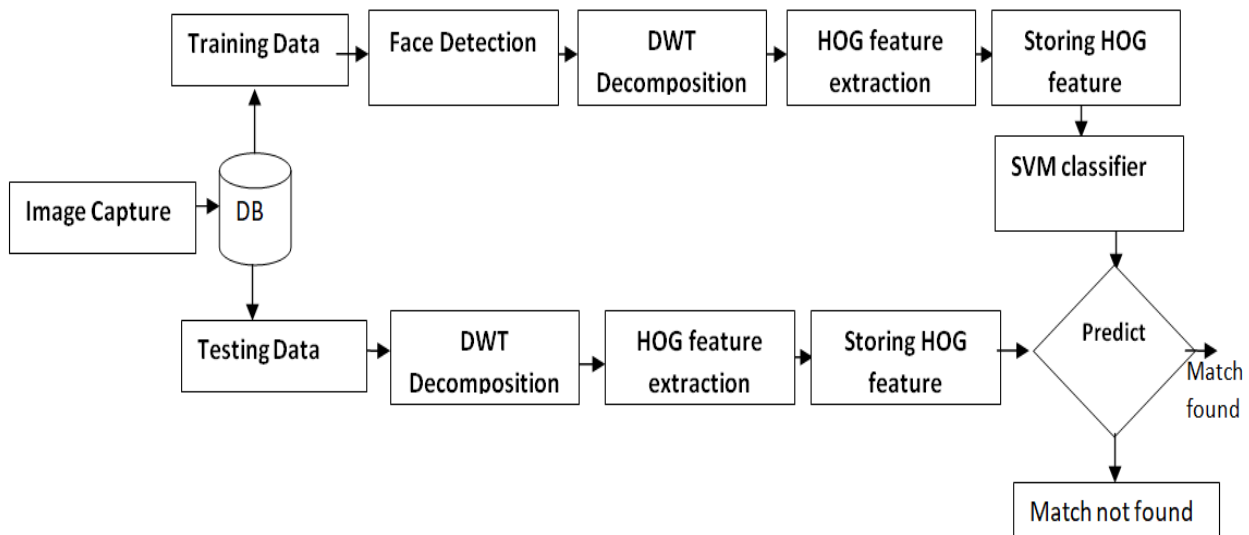


Fig-1: Block view of the proposed recognition system

**3. Face detection**

For face detection, we can do it using the object cascading class and we use the b-box method. The detection of the face using the object cascading is bought from them most popular facial recognition model Viola Jones[19]. In here, there are several objects are present. These are there in the form of small blocks containing them. They are taken through an image and are moved through each block of the image and are checked for overlapping through them. First, we will convert the image from the red blue-green to the grayscale image. The faces from the captured image are to be collected. The images captured from the camera are reshaped into a standard size of 112x92. It would be around 11 KB of size.

**4. Face recognition using DWT and HOG**

The faces taken in the database are needed to be load into a workspace. We will load the gallery images into that. Now we need to split the data of every person into testing and training data. Let us take it in the ratio of 0.2:0.8 from the database.

**a. DWT Decomposition**

The Wavelet is a most popular tool in the field of feature extraction from any set of data in the time-frequency domain. The mother wavelet which annulment the given image into four sub-bands of wavelet coefficients with different classes (LL, HL, LH, HH) (Fig.2). The low-frequency subband (LL) holds the rich features of the image and hence the high-frequency sub-bands can be neglected from the process possibly increases the speed and accuracy[20].

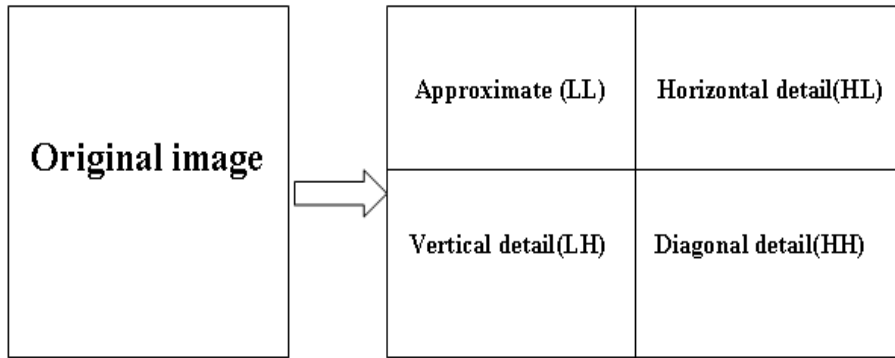


Fig-2: The Wavelet decomposition process.

The feature extraction of the entire image is not so necessary for face recognition process in concern of time latency. However, we can use only low-frequency sub-band of image for the recognition process.

**b. HOG Feature extraction**

Now we will be extracting the HOG features of all the DWT decomposed training individuals and store them in the form of bits and bytes. We need to fetch the decomposed image. Now the training datasets are extracted with the HOG features and are stored with an account.

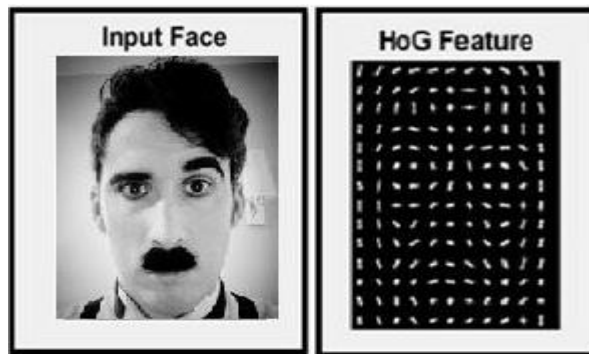


Fig-3: Hog Feature of the Input image

The extracted HOG features are stored as an indexed array. The images in the database along with their labels are sent into features array to identify them separately (like indexing). The HOG features are sent along with the person Label to classify them and store them separately. The data is now classified using the SVM method of face detection. This is completely done on the training data. Now we need to take a fresh photo from webcam or any file and detect the faces, extract the HOG features and then compare that with the data classified. We need a predict method to compare classified data with the data we need. Finally, it returns a label to which the given data matches or nearly matched. To get better results we need a bigger training set.

**III. ANALYSIS**

In this paper, we use face recognition system tool of MATLAB for markup the attendance. In this tool, a new window will open for registering the person into the database. To do so, we need to give the name and his/her registered number to store. Now we get the pictures of the persons from the webcam or any other cams available. Select the camera from which we need to take the image and start to capture the images. The camera is plotted in the axes and we can capture and save the images in the folder created automatically with the registered number we have entered in Fig.4.

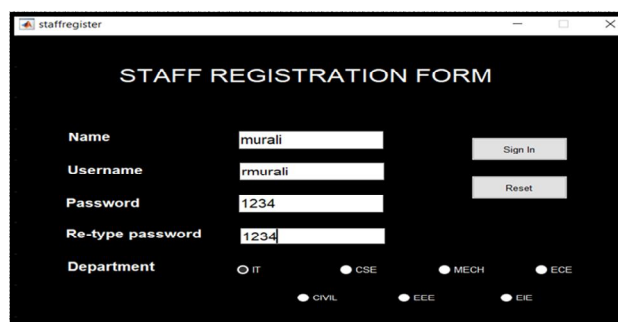


Fig-4.1: Registration form

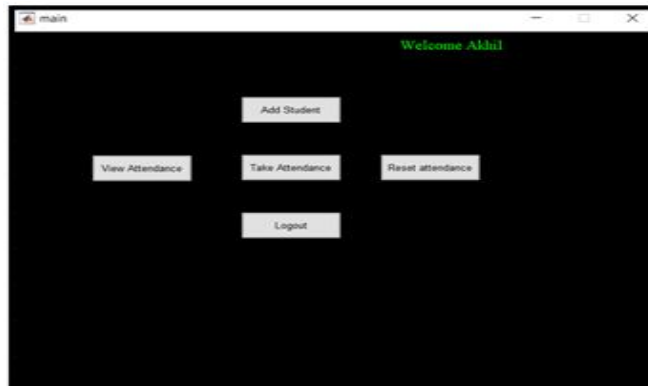


Fig-4.2: Option for selection of images in a database

After this, the data is stored in the database. Now let us capture a picture from the webcam and see the results. Now let us click on the “Take Attendance” and the camera starts and takes the image to give the results checking from the saved database

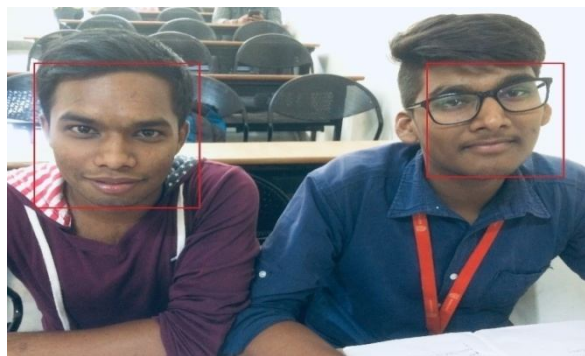


Fig-4.4: Input image

The input image Fig4.4 now undergoes the predict process and the name of each person are given as in Fig4.4

Fig-4.5: Output for the image in Fig 4.4

STUDENT REGISTER DETAILS			
SL.NO	NAME	REGISTER NUMBER	
1	ASHWITHA K	S1814618	ABSENT
2	KAVIYA.S	S1814619	ABSENT
3	RUFINA.M	S1814620	ABSENT
4	KEERTHI.P	S1814621	ABSENT
5	GOVINDH.T	S1814622	PRESENT
6	NIKESH.S	S1814623	PRESENT
7	GEETHAVANI	S1814624	ABSENT
8	SANDEEP	S1814625	ABSENT
9	AKSHATHA	S1814626	ABSENT
10	DAMINI	S1814627	ABSENT

Found images are given their names and not found ones are as the image in the middle.

**IV. CONCLUSION**

The automatic capturing of images in the classroom by using CC camera and then process the image by face detection and recognition reduces the burden of manual work of a human. It also increases efficiency and security safety, deciding this recognition result. This algorithm has wide extension in the field of the police force, Defense, satellite centers, educational institute for safety and security. In this system, we have implemented an attendance system for a lecture, section or laboratory by which lecturer or teaching assistant a record student's attendance. It saves time and effort, especially if it is a lecture with a huge number of students. The complete system is implemented in MATLAB. This attendance system shows the use of facial recognition techniques for student attendance and for the further process this record of student can be used in exam related issues.

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**NARRATIVES IN MANGEMENT DISCUSSION AND ANALYSIS: A STUDY OF CORPORATE PRACTICES IN INDIA**

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**ABSTRACT**

*In the wake of recent financial scandals in India and abroad and in the context of the global economic slowdown, the quality of disclosures provided in the corporate annual report becomes a subject of continuing concern on the part of regulators. The relevance of traditional annual reports has come under question. The debate has grown over, how far annual reports prepared under regulatory guidance are relevant to the investors and other stakeholders in making proper decision on companies' prospects. SEBI has made a serious attempt to overhaul the age-old corporate reporting system and adopt best practices in corporate governance in India. On the basis of the recommendation of the Kumar Mangalam Birla Committee Report, 1999, the SEBI has made it mandatory for listed companies to give certain information in detail in Management Discussion and Analysis section as an addition the Directors' Report from the year 2000. This study seeks to examine the extent and depth of the disclosures made in MD&A section of the annual reports of listed companies in India.*

*Keywords: Corporate Reporting, Narrative Disclosure, Clause 49, Listed Companies, Management Discussion and Analysis, SEBI.*

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**1. INTRODUCTION**

In recent years corporate reporting to the external users has attracted a lot of attention from different groups. They include policymakers, regulators, researchers, academics, etc. Corporate reporting may be defined as a process through which an entity communicates with the outside world. Alternatively, it can be said that, corporate reporting is nothing but transfer of information from the private domain (of management) to the public domain (American Accounting Association, 1977). It aims to communicate financial and non-financial information about the economic entity to various interest groups so as to facilitate informed decision making.

Companies can disclose information to their stakeholders in different ways. There are a variety of media available, a company can choose from, e.g., prospectus, press release, newspaper, interim reports, annual report, etc. Companies usually deploy diverse channels of communication for disseminating information externally. But published annual report is, arguably, still the main and most popular disclosure vehicle. As a public document, annual report generally includes two types of disclosures, viz., statutory disclosures and non-statutory or additional disclosures. Non-statutory disclosures are termed as voluntary disclosures. A significant part of statutory disclosures are in the form of financial numbers and the remaining part discloses some financial and non-financial information in textual form. This form of disclosure is termed as 'Narrative disclosure'. Voluntary or non-statutory disclosures also include both quantitative and qualitative information. But major part of voluntary disclosures are presented in the form of narratives wherein more emphasis is laid on words than on figures.

**2. BACKGROUND AND CONTEXT OF THE STUDY**

In recent years, particularly since the advent of the global financial crisis, the relevance of traditional annual reports has come under question. The debate has grown over, how far annual reports prepared according to the regulatory guidance are relevant to the investors and other stakeholders in making proper decision on companies' prospects. To bridge the perceived information gap and to satisfy the information need of the standard setters and regulators, narrative reporting has come to the fore.

During the last few decades, the narrative disclosure in corporate annual reports has increased significantly due to (i) the rapid pace of change in business, which means that past performance has become less useful guide to future prospects, and (ii) the growth of intangible assets, including those generated from intellectual capital, that are not recognized in traditional financial statements (Beattie V. and Pratt K., 2002). During this period we have witnessed major changes in the nature of business. The fundamental development in information technology is regarded as responsible for these changes. The capital markets and trade have been globalized and as a consequence companies around the world now face intensified competition and rivalry. Moreover, the whole society is networked and the economic structure is largely knowledge-based. Intangibles including knowledge assets have become the major value drivers for many companies. Majority of knowledge assets result from the transformation of intellectual capital. They are generated through innovation, organizational practices and human resources or a combination of these sources and may be embedded in physical assets and employees

(Lev, 2001). To survive and maintain competitive advantage under the changed business environment and business practices, companies has started to show more flexibility in their organizational form and become more adaptable to changes and innovative. Internal management of companies require newer types of information and new performance measure, which, largely non-financial, are designed to focus on the value creation process and the source of competitive advantages (Beattie V. and Pratt K., 2002).

Much of the drive towards narrative reporting has gained its momentum from the US Jenkins Report (AICPA, 1994), which examined the information needs of the users and proposed a comprehensive model for business reporting. The AICPA and FASB invited comments on Jenkins Report and as a result a number of follow-up research projects were undertaken in USA and UK. Many professional organizations around the world like Institute of Chartered Accountants of Scotland (ICAS), Institute of Chartered Accountants of England and Wales (ICAEW), Royal Society for Encouragement of Arts, Manufacturers and Commerce (RSA), Department of Trade and Industry (DTI of UK), PWC, Deloitte, etc., got involved in the debate over various aspects of business reporting. They made significant contributions towards the development of narrative reporting through their research projects. Even the regulatory bodies in many countries have brought out codes governing disclosure in annual reports. After a series of corporate scandals the US Sarbanes-Oxley Act of 2002 was introduced. It requires companies with US listing to improve disclosure and tighten financial reporting. The US Securities and Exchange Commission (SEC) has made it compulsory to include Management Discussion and Analysis (MD&A) section in the corporate annual reports for providing relevant and meaningful information to the investors. The stated purpose of Management Discussion and Analysis section is to provide an “insider’s view” of a publicly traded company’s financial performance and financial health at a given point of time (Cohen J. R., Gaynor L. M., Holder-Webb L. L. and Montague N., 2008). According to the Securities and Exchange Commission, MD&A should offer a discussion and analysis of a company’s business as seen through the eyes of management (SEC 2003a).

UK regulators are also active in promoting better disclosure by listed companies. UK Companies Act mandated inclusion of “Business Review” in the Directors’ Report for all companies except small companies with effect from 1<sup>st</sup> April, 2005. This review was necessary for an understanding of the development, performance and position of the company’s business. With effect from 1<sup>st</sup> October, 2007 the scope of Business Review was enhanced requiring listed companies to disclose certain additional information. A new narrative reporting requirements for UK companies were approved by Parliament in July, 2003 and become effective for financial years ending on or after 30<sup>th</sup> September, 2013 replacing the current business review with a separate “Strategic Report”.

In India, on the basis of the recommendations of the Kumar Mangalam Birla Committee Report, 1999, the Securities Exchange Board of India (SEBI) made it mandatory for listed companies to give certain information in detail in MD&A section as part of the annual report from the year 2000 (Clause 49 (IV) (F) of Listing Agreement). This paper has made an attempt to examine the corporate practices in India in the light of these new developments (new regulations and new requirements) and ever-increasing demands for transparency in corporate disclosure.

### **3. OBJECTIVES OF THE STUDY**

The objective of this study is to examine the extent and depth of narrative disclosure in the Management Discussion and Analysis Reports of Indian companies listed on NSE. Its underlying premise is that narrative reporting, if properly used can play a very important role in bridging the gap between narrowly-focused GAAP reporting and the information needs of the stakeholders. The study will examine and evaluate the nature of information the listed companies are releasing in their MD&A reports in narrative form and judge whether they are clear-sighted and focused on the issue. To be more specific, the study will judge whether listed companies in India are providing the right quality of relevant information on matters such as business strategy, principal risks and uncertainties and accountability.

### **4. RESEARCH METHODOLOGY**

The study is predominantly descriptive in nature. The descriptive approach adopted in the study has been extended further by using analytical perspective. There is however, a research question which is framed in the following words: Are companies in India providing useful and relevant information in their Management Discussion and Analysis reports in narrative form?

**Selection of Sample:** For the purpose of study, the top Nifty 50 companies as on 1st April 2012, which represents 24 different sectors of the economy, have been selected. These 50 companies include 8 PSU’s, 10 banks and NBFC’S and 32 other public limited companies.

**Period of study:** This study covers a period of five years, 2011-12, 2012-13, 2013-14, 2014-15 and 2015-16.

**Collection of data:** Published annual reports of the sample companies have been collected from companies' website.

**Measurement of narrative disclosures:** In the present study un-weighted disclosure index method has been used owing to its wider use and for the practical difficulties involved in using content analysis method. The range of disclosures has been measured both in terms of "item-wise disclosures" and "company wise disclosures"

**Framework of analysis:** Descriptive statistical tools like arithmetic mean, standard deviation and co-efficient of variation have been applied for assessing the levels and variability of item wise and company wise disclosures . Independent sample t-test has been applied to test the significance of difference between mandatory and voluntary disclosures and F test has also been applied to test the significance of differences among the mean disclosure scores of the three categories of companies.

## **5. MANAGEMENT DISCUSSION AND ANALYSIS (MD&A)**

Clause 49 (IV) (F) of Listing Agreement of SEBI provides that as part of the Directors' Report or as an addition thereto, a Management Discussion and Analysis Report should form part of the annual report to the shareholders. The MD&A should include discussion on certain matters prescribed in the clause within the limits set by the company's competitive position. Management is in a better position than outsiders to provide information about the company to the capital market. It can be a powerful tool for the management to communicate how the company has created value and how it plans to continue doing so. MD&A presents a detailed discussion and analysis of a company's business as seen through the eyes of the management. Management has a unique perspective on its business that only it can present. The objectives of the MD&A are:

- (a) To enable readers to view the company's performance, financial condition and future prospects through the eyes of management;
- (b) To provide material information to the readers that may not be fully reflected in the financial statements;
- (c) To supplement or complement the information in the financial statements by helping readers understand what the financial statements show and do not show;
- (d) To outline key trends and risks that have affected or could affect the current and future financial condition; and
- (e) To provide discussion about the quality of earnings and cash flows and potential variability of the components within earnings and cash flows so that investors can ascertain the likelihood that past performance is indicative of future performance (Management Discussion and Analysis- Guidance on presentation and disclosure: CPA Canada, 2014).

Clause 49 (IV) (F) prescribes the following matters to be disclosed in MD&A section within the limits set by the company's competitive position:

- i) Industry structure and development;
- ii) Opportunities and threats;
- iii) Segment-wise or product-wise performance;
- iv) Outlook;
- v) Risks and concerns;
- vi) Internal control system and their adequacy;
- vii) Discussion on financial performance with respect to operational performance; and
- viii) Material developments in human resources/industrial relations front, including number of people employed.

## **6. FINDINGS OF THE STUDY**

This section examines the current disclosure practices of listed Indian companies in their MD&A Reports. The present study is divided into three parts – item-wise disclosure, mandatory and voluntary disclosure and company-wise disclosure.

**A. Item-wise disclosure in MD&A reports:**

The 'item-wise disclosure score' has been calculated for each item included in the index of disclosure by dividing the number of companies disclosing such item by the total number of companies for which the item is applicable. A detailed index of items of information disclosed in MD&A section along with their disclosure scores are presented in the following table.

<b>Table-1</b>							
	<b>Item-wise disclosure in MD&amp;A Report (2011-12 to 2015-16)</b>						
<b>Items of information</b>	<b>Disclosure score (%)</b>						
	2011-12	2012-13	2013-14	2014-15	2015-16	Mean	Rank
<b>A. Mandatory Disclosure</b>							
1. Industry structure and development	92	94	94	94	98	94.4	1
2. Opportunities & threats	54	42	46	40	48	46	9
3. Segment-wise performance	90	86	88	90	92	89.2	4
4. Outlook	78	42	78	56	74	65.6	7
5. Risks & concerns	82	94	92	96	90	90.8	2
6. Internal control system and its adequacy	90	90	90	86	86	88.4	5
7. Discussion on financial performance	92	92	86	88	92	90	3
8. Material development in HR	90	86	86	84	86	86.4	6
<b>B. Voluntary Disclosure</b>							
9. Operational performance	62	0	52	22	42	35.6	11
10. Overview of economy	64	12	70	60	70	55.2	8
11. MIS & IT	32	34	34	34	22	31.2	12
12. Strategies and approaches	32	24	28	36	28	29.6	14
13. R&D, technology and innovation	22	32	22	24	26	25.2	16
14. Quality initiatives	8	14	10	6	8	9.2	27
15. Awards & accolades	8	4	14	10	16	10.4	23
16. Occupational health, safety and environment	13.88	25	13.88	22.22	22.22	19.44	21
17. Brand development	6	0	2	2	0	2	39
18. Supply chain management	5.56	11.11	8.33	13.88	16.67	11.11	22
19. Operations & productivity	2.78	0	0	0	0	0.56	58
20. Value creation	2	6	4	0	4	2.2	38
21. Sustainability	14	8	0	18	8	9.6	26
22. Customer focus and management	10	6	6	10	14	9.2	27
23. Investors relation and engagement	4	4	4	2	6	4	30
24. Company overview	2	2	0	2	0	1.2	43
25. Regulatory environment and guidelines	8	4	4	2	0	3.6	32
26. Environment protection and conservation	4	0	0	0	0	0.8	46
27. Grievance redressal mechanism	4	0	0	0	0	0.8	46
28. Information security	10	0	20	0	20	10	24
29. Legal matters	2	6	4	0	0	2.4	36
30. Corporate communication management	2	0	2	2	2	1.6	42
31. Branch network and infrastructure	50	0	37.5	12.5	37.5	27.5	15
32. Asset Quality Management (NPA Mgt.)	50	40	60	30	30	42	10
33. Tier I & Tier II capital	37.5	0	0	0	75	22.5	19
34. Capital Adequacy Ratio	37.5	0	0	12.5	75	25	17
35. Compliance of regulatory and internal guidelines	30	20	0	30	40	24	18
36. Basel II & III implementation	50	0	0	0	0	10	24
37. Credit monitoring	10	0	0	0	0	2	39
38. Financial inclusion	20	10	30	40	50	30	13
39. Business Process Re-engineering	2	4	0	4	0	2	39

40. Asset-Liability Management	10	20	0	0	0	6	29
41. Borrowings & Deposits	20	0	0	0	0	4	30
42. Integrated management policy	NA	2	0	2	0	0.8	46
43. Intellectual property	NA	6	2	2	6	3.2	33
44. Assets portfolio	NA	2	0	2	2	1.2	43
45. Business excellence	NA	4	2	2	4	2.4	36
46. Digital technologies	NA	2	0	2	0	0.8	46
47. Future growth drivers	NA	NA	8	2	6	3.2	33
48. Strategic Business Units	NA	NA	2	2	2	1.2	43
49. Cost development	NA	NA	2	0	0	0.8	46
50. Technology applications	NA	NA	2	0	2	0.8	46
51. Capital Management	NA	NA	30	10	60	20	20
52. Credit rating	NA	NA	2	0	2	0.8	46
53. Global footprints	NA	NA	NA	2	0	0.4	63
54. Shareholders' satisfaction	NA	NA	NA	2	0	0.4	63
55. Prudential norms of HFCS	NA	NA	NA	12.5	0	2.5	35
56. Potential future growth trends	NA	NA	NA	4	0	0.8	46
57. Business Model	NA	NA	NA	2	2	0.8	46
58. Strategic capabilities and relationships	NA	NA	NA	4	0	0.8	46
59. KPIs and analysis	NA	NA	NA	2	0	0.4	63
60. Integrated product development	NA	NA	NA	4	0	0.8	46
61. Legal Dept.'s role	NA	NA	NA	2	0	0.4	63
62. Key product portfolio	NA	NA	NA	2	2	0.8	46
63. Manufacturing facility	NA	NA	NA	2.78	0	0.56	58
64. Components and raw materials	NA	NA	NA	NA	2.78	0.56	58
65. Natural capital	NA	NA	NA	NA	2.78	0.56	58
66. Market development	NA	NA	NA	NA	2	0.4	63
67. Raw material security	NA	NA	NA	NA	2.78	0.56	58
68. Organization restructuring	NA	NA	NA	NA	2	0.4	63
<b>C. Items to be disclosed in Directors' Report</b>							
69. Corporate development and actions	16	2	10	8	12	9.6	
70. CSR	32	32	16	20	20	24	
71. Finance and capital structure	12	0	6	8	0	5.2	
72. Performance of sub , associates, JVs	16	10	18	6	14	12.8	
73. Energy conservation, Technology absorption & Foreign Exchange Outgo	2	4	0	4	0	2	
74. Dividends	2	0	0	0	0	0.4	
75. MOUs, major agreements and pacts	2	0	0	0	0	0.4	
76. International business achievements	6	0	0	0	0	1.2	
77. Capital investment	4	16	2	10	4	7.2	
78. Reservation policy of reserved category persons	9.09	0	0	9.09	9.09	5.45	
79. Safeguard of women employees at work place	0	0	0	2	0	0.4	
80. Implementation of RTI Act, 2005	9.09	18.18	0	9.09	18.18	10.91	
81. Audit of Consolidated Financial Statements	2	0	0	0	0	0.4	
82. Employees Stock option Scheme	0	2	0	0	0	0.4	
83. Implementation of official language policy	0	18.18	0	9.09	0	5.45	
84. Vigil mechanism and whistle blower policy	0	4	4	2	4	2.8	
85. Directors' Responsibility Statement	0	2	0	0	0	0.4	
86. Directors and KMPs	0	2	0	0	0	0.4	
87. Operational and financial highlights	0	10	0	6	0	3.2	

88. Projects update	0	0	8	6	8	4.4	
89. Capital expenditure	0	0	4	0	0	0.8	
90. Scheme of amalgamation and its effect	0	0	2	0	0	0.4	
91. Cost auditor and report	0	0	2.78	0	0	5.56	
92. Performance evaluation of Board and committees	NA	NA	0	2	0	0.67	
93. Consolidated Financial Statements	0	0	0	4	0	0.8	
94. Policy on sexual harassment	NA	NA	0	0	4	1.33	
95. New initiatives	0	0	0	0	10	2	

There are only 8 items in the Table-1 which are mandatorily required to be disclosed in the MD&A section. From the point of view of SEBI, these 8 items of information collectively provide the context and bigger picture for assessing past financial performance and future prospects. Financial statements are used by investors to screen prospective investments and to understand company’s financial condition and performance. Investors need an insightful analysis of financial statements focusing on what happened, why and what it suggests about strategy and operations going forward. On an average, 90% of sample companies have provided detailed discussion and analysis of financial performance with respect to operational performance. Segment-wise performance has been provided by 89.2% companies on average. Some companies did not provide discussion on financial performance and segment-wise performance in MD&A section as they have already presented such discussion in their Directors’ reports. These companies have followed this practice over the years to avoid duplication of disclosure. An overview of industry structure and developments provides some basic information about growth, changes and the complexities of a particular industry in which the company operates. On an average, 94.4% companies have presented detailed overview of industry structure and developments. Some banking companies have included “Overview of economy” instead of “Industry structure and developments” to provide an idea about the economic and regulatory environment within which they have to operate. Average score of “Overview of economy” is 55.2%.

Investors may want to know what could go wrong – in the industry and within the company – that could derail a company’s strategic plan. It is important to feature risks that distinguish a particular company from its direct competitors in the industry. It is helpful to prioritize identified risks; it is not helpful to provide a boiler-plate list of every conceivable risk. On an average, 90.8% companies have disclosed their potential risks and concerns along with mitigation plans. Some companies did not provide detailed description of risks and instead referred to “Corporate Governance Report” for such information. Tata Motors Ltd has disclosed the highest number of identifiable risks in all the years under study (2011-12: 24; 2012-13: 26; 2013-14: 25; 2014-15: 32 and 2015-16: 41). Table-15 shows the average number of risks identified by sample companies.

**Table-2: Average number of risks identified by sample companies**

	2011-12	2012-13	2013-14	2014-15	2015-16
PSUs	5.5	6.75	5.13	5.13	5.25
Banks &NBFCs	4.1	5.3	4.6	5.4	5.3
Other PLCs	5.06	6.56	6.38	7.25	7.44
Overall average	4.94	6.34	5.8	6.54	6.67

On the other hand, opportunities and threats refer to the factors and forces in an organization’s external environment that are out of its control and can directly or indirectly affect its chances of success or failure. Only 46% companies on average have disclosed detailed description of opportunities and threats that exist in the external environment.

An assessment of outlook is the primary goal of investors in analyzing whether a company’s current market price warrants investment or continued investment in the company. Investment professionals are constantly looking for clues as to the future potential of business. MD&A disclosures should provide insights into the entity’s future prospects. Such insights might arise both from trends observed in past performance and in other information not yet reflected in financial statements. The statement of “Outlook” summarily includes the following:

- (a) Expected development in macro environment;
- (b) Impact of Govt. policies;
- (c) Impact of changes in regulatory environment;

- (d) Opportunities and challenges that exist in the environment;
- (e) Company’s focus and strategic initiatives; and
- (f) Expected growth in company’s business.

Average disclosure score of “Outlook” is 65.6%. A good number of companies resorted to conservative approach. Instead of presenting a separate section in their MD&A, they included top management’s outlook in “Risks and Concerns” and “Opportunities and threats”.

88.4% companies, on an average, have disclosed information about the structure and components of internal control system, while some companies have omitted such disclosure as they have already included such information in their Directors’ reports and Corporate Governance reports. Discussion on “Material development in human resources” provides valuable insights regarding objectives and policies of human resource development, quality of human resources of the company, human resource development programs and initiatives undertaken by the company and industrial relations. On an average 86.4% companies have disclosed detailed information regarding HR management and industrial relations.

Total number of voluntary items identified for 2011-12, 2012-13, 2013-14, 2014-15 and 2015-16 are 33, 38, 44, 55 and 60 respectively, out of which 10 items are applicable for banks and NBFCs(item number 31, 32, 33, 34, 36, 37, 38, 39, 40 and 41). Sample companies are found to include wide variety of voluntary information in MD&A. Some of these items are critical for investors and investment professionals, e.g. strategies and approaches, value creation, business model, future growth trends, etc. But the disclosure scores of these items have been very low. Voluntary items which have recorded a fairly good score, are Operational performance (35.6%), MIS &IT (31.2%), R&D (25.2%), Asset quality management (42%), Capital adequacy ratio (25%) and Financial inclusion (30%). On the other hand, there are 27 items identified in the MD&A section which are required to be disclosed in the Directors’ report. However, some companies have somehow omitted these items while preparing Directors’ report and subsequently complied by including such items in the MD&A section.

**B. Mandatory and voluntary disclosure in MD&A reports:**

Table-1 consists of both mandatory and voluntary informational items. The following table presents the mean and standard deviation of disclosure scores of mandatory and voluntary items of information.

Types of information	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Mandatory</b>					
Mean	83.5	78.25	82.5	79.25	83.25
SD	12.114	21.129	14.517	18.8398	14.83
N	8	8	8	8	8
<b>Voluntary</b>					
Mean	19.249	7.95	10.766	8.334	11.879
SD	18.57	10.57	17.112	12.541	19.727
N	33	38	44	55	60

The above table reveals that there is a large variation between disclosure scores of mandatory and voluntary items of information in a particular year. To test the significance of difference between mean disclosure scores of mandatory and voluntary items of information, the following null hypothesis has been formulated and tested.

Ho: There is no significant difference between mean disclosure scores of mandatory and voluntary informational items in MD&A section of annual reports of listed Indian companies.

To test this hypothesis, independent samples t test has been applied. The results of the ‘t test’ is presented below.

	2011-12		2012-13		2013-14		2014-15		2015-16	
Types of Information	Mean	t value	Mean	t value	Mean	t value	Mean	t value	Mean	t value
Mandatory	83.5	9.096	78.25	13.574	82.5	10.923	79.25	13.43	83.25	9.71
Voluntary	19.25		7.95		10.77		8.33		11.88	

The above table reveals that, ‘t’ values are significant at both 1% and 5% level of significance. Hence the null hypothesis is rejected. Comparing the mean values, it is evident that the disclosure scores of mandatory items are significantly higher than that of voluntary items.

**C. Company-wise disclosure**

The analysis of company-wise disclosure is necessary for determining the inter-company variability in disclosures during the period of study. Variations in narrative disclosure practices are likely to result since companies are managed by groups which have varying managerial philosophies and wide discretion in connection with disclosing information. The present sample includes 8 PSUs, 10 Banks and NBFCs and 32 big public limited companies. The disclosure score has been calculated by dividing the total score obtained for a company in a particular year by the total score applicable to the company using an index of disclosure. Table-4 presents the company-wise disclosure score during the period of study.

<b>Table-5</b>							
<b>Company-wise disclosure in MD&amp;A (in %)</b>							
<b>Company name</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>Average</b>	<b>Rank</b>
<b>A. PSUs</b>							
ONGC	46.67	34.29	22.5	19.6	16.98	28.01	22
NMDC	33.33	28.57	20	17.65	15.09	22.93	39
GAIL	50	34.29	30	15.69	16.98	29.39	18
NTPC	40	42.86	27.5	15.69	18.87	35.85	7
Coal India	56.67	22.87	20	15.69	18.87	42.31	1
BHEL	60	40	37.5	17.65	33.96	37.82	3
Power Grid	26.67	28.57	20	15.69	16.98	21.58	45
BPCL	30	42.86	35	25.49	26.42	31.95	10
<b>B. Bank &amp; NBFCs</b>							
Indusind Bank	42.11	46.51	29.17	17.86	28.07	32.74	9
ICICI Bank	18.42	27.91	27.08	17.86	22.81	22.82	40
Axis Bank	36.84	27.91	20.83	17.86	26.32	25.95	26
Kotak Mahindra	31.58	23.26	25	17.86	26.32	24.8	32
BOB	47.37	46.51	31.25	26.79	28.07	36	6
HDFC Bank	36.84	23.26	20.83	17.86	19.3	23.62	36
PNB	47.37	32.56	6.25	16.07	22.81	25.01	30
SBI	47.37	32.56	14.58	21.43	19.3	27.05	25
HDFC Ltd	39.47	34.88	18.75	17.86	14.04	25	31
IDFC Ltd	31.58	27.91	20.83	14.29	17.54	22.43	42
<b>C. Other PLCs</b>							
Tata Power	31.25	29.73	44.74	25	24.53	31.05	13
Sun Pharma	40.63	27.03	36.84	25	18.87	29.67	17
AurobindoPharma	28.13	27.03	26.32	20.83	20.75	24.61	33
JP Associates	31.25	27.03	28.95	18.75	16.98	24.59	34
RIL	43.75	40.54	42.11	31.25	30.19	37.57	4
Ambuja Cement	25	16.22	26.32	18.75	15.09	20.28	47
ACC	21.88	27.03	23.68	20.83	16.98	22.08	43
Infosys	36	31.03	26.38	17.78	17.39	25.18	29
HCL Tech	32	37.93	34.21	15.55	17.39	27.42	24
Asian Paints	37.5	35.14	34.21	18.75	18.87	28.89	19
Hero Motocorp	37.5	27.03	28.95	22.92	22.64	27.81	23
Dr. Reddy's Lab	31.25	32.43	23.68	12.5	18.87	23.75	35
Tata Steel	28.13	27.03	34.21	20.83	5.66	23.17	37
Bajaj Auto	18.75	27.03	15.79	14.58	16.98	18.63	50
Bharti Airtel	40	37.93	28.95	26.67	23.91	31.49	11
Cairns India	28.13	29.73	28.95	22.92	32.08	28.36	21
L&T	46.88	29.73	34.21	20.83	22.64	30.86	14
TCS	48	48.28	39.47	31.11	23.91	38.15	2
ITC	28	28.57	23.33	17.95	17.07	22.98	38
Maruti Suzuki	40.63	27.03	28.95	22.92	22.64	28.43	20
Lupin	43.75	27.03	36.84	16.67	24.53	29.76	16
HUL	52	39.29	40	30.77	24.39	37.29	5
Hindalco	31.25	29.73	23.68	20.83	20.75	25.25	28

Grasim Industries	34.38	18.92	23.68	18.75	13.21	21.79	44
Vedanta	31.25	21.62	18.42	16.67	18.87	21.37	46
Ultratech	28.13	21.62	23.68	14.58	9.43	19.49	49
Wipro	48	24.14	28.95	20	43.48	32.91	8
JSPL	31.25	24.32	34.21	29.17	33.96	30.58	15
DLF	34.38	27.03	28.95	20.83	16.98	25.63	27
Tata Motors	34.38	32.43	34.21	27.08	28.3	31.28	12
Cipla Ltd	21.88	18.92	15.79	25	16.98	19.71	48
M&M	34.38	21.62	21.05	18.75	16.98	22.56	41

A close look at the above table reveals that the disclosure scores have varied a great deal across the companies in the present sample. The disclosure scores of companies vary between 6.25 and 60 during the period of study. Disclosure scores of PSUs have been highest upto 2012-13. In both 2013-14 and 2014-15 other public limited companies occupied the top positions in terms of disclosure scores. In 2015-16 Banks and NBFCs outperformed other categories.

The mean disclosure scores of companies vary between 18.63 and 42.31. In terms of mean disclosure score, 4 PSUs (Coal India, BHEL, NTPC and BPCL), 2 Banks (BOB and Indusind Bank) and 4 public limited companies (RIL, TCS, HUL and Wipro) have appeared in the top 10 ranks.

**Table-6: Category-wise variability in disclosure scores (%)**

	PSUs	Bank & NBFCs	Other PLCs	Overall
<b>2011-12</b>				
Mean	42.92	37.90	34.37	36.44
SD	11.60	8.67	8.01	9.35
COV	27.03	22.88	23.31	25.66
<b>2012-13</b>				
Mean	34.29	32.33	28.76	30.32
SD	6.85	7.95	6.73	7.36
COV	19.98	24.59	23.40	24.27
<b>2013-14</b>				
Mean	26.56	21.46	28.97	27.28
SD	6.61	6.98	7.23	7.72
COV	24.89	32.53	24.96	28.30
<b>2014-15</b>				
Mean	17.89	18.57	21.40	20.27
SD	3.16	3.21	4.88	4.60
COV	17.66	17.29	22.80	22.69
<b>2015-16</b>				
Mean	20.52	22.46	20.98	21.20
SD	6.00	4.56	7.11	6.53
COV	29.24	20.31	33.89	30.80

A comparison of disclosure scores of three categories of companies clearly highlights the wide differences in the disclosure scores up to 2014-15. But after 2014-15, the gap among the three categories in respect of mean disclosure scores and relative variations have reduced significantly. It is also observed that mean disclosure scores of the three categories have declined over the years. But relative variations within the individual category of companies have remained high during the period of study.

F test has also been applied to find out whether the three categories of companies differ significantly or not in disclosing the items of information in the MD & A reports. The following null hypothesis has been formulated and tested:

H<sub>0</sub>: There are no significant differences among the mean disclosure scores of the three categories of companies in their MD & A reports.

To test this hypothesis, one way ANOVA (Analysis of Variance) has been used. The ANOVA table is presented below:

Table-6						
ANOVA Table						
Year	Sources of Variation	df	Sum of squares	Mean of squares	F Ratio	
					Calculated Value	Tabulated Value
2011-12	Between Groups	2	494.5745	247.2872	2.9966	F <sub>0.05</sub> =3.20
	Within groups	47	3878.5684	82.5227		F <sub>0.01</sub> =5.09
	Total	49	4373.1429			
2012-13	Between Groups	2	244.5754	122.2877	2.3388	F <sub>0.05</sub> =3.20
	Within groups	47	2457.511	52.2875		F <sub>0.01</sub> =5.09
	Total	49	2702.0864			
2013-14	Between Groups	2	482.2686	241.1343	4.5577	F <sub>0.05</sub> =3.20
	Within groups	47	2486.6477	52.9074		F <sub>0.01</sub> =5.09
	Total	49	2968.9163			
2014-15	Between Groups	2	114.8381	57.419	2.8586	F <sub>0.05</sub> =3.20
	Within groups	47	944.0636	20.0865		F <sub>0.01</sub> =5.09
	Total	49	1058.9017			
2015-16	Between Groups	2	21.1136	10.5568	0.2348	F <sub>0.05</sub> =3.20
	Within groups	47	2112.8135	44.9535		F <sub>0.01</sub> =5.09
	Total	49	2133.9271			

Since the observed values of F for the years 2011-12, 2012-13, 2014-15 and 2015-16 do not exceed both the 1% and 5% tabulated values, the null hypotheses formulated for these years are accepted. But in case of 2013-14, the observed value of F is higher than 5% tabulated value but less than 1% value. Therefore, it may be concluded that the mean disclosure scores of three category of companies are significantly different in 2013-14 at 5% level of significance.

## 7. CONCLUSION

An effective financial reporting system is a pre-requisite for an open and efficient financial system. The effective corporate governance can also be ensured if the financial reporting is based on transparency, integrity, speed and efficiency. All round effective corporate governance, in turn, will transform an inefficient and weak financial system into an open and efficient financial system. In the last few decades or so, with the adoption of newer accounting standards, changes in auditing standards and emergence of corporate governance code, corporate reporting has undergone a sea change (Kanhare V. and Murthy G., 2007). From the few-page compilation of balance sheet and profit and loss statement to current comprehensive annual reports, corporate reporting has indeed come a long way.

In the backdrop of the above, the present study has examined the extent of disclosure in Management Discussion and Analysis Reports of listed companies in India. Both mandatory and voluntary items have been considered for measuring the quality of disclosure. The major findings of the study are:

1. There are statistically significant differences between disclosure scores of mandatory and voluntary items of information. The mean disclosure scores of mandatory items are significantly higher than that of voluntary items. Thus, the listed companies in India are more concerned about complying with the statutory requirements regarding disclosure in MD&A reports.
2. It is surprising to note that that no mandatory item has recorded 100% disclosure score. The item "Industry structure and development" has occupied top position with mean disclosure score of 94.4. Some banking companies have included "Overview of economy" instead of "Industry structure and developments" to

provide an idea about the economic and regulatory environment within which they have to operate. Some companies have provided detailed discussion on financial performance and segment-wise performance in their Directors' Reports consistently over the years. They did not included this two items again in their MD&A section to avoid duplication in reporting. In case of "Risk and concerns" some companies did the same thing and referred to Corporate Governance Report for such information. A good number of companies have included top management's "Outlook" in "Risks and concerns" and "Opportunities and threats".

3. Average disclosure score of voluntary items have shown declining trend over the period of study. The majority of sample companies did not follow the practice of disclosing a particular item of information consistently over the years.
4. 27 items which have been identified in the MD&A section, are required to be disclosed in the Directors' reports. Some companies have somehow omitted these items while preparing Directors' reports and subsequently complied by including such items in the MD&A section. This is an example of major lack of efficiency on the part of report preparers.
5. There are no statistically significant differences among the mean disclosure scores of the sample companies under the three categories. Disclosure scores of PSUs have been highest upto 2012-13. In both 2013-14 and 2014-15 other public limited companies occupied the top position in terms of mean disclosure score. In 2015-16, the mean disclosure score of Bank and NBFCs surpassed other categories.
6. If we compare the regulatory guidelines prescribed in Indian with that of developed countries like USA and UK, we will find that Indian regulators are way behind. Information regarding business model and value creation process, strategies, analysis of key performance indicators (KPIs) and intellectual property have not yet been accommodated in the regulatory guidelines in India. The present study has found that very few companies in the sample have disclosed those items voluntarily in their MD&A section.

The investors are concerned with financial information only to the extent it is useful in assessing the attributes of the portfolio return. They need a comprehensive picture of the business the company is in potential risks the company is exposed to and the future prospects of the company. The users of financial reporting cannot assess the opportunities and risks of investment propositions properly, if they are not provided with adequate and meaningful information. They need variety of information relating to economy (domestic and global), industries, markets, companies and securities. The management of a company is regarded as the best source for company-specific information. The information regarding economy, industry and market are required for developing an idea about the external environment in which a company operates. A company's performance is measured with reference to the external environment. Information relating to economic trend, industry and market developments and some important company-specific information cannot be provided by the financial statements as they are purely non-financial. Company-specific non-financial information includes company's business model and value creation process, strategy, risk perception and risk management framework, innovation, customer relationships, human resources, intellectual capital, etc. These non-financial information cannot be quantified and disclosed through financial statements. But these factors are critical for company's success and growth.

Companies already provide a plethora of information in their annual reports to comply with various regulations. SEBI, the capital market regulator in India, has made a sincere attempt to reduce information gap. Still there are many things to be done. If the structure of MD&A section is placed in the framework of the Fundamental Analysis of security valuation, we will find that the philosophy behind the both are same. The Economy-Industry-Company (E-I-C) Analysis Framework provides a detailed analysis of the fundamental factors affecting the performance of companies. The prescribed structure of MD&A section does not include analysis of economy-wide factors. But it is a known and accepted fact that the performance of a company depends on the performance of the economy. Investors are concerned with those variables in the economy which affect the performance of the company in which they intend to invest or retain their investments. Disclosure of information regarding industry structure and development is already prescribed in Clause 49 (IV) (F) of the Listing Agreement. Apart from discussion on financial performance, segment-wise performance, opportunities and threats, risks and concerns, internal control systems and human resources, company-specific information like business model, strategies, analysis of key performance indicators, intellectual capital, etc. are not included in the guidelines. It is also important to provide narrative explanation of the business model to enable investors to understand what company does, how the company generates long-term value, identify its major revenue streams and highlight the company's key relationships, resources and other inputs that enable its successful operation. The ideal level of disclosure should explain how the business model will achieve the strategic

objectives and how it is linked to the principal risks (Financial Reporting Council, UK, 2015). KPIs are the measure that are used by the top management to monitor the development and measure the performance and position of the business. KPIs can also provide a link between the performance of the company and strategies adopted by the top management. Investment analysts around the world use a range of measures while assessing a company's performance. These include some Non-GAAP measures. A clear description of the company's strategy along with vision and objectives can help the report as a whole to stay focused on the most significant drivers of business value (KPMG, UK, 2014).

The task of collating coherent and contextual information in narrative form provides an opportunity to the top management to get a more comprehensive picture of the company's performance and insight into the health and sustainability of the business. The decisions as to what to disclose, for whom to disclose, how to disclose and when to disclose are highly critical for making the corporate reporting more meaningful, relevant and useful to the stakeholders.

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**SOCIAL MEDIA AND SENIOR CITIZEN: SPECIFIC TO AHMEDABAD REGION**

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**ABSTRACT**

*Today is the era of Social Media, everyone from children to senior citizen is making use of social media either for entertainment, interaction, for work, to reduce their isolation etc. Purpose may be different but use of social media is increasing day by day. In this paper researcher aims to find out that, does Social Media is having any impact on the senior citizen, also want to know the purpose of using social media.*

*Keywords: Impact, Purpose Social Media, Senior Citizen*

**INTRODUCTION**

Across the world there is increase in the aging population and the culture of Joint Family especially in India is also moving towards nuclear families. As families are divided into nuclear family, senior citizen either stay alone or stay along with the children but whole day they have to stay alone as their children both son and daughter-in-law go for work. And evening also when they come home they don't have a time to spend with their parents because of tiresome day. One side there is a swift towards nuclear family and on the other side aging population. This make senior citizen alone and sometimes remain frustrated.

**OBJECTIVE**

- 1.) To know the impact of Social Media on the senior citizen.
- 2.) To know the purpose of using social media by senior citizen.

**RESEARCH METHODOLOGY**

**Framework and Methods proposed for Research**

- **Research Design:** Descriptive and Exploratory research is done with the help of questionnaire.
- **Data Collection Sources**
  - 1) **Secondary Data Collection Sources:** Secondary data will be collected from Internet, Periodicals, Journals, Magazines, Newspaper
  - 2) **Primary Data Collection Sources:** Structured questionnaire.
  - 3) **Data Collection Methods:**
    - 1) Questionnaire

• **Sample Planning**

**Sample Method:** Non-Random Sampling

**Sample Unit:** Ahmedabad

**Sample Size:** 100

• **Limitations**

They are listed below:

- The geographical scope is limited to Ahmedabad
- The conclusions derived are totally based on the answers provided by the respondents through the Questionnaire

**DATA ANALYSIS AND INTERPRETATION**

Sr. No	Questions	Responses	
1	Gender	Female	48
		Male	51
2	Pensioner or Non Pensioner	Pensioner	17
		Non Pensioner	83
3	Pensioner	1000-5000	1

	Income/Month	5001-10000	3
		10001-15000	6
		15001-20000	3
		20001-25000	3
		25001 and above	1
4	Source of income for Non Pensioner	Interest from savings	17
		Relatives are giving	1
		Monthly Amount from Son/Daughter	50
		Rent from Commercial	5
		Rent from House	3
		Agriculture Income	4
		Others	3
5	Age	58-60	16
		61-63	19
		64-66	26
		67-69	12
		70 and above	27
6	Do you use mobile	Yes	77
		No	23
7	Mobile Type	Normal	29
		Smart Phone	48
8	Internet Connection	Yes	44
		No	32
9	Browse net	Yes	40
		No	22
10	Do you use	Wi-fi	12
		Mobile Data	21
		Wi-fi+Mobile Data	4
		Mobile Data +Other	3
11	Hours spend on browsing net	0-2 hours	20
		2-4 hours	8
		4-6 hours	6
		6-8 hours	5
12	Purpose to browse net	Only Social Media	1
		Social Media +Entertainment	1
		Social Media+Online Shopping	1
		Health Seeking Information+Entertainment	1
		Health Seeking Information+Financial Interest	1
		Entertainment +learning	1
		Mail+Social Media+Entertainment	1
		Mail+Social Media+Financial Interest	1
		Mail+Entertainment+Learning	1
		<b>Socail Media+Health Seeking Information+Entertainment</b>	<b>4</b>
		Social Media+Health Seeking Information+Learning	2
		SocialMedia+Entertainment+Online Shopping	2
		Mail+social Media+Health Seeking Information+Entertainment	1
		Mail+social Media+Health Seeking Information+learning	1
		<b>Mail+social Media+learning+Entertainment</b>	<b>3</b>
		Mail+Social Media+Entertainment+Online Shopping	1
Mail+social Media+learning+Online Shopping	1		

		Mail+Health Seeking Information+Entertainment+Online Shopping	2
		Mail+Health Seeking Information+learning+Financial Interest	2
		Social Media+Health Seeking Information+Entertainment+Learning	1
		Socail Media+Health Seeking Information+Entertainment+Financial Interest	1
		Socail Media+Health Seeking Information+Entertainment+Online Shopping	1
		Mail+social Media+Health Seeking Information+Entertainment+earning	2
		Mail+social Media+Health Seeking Information+Entertainment+Financial Interest	1
		Mail+social Media+Health Seeking Information+Learning+Online Shopping	1
		Mail+Social Media+Entertainment+Learning+ Online Shopping	2
		<b>Mail+social Media+Health Seeking Information+Entertainment+Learning+Online Shopping</b>	<b>3</b>
13	Purpose of using Social Media	To keep in touch with families member	2
		To keep in touch with families member+Social Photo and Video Sharing	1
		Social Photo and Video Sharing+Professional group	1
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging	1
		To keep in touch with families member+Social Photo and Video Sharing+Sharing	2
		To keep in touch with families member+Social Photo and Video Sharing+To manage Loneliness	1
		To keep in touch with families member+Social Photo and Video Sharing+Childhood friend Group	3
		To keep in touch with families member+Community belonging+Sharing	3
		<b>To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Sharing</b>	<b>6</b>
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Professional Group	1
		To keep in touch with families member+Social Photo and Video Sharing+Sharing+To manage loneliness	1
		To keep in touch with families member+Social Photo and Video Sharing+Sharing+Childhood friend group	1
		To keep in touch with families member+Social Photo and Video Sharing+To manage Loneliness+Professional Group	1
		To keep in touch with families member+Social Photo and Video Sharing+To manage Loneliness+Childhood friend Group	1
		To keep in touch with families member+Community belonging+To manage loneliness+Professional Group	1
		To keep in touch with families member+To manage loneliness+Professional Group+Childhood friend Group	1
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Sharing+To manage loneliness	1
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Sharing+Professional Group	1
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging+To manage loneliness+Professional Group	1
		To keep in touch with families member+Social Photo and Video	1

		Sharing+Sharing+To manage loneliness+Childhood frined Group	
		To keep in touch with families member+Social Photo and Video Sharing+Sharing+Professional Group+Childhood friend Group	1
		To keep in touch with families member+Social Photo and Video Sharing+To manage Loneliness+Professional Group+Childhood friend Group	1
		SocialPhoto and Video Sharing+Community belonging+Sharing+Professional Group+Childhood Friend Group	1
		<b>To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Sharing+Professional Group+Childhood friend Group</b>	<b>3</b>
		To keep in touch with families member+Social Photo and Video Sharing+Community belonging+Sharing+To manage loneliness+Professional Group+Childhood friend Group	2
14	Social media Site browse		
		FB	Twitter
		What 'app	Instagram
		LinkedIn	Youtube
	Not a Priority	1	6
	Low Priority	0	1
	Somewhat Priority	1	1
	Neutral	1	2
	Moderate Priority	4	0
	High Priority	8	1
	Essential Priority	3	0
15	Non Social Media Sites		
		Flickr	Flip kart
		Quikr	Amazon
		Wikis	Skype
	Not a Priority	0	0
	Low Priority	0	6
	Somewhat Priority	0	0
	Neutral	0	3
	Moderate Priority	3	1
	High Priority	0	2
	Essential Priority	0	6
16	Frequency to make use of social media		
	Never		0
	Rarely		1
	Occasionally		6
	Frequently		29
	Always		5
17	Frequency to make use of Non-Social Media Sites		
	Never		1
	Rarely		11
	Occasionally		18
	Frequently		4
	Always		0

18	Social Media Best friend in Elder hood	Never						1
		Rarely						4
		Occasionally						9
		Frequently						22
		Always						5
19	Does Social Media Influence you	Yes	18					
		No	19					
20	Social Media is beneficial to you	Benefits of SM	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
		To get connected with family and friends	22	18	1	0	0	
		To nurture friendship	11	23	3	2	0	
		For community involvement	18	19	3	1	0	
		To pass my leisure time	12	20	4	5	0	
		To learn about illness and alternative medicines	7	22	1	1	0	
		For self-accomplishment	8	24	3	1	1	
		For expansion of social network	16	17	15	2	1	
		To learn new things	17	17	4	2	0	
		To achieve inner peace and serenity	3	15	18	3	1	
		To search for deals to save money on social media	2	7	27	2	2	
21	People don't browse net	Reason	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
		Lack of awareness of internet facilities	7	7	9	18	3	
		Health related issues preventing used of web based technology	9	19	6	11	0	
		I think it is wastage of time	3	6	10	22	3	
		I think to browse	3	3	12	24	2	

		internet is not good					
		Data Plan is not affordable	1	7	8	23	5
		I can't spare time with my family so I don't browse net	1	5	16	19	3
		Browsing net is not secure	7	9	0	0	0
		Internet doesn't give personal feeling which we can get while meeting person in personal	4	7	10	21	2

**ANALYSIS AND CONCLUSION**

From the above analysis researcher has found that those who are non-pensioner they are also getting monthly income from their son and daughter, this show the bonding among families of Indian society. Most of them make use of net for browsing mail, social media, Health seeking information, entertainment, learning, Online Shopping. They also make used of Social Media to keep in touch with family members, Social Photo and video sharing. Most of them give priority to Facebook, what's app and YouTube. They feel that social media is their best friend; help them to connect with friends and family, nurture friendship, community involvement. Many of them are not browsing net due to health related issues preventing used of web based technology.

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A STUDY ON THE PERCEPTION OF EMPLOYEES REGARDING PERFORMANCE MANAGEMENT SYSTEM WITH SPECIAL REFERENCE TO MANUFACTURING COMPANY

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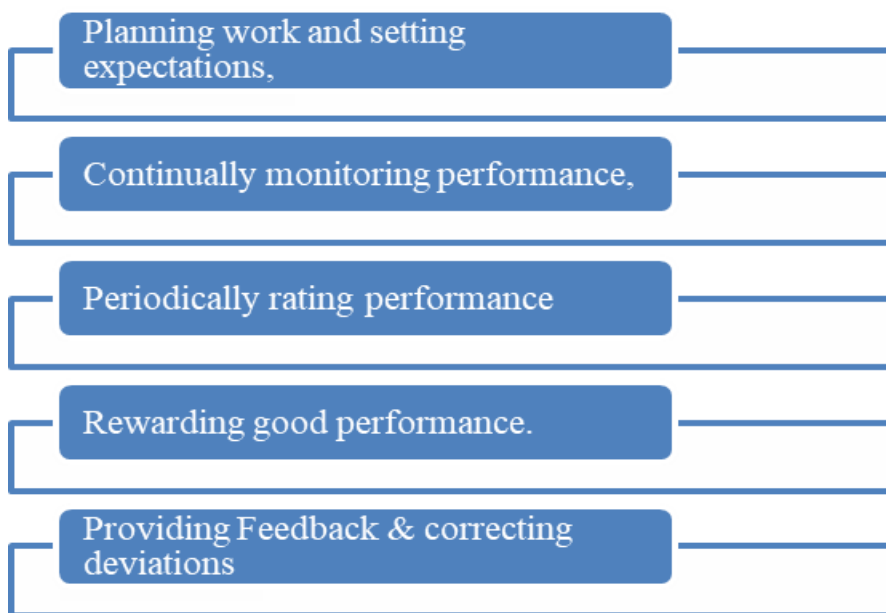
ABSTRACT

Human resource has been considered as a valuable and important resource for any organisation. It is responsibility of an organisation to develop and nurture the talent of people working in the organisation. Besides all the functions of human resource management performance management plays an integral role in increasing the competency and motivating the employee. Now a days lot of technological changes are taking place in tune of the same performance management system should be made reboots to deals with the problem of bell curve and biasness. The paper attempts to analyse the perception of employees working in manufacturing company regarding performance management system.

Keywords: Performance management system, perception, benefit, process, feedback

INTRODUCTION

Human resource has been evolving over the period of time from personnel management to human resource management and now strategic human resource management. Functions of human resource have also been drastically transformed in tune of same performance management system had picked up the boost. The main purpose of performance management system is aligning the objective of organisation and individual. Employee performance management includes:



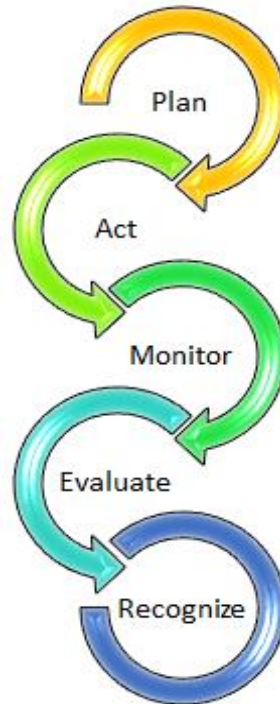
BENEFITS

In most cases, the benefits of a performance management system will include:

- ✓ Consistency
- ✓ Motivation
- ✓ Morale and Retention
- ✓ Training Needs

Process of Performance Management system

Performance management is a management style that has grown increasingly popular. It involves a process in which a company, organization, or institution creates a work environment that empowers employees to work to the best of their abilities. The process that an employer uses to accomplish this often varies from one business to the next. Despite these variations, the performance management process generally involves some form of goal setting, evaluation and reward. In addition, coaching is often offered throughout the process.



### FACTORS AFFECTING PERFORMANCE MANAGEMENT SYSTEM

For performance management system to be implemented, there are a number of conditions that must exist prior to its execution. These factors include:

- Ability of manager to mobilize the organization.
- Effectively communicating the roles, duties and responsibilities of all such individuals who are the participants in the process of bringing about change.
- Transparency and Simplicity
- Practicality and Participation
- Equality and Objectivity

### LITERATURE REVIEW

**K. Jayarama Reddy** in his Paper “A Study on Impact of Performance Management System on Organization” explored the relationship between PMS and Organizational Effectiveness (OE). The study revealed that there is an association between PMS and OE.

**Ms Neeraj Kumari** revealed that training and development, career development and succession planning might become the core essential functions of a PMS. The organizations must concentrate on these areas to effectively appraise and improve the performance of employees in the organizations. The study has identified the most important factors, which contribute to the effectiveness of creation and maintenance of such systems.

**Mr.D B Bagul**, conducted a research deals with Performance appraisal of Larsen & Toubro. L & T implement robust system of PMS. The appraiser and appraisee expectation from Performance appraisal system are the same i.e. "Determination of Promotion or Transfer" and "Salary Administration and Benefits". Hence, a single performance appraisal system can satisfy needs of both the Appraiser and appraisee. Therefore the Performance appraisal program would be designed in such a way that the appraiser would be able to analyze the contribution of the employee to the organization periodically and all the employees who have been performing well would be rewarded suitably either by an increase in the salary or a promotion. Through this, the appraiser can also motivate the employees who felt that they had no growth in the organization and serves the purpose of employee development. Thus, performance appraisals can be used as a significant tool.

**Sandeep Gudla and Valli Sri Krishna Veni** tried to find out the role of Performance Management System in the IT Organizations. From the collected data, it was clear that employees in the organization were clear about how the system works and were also aware of their goals and objectives, key performance areas and self-appraisal forms. This system also helps to meet business expectations and also helps to speed up to market expectations. It also helps management in making promotion.

**RESEARCH DESIGN & METHODOLOGY**

**Research Methodology**

Researcher has used Random Sampling and Questionnaire technique to collect the data from the respondent.

**OBJECTIVES OF THE STUDY**

- To gauge the perception of employee regarding Performance Management System with reference to manufacturing industry.

**Sample Design**

A sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population.

**Sample Size:** Researcher has taken sample size of 100 respondents.

**Sample Technique:** Random sampling has been used to carry out the survey.

**DATA COLLECTION**

- ✓ Primary Data: Through Questionnaire
- ✓ Secondary Data: Through Website

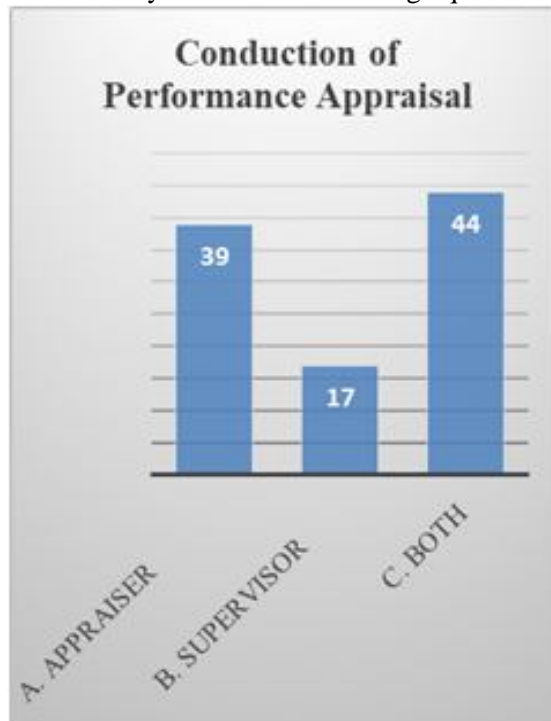
**SCOPE OF THE STUDY**

- The entire research was carried within the Manufacturing Companies at the area of Vapi & Silvassa.
- The research will help to understand the process of performance management system and perception of employees for the same across the area.
- The project will help the companies to redesign and modify their existing performance management system.

**DATA ANALYSIS**

**Conduction of Performance Appraisal**

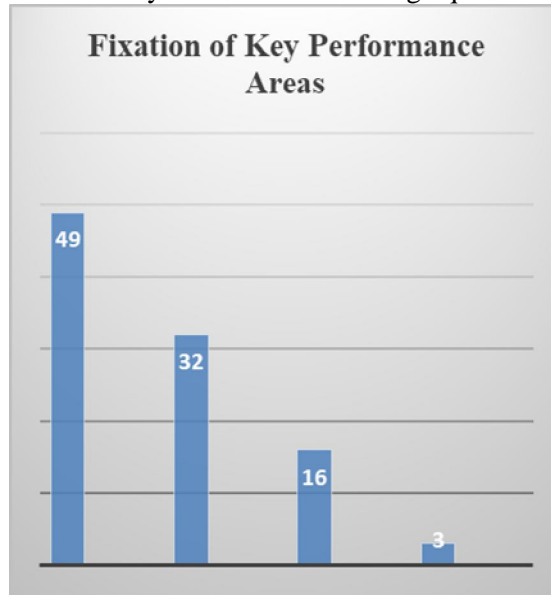
Source: Primary Data collected through questionnaire



**Fixation of Key Performance Areas**

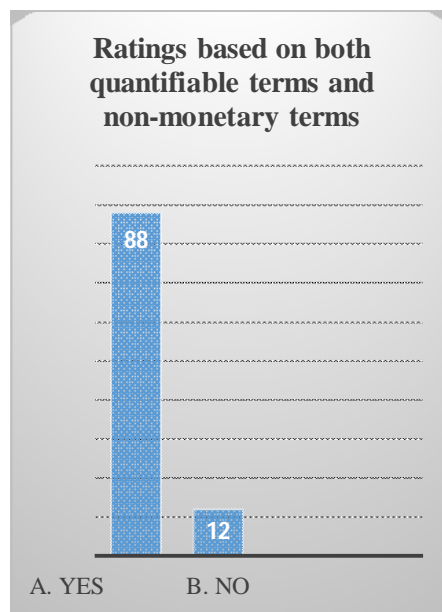
Option	No. Of Respondent
Based on organizational objectives	49
Based on departmental goals/targets	32
Based on individual capability	16
Based on team requirement	3
<b>Total</b>	<b>100</b>

Source: Primary Data collected through questionnaire



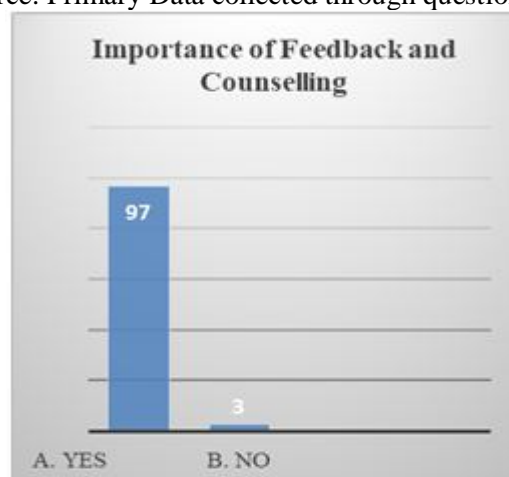
**Ratings based on both quantifiable terms and non-monetary terms**

Source Primary Data Collected through questionnaire

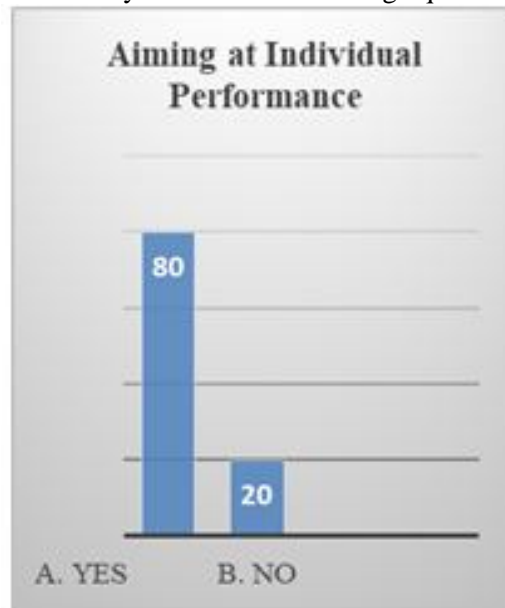


**Importance of Feedback and Counselling**

Source: Primary Data collected through questionnaire



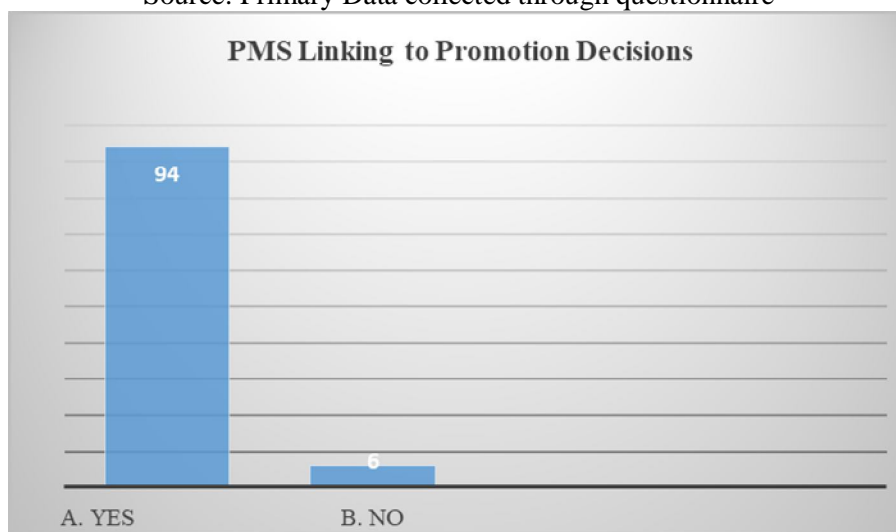
Source: Primary Data collected through questionnaire



Aiming at Individual Performance

**PMS Linking to Promotion Decisions**

Source: Primary Data collected through questionnaire



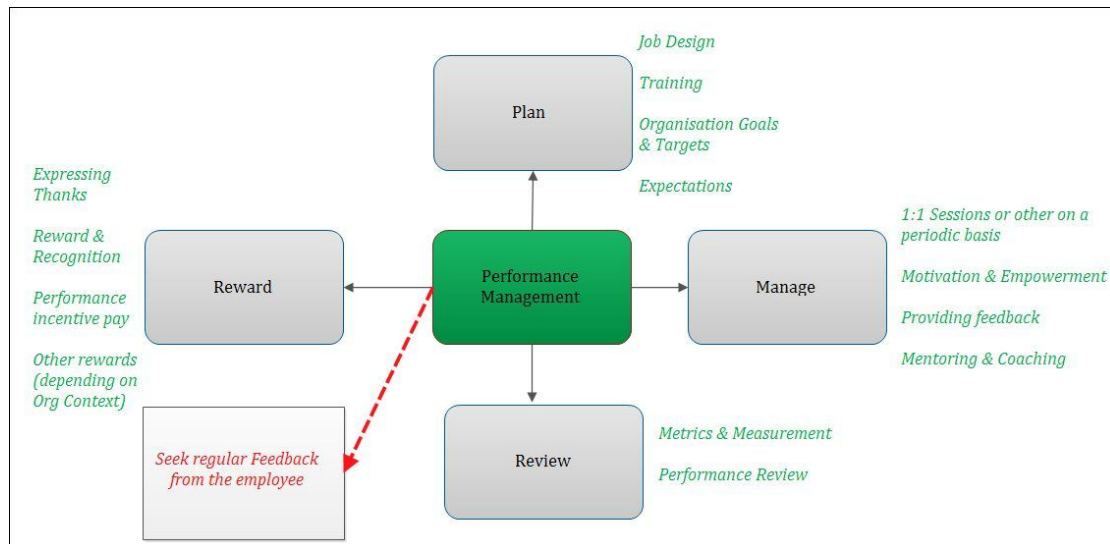
**FINDINGS**

The study had the following major findings:

- The Majority of the respondents responded that their organisation uses Superior’s Appraisal method for Performance Appraisal. The employees are clearly communicated with the Goals and Objectives.
- Majorly the KRA’s are fixed on the basis of the Objectives of the Organisation.
- The Appraiser informs the employees in an Open and Transparent manner after the Performance Review.
- The review is followed by the Personal Counselling and Guidance and that is given due importance in the organisation.
- Public recognition and rewards are given to the employees for their better performance.
- The Performance appraisal is aimed at Individual Performance. The Process of PMS help in administering merit pay and is linked to making promotion decision.

**RECOMMENDATION**

Below mentioned model of Performance management system could be an effective way to implement an effective motivational approach of performance management system at various organisations.



Source: Armstrong, M & Baron, A (1998) *Performance Management: the New Realities*.

**CONCLUSION**

The objective of the study was to analyse the perception of employees towards the performance management system. The research was carried out through structured questionnaire and the analysis was made by the response given by the employees and findings were derived. Performance management system is an integral important part for HR department. Fruitful performance management system can serve a guideline to various HR functions like planning, selection, motivation, compensation and training. Performance management system if manage properly can achieve both individual and organisational objective.

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**A STUDY ON STATUS & PROSPECTS OF WOMEN EMPLOYMENT IN INDIAN CONTEXT**

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**ABSTRACT**

*Enhancement of women's participation in economic activities is essential not only for achieving social & economic development but it significantly builds the base for the human development in the Nation. "The best thermometer to the progress of a nation is its treatment of its women."- —Swami Vivekananda. Reducing gender gap in participation in economic activities contributes towards multiple benefits, right from home to Nation. Women constitute roughly half of the Indian population, but their contribution to economic activity is far below the potential. Unlocking this large potential could work as catalyst in achieving goals as set under Sustainable Development Goals.*

*This Paper attempts to understand the significance of Women Employment in general while discussing the concept of Women Entrepreneurship & Women's Economic Empowerment. Also it presents the status & prospects of Women employment in Indian Context with special mention of Women Entrepreneurship. The authors have exhibited the inferences drawn from the Interviews of Women in Employment. It is a descriptive study conducted massively with the help of secondary data and support of primary data in the form of Interviews of women in employment selected through convenience sampling. The Authors have considered the Women Employment at large in Indian context rather a specific Industry or a region for the study. This may lead to limitation of the study and hence the results are more indicative in nature rather exhaustive. Women Employment in the light of economic participation & entrepreneurship has been a much talked about theme, this piece of literary work adds to existing literature.*

*Keywords: Women Employment, Women Entrepreneurship, Women's Economic Empowerment, Entrepreneurship, Empowerment*

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**INTRODUCTION**

**"It's important for women to work. They need to keep their independence, to keep earning and being challenged."**

**- Tamara Mellon, Fashion entrepreneur**

India, in its past had been predominantly Male oriented society due to which the participation of women in the workforce had been significantly low. It was after the independence that the awareness about the significance of participation of women in the workforce started gaining attention. Various remedial measures in the fields of education, health and employment have brought about significant changes in increasing the economic empowerment of women. Major steps taken by government such as compulsory primary and secondary education for children, criminalization of female infanticide and feticide, as well as general changes in socio cultural norms with the help of feminist movement have been part and parcel of the ascend towards creating an egalitarian work culture in India. Today, India has a female population of about 48.5% and yet the participation of women in the workforce is still significantly low. Economic Survey 2018, Stressing on the need to increase women participation in labour force, said that lower women engagement adversely affects the growth potential of the economy. "Among developing countries, there exists gender gap in labour force participation rates. In the case of India, the gender gap in labour force participation rate is more than 50 percentage points," said the survey tabled by Finance Minister Arun Jaitley in Parliament.

According to World Economic Forum's global gender gap index (2017), India ranks at 108<sup>th</sup> position among 144 nations studied. Thus, there is no denying that it is the need of the hour to address the low participation of women in workforce and bring about more effective remedial changes to increase their participation. Thus, reaching gender parity would have greater impact on India than in any other region in the world. Various organizational variables such as industry and occupation, informal social networks, stereotypes and discriminations, personal variables such as traits, family and human capital play a vital role in the progression of women's career. The lack of women in politics has also a role to play in this gender gap. Few major problems analyzed for the progression of women's career had been pay disparity, discriminative task allocation, lack of opportunities for promotion etc.

**RATIONALE & SIGNIFICANCE OF THE STUDY**

According to Mckinsey Global Institute (The Power of Parity: Advancing Women’s Equality In India 2015), in “best-in-region” scenario, in which all countries match the progress towards gender parity of the fastest-improving country in their region, the world could add \$12 trillion to GDP in 2025, doubling the contribution of women to global growth in business-as-usual scenario in the coming decade. India shall boost its GDP by \$0.7 trillion in 2025 or 16 percent of the business-as-usual level, the largest relative boost of all ten regions analyzed by MGI. This translates into 1.4 percent per year of incremental GDP growth for India. About 70 percent of the increase comes from raising India’s female labour-force participation rate by 10 percentage points, from 31 percent at present to 41 percent in 2025, to bring 68 million more women into the economy over this period. This huge potential & growth through the Women employment signifies the rationale behind studying the status & prospects of Women Employment.

**LITERATURE REVIEW**

The studies on status and prospects of women employment in India have been in abundance and the authors had a good scope of reviewing the thoughts of different authors pertaining to the theme of the study. Studies in Female Labor Force Participation (FLFP) show that over the past four decades, India has experienced rapid population and economic growth, urbanization, and demographic change. Between 1990 and 2013, GDP growth averaged 6.4%; the share of agriculture in GDP roughly halved (from 33% to 18%), while that of services increased from 24 to 31%. Urbanization has also increased, from 26% to 32%, (The World Bank Report, 2015). At the same time, women’s education and childbearing patterns have changed: over the same period, total fertility fell from 4.0 to 2.5 children per woman (The World Bank Report, 2015). Girls’ primary school enrollment has reached parity at boys, and universal enrollment was achieved in 2015. Between 1994 and 2010, the fraction of women aged 15-24 attending any educational institution more than doubled (from 16.1% to 36%). However, despite this rapid economic growth, educational gains, and fertility decline, India’s women are noticeably absent from the labor force. Female labor force participation (FLFP) rates remain low and have even fallen in recent years. (Women and work, 2017)

In the entrepreneurship sphere, the current status of women has been observed as follows: At a global level, about 126 million women have started or are running their businesses and whereas in India, there are about 8 million women have started or are running their businesses. Apart from that, women have 24% share in corporate senior management positions and in India it’s 30% for the same. Not only that, round about 37% of formal enterprises owned by women around the globe whereas 10% of formal enterprises in India are being operated by women. (<https://bizztor.com/in/women-entrepreneurship-india>). The changing scenario of entrepreneurship is reflecting a gradual increase of women entrepreneurs.

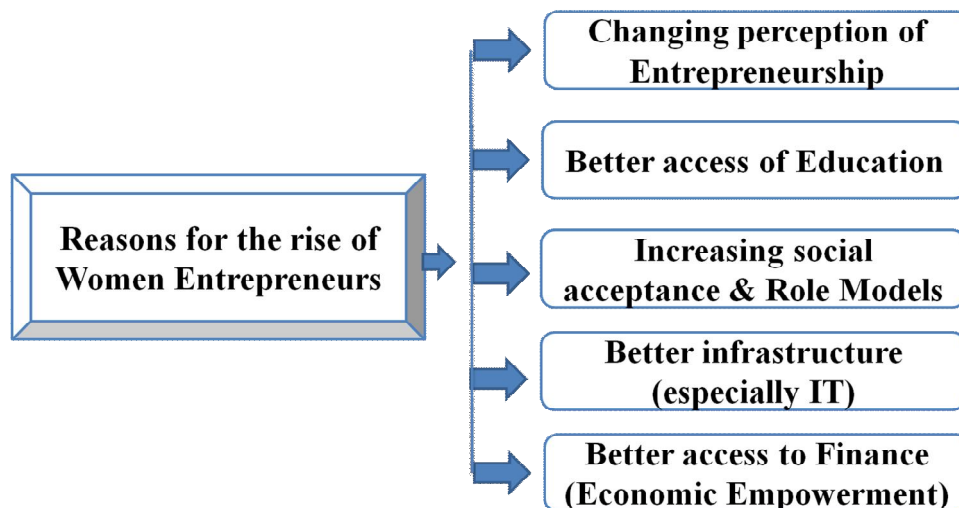


Chart No. 1: Reason for the Rise of Women Entrepreneurship  
Source: Author’s Study

While studying the prospects of women employment in India, following learning has been drawn: In “best-in-region” scenario where all countries match the progress towards gender parity of the fastest-improving country in their respective region, the world may add \$12 trillion to GDP by 2025; doubling the contribution of women to global growth in business-as-usual scenario in the coming decade. India may boost its GDP by \$0.7 trillion by 2025 or 16 percent of the business-as-usual level, the largest relative boost of all ten regions analyzed by MGI. This translates into 1.4 percent per year of incremental GDP growth for India. About 70 percent of the



**OBJECTIVES OF THE STUDY**

The authors have considered the following objectives for the study:

- ▶ To understand the significance of Women Employment in general while discussing the concept of Women Entrepreneurship & Women’s Economic Empowerment.
- ▶ To study the status & prospects of Women employment in Indian Context with special mention of Women Entrepreneurship.
- ▶ To exhibit the inferences drawn from the Interviews of Women in Employment.

**RESEARCH METHODOLOGY**

**A Study on Status & Prospects of Women Employment in Indian Context** is a descriptive study conducted with the help of both Primary & Secondary data. The study aims to understand the significance of Women Employment in general while discussing the concept of Women Entrepreneurship & Women’s Economic Empowerment. The study encapsulates the learning gathered from the theoretical reviews and in-person interaction with the selected Working women based on convenience sampling. This attempt adds to the existing literature pertaining to the theme of the study. The Authors have considered the Women Employment at large in Indian context rather a specific Industry or a region for the study. This may lead to limitation of the study and hence the results are more indicative in nature rather exhaustive.

**RESEARCH PROCESS**

The study was massively conducted with the help of Secondary data collected from various sources. The study also had the scope of Primary data collection, executed by Interviewing Women at Workplace. The Authors have followed the following Research Process to complete the literary work:

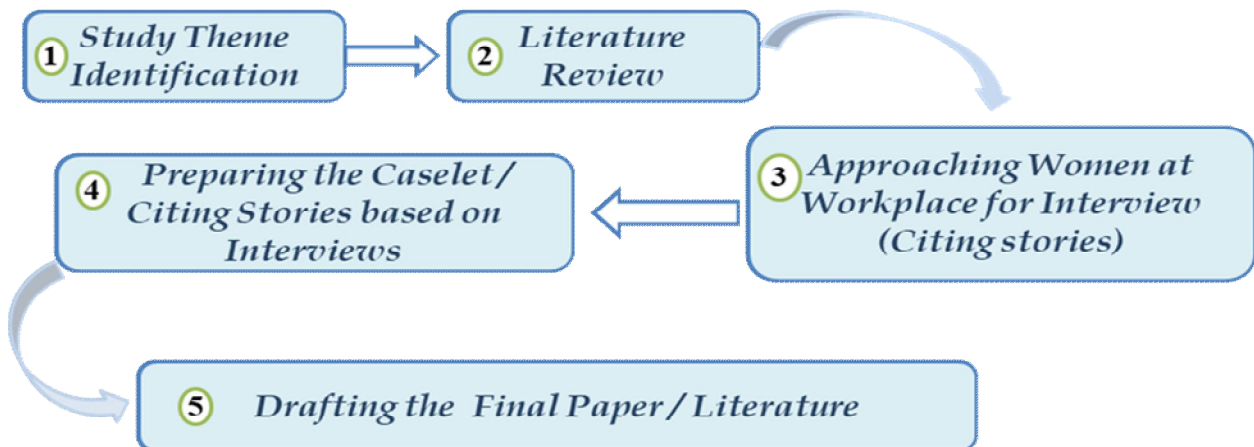


Chart No-2: Research Process adopted (Self demonstrated process)

**Exhibit – 1: Mrs. Minaxi Desai – Entrepreneurial Personality**

*Education is the solid foundation and practical experiences, the blocks that you build your success with.*

Mrs. Minaxi Desai, co-owner of Kohinoor Industrial Training Institute, is a woman of varied experiences in her life. Initiating her journey from a low paying job of receptionist in Kodri Papers in 2006, she rose up to be the HR Manager of the firm by 2008. With a strong working experience of six years in the firm, she decided to try her hands in Entrepreneurship. She joined Kohinoor in 2012 as a managing director, and subsequently took over the firm in 2015. Her varied experiences and struggles in corporate include gender based pay disparity for similar work, unhealthy work environment, gender discrimination and stereotyping, predominance of male population at work etc.. Personal financial constraints and that of human capital, i.e. investment in her education have also been significant challenges she overcame.

Mrs. Minaxi claims that through all the struggles, her communication skills, her determination, hard work and belief in herself have kept her from giving up. She believes that constant support and motivation of people around her have been a boon during her hardships and have kept her inspired for success. Her struggles in corporate indicate that women in general face uneasy work environment, discrimination and stereotyping at workplace. But, she also believes that increasing awareness of egalitarian approaches is slowly but gradually changing the scenario. She strongly believes that hard work, patience and perseverance are the qualities needed to tackle the challenges at the workplace.

Source: Personal Interview with the Women Entrepreneur

**WOMEN EMPLOYMENT: STATUS**

**“An important attribute of success is to be yourself. Never hide what makes you, YOU.”**

**– Indra Nooyi, PepsiCo**

Women Employment is an essential element of economic discussion not just in Indian context but largely at global sphere. *“The best thermometer to the progress of a nation is its treatment of its women.”* – Swami Vivekananda. This quote states that in yester years the need was already felt. Reducing gender gap in participation in economic activities contributes towards multiple benefits, right from home to Nation. The economic activities are broadly classified as organized and unorganized, each of which may be in the formal or informal sector. Participation of women in economic activities in formal sectors of industries, services and agricultural sector is measurable, but activities of women in informal sectors such as house works, training and education of children, activities in agricultural sectors and household services are still not measured. Women constitute roughly half of the economically active population, but their contribution to economic activity is far below the potential. Unlocking this large potential could work as catalyst in achieving goals as set under Sustainable Development Goals. Investment in Human Capital is an essential way to tackle societal issues and achieve sustainable development in society. While the female employment rate has risen, the gender wage gap continues to be a very high 27 percent. This is partly due to the fact that women are forced to take up lower quality of jobs, with a large part of employment rise catered by part-time jobs. (Swaniti Report, a not for profit Organisation)

**Table No-2: Workforce Participation Rate in India (Census 2011- Employment Statistics)**

Rural (%)			Urban (%)			Combined (%)		
Female	Male	Total	Female	Male	Total	Female	Male	Total
30.0	53.0	41.8	15.4	53.76	35.31	<b>25.51</b>	<b>53.26</b>	<b>39.79</b>

Source: - NSSO Statistical Compilation Report – Men & Women in India 2018 referred through Census 2011

**Table No-3: Distribution of proprietary establishments by Gender of owner: 2014**

Rural			Urban			Combined		
Female	Male	% Female	Female	Male	% Female	Female	Male	% Female
823609	258633	24%	583264	137485	19%	<b>1406873</b>	<b>396118</b>	<b>22%</b>

Source: - NSSO Statistical Compilation Report – Men & Women in India 2018

**Table No-4: Total number of establishments under Women entrepreneurship (Hired or no Hired Workers): 2014**

Hired/No Hired Workers		
Without Hired Workers	With Hired Worker	% with Hired Workers
<b>6697354</b>	<b>1353465</b>	<b>17%</b>

Source: - NSSO Statistical Compilation Report – Men & Women in India 2018

The female labour force participation in India has fallen to 26% in 2018 from 36.7% in 2005, amid lack of access to quality education and underlying social, economic barriers limiting the opportunities for women, says a Deloitte report. According to the Deloitte report titled ‘Empowering Women & Girls in India’ for the Fourth Industrial Revolution, 95% or 195 million women are employed in the unorganized sector or are in unpaid work. (www.thehindu.com)

Women Entrepreneurship is an essential part of the Human resource development. Women have become aware of their existence, their rights and their work situation due to the growing industrialization, urbanization and social legislation and with the spread of higher education & awareness, the emergence of women owned businesses are speedily increasing in the economies of almost all countries (Bulsara, et al., 2014). India is not performing well on the index of female entrepreneurship with only 21.49 percent of total establishments and 13.41 percent of non-agricultural establishments in India being owned by women. (Swaniti, Not for Profit Organisation) Women entrepreneurship was a neglected domain during the past, but with the spread of education and awareness among the women the picture has been changed and the women have emerged as today’s most memorable and inspirational entrepreneurs. (Sharma, 2017) A study on women’s entrepreneurship conducted by the United Nations Development Programme (UNDP) reveals based on surveys that an absence of business management skills is a major barrier faced by women with entrepreneurial aspirations. The barriers that exist in this domain are also closely linked to the structural challenges that women face given existing gender norms. For instance, women can conceptualize ideas for and enter only select business domains. However, the most significant barrier is posed by accessibility to finance for setting up businesses, with around

70% of women surveyed across 4 cities citing access to credit as a barrier. (Swaniti Report, a not for profit Organisation)

Nation’s Five Year Plans have focused to a large extent on enhancing the Women Employment related aspects. Be it the employability or the Entrepreneurship. At the same over the period the Literacy rate for Women have constantly increased.

**Table No-5: Women Employment related sections in Five Year Plans**

Five Year Plan (Year)	Women Employment related sections
Second Five-Year Plan - (1956 - 61)	Supported the development of women to work at the grass roots.
Fifth Five-Year Plan - (1974 - 79)	Emphasized training of women
Seventh Five-Year Plan - (1985 - 90)	Emphasized the need for gender equality
Eleventh Five Year Plan – (2007 – 12)	Encourage women in setting up their own ventures

Source: Nandy & Kumar, 2014

**Table No-6: Literacy Rate of Women across the Census**

Census Year	Literacy Rate for Women
1971	22%
2001	54.16%
2011	65.46%

Source: Vinitha, 2015

**Table No-7: Growth of literacy in Male Vs Women**

Gender	Growth of Literacy in Male Vs Women
Men	11.72%
Women	14.87%

Source: Vinitha, 2015

**Exhibit – 2: Ms. Sofia Chaudhary, Sterling Generators, UT of DNH**

*“There is no such thing as shortcut or instant success; it takes hard work, perseverance and struggle to achieve a goal.”*

Ms. Sofia Chaudhary, commercial manager of Sterling Generators, is one of the celebrated employees of the firm since last 12 years, before which, she had been working in few other organizations on brief account. She initiated her employment right after completing her higher secondary education in Commerce. Starting her journey as a stenographer and then gradually climbing her ladders to be a successful commercial manager in a prestigious firm, wasn’t free from challenges. Initially, her struggles included managing her employment and education simultaneously due to financial constraints. She claims that throughout her journey, her dominant and influencing personality and her ever positive approach had been her tools against the prevalent gender prejudice and stereotype.

She’s also achieved some distinguished recognitions and awards such as ‘Parivartan Award’ for stacking of material in its proper place and the Safety quiz award presented by her President. In her view, there are several drawbacks for women in workforce such as predominance of male population, gender prejudice and stereotyping. She also believes that personal variables such as economic conditions, family, personality and emotional stability as well as human capital, i.e. investment in education and training also play a vital role in development of women in employment. She says that, “If a woman is seen climbing the ladders of success and gradually working her way to the top, there are numerous hands to pull her down in every possible way, but if you just focus on your work and not let others dominate you, you can achieve anything!” Bravo!! such stories support the women empowerment instinct in the nation.

Source: Personal Interview with the Women Employee at the Sterling Generators, UT of DNH

**WOMEN EMPLOYMENT: PROSPECTS**

**“If you exclude 50% of the Talent Pool, it’s no wonder you find yourself in a war for Talent”**

- **Theresa J. Whitmarsh,**

**ED, Washington State Investment Board**

Women’s participation in economic growth and women participation in business entities has been remarkable. India being termed as the second largest startup ecosystem in the world is expected to grow at around 10-

12percent. (Hans & Colaco, 2018) The Economic development without Women’s participation will be a distant dream. Entrepreneurship facilitates the economic growth of Nation. An Entrepreneur is that enterprising person who combines the factor of production towards achievement of desired results. A leading prospect for the Women Employment is the entering the path of Entrepreneurship. The concept of Women Entrepreneurship is of recent origin in the Nation. According to Government of India, “An Enterprise owned and controlled by a Women having a minimum financial interest of 51% of capital and giving at least 51% of the employment generated by the enterprise to Women is considered as Women Entrepreneurship.” This definition went through refinement and post the establishment of the *Small & Tiny Enterprises Policy 1991* the stipulation of the percentage of Women Employed in the Enterprise was dropped. Although Women Entrepreneurship may sound to be a recent trend however self employment has got the lady touch since ages. We have women contributing towards family Income however may be through small initiatives like home run grocery shops, services in the agricultural field etc. Today women are taking big Initiatives and the bigger entrepreneurial ventures are getting the lady touch. The Pace of Women Entrepreneurship is increasing today and hence the Women entrepreneurs need to be lauded for their increased utilization of modern technology, increased investments, finding a niche in the export market, creating a sizable employment for others and setting the trend for other women entrepreneurs in the organized sector. While women entrepreneurs have demonstrated their potential, the fact remains that they are capable of contributing much more than their current contribution.

Women Entrepreneurship has been encouraged in the Nation through various efforts in the form of Entrepreneurship Development Programmes (EDP), financial assistance through National Bank for Agriculture and Rural Development (NABARD) and Small Industries Development Bank of India (SIDBI). State owned efforts like Association of Lady Entrepreneurs of Andhra Pradesh (ALEAP), Association of Women Entrepreneurs of Karnataka (AWAKE), Self Employed Women’s Association (SEWA) at Ahmadabad, Gujarat, Women Entrepreneurship Promotional Association (WEPA) at Tamil Nadu and several others have assisted in promoting the status of Economic Development of Women. The Make in India movement and support to Start ups in general in the Nation Has also extended desired support to the Women Entrepreneurship. The major strength that supports Entrepreneurial Instinct includes their ability to learn quickly, persuasiveness, Good problem solving skills, willingness to take risks and chances, ability to motivate people, knowing how to win and lose gracefully. These key attributes once imbibed by the entrepreneurs makes them deserving candidates for Entrepreneurial portfolio. This virtue is across the genders. Entrepreneurial opportunities are not equally available to everyone however the prospects aren’t limited.

**Table No-8: Prospects for Employment of Women**

<i>Manufacturing</i>	<i>Trading</i>	<i>Service</i>
Fabrication	Retail Outlet	Nursing Home
Assembling of TV sets	Whole Sale / Distributorship	Pathological Laboratory
Automobile Parts	Ice Cream Distributor	Beauty Centre
Polyfilms	Travel Agency	School / Coaching
Defense Packaging	Tailoring Materials	Computer & Training Institute
Ready Garments	Photographic Materials	Tailoring
Food Products	Departmental Store	Desk Top Publishing
Bakeries	Hardware & Electrical Items	Book Binding
Fancy Items	Ladies accessories	Plants & Nursery
Oils & Essences	Florists	Floral Decoration
Flower Cultivation	General Stores	Architect
Flour Mill	Multi Level Marketing	Interior Designer

Source: - *Book on Women Entrepreneurship & Small Enterprises* by D. Nagayya & S Shahina Begum, Pg: 28

**Exhibit – 3: Mrs. Bindu Nair, K.R. English School, Silvassa, UT of DNH**

***“Hard work and excellence are the limbs of a successful career.”***

Mrs. Bindu Nair is the founder and chairperson of K.R. English School, Silvassa. She started her long and progressive career from tutoring a few failed kids into attaining a distinction in matriculation. She successfully managed to convert what started as a part time hobby into a strong and successful career. By 2003, she was already tutoring around 150 students. In 2008, on the request of a few parents, she founded K.R. English School. Currently her school provides education to above 600 students, with the help of dozens of teaching and supporting staff. She believes for a strong and successful career, hard work and excellence are the keys. Among

the other challenges she faced, low financial stability has been primary. To the young and aspiring women out there, she suggests that the primary motive of any job one does should be excellence & perfection and not money. She believes if one should always put in more efforts than the returns they expect. In other words, “one should give more than they get”.

Source: Personal Interview with the Women Edupreneur

**RECOMMENDATIONS**

Women Employment has been discussed on National front and there have been focus on the same right from the Five Year Plans to National developmental policies. While at one end it is very evident that Women Employment is increasing over the period, however there are a few elementary areas that need to be focused more in order to enhance the women employment factor further. These are stated below:

1. Special Initiatives by Employers towards promoting Women Employment
2. Special Education of Professional courses to Girls
3. Awareness programmes at Industries (especially Manufacturing) on Women Participation
4. New Policy to avoid the biased approach – Gender biased Task Allocation

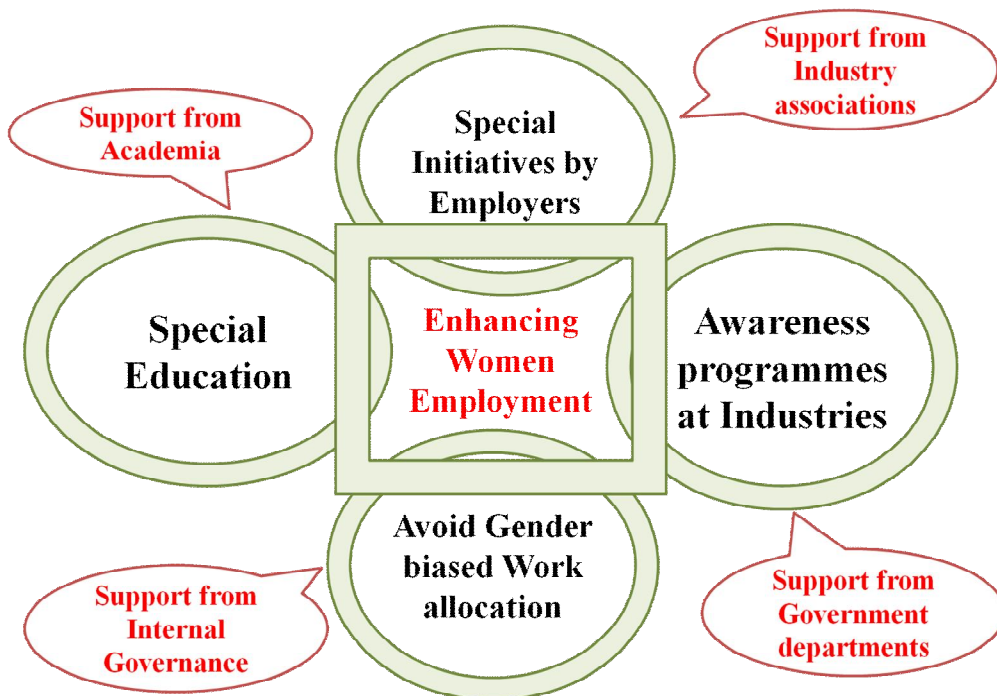


Chart No-3: Authors Recommendatory Thought on enhancement of Women Employment

**CONCLUSION**

Women Employment over the years have witnessed a good phase of development especially this has been possible through changing mindset of society towards development of women. The nation certainly needs to formulate economic and social policies that eventually support the betterment of the women in society. The Recommendatory thoughts presented by the authors support the momentum of the development of employment for Women. *Special Initiatives by Employers towards promoting Women Employment, Special Education of Professional courses to Girls, Awareness programmes at Industries (especially Manufacturing) on Women Participation and New Policy to avoid the biased approach – Gender biased Task Allocation* shall help in reaching the dream of the Nation towards employment development for women. Women Entrepreneurship is an important segment of Women Employment and development of Entrepreneurial avenues for Women supports the overall Economy and not just the gender based development. Women entrepreneurship must be molded properly with entrepreneurial traits and skills to meet the changes in trends, challenges global markets and also be competent enough to sustain and strive for excellence in the entrepreneurial arena. Gender equity has already set in. Women who could not think beyond the welfare of their families have now awakened to action. A set of underlying social, economic and political barriers limits opportunities for women and the same needs to be tackled. To further empower women in India quality education and re-skilling will be handy. Enhancing women’s participation in economic activities is very critical not only for achieving poverty reduction & economic development but it also crucial for over all social development.

**FUTURE SCOPE OF THE STUDY**

The current study is a massive conceptual & review study conducted with support of Secondary data. The exposure to the primary data was limited to the interviews of Women in employment. The future scope of this study comprises of selecting specific region for the study or specific Industry & then produce recommendation towards developing the Women employment. The focus on more of Primary data collection on women in employment shall enable the future study in this regard with substantial data and concrete suggestions.

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**IMPACT OF DEMONETISATION IN THE MARINE FISHERIES SECTOR OF KERALA-WITH  
REFERENCE FISH RETAILERS IN KOLLAM DISTRICT****Dr .Umaprabha<sup>1</sup> and Benny C<sup>2</sup>**Assistant Professor<sup>1</sup> and Research Scholar<sup>2</sup>, Department of Commerce Periyar EVR College Trichy**INTRODUCTION**

Demonetisation refers to Withdrawal of a particular form of currency from circulation. The currency was demonetized first time in India in 1946 and second time in 1978. On Nov. 2016 the currency is demonetized third time by the present Central government. This is the bold step taken by the govt. for the betterment of the economy and country. The impact of recent demonetization on the fisheries sector has been discussed here. Due to this step adverse impact on Indian economy can be evident as: banning on the medium of exchange for commodities will lead to financial crisis reducing the purchasing power of people. It is evident that demonetization has led to money contraction (to the extent of 14 lakh crore) of which the rural population and urban lower and middle as well as informal class are the worst sufferers. India is still largely dependent on primary activities including agriculture and allied activities as well as activities of informal sector where almost all the transactions are in cash. Kerala's fishing sector had witnessed a diminishing trend in prices, especially in the retail market. The sector, which offers direct and indirect jobs to nearly four lakh workers in the fishing segment.

Fisheries are a promising sunrise sector in the national and State economies. Apart from its contribution to GDP and employment, it stimulates growth in a number of subsidiary industries. It is a source of low-cost and nutritious food besides being a source of foreign exchange.

India is the second largest fish producing nation in the world. India is also a major producer of fish through aquaculture and ranks second in the world after China. The total fish production during 2015-16 (provisional) is at 107.9 lakh tonnes with a contribution of 71.65 lakh tonnes from inland sector and 36.3 lakh tonnes from marine sector. Though marine fish production has increased during the recent years, the growth rate is very low. Marine fisheries in India is supposed to be passed through a crisis due to demonitisation. The sector engaged over 14.50 million people at the primary level and many more along the value chain. Export earnings from the sector was 37,870.90 crore in 2016-17. The sector contributed about 0.9 per cent to the National Gross Value Added (GVA) and 5.43 per cent to the agricultural GVP (2015-16). Analysis of recent trend in exports of marine products suggests that though there was a fall in the value in 2015-16, it has increased in 2016-17.

The total fish production in Kerala during 2016-17 was 6.76 lakh tonnes, of which marine fish landings accounted for 4.88 lakh tonnes . Population of the State as per Census 2011 is 334 lakh. The fish worker population is estimated to be around 3.1 per cent of the State's population. They reside in 222 marine fishing villages and 113 inland fishing villages of the State. The fish worker population of the State in 2016-17 is estimated to 10.29 lakh. Out of this, 7.92 lakh fish workers belong to marine sector while 2.37 lakh fish workers belong to inland sector. Alappuzha (1.91 lakh) is the district with largest fish worker population, followed by Thiruvananthapuram (1.70 lakh) and Ernakulam (1.37 lakh)

Fisheries and aquaculture contributes around 8.5 percentage of the Gross State Value Added (GSVA) from the primary sector which is of significance to the State economy. The Gross State Value Added of the State has been increasing over years, but the share of primary sector and that of fisheries sector has been declining. The share of fisheries sector in the State Value Added has declined from 1.12 per cent in 2011-12 to 0.95 per cent in 2016-17.

**STATEMENT OF THE PROBLEM**

This impact of demonetisation is being felt largely by marginalized people and the unorganized retailing segment prevalent in the state, as compared to the organised retailing sector. They didn't get sufficient money to meet their demands. A study is undertaken to identify the influence of demonetisation on fishing sector and fish traders.

**OBJECTIVES**

1. Major objective of the study is to highlight the fisheries sectors that have been greatly impacted by Demonetization in Kerala.
2. To identify the influence of demonetisation on retail fish traders

**RESEARCH METHODOLOGY**

The data is collected from both unorganized fishermen and fish traders from Kollam district of Kerala. 36 fish traders were contacted for the study. Convenience sampling is used for data collection. Data is collected with the help of interview schedule

And also secondary data collected from various published sources like government reports, magazines, journals, newspapers, websites etc.

**REVIEW OF LITERATURE**

Historically, previous Indian governments had demonetised bank notes. In January 1954, banknotes of 100 and 1,000 rupees were withdrawn and new notes of 100, 500 and 1000 rupees were introduced in 1954. The Janata Party coalition government demonetised banknotes of 1000, 5000 and 10,000 rupees on 16 January 1978 as a means of curbing counterfeit money and black money. In 2012, the Central Board of Direct Taxes had recommended against demonetisation, saying in a report that "demonetisation may not be a solution for tackling black money or economy, which is largely held in the form of benami properties, bullion and jewellery". According to data from income tax probes, black money holders keep only 6% or less of their ill-gotten wealth as cash, hence targeting this cash may not be a successful strategy. Demonetization calls for a cashless , digitized India. The government asked the people to go cashless by adopting and adapting to the digital mode of financial transactions. The study focuses on understanding the opinion of the common fisherman, who are meant to take major step in the process of transformation of India into a Digitized Economy and how they take this initiative of demonetization.

**PROBLEMS FACED BY FISHERIES SECTOR DURIND DEMONITISATION**

The fisheries sector in Kerala relies heavily on cash transactions at every level .The bidders obtain their supplies at auction of the catch at harbor and pay the required amount to the fishermen who use their money to meet their various expenses. The bidders are not able to carry out business in high volume as the amount that the one person can withdraw from bank has been restricted. The expected price for the fish is not realized.as the fish are sold to the bidders for the cash rather than the highest bid ,who often offer to pay by cheque or against credit.

A survey by the central marine fisheries research institute found that small scale retailers who purchased 5-1boxes of fish per day were affected because of lower effective demand for fish from the consumers and a shortage of lower denominations of money to be provided as change. Retailors also reported that they need longer selling hours' to sell the fish and sometime had to resort to distress sales. Consumption of fish by consumers has declined by 30-40 percent during the demonitisation period .70% of the consumers reported some reduction in consumption on account of the non-availability of lower denomination notes. The worker who works in the fishery sector has been relaying on small loans or credit for their consumption needs. Some of them reported loss of jobs in the first week following demonetization.

**DATA ANALYSIS AND INTERPRETATION****Table-1: The sudden announcement of demonetization led to problem in currency exchange**

Time consuming	34	94.44%
Difficult	2	5.55%
Total	36	100

From the table 1 ,it is evident that majority of respondents which constitute 94.44% have the opinion that exchanging invalid notes is a time consuming task While 5.55% considers it as a difficult task.

**Table-2: Do you think demonetisation eliminate black money and reduce curreption**

Yes	24	66.66
No	12	33.33
Total	36	100

Table 2 shows that out of 36 respondents, 66.66% agrees that demonetisation eliminates Black money in INDIA, whereas 33.33% disagrees.

**Table-3: Did you have 1000 and 500 rupee currency during demonitisation**

Yes	31	86
No	5	13.88
Total	36	100

From the table 3, it can be seen that majority of respondents were in possession of 1000 & 500 Rupees at the time of announcement of demonetisation. Only 13.88% were not having.

**Table-4: Mean resorted to exchange invalid notes**

Banks	27	87.09
Post office	3	9.67
Others	1	2.77

It can be seen from the table 27 that, out of the total respondents 87.09% exchange these invalid notes with bank,9.67% with post office. Only 2.77% have exchanged through other sources.

**Table-5: Sufficient money to meet daily needs**

Yes	4	11
No	32	88.8
Total	36	100

According to table 5, only 11 % of the respondents got sufficient money to meet their demands, whereas majority of them did not get sufficient money

**Table-6: Mode of transaction in daily**

Liquid cash	34	94.4
Debit card	0	
Other means	2	5.55

From the table 6, it is clear that 5.55% of respondents depends on modes of transactions other than liquid cash. Around 94.4% were depended on liquid cash only.

**Table-7: Faced the problem in Marketing fish at selling point**

Yes	25	69.44
No	11	30.55

From table 7, it can be seen that 69.44% of them faced many problems in marketing the fish at selling points. Though it directly affected their day today needs and took much time to recover from this Crisis

**Table-8: Lost the reasonable profit because of demonetization**

Yes	32	88.8
No	4	11.11

According to table 8 , 88.8% opinioned that the demonetisation has badly affected their life. They didn't get even reasonable profit from the sale of fish products.

**Table-9: Awareness about digital transaction**

Yes	7	19.4
No	29	80.5

According to table 9, 19.4% aware about digital transaction onset of demonetization. 8.5% are not aware about any kind of digital transactions.

**FINDINGS AND SUGGESTIONS**

Most of the fishermen categories are lower level earning categories, even when we go through fishermen and retail traders. They do not have a well-structured saving habit. Most of them were having 1000 and 500 notes during the declaration of demonetization. Banks and post office were only the mean among them for the exchange of invalid notes.

Process of exchanging invalid notes was a difficult task for them even that affected their fishing job They didn't get sufficient money to meet their demands it affected their purchasing power. They were not aware of digital transactions. Even though during the demonetisation they depend on liquid cash.

Fish retailers were badly hit by the demonetisation decision since they had seen a decline in the purchasing of fish products by the customers. The Traders is having the opinion that most of their regular customers are not purchasing as earlier. The customers are also having the opinion that there is a change on the buying behaviour because of the demonetisation. The customers and fishing community need to be educated to use the payment apps with ease. Mechanisms should be in place to ensure the safety and security of transactions happens through mobile and other. More financial literacy programs should be organised in coastal areas and also ensure their participation.

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**CONCLUSION**

Cash is the only medium available for transactions for the majority of fish traders, and fisheries sector is an incredibly cash-based economy; other alternatives are virtually non-existent for the vast majority. It knew that 69% of the Indian population was from the country's six lakh villages; only 48,768 bank branches (i.e., 35%, or one bank per 12 villages) out of a total of 1,39,240 bank branches serviced this 69%, which meant an average of fewer than six bank branches per one lakh rural population, and only 40,480 ATMs (18%) of the country's 2,19,637 ATMs were in rural areas. From the opinion of the respondents that demonetization affected the fisheries sector most when compared to Manufacturing and Service sector. It also state that the Lower Income Class was the most negatively impacted class of all. Respondents opined that at the onset of demonetization being declared, they resorted to Banks while some resorted to Post Offices for getting their invalid currencies exchanged. Majority felt that the process was more time consuming rather than sensing it as difficult .In spite of going through this hectic task the say that insufficient money was the result.

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**URBANIZATION AND CHALLENGES OF URBAN INFRASTRUCTURE FACILITIES IN INDIA**

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**ABSTRACT**

*Due to rapid pace of urbanization, more pressure on urban infrastructure facilities in every corner of Indian cities. There is huge gap of urban infrastructure services between demand and supply in every section of society. Need to improve the urban services is prime concern of Indian government including union, state, Urban Local Bodies (ULBs) levels and other private agencies for better quality of life in urban area. In this context, paper is study the urbanization progress in India and challenges for urban infrastructure facilities in the sectors of water supply, urban waste water management, urban storm water drainage system, solid waste management and housing for urban poor. Discussion of this paper is based on secondary data that available at public domain.*

*Keywords: Urbanization, water supply, solid waste management, drainage, housing for urban poor*

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**1. INTRODUCTION**

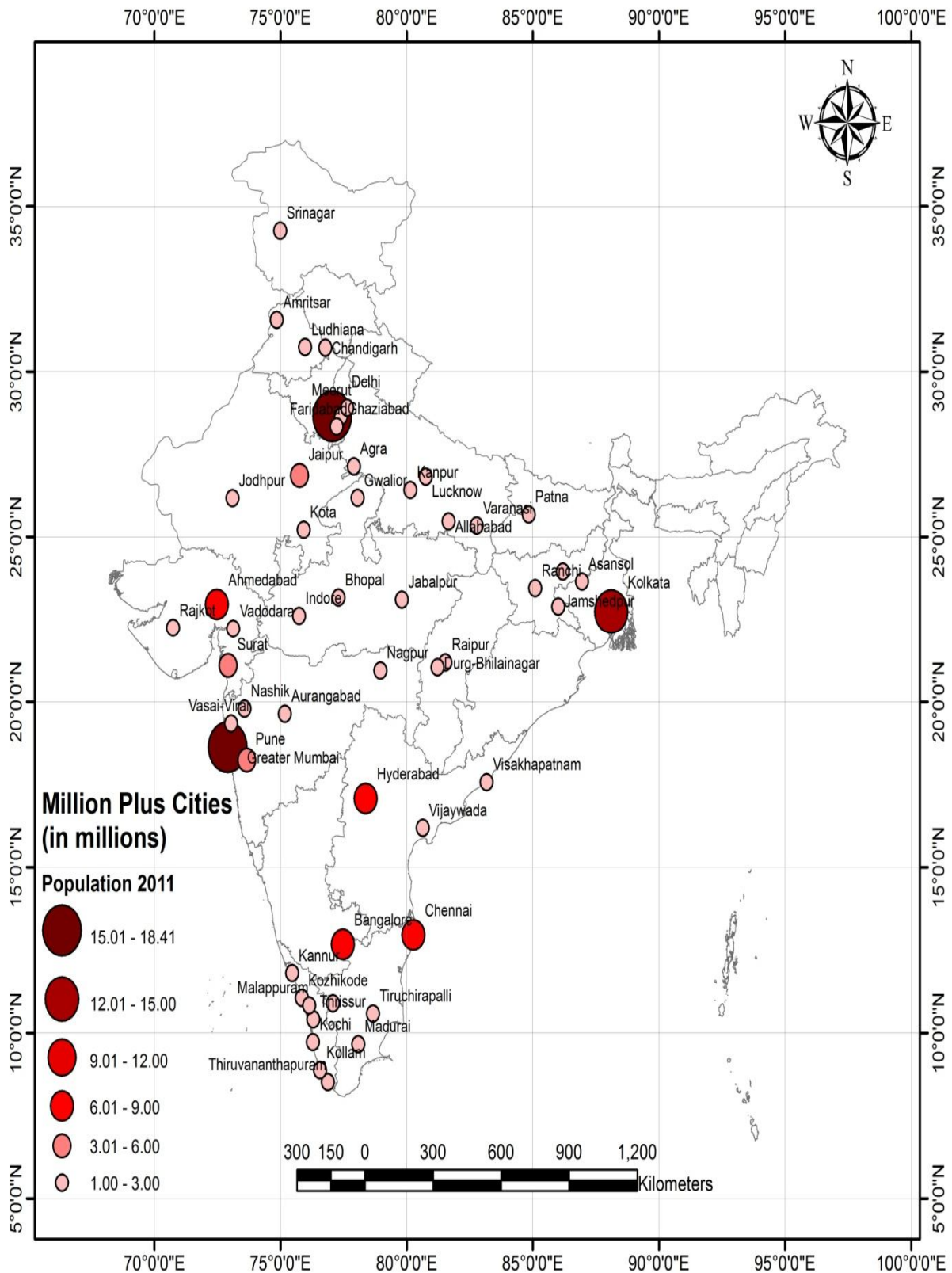
Urbanization is a continue process as city is an engine of economic growth and expected to increase more and more number of population in urban areas, by 2030 it will be 60 percent (MGI, 2010). The number of slum dwellers is projected to double from 1 billion to 2 billion over the next 25 years. It is also speculated that the number of mega-cities (with population over 10 million) will have risen from 19 in 2007 to 27 in 2025 in the developing countries (Patricia and Johannes, 2010). The process of urbanization creates many challenges for urban infrastructure improvement particularly water supply, sanitation, solid waste management, drainages etc in the developing countries (Luc Christiaensen, Maria Gindelsky, Remi Jedwab., 2013).

The pace of urbanization in India is set to be accelerated. As per census 2011, about 377 (32.09%) million populations are living in cities/towns and expected to reach 600 million by 2030. The Planning Commission, 2012 had reported that rapid urbanization has caused a huge gap in the urban infrastructure facilities mainly in the sectors of water supply, waste water management, storm water and drainage, solid waste management, housing for urban poor and slums dwellers in urban areas.

**2. URBANIZATION SCENARIO IN INDIA**

India has reached a total population of 1210.2 million out of which 377.1 million populations are living in urban areas. The percentage of urban population to the total population of the country stands at 31.6. There has been an increase of 3.35 percent in the proportion of urban population in the country during 2001-2011. The number of towns has jumped from 5161 in 2001 to 7953 in 2011. There is a net addition of 2774 towns comprising 242 Statutory and 2532 census towns over the decade (Census, 2011). Based on the census 2011, 53 cities in India which having population above one million. As per the study, 53 cities has classified into six categories based on the level of urban population. In the first category (cities having population of about 1 to 3 million), second category (3.01 to 6.00 million), third category (cities having a population of 6.01 to 9.00 million) fourth category (cities with population of 9.01 to 12.00 million), fifth category (cities having a population of 12.01 to 15.00 million), sixth category (cities with population ranging from 15.01 to 18.41 million) (Figure. 1).

Figure-1: Million Plus Cities of India



### 3. URBAN INFRASTRUCTURE CHALLENGES IN INDIA

**Water Supply** - Safe drinking water is a basic need for all and a prime concern as per the millennium development goal (Srija, G., et al., 2009). Indian cities and towns have increasing shortage of potable water mainly due to mounting demand and inadequate measure to meet the demand. This situation is due to increasing urban population, depleting of nearby water sources, water pollution, and inefficient use of water. There are instances of inefficient use of water, inefficient management of water supply system by various government

agencies. Irregularity of water supply and poor performance is common in cities and towns of India. Generally municipalities supply water for about 4 to 5 hours only daily. This is not matching with the benchmark (24X7 water supplies) of Indian Government Standard Norm (IGSN). The coverage of water supplied is 85 percent of urban population (CPHEEO, 2005). The delivery of water quality in urban area is very low and insufficient and varies from one city to another. The average range of water supply is 37 to 298 liter per capita per day in Indian cities and towns. About 26 percent of urban households have being covered by pipe line connection with duration of 1 to 6 hours in a day and only 26 percent of it has been collected as revenues. Waste of water during supply in urban area is almost 70 percent and it's mainly cause is due to lack of operation and maintenance (Anjal et al 2013). The physical losses (34 to 42 percent) occur due to leakages or overflow of water in the system. Reasons for leakages includes negligence by urban local bodies, poor quality of material or workmanship, ageing and corroded networks, leaking joint, etc. There are major issues such as theft of water or illegal registration connections, faulty meters, unrecorded supply due to the poor records, and billing errors as well as public stand post and use by charitable and religious institutions ranges from 12 to 18 percent (Kevin, 2000). The services level in Indian context is quite poor and unequal distribution of water supply as per water supply benchmark as per Ministry of Housing and Urban Affairs, Government of India has cleared cut for water supply benchmarks such as coverage of water supply connections (100%), per capita supply water (135lpcd), extent of non-revenue water (15%), extent of metering (100%), continuity of water supply (24 hours), efficiency in redressal customer complaints (80%), quality of water supplied (100%), cost recovery (100%) and efficiency in collection of water charges (90%).

**Urban Waste Water Management** - The release of untreated wastewater is common issues in urban areas and resulted in increased pollution and depletion of clean water resources (AGR, 2011). Discharge of waste water into water bodies both surface water and ground without untreated is common issue in Indian cities and towns. Out of the 38000 million liter per day was generated and could be able treated only 12000 million liter per day. This was a large gap between generation and treatment of waste water In Indian cities and towns (CPCB, 2009). Central Pollution Control Board (CPCB) carried out the study and depicted that there are 269 sewerage treatment plants (STPs) in India, of which 231 are operational, thus the existing treatment capacity is just 21 percent of the present generation. The remaining untreated sewer is the main cause of pollution of river and lakes (Isher et al, 2011). In the peri-urban areas, waste water management practices are almost nil. This lack of waste water management creates stagnant water in ponds with a foul smell which is very common in peri-urban areas (Jonathan, and Kevin, 2003). The 54<sup>th</sup> National Sample Survey (NSS) reported that 26 percent of households had no latrine facility, 35 percent used septic tank and 22 percent used sewerage lines. About 43 percent of households in urban areas either had no latrines or no connection to a septic tank or sewerage. In urban areas sewerage connection varied from a low (48 percent) to a high (70 percent). About 63 percent of the urban population has access to sewerage and sanitation facilities as on 31<sup>st</sup> March 2004. This includes both underground as well as sanitation through septic tanks. The access to underground sewerage facilities is very low, that is below 30 percent in many state viz. Rajasthan, Orissa, Chhattisgarh, Madhya Pradesh, Andhra Pradesh and West Bengal. Nearly 46 percent of urban households have water toilets, but only 36 percent of the urban households are connected to the public sewerage system (Planning Commission, 2008). With these words, the current practice system for waste water management quite poor and not able to meet the benchmark as Ministry of Housing and Urban Affairs, Government of India has clear – coverage of toilets (100%), coverage of sewerage network (100%), collection of efficiency of sewerage network (100%), adequacy of sewerage treatment capacity (100%), quality of sewerage treatment (100%), extent of reuse and recycling of sewerage (20%), extent of cost recovery in waste water management (100%), efficiency in redressal of customer complaints (80%) and efficiency in collection of sewerage water charge (90%).

**Urban Storm Water Drainages System** - Storm water runoffs are not able to pond and infiltrate into underground water body due to the buildup of buildings and cemented pavement in the urban areas. It has also increased the surface runoff by creating more impervious surfaces such as pavement and buildings which do not allow percolation of the water down through the soil to the aquifer. Increased runoff reduces groundwater recharge, thus lowering the water table and creating water scarcity for people who depend on water wells which sometimes lead to droughts. Generally when runoff rate increases, it leads to exceeding capacity of downstream channels as a result of which floods occur over the floodplains (Needhidasan and Manoj, 2013).

Urban drainage interacts with the natural water system is common issue in Indian cities and towns. There is often an influx of sewerage and solid waste in storm drains leading to pollution to receiving bodies (Wankhade, 2013). Stagnation of rain water in urban areas is very common in Indian cities and towns. Rain water accumulates at depressions in roads and channels or at times water drains out at a slow pace due to gentle slopes and lack of proper connectivity to storm water drains. As long as water remains on roads at the locations of

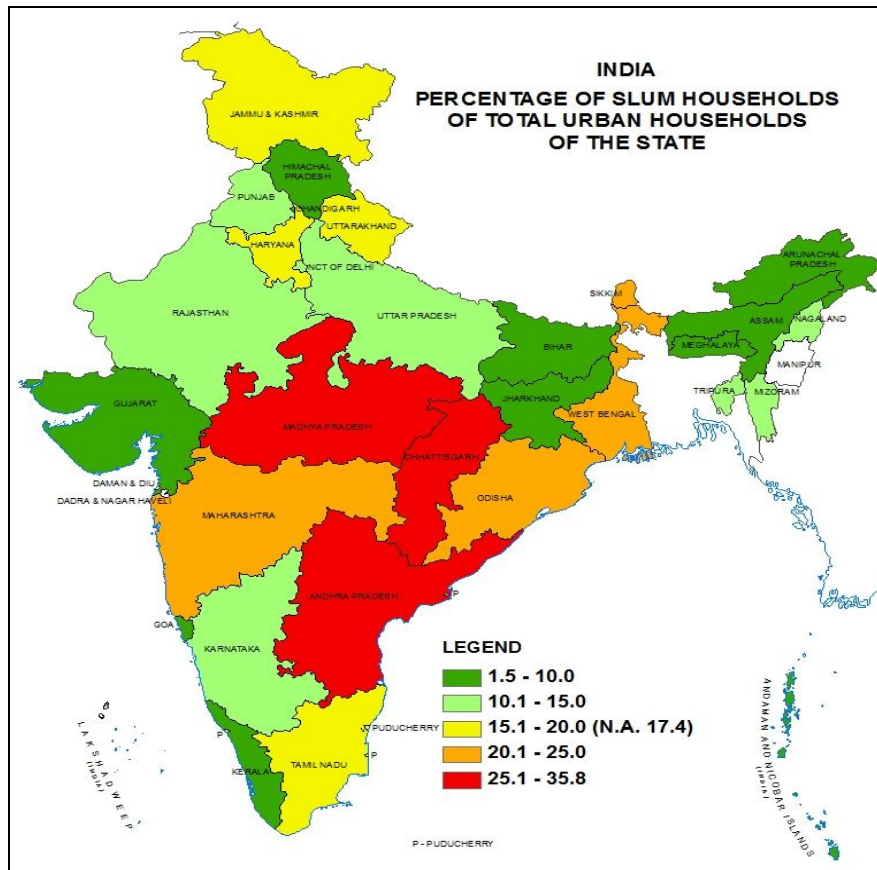
under passes, road junctions and spots having poor camber, traffic is put to lot of inconvenience (Arun, 2012). The existing urban drainage system in the fast growing towns and cities are very complex, the sewerages gets mixed with storm water drains. This situation is a very common phenomenon in India (Joel, A., et al., 2007). Management of storm water is a very important component as the urban storm water could be potential sources by harvesting for further uses (IRDA, 2011). The permanent physical changes (building construction/parking/paving and roof) in urban areas result in the changes in runoff patterns, frequency of flooding and create drainage problems in some locations (Jonathan, 2003), example Mumbai city has over hundred flood prone areas and has affected many people due haphazard construction and choked natural runoff (Kulshrestha, 2007). Water logging in slums areas is common phenomenon either due to the absence of storm water management practice or inadequate of drainage system or lack of planning. As a result spreading of disease like malaria, filarial, dengue and annual recurrence of gastro-enteric diseases in cities is one of the critical situations in India (Neli, 2008).

**Urban Solid Waste Management** - The solid waste management practices in Indian cities and towns are very poor in terms of collection, transportation and disposal system. All cities in India do not have the same level of service for solid waste management; some cities are neat and clean for example Surat and Chandigarh whereas some cities have very poor performance (MoUD, 2013). The Supreme Court has enforced the municipal solid waste management Rules 2000. In this rules, efficiency of collection and scientific process of the solid waste in cities and towns is mandatory. But the implication of the enforcement is ineffective in most of the cities in India. Neither households nor municipalities in India practice of segregation of biodegradable waste from the rest, and public awareness on the benefits of segregation is low. The collection of the garbage from dustbins is infrequent; processing is not even done in most cities (Isher et al, 2011).

Coverage of municipal solid waste collection ranges from 70 percent to 90 percent in major metropolitan cities and less than 50 percent in smaller cities (in case of India (Marwaha, 2011). Less than 30 percent of solid waste is segregated and scientific disposal of waste is almost never practiced (UN Habitat, 2010). By 2047 solid waste generation in Indian cities will increase five-fold to touch 260 million tons per year, implying that the current solid waste generation is over 50 million tons per year. The city of Chandigarh is best example of efficient collection where almost 96.2 percent of the households is covered (Isher, 2011). At current scenario, practicing of solid waste disposal in open dumping sites is common and highly dangerous and unethical. The poor management of solid waste has led to contamination of groundwater and surface water through leaching and pollution of air through unregulated burning of waste. The overall practice of solid waste management in Indian cities and towns are poor. Ministry of Housing and Urban Affairs has clear for solid waste management such as household coverage (100%), efficiency in collection of solid waste (100%), extent of segregation of municipal solid waste (100%), extent of municipal solid waste recovered (80%), extent of scientific disposal of municipal solid waste (100%), extent of cost recovery (100%), efficiency in collection of solid waste management charge (90%) and efficiency in redressal of customer complaints (80%).

**Housing for Urban Poor** - According to National Sample Survey conducted in 2003, the estimated number of slums was 52,000 with 51% of the slums being notified slums in Indian cities and towns. All state and union territories has slums dwellers except Manipur state as per census, 2011. Andhra Pradesh, Madhya Pradesh and Chhattisgarh have highest percentages of slum households of total urban households ranging between 25.1% and 35.8%; while those of Maharashtra, Orissa, West Bengal and Sikkim range between 20.1% and 25%. Jammu and Kashmir, Uttarakhand, Haryana and Tamil Nadu have moderate percentages of slum households of total urban households ranging between 15.1% and 20%. Percentages of slum households of total urban households Punjab, Rajasthan, Uttar Pradesh, Nagaland, Mizoram, Tripura, and Karnataka range between 10.1% to 15%; while those of Himachal Pradesh, Gujarat, Bihar, Jharkhand, Assam, Arunachal Pradesh, Meghalaya, Goa, and Kerala range between 1.5% and 10%. The total slum population as per census 2011 was 65494604. In comparison among states/UTs Maharashtra state has shared highest slum population with 18.09 percent of the total slum population in India. In the states of Andhra Pradesh, West Bengal, Uttar Pradesh, Tamil Nadu, Madhya Pradesh has share above 10 percent of the slum population to total slum population in India. While Karnataka, Rajasthan, Chhattisgarh, Delhi, Gujarat, Haryana, Orissa, Bihar and Jammu and Kashmir states had shared above 1 percent to 5 percent of the slum population to the total slum population in India. The rest of states have shared below one percent of the slum population (Census 2011). The definition of slums as per census is define as "mainly those residential areas where dwellings are in any respect unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and designs of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals". With these words, there is huge gap of housing demand for urban poor in India cities and towns.

State-wise Slum Households as percentage of Urban Households



Source: Census, 2011

4. CONCLUSION

The urbanization process cannot stop by any means. It is a process of adding the number of people to the urban area and demand their services will increase over year in the coming future. This rapid increase of urbanization process has been occurred while existing urban services in the sectors of water supply, sewerage system, urban storm water drainage system and solid waste management are sufficient. The current urban services are not able to meet the target (benchmark) as per Ministry of Housing and Urban Affairs, Government of India. It is also encouraged to state and ULBS levels to work out the program and schemes effective and efficiently in terms of planning, implementation and operation & Maintenance for urban infrastructure facilities to fill the gap. Hence, Government of India must encourage the institutional structure and administrative reforms at state and ULBs to deliver the effective services at state level and urban bodies level. Need to learn the best practice of urban services delivery in others of India. For improvement of urban services, state and urban local bodies should go along with JnNURM reforms implementations to strengthening the governance system. It will help in improvement of urban services.

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**OPINION OF SECONDARY SCHOOL STUDENTS TOWARDS THE IMPLEMENTATION OF MATHEMATICS PROJECTS – A STUDY**

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**ABSTRACT**

*This study adopted descriptive survey design. Data were collected by use questionnaires, checklist and document analysis guide and analyzed by use of descriptive and inferential statistics. The findings indicate that teachers used a variety of methods to teach mathematics in class. However, teachers rated themselves as using explanation and demonstration methods prominently. It was found that the implementation of mathematics alternative curriculum was constrained by inadequate teaching and learning resources. Higher education institutions should immediately come up with the training program for teachers for mathematics. Some of the respondents found it difficult to use certain method in project due to lack of adequate teaching and learning materials such as books and time. Projects improve the learning efficiency of the in the students mathematics subject and improve the understand mathematics concepts easily with mathematics projects, Projects make students fearless in learning mathematics and projects increase student's interest towards mathematics, There is a more benefit with Group projects then individual projects for the students, Teacher role become as a facilitator in implementing mathematics projects, Project works improve student's communication skills, Students get leadership qualities with project method of learning Student understands correlation between mathematics and other subjects with projects.*

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**STATEMENT OF THE PROBLEM**

“Opinion of Secondary School students towards the implementation of mathematics projects – A study”.

**OBJECTIVES OF THE STUDY**

1. To study the opinions of Secondary School students towards the implementation of Mathematics projects in their school.
2. To study to what extent project works in mathematics are more effective in understanding mathematical concepts.
3. To study the opinions of Secondary School Students towards mathematics projects management wise (Private/Government).
4. To study the opinions of Secondary School students towards mathematics projects gender wise (Girls/Boys)
5. To study the opinions of Secondary School Students towards mathematics projects medium wise (E.M./T.M.)

**HYPOTHESIS OF THE STUDY**

1. There is no significant difference in the opinions of Secondary School students towards the implementation of mathematics projects in their school as the part of new CCE method of teaching with respect to gender, medium and type of management of the school.
2. There is no significant difference in the opinions of Secondary School students towards necessity of mathematics projects in teaching learning process with respect to gender, medium and type of management of the school.
3. There is no significant difference in the opinions of Secondary School Students towards project works which are being given in school are related to daily life with respect to gender, medium and type of management of the school.
4. There is no significant difference in the opinions of Secondary School Students towards project works in mathematics increasing interest towards the mathematics subject with respect to gender, medium and type of management of the school.
5. There is no significant difference in the opinions of Secondary School Students towards project works in mathematics increasing learning efficiency of the pupil with respect to gender, medium and type of management of the school.
6. There is no significant difference in the opinions of Secondary School Students towards improvement of pupil achievement in grade due to implementation of projects in mathematics with respect to gender, medium and type of management of the school.

7. There is no significant difference in the opinions of secondary School Students towards pupil understanding mathematics concepts easily with mathematics projects with respect to gender, medium and type of management of the school.
8. There is no significant difference in the opinions of Secondary School students towards their classmate positive feeling towards the implementation of mathematics projects with respect to gender, medium and type of the management of the school.
9. There is no significant difference in the opinions of Secondary School Students towards implementation of mathematics projects is a time consuming activity with respect to gender, medium and type of the management of the school.
10. There is no significant difference in the opinions of Second School Students towards preparation of entire mathematics text book according to project method with respect to gender, medium and type of the management of the school.

**DESIGN OF THE STUDY**

Design of the study is an important aspect of research which studies the researcher to move in a right direction of the study. The present study is about opinion of Secondary School Students towards the implementation of mathematics Projects”. In this study different schools are included they are government and private schools.

**TOOLS USED IN THE RESEARCH**

The research tools play a vital role in any scientific research. In order to get the worthy findings the tools should have validity. Different tools are suitable for collecting different types of data. In this present study, the researcher adopted “Questionnaire” which consists of 20 Questions related to “Opinion of Secondary School Students towards the implementation of maths projects”.

**DATA COLLECTION PROCEDURE**

The researcher went to different type of management and different type of medium (E/M and T/M) schools, and the questionnaire was given to Secondary School Students. The questionnaires consist of 20 questions. For each question, the students were asked to opt their opinion either by putting tick mark against “Yes” or against “No”. There were no marks for this questionnaire and this is not a speed test but it is a power test.

**STATISTICAL TECHNIQUES USED**

After the collection of data, the data should be analyzed by selecting suitable statistical techniques. In the present study the researcher use the  $\chi^2$ -test (Chi – Squarer test) for analysis of data:

$$X^2 = \sum (f_o - f_e)^2 / f_e \text{ for equal probability}$$

Where  $f_o$  = observed frequency.

$F_e$  = expected frequency.

**ANALYSIS OF THE DATA**

Analysis of the data means studying the tabulated material in order to determine the inherent facts or meaning, it involves breaking down the existence complex factors into simple parts and putting the parts together in new arrangement for purpose of interpretation.

**ANALYSIS AND INTERPRETATION OF THE DATA HYPOTHESIS – 1**

“There is no significant difference in the opinion of Secondary School Students towards the implementation of mathematics projects in their School as the part of new CCE method of teaching with respect to gender, medium and type of management of the School”. The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-1: The opinions of Secondary School Students towards the implementation of mathematics projects in their school as the part of new CCE method of teaching.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	35	05	40	0.39 #
		Girls	33	07	40	
2.	Medium	T/M	33	07	40	0.39 #
		E/M	35	05	40	
3.	Management	Private	34	06	40	10.00 #
		Government	34	06	40	

# Not significant.

**Interpretation**

The above table 4.1 shows the calculated  $\chi^2$  (chi – square) values: 0.39, 0.39, 0.00 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the school.

**Hypothesis – 2**

“There is no significant difference in the opinions of Secondary School Students towards the necessity of mathematics projects in teaching learning process with respect to gender, medium and type of management of the school”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-2: The opinions of Secondary School Students towards the necessity of mathematics projects in teaching learning process.**

S.No.	VARIABLE		YES	NO	TOTAL	$\chi^2$ VALUE
1.	Gender	Boys	35	05	40	0.55 #
		Girls	37	03	40	
2.	Medium	T/M	34	06	40	0.22 #
		E/M	38	02	40	
3.	Management	Private	37	03	40	0.55 #
		Government	35	05	40	

# Not significant.

**Interpretation**

The above table 4.2 shows the calculated  $\chi^2$  (chi – square) values: 0.55, 0.55, 0.22 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 3**

“There is no significant differences in the opinions of Secondary School Students towards project work which are being given in school are related to daily life with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-3: The opinions of Secondary School Students towards project works which are being given in school are relate to daily life.**

S.No.	VARIABLE		YES	NO	TOTAL	$\chi^2$ VALUE
1.	Gender	Boys	30	10	40	0.67 #
		Girls	33	07	40	
2.	Medium	T/M	28	12	40	3.66 #
		E/M	35	05	40	
3.	Management	Private	30	10	40	0.67 #
		Government	33	07	40	

# Not significant.

**Interpretation**

The above table 4.3 shows the calculated  $\chi^2$  (chi – square) values: 0.67, 3.66, 0.67 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 4**

“ There is no significant difference in the opinions of Secondary School Students towards project works in mathematics increasing interest in mathematics subject with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-4: The opinions of Secondary School Students towards project works in mathematics increasing interest in mathematics subject.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	35	05	40	2.88 #
		Girls	39	01	40	
2.	Medium	T/M	37	03	40	0.00 #
		E/M	37	03	40	
3.	Management	Private	38	02	40	0.72 #
		Government	36	04	40	

# Not significant.

**Interpretation**

The above table 4.4 shows the calculated x<sup>2</sup> (chi – square) values: 2.88, 0.00, 0.72 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 levels.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 5**

“ There is no significant difference in the opinions of Secondary School Students towards project works in mathematics increasing learning efficiency of the pupil with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-5: The opinions of Secondary School Students towards project works in mathematics increasing learning efficiency of the pupil.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	35	05	40	0.55 #
		Girls	37	03	40	
2.	Medium	T/M	36	04	40	0.00 #
		E/M	36	04	40	
3.	Management	Private	38	02	40	2.22 #
		Government	34	06	40	

# Not significant.

**Interpretation**

The above table 4.5 shows the calculated x<sup>2</sup> (chi – square) values: 0.55, 0.00, 2.22 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 6**

“ There is no significant difference in the opinions of Secondary School Students towards improvement of pupil achievement in grade due to implementation of projects in mathematics with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-6: The opinions of Secondary School Students towards the improvement of pupil achievement in grade due to implementation of projects in mathematics.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	35	05	40	1.40 #
		Girls	38	02	40	
2.	Medium	T/M	38	02	40	1.40 #
		E/M	35	05	40	
3.	Management	Private	38	02	40	1.40 #
		Government	35	05	40	

# Not significant.

**Interpretation**

The above table 4.6 shows the calculated  $\chi^2$  (chi – square) values: 1.40, 1.40, 1.40 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 7**

“There is no significant difference in the opinions of Secondary School Students towards pupil understanding mathematics concepts easily with projects with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-7:** The opinions of Secondary School Students towards pupil understanding mathematics concepts easily with projects.

S.No.	VARIABLE		YES	NO	TOTAL	$\chi^2$ VALUE
1.	Gender	Boys	29	11	40	2.81 #
		Girls	35	05	40	
2.	Medium	T/M	36	04	40	5.00 *
		E/M	28	12	40	
3.	Management	Private	36	04	40	5.00 *
		Government	28	12	40	

# Not significant. \*Significant at 0.05 level

**Interpretation**

(1)The above table 4.7 shows the calculated  $\chi^2$  (chi – square) value of the gender is 2.81, which is lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender.

(2)The above table 4.7 also shows the calculated  $\chi^2$  (chi – square) values of the medium and type of management of the school are 5.00 and 5.00 which are greater than table value at 0.05 level. Hence the null hypothesis is reject at 0.05 level.

It is concluded that there is a significant difference in the opinions of Secondary School Students regarding above statement with respect to medium and type of management of the school.

**Hypothesis – 8**

“There is no significant difference in the opinions of Secondary School Students towards their classmates positive feeling about the implementation of mathematics projects with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-8:** The opinions of Secondary School Students towards their classmates positive feeling about the implementation of mathematics projects.

S.No.	VARIABLE		YES	NO	TOTAL	$\chi^2$ VALUE
1.	Gender	Boys	28	12	40	0.00 #
		Girls	28	12	40	
2.	Medium	T/M	31	09	40	2.14 #
		E/M	25	15	40	
3.	Management	Private	35	05	40	11.66 **
		Government	21	19	40	

# Not significant. \*\*Significant at .01 level

**Interpretation**

(1)The above table 4.8 shows the calculated  $\chi^2$  (chi – square) value of the gender and medium are: 0.00, 2.14 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender and medium of study.

(2)The above table 4.8 also shows the calculated  $\chi^2$  (chi – square) values of the type of management of the school is 11.66, which is greater than above value at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

It is concluded that there is a significant difference in the opinions of Secondary School Students regarding above statement with respect to medium and type of management of the school.

**Hypothesis – 9**

“ There is no significant difference in the opinions of Secondary School Students towards the implementation of mathematics projects is a time consuming activity with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-9: The opinions of Secondary School Students towards project works in mathematics increasing interest in mathematics subject.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	11	29	40	1.14 #
		Girls	07	33	40	
2.	Medium	T/M	06	34	40	2.58 #
		E/M	16	28	40	
3.	Management	Private	08	32	40	0.28 #
		Government	10	30	40	

# Not significant.

**Interpretation**

The above table 4.9 shows the calculated  $\chi^2$  (chi – square) values: 1.14, 2.58, 0.28, which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 level.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender, medium and type of management of the School.

**Hypothesis – 10**

“There is no significant difference in the opinions of Secondary School Students towards preparation of entire mathematics text book according to project method with respect to gender, medium, type of management of the School”.

The relevant information pertaining to the above hypothesis is presented in the following table.

**Table-10: The opinions of Secondary School Students towards preparation of entire mathematics text book according to project method.**

S.No.	VARIABLE		YES	NO	TOTAL	X <sup>2</sup> VALUE
1.	Gender	Boys	20	20	40	0.05 #
		Girls	19	21	40	
2.	Medium	T/M	25	15	40	6.05 *
		E/M	14	26	40	
3.	Management	Private	21	19	40	0.45 #
		Government	18	22	40	

# Not significant. \*Significant at .01 level

**Interpretation**

(1)The above table 4.10 shows the calculated  $\chi^2$  (chi – square) value of the gender and type of management of the school are: 0.05 and 0.45 which are lesser than table value at 0.05 level. Hence the null hypothesis is accepted at 0.05 levels.

It is concluded that there is no significant difference in the opinions of Secondary School Students regarding above statement with respect to gender and type of management of the School.

(2)The above table 4.10 also shows the calculated  $\chi^2$  (chi – square) values of the medium is 6.05 which greater than table value of 0.05 level. Hence the null hypothesis is rejected at 0.05 level.

It is concluded that there is a significant difference in the opinions of Secondary School Students regarding above statement with respect to medium of the study.

### **FINDINGS OF THE STUDY**

#### **1) The results pertaining to the opinions of Secondary School Students towards the implementation of mathematics projects in their school as the part of new CCE method of teaching:**

##### **Result – 1**

The  $\chi^2$  (chi-square) values of the gender, medium and type of management of the school are: 0.39, 0.39, 0.00 which are not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards the implementation of mathematics projects in their school as the part of new CCE method of teaching with respect to gender, medium and type of management of the School.

#### **2) The result pertaining to the opinions of Secondary School Students towards the necessity of mathematics projects in teaching learning process.**

##### **Result – 2**

The  $\chi^2$  (chi – square) values of the gender, medium and type of management of the school are: 0.55, 0.22, and 0.55 which are not significant. It is found that there is no significant difference in the opinions of Secondary School students towards the necessity of mathematics projects in teaching learning process with respect to gender, medium and type of management of the school.

#### **3) The results pertaining to the opinions of Secondary School Students towards project works which are being given in school are related to daily life.**

##### **Result – 3**

The  $\chi^2$  (Chi-square) values of the gender, medium and type of management of the School are: 0.67, 3.66, 0.67 which are not significant. It is found that there is no significant difference in the opinions of Secondary School students towards project works which are being given in school are related daily life with respect to gender, medium and type of management of the school.

#### **The results pertaining to the opinions of Secondary School Students towards project works in mathematics increasing interest in mathematics subject**

##### **Result – 4**

The  $\chi^2$  (chi – square) values of the gender, medium and type of management of the school are: 2.88, 0.00, 0.72 which are not significant. It is found that there is no significant difference in the opinions of Secondary School students towards project works in mathematics increasing interest in mathematics subject with respect to gender, medium and type of management of the School.

#### **5) The results pertaining to the opinions of Secondary School Students towards project works in mathematics increasing learning efficiency of the pupil.**

##### **Result – 5**

The  $\chi^2$  (Chi – square) values of the gender, medium and type of management of the school are: 0.55, 0.00, 2.22 which are not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards project works in mathematics increasing learning efficiency of the pupil with respect to gender, medium and type of management of the school.

#### **6) The result pertaining to the opinions of Secondary School Students towards improvement of pupil achievement in grade due to implementation of projects in mathematics.**

##### **Result – 6**

The  $\chi^2$  (Chi – square) values of the gender, medium and type of management of the school are: 1.40, 4.00, 1.40 which are significant. It is found that there is no significant difference in the opinions of Secondary School students towards improvement of pupil achievement in grade due to implementation of projects on mathematics with respect to gender, medium and type of management of the school.

**7) The results pertaining to the opinions of Secondary School students towards pupil understanding mathematics concepts easily with projects.****Result – 7**

- (i) The  $\chi^2$  (chi – square) value of the gender is 2.81 which is not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards pupil understanding mathematics concepts easily with respect to gender.
- (ii) The  $\chi^2$  (chi – square) values of the medium and type of management of the school are: 5.00 and 5.00 which are significant. It is found that there is a significant difference in the opinions of Secondary School Students towards pupil understanding mathematics concepts easily with projects with respect to medium and type of management of the school.

**8) The results pertaining to the opinions of Secondary School Students towards their classmate’s positive feeling about the implementation of mathematics projects:****Results – 8**

- (i) The  $\chi^2$  (chi – square) values of the gender and medium are: 0.00 and 2.14 which are not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards their classmates positive feeling about the implementation of mathematics projects with respect of gender, and medium of study.
- (ii) The  $\chi^2$  (chi – square) value of the type of management of the school is 11.66 which is significant. It is found that there is a significant difference in the opinions of Secondary School Students towards their classmates positive feeling about the implementation of mathematics projects with respect of type of management of the School.

**9) The results pertaining to the opinions of Secondary School Students towards the implementation of mathematics projects is a time consuming activity.****Result – 9**

The  $\chi^2$  (chi – square) values of the gender, medium and type of management of the school are: 1.14, 2.58, and 0.28, which are not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards the implementation of mathematics projects is a time consuming activity with respect to gender, medium and type of management of the school.

**10) The results pertaining to the opinions of Secondary School Students towards preparation of entire mathematics text book according to project method.****Result – 10**

- (i) The  $\chi^2$  (Chi-square) values of the gender, and type of management of the school are: 0.05, 0.4t which are not significant. It is found that there is no significant difference in the opinions of Secondary School Students towards preparation of entire mathematics text book according to project method with respect to gender and type of management of the school.
- (ii) The  $\chi^2$  (Chi-square) value of the medium is 6.05 which is significant. It is found that there is a significant difference in the opinions of Secondary School Students towards preparation of entire mathematics text book according to project method with respect to medium of study of the students.

**CONCLUSIONS OF THE STUDY**

- 1) Projects improve the learning efficiency of the in the students mathematics subject.
- 2) Students understand mathematics concepts easily with mathematics projects.
- 3) Projects make students fearless in learning mathematics.
- 4) Mathematics projects increase student’s interest towards mathematics.
- 5) There is a more benefit with Group projects then individual projects for the students.
- 6) Teacher role become as a facilitator in implementing mathematics projects.
- 7) Project works improve student’s communication skills.
- 8) Students get leadership qualities with project method of learning.
- 9) Student understands correlation between mathematics and other subjects with projects.

10) Mathematics projects socialize the child and develop problem solving ability.

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## BIASED ATTENTIONAL PROCESSING IN LOW TRAIT ANXIETY ON THREATENING STIMULI

Shiva Shanker Kumar<sup>1</sup> and Tara Singh<sup>2</sup>Research Scholar<sup>1</sup> and Professor<sup>2</sup>, Department of Psychology, Banaras Hindu University, Varanasi**ABSTRACT**

Attentional processes determine what is attend to and therefore what is learn through observation. Biased in attentional process for threat related information have been assign as prominent factor in etiologic and maintenance of anxiety. Attentional processing system of anxious people is normally sensitive to threat related stimuli and these anxieties direct their attention toward threatening information. The present study examined the effect of different level of threatening stimuli on biased attentional processing task performance among low anxious people. Thirty college (male-15 and female-15) students 21 to 30 years of age range participated in the present study. A 3(Threatening Stimuli: low, moderate and high valence words) × 4(Time block: 2 minutes each block) mixed factorial design with repeated measure on the last factor was used. The analysis of variance results revealed a significant difference between threatening stimuli and time periods ( $p = 0.01$ ).

*Keywords: biased attentional processing, trait anxiety, threatening stimuli*

Anxiety is a future orientation mood or state associated with preparation for passible upcoming negative events. As we see, people display anxiety when he has to meet the boss or social group or social relationship or start of journey or test. Anxiety itself show intention of certain bodily symptom like sweating and tremor or it comes out in the form of certain attitude with which he faces a situation, i.e. restlessness, worry, lack of sleep and so on. Anxiety is certain symptom that found in different population. Anxiety is usually define as a vague, very unpleasant feeling of fear or apprehension (Sarason & Sarason, 2007). Anxiety affects individual's attention automatically captures by threat related stimuli (Mathews & Mackintosh, 1998).

Anxious people individually respond faster to replacing threat stimuli rather than neutral stimuli. Several studies have suggested attentional processing biased for threat stimuli in clinical and non-clinical sample of anxious people (Telzer, Mogg, Bradley, Mai, Ernt, Pine & Monk, 2008; Puliafico, & Kendall, 2006; Hadwin & Field, 2010). Cognitive bias exists in individual with high and low trait anxiety. There is causing evidence that high in trait anxiety controlling various cognitive biases for threat related (in social threat related) stimuli (Eysenk, 1992, 1997 for review). Most of study revealed that the individual's tendency to processing and interpret ambiguous stimuli and situation in threatening factor in their perspective (Dennis, Chen, & McCandliss, 2008). Other study in attention bias is facilitate to detection rate of threat stimuli and fearful stimuli (Bar-Haim, Lamy, Pergamin, Bakermans- Kranenburg, & Van IJzendoorn, 2007; Bradley, Mogg, & Millar, 2000; Fox, Russo, & Dutton, 2002).

Anxious people adaptive response enhance to attentional performance which turn may serve individual response to threatening situation. Attention biased examine to multiple attention system by cognitive neuroscience such as alerting, orienting and executive attention (Callejas, Lupiáñez, & Tudela, 2004; Fan, McCandliss, Sommer, Raz, & Posner, 2002; Keogh & French, 1999). Few studies assess multiple aspect of attention in single paradigm (Callejas et. al., 2004; Fan, et al 2002). Attention of threat related biases have been both affect to facilitation and interference. Facilitation effects are mostly supported to alerting cases for example; Human faces display fear respond and detected more rapidly (Eastwood, Smilek, & Merikle, 2001; Eysenk & Calvo, 1992; Fenske & Eastwood, 2003). Anxiety also appears positively correlated to heighten attentional process related to alerting such as vigilance and detection. (Comptan, 2003; Keogh & French, 1999; Mogg et al., 1992). Facilitation of emotional process to be associated with different of attention (Comptan, 2003) for example threat related stimuli are more difficult to disengage from once attention in capture leading to compromised alerting and orienting (Derry & Reed, 2002; Fox et al, 2001, 2002).

Attentional bias refers to the tendency of perception to be affect by recurring thoughts. For example, if we think frequently about the clothes we wear, we pay more attention to the clothes of others. Attentional biases may contribute to cognitive biases. Cognitive biases may occur when people filter information through their own likes, dislikes, and experiences (Ovejero, 2013). It reflects opinions or pre-judgements development based on the interpretation of the available information, seeing relationships that may not exist. Occurrence of attentional bias towards threat-related stimuli across a range of anxiety disorders has observed using the *Emotional Stroop task*, the *probe detection task*, *visual search paradigms* and *eye tracking*. Attentional bias persists for all types of anxiety disorders for subliminal perception as well as for conditions, which restrict conscious awareness of threat stimuli (Mogg & Bradley, 2002). Though cognitive biases are common to all anxiety disorders, the

content of these biases are relatively specific, presumably as a result of past history and learning experiences (Craske, Rauch, Ursano, Prenoveau, Pine, & Zinbarg, 2009).

Attentional biases introduce either facilitator or interference effect (Buckley, Blanchard, & Neill, 2000). Facilitation effects occur when the negative stimulus functions as a target to be detected quickly (Fox, Russo, Bowles, & Dutton, 2001), and interference effects occur when the negative stimulus functions as a distractor (Derryberry & Reed, 2002). In the first case, a high level of anxiety facilitates performance, and in the later, performance is impaired. High anxiety is associated with facilitated processing of threat-related verbal stimuli for tasks related to recall, recognition, lexical decision speed, reading time or naming latency and indirect evidence for interpretive bias has observed for risk estimation paradigm (Calvo, & Castillo, 2001).

### **TRAIT ANXIETY**

Trait anxiety is associated with subjective perception of increased probability of future negative events and/or decreased probability of positive events (Butler & Mathews, 1987). Tasks assessing attentional biases in anxiety capitalize on two different levels of anxiety proneness. High anxious individuals often show attention deficits for primary attention task and low anxious individuals show attention deficit for secondary or dual tasks (Wood, Mathews, & Dalgleish, 2001). According to the latest research of anxiety and visual attention, for individuals who appear to be anxious even in the brightest of occasions, certain images – as well as more boring threatening elements in the environment – might be particularly unavoidable, not only representing increased anxiety but perhaps also maintaining it. The fresh research, released in December issue (JEP: General) (Vol. 130, No. 4), sheds new light on recently-observed biases in anxiety, suggesting that attention is drawn not only faster to threatening stimuli for anxious individuals than for individuals who are not, but also that anxious individual have difficulty in separating their attention from such stimuli.

To sum up, the study offers limited evidence to demonstrate in low anxious people that how biased attention processing to threats indications can be influenced by changing the type of the stimuli's threatening effect. In the present experiment, it was hypothesised that threatening words stimuli record biased information processing when competing for preference processing with the detection of various threatening stimuli in people with high anxiety. Emotional words were split into those getting high, mild, or low word threat levels to explore the chance that the most threatening stimuli would generally catch biased attention processing, with less threatening stimuli receiving attention only in people with low anxiety-prone.

### **PARTICIPANT**

Thirty college students (male-15 and female-15) of 21 to 30 years age range with mean age ( $M = 24.20$ ,  $SD = 2.10$ ) participated in the present study. Participant with no clinical history and no any medical condition like mental disorders were randomly selected and assigned through trait anxiety inventory score in three different experimental conditions (low, moderate and high threatening words stimuli). All participants have normally 6/6 or corrected to normally 6/9 visual acuity. Participants who scored 75% above accuracy in practice session of task were further retain for final experiment.

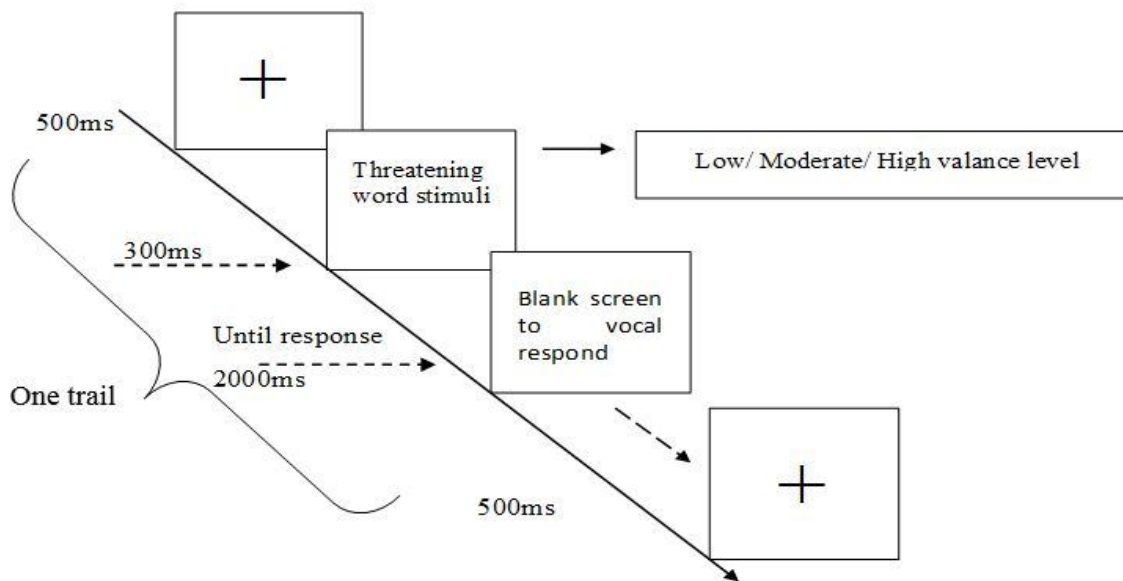
### **APPARATUS**

A computer (i3 Intel processor) with 15" colour monitor was used for presentation of word stimuli. The experimental task was develop using Super Lab<sup>®</sup> (Cordrus 1992, Version 4.5) software and response measured using SV-1 voice key (18 MHz Microprocessor). Snellen chart used to check visual acuity in both eyes.

### **PROCEDURE**

The participants were asked to read and sign the informed consent form. After this, biographical information were obtained. Participants were tested for visual acuity through the Snellen chart. A demonstration of the task for one minute to acquaint with the task were provided to the participants. Further, they were ask to participate in a two-minute practice session. Baseline state of anxiety of the participant was recorded through STAI. Further, the participants were asked to start main session of the task and continue until it last. Participants were provide responses on blank screen by correct words pronunciation as soon as after the threatening stimuli appear on the screen. Once completed the task, the participant were debrief and seen off with words of appreciation and thanks.

Graphical representation of Experiment



RESULTS

The observed data were further subjected to 3 (Threatening stimuli: Low, Moderate and High) x 4 (Time block) mixed factor analysis of variance (ANOVA) repeated measure on last factor for measure of reaction time performance presented in Table 1.

Table-1: Summary of 3(Threatening stimuli) x 4(Time block) analysis of variance repeated measure on the last factor for the measure of reaction time performance.

Source of variance	df	Sum of square	Mean square	F-value	Level of significance	Partial Eta Squared
<b>Between subject</b>						
A: Threatening Stimuli	2	188171.30	94085.65	3.24	0.055*	0.19
Error	27	784251.55	29046.35			
<b>Within subject</b>						
B: Block	1.47	206728.61	141060.77	42.66	0.00**	0.61
A x B	2.93	27375.43	9339.78	2.82	0.05*	0.17
Error	39.57	130854.05	3306.96			

Note. \*p = 0.05, \*\*p = 0.01

The main effect of threatening stimuli for measure of reaction time performance was found marginally significant,  $F(2, 27) = 3.24, p = 0.055, \eta^2 = 0.19$ . Participants for all three levels of threatening stimuli mean reaction time scores and SDs were presented in Table 2 indicate that participants respond faster in moderate level of threatening stimuli ( $M = 322.49, SD = 79.97$ ) in comparison to high ( $M = 371.73, SD = 108.68$ ) and low ( $M = 419.48, SD = 102.59$ ) level of threatening stimuli. Participants mean reaction time scores have also been graphically display in Figure 1.

Table-2

Threatening Stimuli	Block 1	Reaction Time (milliseconds)			Total
		Block 2	Block 3	Block 4	
Low	523.81	409.32	375.64	369.16	419.48
	(116.00)	(69.30)	(61.83)	(67.64)	(102.59)
Moderate	367.81	321.15	305.38	295.61	322.49
	(81.58)	(71.89)	(75.91)	(70.15)	(79.97)
High	431.68	359.95	349.25	346.06	371.73
	(115.86)	(99.92)	(98.04)	(96.58)	(108.68)
Total	441.10	363.48	343.42	336.94	371.23
	(123.61)	(89.18)	(85.08)	(84.96)	(105.57)

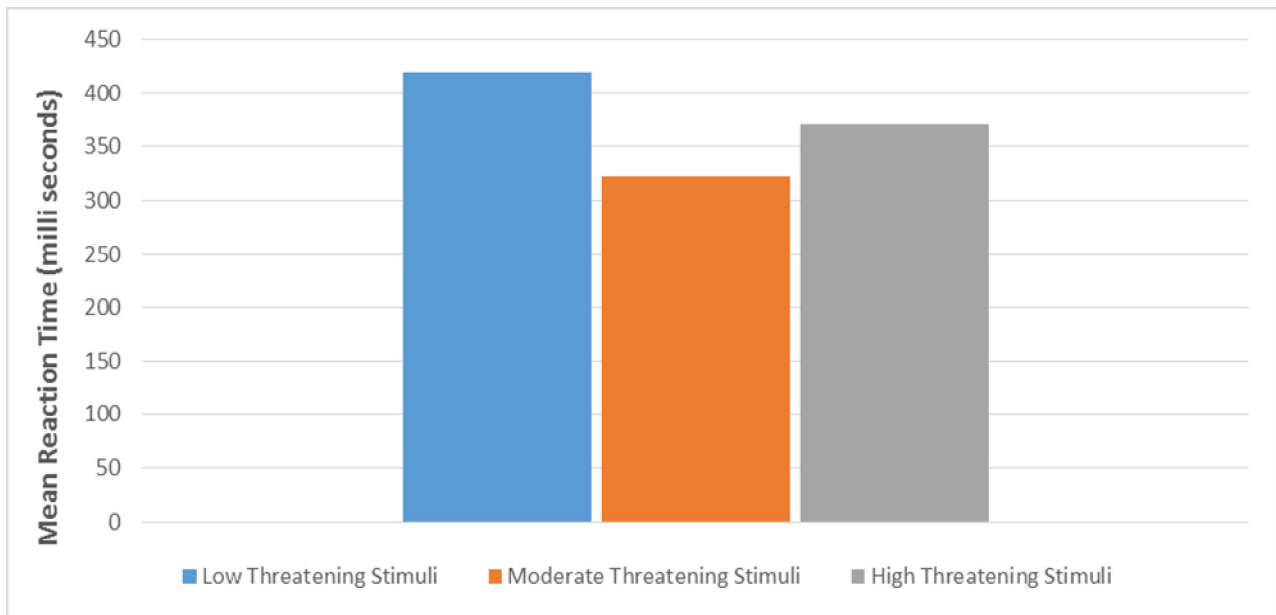


Fig-1: Mean reaction time scores as a function of level of threatening stimuli.

Analysis of variance  $F$ -values presented in Table 1 revealed significant main effect of time blocks for measure of reaction time performance,  $F(1.47, 39.57) = 44.60, p = 0.00, \eta^2 = 0.61$ . Participants mean reaction time scores and  $SD$ s were presented in Table 2 which indicate that reaction time performance improved with the passage of time from block 1 to block 4 (block 1:  $M = 441.10, SD = 123.61$ , block 2:  $M = 363.48, SD = 89.18$ , block 3:  $M = 343.42, SD = 85.08$ , block 4:  $M = 336.94, SD = 84.96$ ). Participants mean scores have also been graphically display in Figure 2.

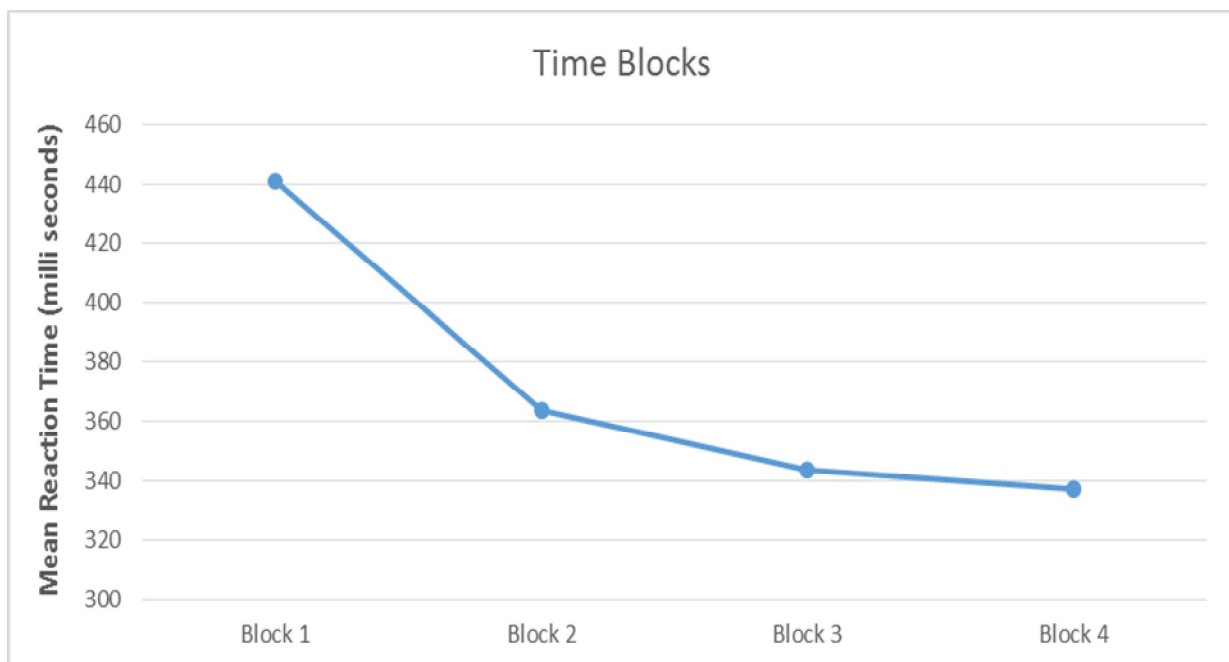


Figure-2: Mean reaction time scores as a function of time blocks.

Two-way interaction of threatening stimuli and time block for measure of reaction time performance was also found significant,  $F(2.93, 39.57) = 2.82, p = 0.05, \eta^2 = 0.17$  (Table 1). Mean reaction time scores and  $SD$ s were presented in Table 2, and that indicate that participants reaction time performance were faster respond under moderate threatening stimuli condition across time form block 1 to block 4 (block 1:  $M = 367.01, SD = 81.58$ , block 2:  $M = 321.15, SD = 71.89$ , block 3:  $M = 305.38, SD = 75.91$ , block 4:  $M = 295.61, SD = 75.15$ ) in comparison to high from block 1 to block 4 (block 1:  $M = 431.68, SD = 115.86$ , block 2:  $M = 359.95, SD = 99.92$ , block 3:  $M = 349.25, SD = 98.04$ , block 4:  $M = 346.06, SD = 96.58$ ) and low from block 1 to block 4 (block 1:  $M = 523.81, SD = 116.00$ , block 2:  $M = 409.32, SD = 69.30$ , block 3:  $M = 375.64, SD = 61.83$ , block 4:  $M = 369.16, SD = 67.64$ ) level of threatening stimuli conditions across time blocks. Mean reaction time scores have also been graphically display in Figure 3.

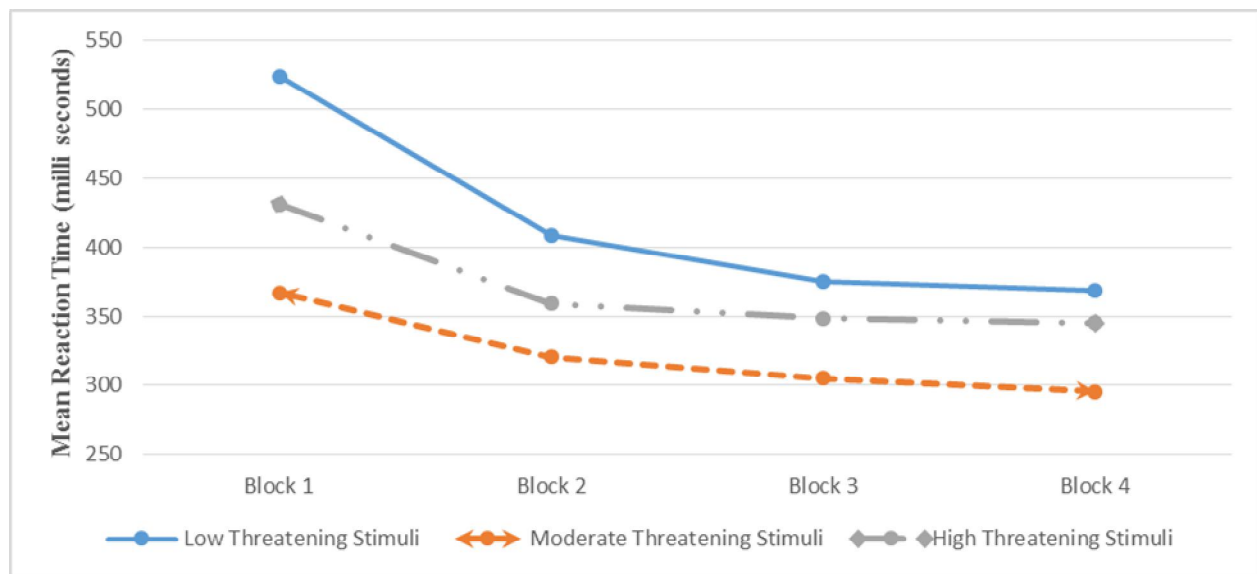


Figure-3: Mean reaction time scores as a function of threatening stimuli and time blocks.

## DISCUSSION

Production of results from experimental demonstration of biased attentional processing of threatening words stimuli among trait anxiety participants. Biased attentional processing are measure as a reaction time, accuracy (Hit) rate respectively. Response rate revealed a significant biased attentional processing advantage for different condition of the threatening words stimuli in low anxious participants. However, the response rate was faster in moderate threatening stimuli in comparison to low and high threatening stimuli conditions respectively and the reaction time were found high in low threatening stimulus in comparison to high and moderate threatening stimulus respectively. In additions, when people seen low threatening words stimuli they respond slow, while individuals seen in high threatening they ignoring threat that reason they respond fast (Wilson & MacLeod, 2003).

According to neurocognitive model of anxiety (Bishop, 2007) low anxious individuals have less sensitive to threat appraisal than high anxious individuals. This model posits that anxious individuals are characterized by heightened responsiveness of the amygdala, the increased amygdala activity is coupled with decreased attentional regulation from prefrontal cortex, which reduces the ability to inhibit processing of threatening distracters. In socially anxious individuals may tend to look away faster, which results in deficient attentional processing (Chen, Clarke, MacLeod, & Guastella, 2012). The relationship between social anxiety and anxious reactivity in response to a stressor is mediated by attention away from positive stimuli (Taylor, Bomyea, & Amir, 2010).

Anxious individuals show greater Stroop interference when the words are emotionally threatening as opposed to neutral words (MacLeod, 1991). Studies with normal subjects suggest low trait anxious subject are show increased Stroop interference for positive words relative to neutral words (Richards, French, Johnson, Naparstek & Williams, 1992). Low trait anxious people show significantly more color naming interference for positive than neutral words, but high trait anxious people display more interference for threatening than neutral words (Mogg & Marden 1990).

Mathews and Mackintosh, (1998) suggested that some decision threshold may exist, such that below this threshold, stimuli related to threat are ignored (and perhaps inhibited), so that attention is likely to be captured only when the threshold is exceeded support the result of present study. Attentional differences associated with anxiety can thus be understood as arising from variations in this threshold level. If anxiety-prone individuals have a relatively low threshold, then their attention will be captured by weak threat cues. In contrast, non-anxious individuals are less likely to attend to weak cues and may even appear to inhibit them. Cues that are strongly related to threat, however, should capture attention in everyone, irrespective of anxiety level (Yiend and Andrew Mathews, 2001).

## CONCLUSION

The present study was mainly focused on investigating the effect on biased attentional processing for different threatening stimuli in low trait anxious participants. The findings of the present study reflect that low trait anxious participants having more bias attentional processing in high threatening stimuli in comparison to low threatening stimuli. Because these participants quickly respond in high threat condition, however participant in

low threat conditions took larger response time due to familiar condition. The study must be carryout in large sample size with different participants to measure biased attentional processing in both low, moderate and high threatening information.

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**PERFORMANCE INVESTIGATIONS OF SOLAR PARABOLIC TROUGH CONCENTRATOR  
PROTOTYPE FOR SINGLE OPEN ABSORBER TUBE**

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**ABSTRACT**

*The solar technology offers plentiful potential in terms of providing the world's energy supplies. However, its present contribution in the world energy supply is still partial, due to the reason that the solar energy is dispersed in nature and a high initial construction cost of the solar concentrator system in spite of low operating cost and green energy. The solar parabolic concentrator is extensively used in industry and plant due to higher concentrator ratio and competences to produce high temperature or high mass flow rate of working fluid. The outputs of parabolic trough concentrator in terms of enhancement in heat transfer depends upon its various design and operating parameters. A prototype is design and developed based on up to date reviews of design and operating parameters of solar parabolic trough. The absorber tube is one of most important parameter which receives the concentrated energy form it's outside surface and transfer it to working fluid flowing inside the absorber tube. The performance of open single absorber tube mounted solar parabolic trough in terms of experimental heat gain  $Q_u$ , efficiency  $\eta_i$  is evaluated and compared with with theoretical values.*

*Keywords: Heat transfer enhancement, Open absorber tube, Solar energy, Solar parabolic trough concentrator.*

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**1. INTRODUCTION**

The worldwide demand for the energy has increased tremendously because of industrialization and rapid increase in population. Whereas there is inadequate energy supply than the current requirement. Government authorities, industrial bodies and educational institutions are applying tremendous effort to search viable energy sources and to increase energy efficacy.

Solar energy is one of the substitute for deficit energy having enormous prospective. As per assessment, it is found that the earth surface gets about  $1000\text{W}/\text{m}^2$  quantity of solar insolation in daytime. This energy have potential to generate about 85,000 TW and estimates that the present world's energy usage is about 15 TW.

The performance of solar parabolic trough depend on various designed parameters. It depends on the design parameters like set up size, concentration ratio, type of reflecting material, rim angle, type of absorber open or evacuated, material of absorber tube, length and diameter of absorber tube, coating of absorber tube etc. While operating condition parameters like with or without tracking, type of working fluid, mass flow rate of working fluid, maximum temperature required, with or without storage of energy etc.

The absorber tube is most important parameter of solar parabolic trough collector as reflected and concentrated energy fall on absorber and this energy is transferred to working fluid through convection after conducted though absorber tube wall. For lower temperature and lower efficiency requirement, open absorber tube is used due to its easiness in operation and low cost installation.

**2. LITERATURE REVIEW**

The present research work on parabolic trough concentrator for the effect of the various parameters like the mass flow rate, concentration ratio, rim angle, absorber tube materials, reflecting surface materials, various heat transfer fluids and tracking of the trough on the performance of the system is studied. As heat transfer take place through absorber tube, therefore, it is important to know the description of the absorber tube.

Bakos et al. (2001) stated that parabolic trough solar concentrators (PTSC) are favoured compared to flat plate concentrator due to its ability to perform at high temperature and gives high efficiencies. The PTSC can achieve as high as the temperature of  $300\text{ }^\circ\text{C}$ . Accordingly, the efficiency of the concentrator increases with the decrease in diameter of the fluid flow pipe. The presence of the glass moderates the heat loss due to the convection and radiation.

Kalogirou (2004) presented the study of commonly used solar collectors like flat-plate, compound parabolic collector, an evacuated tube mounted parabolic trough, solar furnaces, Fresnel lens, parabolic dish, and heliostat.

Diver and Moss (2007) have developed and commercialized the parabolic trough collector with the small focal lengths and lower operating temperature with comparatively erroneous configuration by the use of fixtures.

Sukki et al. (2010) concluded that solar concentrators could reduce the entire cost of the solar cell, thus generating the solar energy reasonable and inexpensive, without compromising the overall performance of the solar technology.

Kawira et al. (2011) found the efficiency of solar parabolic trough for open tube absorber using Aluminium sheet reflector and car solar reflector are 32.38% and 34.45% respectively for same size of Parabolic trough concentrator.

Bayat and Nikseresht (2011) have performed a numerical analysis of laminar forced convective flows of nanofluid and prevailing equations solved using the finite volume approach.

Yaghoubi et al. (2013) performed the experimental measurements and numerical modelling to find the impact of failure on heat collecting tubes for heat losses of absorber tubes of parabolic trough collectors.

Mohamed (2013) experimentally tested a simple parabolic trough concentrator for performance and the temperature effective length of the concentrator under the local climatic condition. The average collector efficiency found about 37%. Using evacuated glass envelop around the absorbing tube and using stainless steel pipes instead of galvanized pipes will enhance collector's performance.

Tayade et al. (2014) had locally fabricated and designed the solar parabolic trough with unusual features like minimum maintenance cost, running cost and labor cost for low-temperature application use in the village area.

Keou et al. (2017) assessed solar perspective for the four different tracking means and revealed that the one axis polar movement E-W and horizontal E-W tracking provide 96% and 94% of full annually tracking mode, respectively.

Chaudhary et al. (2018) carried out the experimental investigation of a parabolic trough collector for the solar dehumidification purpose.

### 3. DESCRIPTION OF EXPERIMENTAL SETUP OF OPEN ABSORBER TUBE FOR PTC

Absorber tube is very important part of solar parabolic trough as proper selection of material, size and length of absorber effect the performance of the SPTC. Figure 1. show overview of single open tube absorber mounted experimental set up of PTC. For the specifications of single absorber tube, it copper made absorber tube, which is painted with black enamel paint for increase the absorptivity of absorber. Figure 1. shows absorber mounted on parabolic trough with tracking mechanism, at one end water is supply through water tank maintain at elevated height to provide constant pressure water inlet, while at other end 1 litre of hot water is collected in measuring jar and time noted by stop watch to find mass flow rate of water. Thermocouples are used to measure inlet and outlet temperature of water along with ambient air temperature. Digital anemometer is used to measure velocity of wind while solar power meter is used to measure solar insolation available at same time, all data recorded in specific format at every five minute of time interval.



Fig-1: Experimentation set up for open tube absorber mounted parabolic trough

All reading were taken from 10:00 am to 3:30 pm every day for 05 number of different days.

**4 THE EXPERIMENTAL AND THEORETICAL ANALYSIS OF THERMAL EFFICIENCY AND OUTLET TEMPERATURE ( $T_{FO}$ ) OF THE WATER FOR SINGLE OPEN TUBE ABSORBER TYPE PARABOLIC TROUGH.**

The experiments performed for 05 days for setup installed at the terrace of building for all sunny days. The solar power meter is put on the solar parabolic trough to measure the incidents of solar radiation. Measure the wind velocity  $V_w$  with help of Digital Anemometer and solar insolation  $I_g$  with solar power meter TES 133R. Automatic tracking mechanism will rotate the trough by  $1^\circ$  at every 4 minutes of the time interval. Calculated the mass flow rate ( $\dot{m}$ ) of water-based on quantity and time of water collection. Calculated the useful heat gain ( $Q_u$ ) and the thermal efficiency of the system from a computer program in MICROSOFT EXCEL PACKAGE 2013. It used to calculate the various heat transfer coefficients bases on theoretical equations available. These values used to calculate theoretical values of water outlet temperature, Mean absorber temperature, overall heat transfer coefficient and loss coefficients. The solar intensity, wind velocity, ambient temperature, inlet water temperature and mass flow rate values were taken from daily observation. With the help of programme made, calculation done for minimum been 40 set of data that were taken at 5 minute time interval for for single tube open absorber to calculate average value overall all heat loss coefficient  $U_1$ , thermal efficiency and fluid outlet temperature  $T_{fo}$  for whole day.

**5 RESULT AND DISCUSSION**

Based on above procedure followed various graphs are plotted for different temperature, Heat gained by water, heat loss by convention and radiation along with efficiency and fluid outlet temperature comparison.

**5.1 Variations of different temperature for open single tube absorber mounted solar parabolic trough concentrator**

Fig.2 represents the variations of ambient air temperature  $T_{air}$ , Fluid inlet temperature  $T_{fi}$ , Absorber mean temperature  $T_{am}$  and experimental fluid outlet temperature  $T_{fo}$ , for open tube absorber mounted solar PTC from morning to evening. Ambient air temperature  $T_{air}$ , Fluid inlet temperature  $T_{fi}$  having almost same values throughout the day as overhead tank water is used as an inlet water which is exposed to environment. Theoretically calculated temperature of absorber tube is vary from  $92^\circ\text{C}$  to  $103.6^\circ\text{C}$  from morning to evening as having average temperature of  $99.5^\circ\text{C}$ .

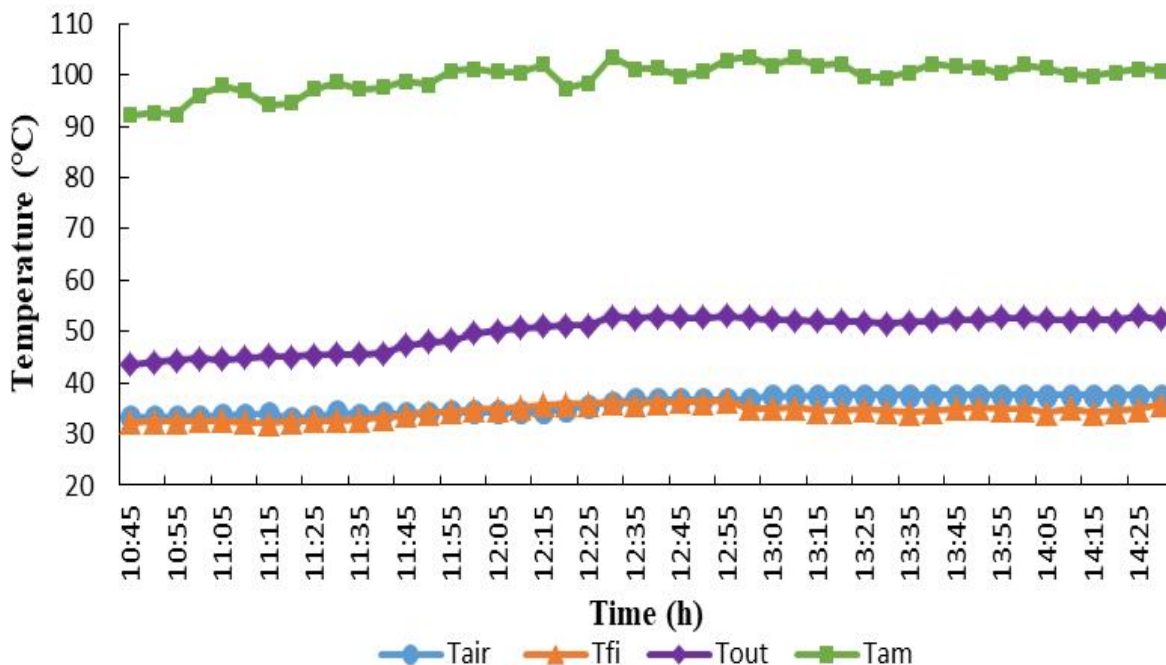


Fig-2: Variations of ambient air temperature  $T_{air}$ , fluid inlet temperature  $T_{fi}$ , absorber mean temperature  $T_{am}$ , experimental fluid outlet temperature  $T_{fo}$  for open tube absorber mounted solar PTC

There is huge convective and radiative losses from the surface of an open absorber tube this leads comparatively lower experimental fluid outlet temperature  $T_{fo}$ .

**5.2 Variations of heat gain and different losses parameters for open single tube absorber mounted solar parabolic trough concentrator**

Fig. 3 shows the variations of theoretical useful heat gain  $Q_u$ , Optical Losses, Convective and radiative losses from outside surface of the absorber tube along the day.

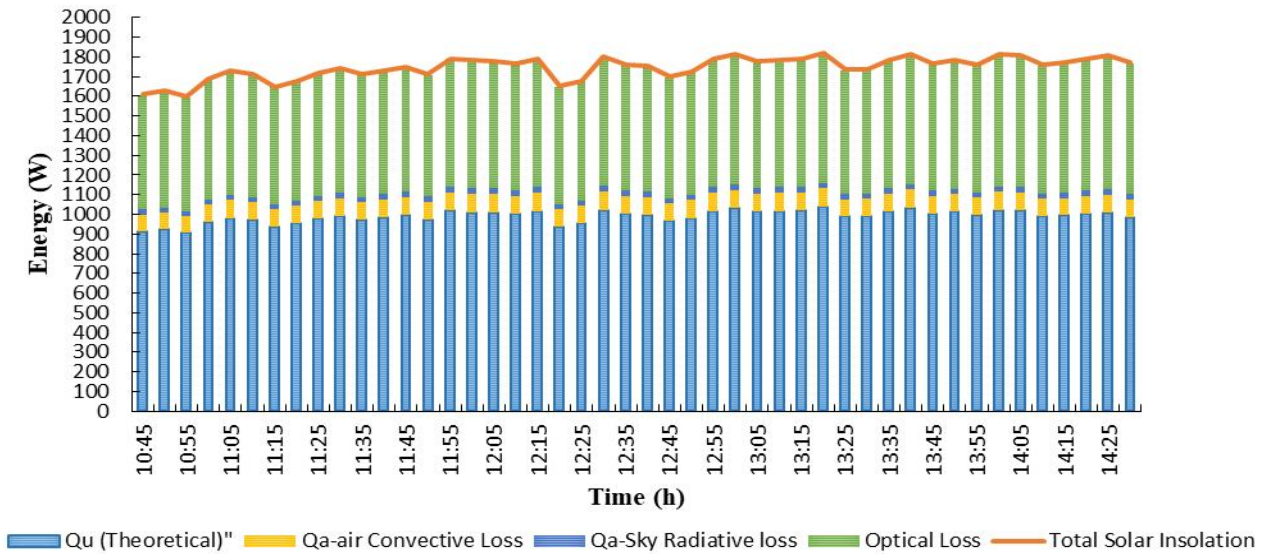


Fig-3: Variations of theoretical useful heat gain  $Q_u$ , Optical Losses, Convective and radiative losses from outside surface of the absorber tube.

As per the energy balance total solar insolation disseminated in the form of first optical losses, than convective and radiative losses from the outer surface of the absorber tube and parallel energy is transfer to convective fluid that used to increase the temperature of the water. It is observed that optical losses are 36.3 %, Convective losses are 5.2%, whilst radiative losses are 1.6% of the total solar insolation. Proportionate value of convective heat losses are 76.7 % and radiative losses are 23.2 % among total heat loss from the surface of the absorber tube. In open absorber tube, absorber is exposed to ambient air so it leads more convective loss compared to radiative losses. Day average value of experimental total insolation available, theoretical useful heat gain  $Q_u$ , Optical Losses, Convective and radiative losses are 1747 W, 724 W, 634 W, 91 W and 27 W, respectively.

**5.3 Variations of experimental heat gain  $Q_u$ , efficiency  $\eta_i$  for open single tube absorber mounted solar parabolic trough concentrator and its comparison with theoretical values.**

Fig. 4 shows experimental heat gain  $Q_u$  vs theoretical heat gain  $Q_u$  for open single tube absorber along with total solar insolation available for aperture area of the setup. The average value of experimental heat gain  $Q_u$  is 724 W against its theoretical heat gain  $Q_u$  1253 W at total solar insolation available are 1746 W, less heat by absorber tube is due to many reasons like small area of absorption due to single tube, conductive, convective and radiative losses from the surface of the absorber tube, improper alignment of the single tube leads out focus the concentrating rays. The difference between the theoretical and experimental heat gain is having higher value before noon and then after it is somewhat reduced, variations of heat gain from 543 W in the morning to 874 W in the evening. Owing to that, there is the considerable differences in the efficiency as shown in Fig. 4, the average value of experimental efficiency  $\eta_i$  is 48.2 % against its theoretical efficiency  $\eta_i$  is 56.7 %, having maximum percentage difference of 20.2 %.

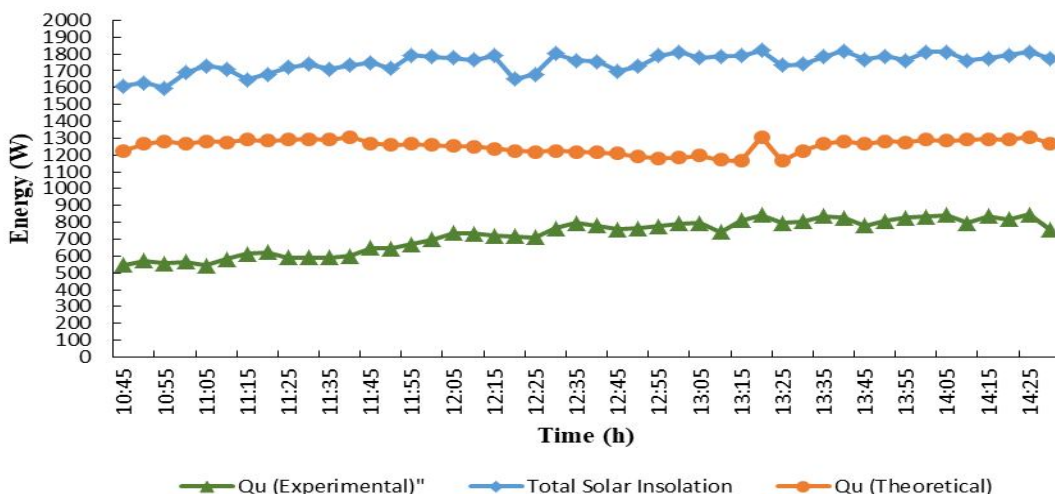


Fig-4: Variations of experimental heat gain  $Q_u$  and its comparison with theoretical values for open single tube absorber mounted solar PTC

The average value of experimental fluid outlet temperature  $T_{fo}$  is 49.9 °C against its theoretical fluid outlet temperature  $T_{fo}$  that is 57 °C. The Maximum and minimum value of experimental fluid outlet temperature  $T_{fo}$  are 53 °C and 43.5 °C against its theoretical fluid outlet temperature  $T_{fo}$  which are 60.7 °C and 52.1 °C, respectively. There is gradually increase in theoretical fluid outlet temperature  $T_{fo}$  from morning to afternoon but in case of experimental fluid outlet temperature  $T_{fo}$  is increase up to noon and then after reduced, as shown in Fig. 4, The average difference between experimental fluid outlet temperature  $T_{fo}$  and theoretical fluid outlet temperature  $T_{fo}$  is 14.5 % also the maximum and minimum fluid outlet temperature  $T_{fo}$  differences goes up to 23.87 % and 7.65 %, respectively.

## 6. CONCLUSION

Integrating various parameters to design parabolic trough is essential for optimum output. Based on essential parameters prototype is design and developed for single open absorber tube mounted solar parabolic trough collector. The polish Aluminium sheet is used as a reflecting material, copper tube as an absorbing material, and water as working fluid with tracking of trough to received maximum solar radiation for the development of collector. Experimental output is compared with analytical and found almost same trend with some differences. The maximum and minimum value of experimental efficiency  $\eta_i$  are 55.1 % and 36.6 % against its theoretical maximum and minimum efficiency  $\eta_i$  are 57.13% and 55.6 %, respectively. The average error of 8.55 %. The average experimental efficiency for open single tube absorber found 48.21 %.

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**BAYEN: RE-LABELLING A WOMAN'S IDENTITY AND RELOCATING HER TO THE PERIPHERAL SPACE OF SEMI-EXISTENCE WITHIN THE SOCIAL STRUCTURE OF BENGAL'S FOLK COMMUNITY**

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As curtains roll up, a female figure totally distressed and dishevelled emerges on stage and in the description that follows almost immediately, she is addressed to as a "bayen" who walks like "some condemned ghost debarred entry into human society" (Sc. 1, p. 97). The very opening lines strike the keynote of the play with the theme of exploitation reverberating throughout in different ways.

A thematic analysis of the play *Bayen* offers an insight into the several strands of human existence which are defined by outer forces. Of course, the primary theme that underlies the plot is exploitation of woman but there are other factors which actually contribute to the execution of such inhuman act.

Mahasweta Devi's personal encounter with the rural mass and her concern for them over perpetual issues of slavery, male dominance over women, oppression and suffering bring out a very sensible and thought-provoking plot that weaves the story of a woman belonging to a community from the interiors of Bengal that forcibly thrusts upon her an identity which strips them of every means of peaceful existence.

Samik Bandyopadhyay's study of the play points out, "Mahasweta Devi's plays and stories are often located in communities of the fringe, outside the dominant upper caste milieu" (Introduction, p. xi) and like Aajir (the eponymous protagonist from Devi's another play *Aajir*), "Bayen" too is more of an "archetypal outcast". He further observes, "Life on the fringe creates a culture of the fringe, a culture often defined in Mahasweta Devi's plays in terms of rituals, food and practices that lie outside the pale of respectable existence." (Introduction, p. xi). The statement stands true because in this "Bayen" does belong to the community of the fringe which is a socio-cultural phenomenon of rural life with a defining culture of its own but on a stronger note, this very culture pushes her further towards the periphery of the fringe. Therefore, her position becomes "double marginalised", first for being a woman belonging to the margins and second for the ancestral profession she practices that gradually tags her a "bayen" which alienates her from the rest of the members of her community who look down upon her as an outcast. In both cases, patriarchy plays a dominating role to which the female protagonist is unwillingly bound or subjected.

At the outset of the play, Chandidasi (as she is known before being labelled a "bayen") is seen as someone inauspicious whose entry into the human society is prohibited as she is considered a "bayen" (witch) by her community. She regrets her condition of living a secluded life, "I don't have anybody anymore, nobody. When I hadn't become a bayen, I had everybody." (Sc. 1, p. 97). Slowly we learn that she has been victimised by the superstitious beliefs harboured by the rural people and that her situation is not that is naturally formed but has been created by the same people around her. Ritualistic practices and superstitious beliefs pervade throughout the length of the play. Superstition occupies an indispensable place in the lives of the subaltern community so much so that it leads them to blame a woman for practising witchcraft and label her as an outcast. In the very first scene we get a cruel picture of the community that believes if "bayen" crosses their way, it would cause them bad luck. To avoid her presence, she is deprived of even the basic necessities of life like food, shelter and clothing. Such provisions are supplied to her only once in a while and that too without making any personal contact with her. At one point she complains, "Just a little rice, the salt all mixed with dirt, worms in the lentil – why should I take it?" (sc. 1, p. 98). She desperately wants her plight to be communicated to Malindar, her husband before she became a "bayen", with a little hope that he would understand her needs and make some arrangements. So she waits for him near the railway tracks. The humanity in her still allows her to have faith in Malindar who is responsible as well for accusing her of having supernatural powers and who left her all alone to suffer the blame.

When Malindar enters the stage with his little son Bhagirath, it is really ironical that he too, even after being a little more qualified than the other members of his clan, has given in to the whims of superstition. He is annoyed and scared when Chandidasi appears suddenly before them as a sight of her might bring bad omen to them. Chandidasi is herself aware of the threat that she poses to the village community and tries to keep away from the crowd. On realising the presence of her son Bhagirath, she out of love, fear and concern, provides solution at once that Malindar should tie knots in his hair and dhoti and also spit on the child's head. Chandidasi submits to superstition for the sake of her child's safety which is a very natural behavior on the mother's part. But even then they avoid eye contact with her. With time Chandidasi grows tired of receiving such mean and irrational

treatment from the people. Moreover, being a woman and a mother of a small boy, she is divested of her motherhood. How ironical it is to think of a mother who also takes care of the buried children to cast an evil eye that causes death to children. Such irrelevant ideas not only tagged her as a “bayen” but even removed her from her own son – a pain she never gets healed of. Her motherly instincts surface up every now and then but she feels scared to confront her son, lest she might bring misfortune to him. Samik Bandyopadhyay observes, “In the one scene in which the son confronts the witch-mother who herself fears the confrontation more than the son, Mahasweta touches the larger space of the social forces that separate mother and son in a male-dominated system” (Introduction, p. xiii-xix). The sense of rejected motherhood pricks her again and again and makes her feel miserably dejected and helpless. The recurring image of Chandidasi singing lullaby to a child shows evidences of her motherly affinities from which she has been separated since she became a “bayen”. In her book, *Second Sex*, Beauvoir says that it is in maternity that woman fulfils her physiological destiny. Chandidasi’s physiological destiny remains unrealized as her motherly instincts and concerns are never revered. She is separated from her son.

At the close of the first scene, where Malindar recalls how he had fallen in love with Chandidasi, married her and how everything changed overnight as Chandidasi became a “bayen”, Bhagirath learns about his real mother for the first time. This is done through Malindar’s enactment of the past which also shows the transformation of Chandidasi from a woman to a “bayen”. This revelation not only emphasizes the significance of superstition among rural folks but at the same time throws light on how a male-dominated community, no matter how marginalised they themselves are, uses superstition as a tool to control the life of an innocent woman and ostracise her from their community. Enactment of the past is an important device that Mahasweta Devi uses in many of her plays including *Ajir* and *Water*. Here also, Malindar acts out his love affair with Chandidasi and the events that lead to the labelling of Chandidasi as “bayen”. Samik Bandyopadhyay comments, “The device itself becomes a metaphor for the continuities in the process of exploitation” (Introduction, p. xiii). The past repeats itself in the present and forever, with no sign of transformation. The process is a vicious cycle wherein innocent people like Chandidasi gets trapped till death liberates her.

The enactment also informs us how much Chandidasi is appreciated and desired for her physical beauty. Malindar eloquently expresses his love for Chandi claiming, “there was no one as beautiful as she, no one with such grace”. (Sc.1, p. 102). His utterance, “I gave her striped saris to wear, and silver-nickelled jewellery. I fed her, I rubbed oil in her hair, her body” (Sc.1, p. 102) further glorifies the idea of physical acceptance of a woman as if she is just an object of desire rather than understanding and respecting her as an individual. However, even after loving her so much, the thick cloud of superstition that shrouds him weakens his visibility and strengthens his sense of irrationality to an extent where he utters, “Once a bayen she’s no longer human”.

In the following scene (Sc. 2), a picture of domestic life is portrayed (still in flashback) where Chandidasi sits with her little son in her lap singing the same lullaby we hear at the beginning of the play. She pours her heart out to the little child on how her ancestral profession of burying dead children and people’s superstitious bent of mind have taken a toll on her life. She says, “Men in general are so insensitive. Their children die. I bury them. And they say I have the evil eye – if I stare at a child, it’s sure to die.” (Sc. 2, p. 106). People even throw stones at her, she recalls. A simple gesture of concern for Malindar’s cousin Pakhi’s daughter Tukni whom she had fed before Bhagirath was born is seen as something inauspicious. When she discloses this to Malindar, though initially he listens to her with attention, gradually he starts laughing in order to lighten her mood. Laughing at her helpless situation only proves his mental weakness and incapability to understand human pain. Chandidasi, however, does reciprocate to this attitude, “What a joke to crack at the expense of a mother with a little child.” (Sc. 2, p. 109). She even threatens him of hurting herself if he didn’t take back his words. Being a husband, he is never really able to understand his wife.

Being a part of the subaltern community that so much depends on superstitious beliefs as means of controlling life, Chandidasi has little or no choice at all over her will, more so because she is a woman, a “sub-subaltern”, which makes matters worse. At several points of time she is torn between practising her ancestral job of burying and protecting dead children and her own unwillingness to carry out the task which earns her nothing more than disrespect. She expresses her pain of staying away from her son and her inability to feed him but at the same time is bound by family sentiments, “Whenever I seem to have made up my mind that I won’t go back to the job ever, I seem to hear my father’s voice roaring like thunder, If you opt out, it’ll be my beat again, is that what you desire?” (Sc. 2, p. 108).

Here comes the reference to the legend of Kalu Dom, the forefather of Chandidasi. Mahasweta Devi’s allusion to history and folklore is something that makes her ideas more transparent to the readers. She believes, “they reveal how the common people have looked at an experience in the past and [how they] look at it now.”

(Preface to *Shrestha Galpa*, 1985). She explains that use of legends and folklores in the present context is a means “to capture the continuities between past and present held together in the folk imagination, I bring legends, mythical figures, and mythical happenings into a contemporary setting, and make an ironic use of these as I do with the Dasharath story in my *Pindadan* and the legend of Kalu Dom in my *Bayen*.” (Preface to *Shrestha Galpa*, 1985). Chandidasi is shown as a descendant of Kalu Dom, who, as legend says, was given “all the cremation grounds of the world” by King Harishchandra as a token of returning the favour to him who had provided him shelter when he had lost his kingdom and had nothing to do but beg. It is this profession that has been passed down through generations and of which Chandidasi is a part.

Legend becomes fate. Her profession takes her away from her son, alienates her from the rest of the community and later brands her a “bayen”. Even though she complains of her inability and unwillingness to carry out such a task, she can’t renounce it either. She feels that would be an act of showing disrespect to her forefathers. Also, it is the pre-determined social identity she is born with, an identity that is not her choice. This is how in rural communities such social constraints are put down to fate. At every step her life is conditioned and determined by others. She has no space for herself and is left with no other choice but to mourn over her personal loss.

Coming back to the domestic picture, Malindar, instead of showing care and concern, gets irritated at her complaints. Here again the character of Chandidasi stands stronger than Malindar. Chandidasi braves every adverse situation with great sensibility which Malindar, even being a man is not capable of doing.

Chandidasi faces another blow when Pakhi’s husband Shashi, brother-in-law of Malindar, comes crying and breaks the news of Tukni’s death for which he accuses Chandi. It is noteworthy here that instead of seeking medical help for their daughter’s ailment, they went for ritualistic remedies. Their blind faith in religious rituals and superstition blocked their minds completely, as a result of which they are at a loss to understand that rituals alone can’t cure such health disorders. One has to be sensible and practical. To make matters worse, they blame Chandidasi’s “evil eye” to have brought such misfortune on them, another baseless assumption arising from superstition. Here again, irony plays a significant part when despite all blames, Tukni’s father along with Gourdas insists Chandidasi to come with them and follow the ritual of burying Tukni’s body. It is shocking that on the one hand they put all blames on her for Tukni’s death and on the other hand, they shamelessly ask her to carry out her duty. Gourdas goes to such an extent as of reminding her when she openly refuses to accompany them that she is a descendant of kalu Dom and so should stick to her duties. At this juncture, it is Chandidasi again who shows great sensibility by revolting against the wrong done to her. Though Malindar witnessed all that took place before him, it is a pity that being a husband he couldn’t raise his voice in support of his wife. In fact, it is Chandidasi who, in response to Gourdas’ words, boldly states that she carries out her task with loyalty only as an act of showing reverence to her forefathers, “I carry out my obligations as a sign of reverence for them.” (Sc. 2, 111). She continues to speak with great pride that it is she who will ultimately decide whether to go and carry out the ritual. With her refusal to obey them, she literally makes the men plead before her and beg her perform the ritual, to which she agrees later. Through this scene, Chandidasi comes out the strongest.

The final blow comes, when in the third scene, Chandidasi is labelled as a “bayen” by the village people. After all the accusations showered on her and troubles that come her way, she is still seen devoting her time to her job, guarding dead children at night from the wild animals and spirits. Hypocrisy reaches its limits when the same people who pleaded her to bury Tukni’s body call her a “bayen” just because they surreptitiously hear her uttering to herself in the darkness of the night sitting all alone at the graveyard. Malindar too accompanies the crowd who force him to see for himself that his wife has turned into a witch. Despite his qualifications and a being husband who witnessed every pain that his wife went through, Malindar readily believes what he sees before him. A simple picture of a lonely woman speaking her heart out to herself in the darkness is nothing unnatural or unearthly, but Malindar accepts the villagers’ verdict of the scene. He worsens the situation by asking Chandidasi weird questions. His insensitivity becomes evident from the way he, without even thinking twice over it, suddenly starts beating the drum and announces that Chandidasi has become a “bayen”. Chandidasi screams and protests but no one even cares to listen to her. Instead she is dragged away by the mob. And with this the flashback comes to an end.

Throughout the enactment of the past, the discrepancies between rationality and irrationality, patriarchy and woman, superstition and education are clearly visible. The indifferences and disparities created by patriarchy in a subaltern community hampers the harmony of existence. A closer look at the string of incidents that follow one after the other, shows that Chandidasi fell prey to the web of patriarchal dominance. Patriarchy can only blame, control and impose like it did in this case but can never take an honest stand or find solutions. This is a case of “gendered subjectivity” where the “subject” is thought as the signifier of one who is under the authority of another. (*Engendering Modernity-Feminism, Social Theory and Social Changes* by Barbara L. Marshall).

Male dominance binds her to the profession she wishes to renounce for the sake of her child but actually cannot and it also blames her of casting an “evil eye” upon children and cause their death. But they still need her for burial of dead children else they believe spirits of those children would hover around forever.

In whatever she does, it is the community that makes her life miserable. In the end it is again the mob and her husband who decide for themselves that she is a “bayen”. Her image of a “bayen” is socially constructed and it is not something she was born with. It is an imposed identity, not chosen by her. She therefore suffers from identity crisis wherein she is unable to identify her innate being, for an imposed image has been thrust upon her. She believes in her womanhood and motherhood but is forced to live with a false identity. All this is a result of Malindar’s insensitive declaration. He fails to realise how unfair he has been to her dragging her to eternal suffering. This stands in sharp contrast to the idea of free individual. It is as much the individual in conflict with society as the norms and conventions thwarting the subjectivity of the individual.

Chandidasi’s suffering culminates in her death at the end of the play when she gives up her life for the sake of saving passengers. Her death, like her life, is tied to the goodwill of the people, she has no control over either of them. But it is Bhagirath who finally acknowledges her as mother and also states boldly before the villagers present at the site of accident that she was never a “bayen”. The reverence she deserved in her lifetime comes to her after she gives up her life. Not only she gets rewarded by the officials for her act of bravery but even gets rid of the tag “bayen” that haunted her throughout her life. Still, the fate she suffers is not at all justified. She had no role to play in it, it was all enforced by external forces. Things can’t change anymore, she can’t get back her life, nor can Bhagirath get back his mother. Caught in the vicious cycle of exploitation, Chandidasi, despite making several efforts and revolts, could actually do nothing to alter her destiny which was imposed on her.

Plays like *Aajir* and *Bayen* are realities of the experience in rural Bengal, steeped into the social life of the people. Man constructs a larger worldview to be reflected in social behavior to ostracise and punish the aberrant forces, in this case woman and Dalits, in order to justify and legitimise the dominance of a group of people as objective or natural principles. This is what Foucault calls ‘strategies of power and social control’.

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## AN EMPIRICAL STUDY OF STOCK SPLIT ANNOUNCEMENTS OF BSE AND NSE SECTOR

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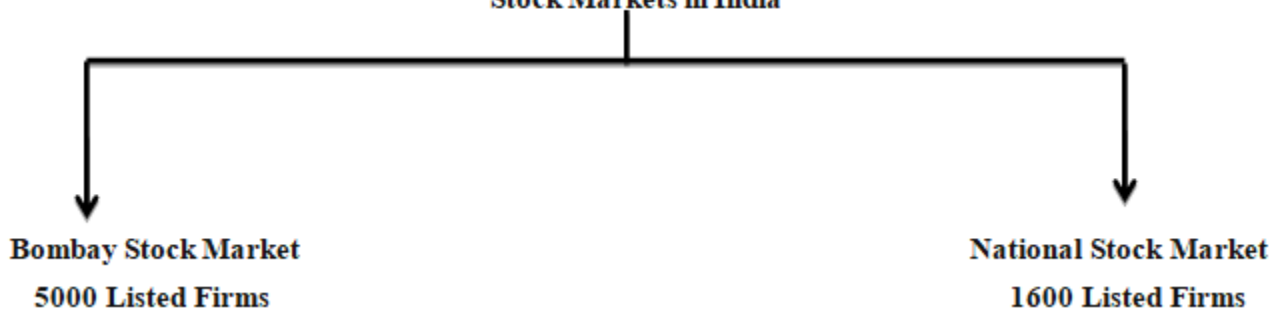
*In the field of stock exchange, there are mainly two types of stock exchanges prevailing in India. First is Bombay Stock Exchange and second is National Stock Exchange. The Bombay Stock Exchange was established in 1875 and it is India's oldest stock exchange. Another stock exchange is National Stock Exchange which is established in 1992 and started trading in 1994. The above two stock exchange markets are followed the same trading mechanism. In this research paper, researcher has used descriptive research design and collected a data and information through open ended questions. The objectives of the present study is to study performance of Indian Banking Sectors in recent times, to study the factors variables affecting the selected Banks registered in Indian Stock Market and to study effect of EPS on Share market of the selected Banks registered in Indian Stock Market.*

*Keywords: Indian Stock Market, BSE and NSE, Factors and EPS effect.*

**INTRODUCTION**

In the field of stock exchange, there are mainly two types of stock exchanges prevailing in India. First is Bombay Stock Exchange and second is National Stock Exchange. The Bombay Stock Exchange was established in 1875 and it is India's oldest stock exchange. Another stock exchange is National Stock Exchange which is established in 1992 and started trading in 1994. The above two stock exchange markets are followed the same trading mechanism.

**Figure-1.1: Listed Firms  
Stock Markets in India**



Stock markets in India are attracting private sector and public sector units. In these markets, there are two significant indexes of Indian market. First is Sensex and second is Nifty. Two types of people or marketer can invest in India. First is Foreign Investment, Foreign portfolio investment and second is Foreign Direct Investment.

**LITERATURE REVIEW**

**Sanders and Zdanowicz (1992)** examined the average abnormal returns, average abnormal trading volume and reported insider trading of corporate control target firms prior to public announcement of the initiation of corporate control transactions. They report no evidence of abnormal trading volume until the first public announcement regarding the transaction.

**Kim and Verrecchia (1997)** work is the modeling and predictions of market reactions to public announcements. Notably, their models recognize and attempt to incorporate the interaction of public and private information. The authors identify institutions such as financial analysts and large shareholders (e.g. fund managers) that are capable of acquiring and processing information in such a way that it retains a private or confidential nature.

**Markku Vieru (1998)** reported the empirical findings on the effect of interim earnings announcements in investors' trading behaviour. He found that the trading volume reaction was positively associated with the information content of an announcement.

**Fleming and Remolona (1999)** studied the impact of scheduled macroeconomic news releases on the U.S. Treasury market. They found that the arrival of public information resulted in a two-stage adjustment

process. In the first stage, prices reacted immediately, trading volume dropped, and bid-ask spreads widened. In the longer second stage, volume surged, volatility persisted, and spreads remained wide. Their first-stage results were the same as the NYSE's and Nasdaq's responses to the arrival of public information. The second-stage findings indicated disagreement among investors on the information content of the public announcement.

**Harrison Hong, Terence Lim, and Jeremy C. Stein (2000)**, tested the gradual- information-diffusion model and established three key results. First, once one moved past the very smallest stocks, the profitability of momentum strategies declined sharply with firm size. Second, holding size fixed, momentum strategies worked better among stocks with low analyst coverage. Finally, the effect of analyst coverage was greater for stocks that were past losers than for past winners. These findings were consistent with the hypothesis that firm-specific information, especially negative information, diffused only gradually across the investing public.

**Elizabeth Demers and Clara Vega (2008)** examined the conditions under which management-issued soft information was incorporated in prices. They found that under conditions that induced the provision of informative soft information rather than mere noise (e.g., where stock turnover and analyst scrutiny were high), the market responded more to the surprise net optimism in managerial announcements.

**Kothari S. P, Susan Shu and Peter D. Wysocki (2009)** conducted the empirical tests focusing on two major corporate information events, dividend changes and managerial earnings forecasts. They found that the magnitude of the five-day market reaction to bad new announcements, such as negative dividend changes and pessimistic managerial forecasts, exceeded the good news announcements. In addition, they found evidence that the asymmetric market reacting to good versus bad news varied predictably across firms depending on managers' incentives and opportunities to withhold bad news. However, their overall evidence that the managerial incentives to withhold bad news dominated managerial disclosure behaviour and on average leads managers to withhold bad news and leak good news early.

## TYPES OF CORPORATE ANNOUNCEMENTS

### Financial Results Announcement

**Beaver (1968)** argue that earnings announcements accompanied by high trading volumes and abnormal returns around the announcement window convey more information to investors than announcements which generate low trading volumes and insignificant stock returns.

**Whaley and Cheung (1982)** analyzed the information content of quarterly earnings announcements, which are mandated announcements in the US market, and found

significant stock price changes and abnormal volumes occurring around the date of quarterly earnings announcements.

**Bamber. L (1987)** Stock market reactions represent an average on investors' belief about the firm value and trading volumes indicate investors' behavior on firm shares. Both measures aim at estimating public announcements of information content and information asymmetry. Trading volume is also considered as a measure of stock market liquidity given that it captures the willingness of some investors who hold firm shares to sell, and the willingness of others to buy.

**Ziebart (1990)** studied a sample of 611 earnings announcements of 90 NYSE listed firms. He found that abnormal trading volume was related to the change in the level of investor consensus and the absolute value of the percentage change in the consensus forecast as opposed to the level of prior information.

**Dreman and Berry (DB) (1995)** found the hypothesis that a stock was out of favour, negative news caused little or no change in perception and therefore had little effect on the stock's price. Positive news, on the other hand, did initiate a change in perception, sending the stock's price higher. DB provided evidence that the -earnings surprise hypothesis was valid.

**Asquith, Mikhail and Au (2005)** evaluated the analysts' reports and the market reaction to the release of the reports. The authors found that analysts provided new information and interpret previously released information. In addition, they also found that the market reacts to all of the elements of the report, namely, earnings forecast revisions, recommendation revisions, and price target revisions.

**Engelberg (2007)** examined whether a quantitative measure of negative language in firm-specific earnings news stories could be used to predict firms' future accounting earnings and stock returns. He concluded

that linguistic media content captured otherwise hard to quantify aspects of firms' fundamentals which investors quickly incorporated into stock prices.

**Hsu-Ling Chang, Yahn-Shir Chen, Chi-Wei Su and Ya-Wen Chang (2008)** investigated the relationship between the stock prices and Earnings per Share (EPS) of the electronic firms listed on the Taiwan Stock Exchange (TSEC). They found that the evidence of EPS could affect stock prices, and the -Earnings Information Content<sup>1</sup> existed in the listed electronic industries in Taiwan. It could provide investors or securities analysts a method to predict the variation for stock prices under long-run strategy of investment.

#### **DIVIDEND ANNOUNCEMENT**

**Richardson Pettit. R (1972)** supported the proposition that the market made use of announcements of changes in dividend payment in assessing the value of a security. The importance of these announcements suggested at least two conclusions regarding the rules and regulation of corporate disclosure. First, if the information implicit in the announcement could be conveyed to the market in a different way, the financing alternatives available to the firm would be broader. Second, the use of dividends as an information disseminating device was inefficient since it was an imperfect means of describing the firms' future prospects. Allowing or encouraging the publication of managerial expectations might reduce uncertainty more than the conveying information through changes in dividend.

**Randal Woolridge (1983)** investigates the impact of unexpected dividend changes on the values of common stock, preferred stock, and bonds. He identified two potential effects: a wealth-transfer effect and a signaling effect. The author gave the evidence of previous studies which showed that positive (negative) dividend change announcements produced positive (negative) common stock returns. His findings were attributed to the signaling aspect of dividends and also consistent with a wealth transfer hypothesis. The evidence is confirmed to his results that signaling is the primary factor influencing security prices around dividend change announcements.

**Alex Kane and Young Ki Lee (1984)** evaluated the corroborative relationship between earnings and dividend announcements. In their sample, they found that unexpected dividend and earnings announcements appear to be able to induce abnormal stock returns. They found that there was statistically significant interaction or corroborative effect.

**Kenneth M. Eades, Patrick J. Hess and E. Han Kim (1985)** investigated the stock market rationality by examining the timeliness and unbiased of the market's response to dividend announcements. They observed a significant positive net announcement effect and examined several plausible conjectures for this puzzling phenomenon, but none provided a satisfactory explanation.

**Miller and Rock (1985)** stated that managers knew more about a firm's future cash flow than the shareholders, but there was no such informational asymmetry concerning both the level of planned investment and the value of the firm's assets condition on current cash flow. In their model, the unanticipated decision to issue equity signaled bad news about a company's future cash flows to finance its planned investment, which brought about a negative price response.

**Impson and Karafiath (1992)** narrated the stock market reactions to dividend by focusing on the different reactions to the proportion of increasing and decreasing payout ratio for both dividend increase and decrease announcements. They mainly tested the following two hypotheses. First, they hypothesized that the abnormal returns are positively correlated with dividend changes and negatively correlated with payout ratio changes. Second, they suggested that there are more negative abnormal returns for increase in payout ratio as compared to decrease in payout. Results of their study showed that the share price reaction is not significant when it is associated to dividend increases, whether the payout ratio increases or decreases.

**Mitra and Owers (1995)** discussed the information content of dividend hypothesis by focusing on the relationship between security price reaction to a dividend announcement and the company's information environment. The results indicated that the association of dividend initiation announcements where a highly significant positive CAR of 2.19% with a z statistic of 5.08 during the two day announcement period ( $t = -1, 0$ ) was observed.

**Roni Michaely, Richard H. Thaler, and Kent L. Womack (1995)** studied the immediate and long-term effects of dividend initiation and omission announcements. They reported that the market reaction to a dividend omission announcement was no longer greater than to an initiation for a given change in yield.

The most surprising of their findings concerned the significant long-term drifts following announcements of initiations and especially omissions.

**Scott D. Below and Keith H. Johnson (1996)** found the differential share price reaction to dividend increase and decrease announcements with respect to market phase. The results had important implications for event studies. Based on their findings, good news and bad news were perceived differently with respect to market phase. The confounding influence of market phase on dividend change announcements had obvious implications for research design in dividend studies, especially where clustering was problematic.

## **RESEARCH METHODOLOGY**

### **Research Design**

In this research paper, researcher has used descriptive research design and collected a data and information through open ended questions.

### **Nature of Research Work**

The present study is empirical in its nature.

### **Period of the Study**

The current research study is conducted between the year of 2012-13 to 2018-19.

### **Objectives of the Study**

- 1) To study performance of Indian Banking Sectors in recent times.
- 2) To study the factors variables affecting the selected Banks registered in Indian Stock Market.
- 3) To study effect of EPS on Share market of the selected Banks registered in Indian Stock Market.

### **Formulation of Hypothesis**

H0 (Null hypotheses): Stock split announcement contained information's are relevant for the valuation of stocks.

H1 (Alternative hypotheses): Stock split announcement contained information's are not relevant for the valuation of stocks.

### **Types of Data Collection**

Researcher has collected only secondary data. These data are collected personally, from websites and past research studies.

### **Sample Selection**

The researcher has collected the list of the EPS and Share price during the year 2010-11 and there were 20 Banks that have been selected to study of empirical analysis. There are 10 public banks and 10 Private banks.

### **Sampling Frame**

#### **❖ Public banks**

- 1) State bank of India
- 2) Bank of Baroda
- 3) Bank of India
- 4) Central Bank of India
- 5) Corporation Bank
- 6) Dena Bank
- 7) Indian Bank
- 8) Canara Bank
- 9) Indian Overseas Bank
- 10) Union Bank of India

#### **❖ Private Banks**

- 11) City Union Bank
- 12) Federal Bank

- 13) South Indian Bank
- 14) Axis Bank
- 15) Karurvysya Bank
- 16) HDFC Bank
- 17) ICICI Bank
- 18) Indusland Bank
- 19) Kotak Mahindra Bank
- 20) YES Bank

**Research Tools**

For the testing of hypotheses ANOVA, correlation and regression test has been used through the S.P.S.S.

**DATA ANALYSIS AND INTERPRETATION**

**Table 5.2 ANOVA test of share price of selected banks in India**

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2494623.65	19	131295.9722	23.30379489	0.00	1.618026
Within Groups	450728.116	80	4634.102823			
Total	2945251.89	99				

**INFERENCE:** The above table 5.2 represents the above test of selected banks in India. The test is based on selected variables at significance level of 5% (0.05). From the above analysis it is clear that F value is greater than F- critical value at significant level for all the variables. P – Value of each variables are less o.o5 means null hypothesis is rejected. Enhance There is significant difference in share price of the selected banks registered in Indian stock Market.

**Table-5.3: EPS of Selected Banks**

	NO.	BANKS	2010	2011	2012	2013	2014
<b>P U B L I C B A N K S</b>	1	STATE BANK OF INDIA	144.37	116.07	174.46	206.2	145.88
	2	BANK OF BARODA	83.96	108.33	121.79	106.37	105.75
	3	BANK OF INDIA	33.15	45.54	46.66	46.14	42.45
	4	CENTRAL BANK OF INDIA	24.87	28.15	5.49	8.28	-9.35
	5	CORPORATION BANK	74.78	81.44	101.67	93.82	33.53
	6	DENA BANK	17.82	18.35	22.94	23.15	10.26
	7	INDIAN BANK	35.25	38.95	39.91	35.94	24.37
	8	INDIAN OVERSEAS BANK	12.98	17.33	13.18	6.14	4.87
	9	CANARA BANK	73.69	90.88	74.1	64.83	52.86
	10	UNION BANK OF INDIA	41.08	39.61	32.27	36	26.75
<b>P R I V A T E B A N K S</b>	11	CITY UNION BANK	3.83	5.31	6.87	7.85	6.39
	12	FEDERAL BANK	27.16	34.32	45.41	49	9.81
	13	SOUTH INDIAN BANK	20.69	2.59	3.54	3.75	3.78
	14	AXIS BANK	62.06	82.54	102.67	110.68	132.34
	15	KARUR VYSYA BANK	61.73	38.96	46.81	51.35	40.08
	16	HDFC BANK	64.42	84.4	22.02	28.27	35.34
	17	ICICI BANK	36.1	44.73	56.09	72.17	84.95
	18	INDUSLAND BANK	8.53	12.39	17.17	20.3	26.8
	19	KOTAK MAHINDRA BANK	16.12	11.1	14.65	18.23	19.51
	20	YES BANK	14.06	20.95	27.68	36.27	44.86

Sources: Computed

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**CONCLUSION**

The present study has been undertaken to examine an impact of factors variables on Indian stock market. In which we have examine the impact of EPS on Share price. In this matter of public sector bank, in which the EPS is higher compared to private sector bank. This study investigated that share price of public bank is seen lower as compared to private bank.

The above table 5.2 represents the above test of selected banks in India. The test is based on selected variables at significance level of 5% (0.05). From the above analysis it is clear that F value is greater than F- critical value at significant level for all the variables. P – Value of each variables are less o.o5 means null hypothesis is rejected. Enhance There is significant difference in share price of the selected banks registered in Indian stock Market.

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**CUSTOMER EXPERIENCE AND ITS INFLUENCES ON BEHAVIOR INTENTION****Stanley Vincent G<sup>1</sup> and Dr. Malarmathi K<sup>2</sup>**Research Scholar<sup>1</sup> and Professor<sup>2</sup>, Bharathiar School of Management and Entrepreneur Development (BSMED), Bharathiar University, Coimbatore

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**CUSTOMER EXPERIENCE**

A customer experience is an interaction between an organization and a customer as professed through a customer's conscious and subconscious intellect. It is a blend of an organization's lucid presentation, the senses stimulated and the emotions evoked and spontaneously measured against customer expectations across all moments of contact. It is used to describe the relationship a customer has with a business. Customer experience refers to the total of all experiences the customer has with the business, based on all interactions and thoughts about the process. Customer experience is an integral part of customer relationship management. It is important to business because customers who have a positive experience are most likely to become repeat customers and loyal customers of the business.

**Customer Experience and Behavior Intention in Retail Outlets**

Verhoef et al. (2009), customer experience influence the shopping process from early formation of expectations to post-purchase evaluation of a consumption situation. Along similar lines, Gentile et al. (2007) stress that customer experience results in a perception of value that determines preference for a brand/company. If perception of value is constructive as a result of a expensive experience, customers will be more loyal and less price elastic (Schmitt, 1999).

Van Doorn et al.(2010) and Verhoef et al.,(2010) depicted customer engagement in terms of behavioral perspective, defining the term as customer's behavioral manifestations toward products and services that goes beyond purchase, arising from motivation drivers.

**OBJECTIVES OF THE STUDY**

1. To analyze the determinants of customer experience with respect to the retail outlets.
3. To determine the influences of customer experience on behavior intention.
4. To establish interdependence between customer experience and behavioral intention dimensions.
5. To construct a relevant model through "Structural Equation Modeling-SEM."

**CONCEPTUAL FRAMEWORK****PE: PRAGMATIC EXPERIENCE**

Pragmatic experience is an experience resulting from the functional activity of the retailer. It is a desired experience for those consumers who value functionality, utility, financial value and who do not consider to the aesthetics, blueprint or societal context in which the purchase takes place. This consumer is a shopper who is not guided by his emotions. (Alba, J.W. and William, E.F. 2013).

**SE: SOCIAL EXPERIENCE**

The social Experience of customer experience is based on the Quality and intensity of the relationships that can arise between the individual's ideal, the "Self" and other people with whom he/she interacts. It is interpreted as the individuals' relationship with a broader social system, where relationships with the members who compose the system can be established with different degrees of strength (Ouwersloot and Odekerken, 2008).

**SSE: SENSORY EXPERIENCE**

The sensory marketing is defined as 'marketing that engages the consumer's five senses and affects their perceptions, judgments and in turn behaviors (Krishan A. 2013). Retail atmosphere literature has identified experiences that customers perceive by the senses of somato sensation, olfaction, hearing, sight and taste. These sensory experiences are caused in retail environments by a variety of stimuli encountered by the customers. (Herm .S. 2013, Helkkula. A. 2011)

**IED & IEE: INTELLECTUAL EXPERIENCE THROUGH DESIGN AND EMPLOYEES**

Intellectual experiences are associated to thinking and conscious mental processes to get consumers to use their imagination or problem solving so that they review a product. This type of experience occur when the retailer's merchandising strategy (intellectual experience through design) and/or communication with employees

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(intellectual experience with employees) help to inspire customer curiosity and invite them to think and to imagine. (Albretch, C.M., Hattula, S., Borneman, T. and Hoyer, W.D. 2016)

### **HYPOTHESIS**

The following hypotheses are included in the study to fulfill the research objectives

Ho1: The Pragmatic experience influences customer experience in the retail outlet.

Ho2: The Social experience influences customer experience in the retail outlet.

Ho3: The Sensory experience influences customer experience in the retail outlet.

Ho4: The Intellectual experience through design influences customer experience in the retail outlet.

Ho5: The Intellectual experience with employees influences customer experience in the retail outlets.

Ho6: The customer experience influences Behavioral intention of the customers in the retail outlets.

### **SIGNIFICANCE OF THE STUDY**

When customers go to the store, they want to fully enjoy the activity of shopping. Retailers must consider how the stimulus activates good experiences and memory through interesting or relevant content. It is important to engage customers in a retail store and stimulate positive emotions. The product is not the end or goal of the customer-firm relationship. Rather it is a means by which retailers provide their customers with experiences throughout the various channels for commercialization of supply and social interaction. Most importantly, the attributes offered by the store need to apply the concept of “experience space” which focuses on customer involvement and personal interaction and allows customers to play an active role in generation a unique customer experience, which in turn initiates and encourages customer engagement in the store.

### **REVIEW OF LITERATURE**

**Moller, J. and Herm, S. (2013)**, investigated that Customer experiences play an important role in retail brand management. This research investigates how bodily experiences in retail environments influence customers' perceptions of retail brand personalities. They found a metaphor-specific transfer of experiences to retail brand personality perceptions (on the dimensions “ruggedness” and “warmth”). Further the study reveals mechanism behind the effect and demonstrates concept activation elicited by bodily experiences in customers' minds.

**Kaul (2014)**, The study identifies the determinants of customer experience in lifestyle retail and measures the relationship between predictor variables, customer experience, customer satisfaction and loyalty. The study suggest that customer experience mediates the relationship between all antecedent variables such as merchandise, store image, corporate citizenship, convenience, store image and customer satisfaction. According to the researchers if the shopper had a good shopping experience at the store, they will feel more satisfied and hence it will lead to customer loyalty towards the retail.

**Sachdeva and Goel (2015)**, emphasized that shopping experience is a process which includes more than just buying goods or services as what customer remember about shopping experience is defined by the mood, feelings and intensity of emotions created while shopping. Therefore, both utilitarian and hedonic experiences contribute in overall consumption experiences.

**Atulkar and Kesari (2016)**, conducted an empirical research to measure the shopping experience of 366 hypermarket shoppers on weekends in Bhopal city. The results of the study revealed that five out of six dimensions such as emotional attachment, uniqueness, enjoyment, comfort, and impulsiveness positively influenced the shopping experiences of the shoppers whereas, social interaction does not have any significant impact on the customer shopping experiences.

**Silvia Cachero-Martínez, Rodolfo Vázquez-Casielles (2017)**, the authors have developed a shopping experience scale that includes six dimensions: sensory, social, pragmatic, intellectual through design and employees and emotional. The study also reveals that in some sectors like jewelry and book store the emotional experience predominates. Similarly emotional experience can be linked o pragmatic experience in sports, decoration and toy sectors. The tasks of the retailer are to enhance the imagination, creativity and arouse the curiosity.

**Brodie et al., (2011)**, behavioral intention is defined by multidimensional constructs and seems to dominate customer experience in the literature. The author also aggregates that the multiple ways of customer behavior beyond may influence the store loyalty.

**Gummerus et al., (2012)**, suggested that Customers engage in a number of behaviors that strengthen their relationship with the product, company, or brand that go beyond mere purchasing behavior including also word-of-mouth (WOM), recommendations, cross-buying, and active voice/complaints.

**Reimers (2014)**, through their study provided 25 tools prepared from the literature of convenience and empirically tested by retailers so that they can help their customers in saving time and effort. The most commonly used attribute in the literature of convenience is parking which was ranked 8th by the respondents in terms of level of convenience and the attributes that the respondents perceived offering greater convenience were air conditioning, product return and checkout, payment options, etc.

**RESEARCH GAP**

One of the first research papers to show the importance of the “experiential view” for customer behavior was Holbrook and Hirschman (1982). While customer experience has received substantial theoretical development, little attention has been given to measuring customer experience in service research (Lipkin, 2016). While customer experience and service experience are often used interchangeably in service research (Klaus and Maklan, 2012), the terms differ .Whereas service experience is limited to the actor experiencing the service, customer experience encompasses direct and indirect customer contacts with the experience provider (e.g. brand, store).

**RESEARCH METHODOLOGY**

**RESEARCH DESIGN**

The Research design applied for this study is a Descriptive Research Design.

**SAMPLING AREA**

Area of Study for the research work is Chennai city.

**SAMPLING TECHNIQUE**

Sampling technique adopted for this study is purposive sampling technique.

**SAMPLE SIZE**

The required sample size is 384.

**DATA SOURCE**

The primary data was collected by the researcher, through a structured questionnaire, which is used for all the analysis in the study, and out of which the findings and inferences are made. Secondary data was also used for the purpose of collecting the industry profile of retailers, customer experience, customer engagement and the census report. It was collected from Journals, books; magazines survey reports, authentic websites, etc.

**VARIABLES USED FOR SETTING THE QUESTIONNAIRE AND THE SOURCE**

VARIABLES	SOURCE
<b>Customer Experience</b>	
Social experience	Moore and Moore (2005) . Hu & Jasper (2006) , Pan and Zinkhan (2006)
Pragmatic Experience	Cachero.S.M.,Vazquez.C.R.(2017), Schmitt.B.H.(1999)
Sensory Experience	Schmitt.B.H.(1999), Barkus et a.(2009)
Intellectual Experience through design	Cachero .S.M. , Vazquez .C.R. (2017), Barkus et al( 2009 ),
Intellectual Experience with employees	Cachero .S.M. , Vazquez .C.R. (2017), Barkus et al(2009)
<b>Behavioural Intention</b>	Zeithaml, V., Berry, L.& Parasuraman, A. (1996); Bloemer, J., Odekerken-Schröder, G. & Kestens, L.(2003)

**PILOT STUDY**

Pilot Study was conducted with a sample size of 80 respondents.

**RELIABILITY**

Reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure.

**RELIABILITY TEST**

VARIABLES	CRONBACH ALPHA	NO.OF ITEMS
Customer Experience	.849	35
Behavioral Intention	.782	11
	Total	46

As the Cronbach alpha value is more than 0.7 in all the cases, there is high reliability. Hence there is consistency in the measures.

**DATA ANALYSIS AND INTERPRETATION**

**CONFIRMATORY FACTOR ANALYSIS FOR CUSTOMER EXPERIENCE**

The first CFA examined the factor structure of customer experience instrument. Based on the several model fit indicators, the customer experience measurement model demonstrated good fit.

**FIT STATISTICS OF THE CFA**

Fit statistic	Recommended	Observed Values
Chi- square ( $X^2$ )	-	174.247
$X^2/df$	Less than 5.0	174.247/67= 2.601
Goodness of Fit (GFI)	Greater than or equal to 0.90	0.900
Adjusted goodness of Fit index (AGFI)	Greater than or equal to 0.90	0.902
Normed Fit index (NFI)	Greater than or equal to 0.90	.852
Incremental Fit Index (IFI)	Greater than or equal to 0.90	.905
Comparative fit index (CFI)	Greater than or equal to 0.90	.900
Tucker- Lewis Index(TLI)	Greater than or equal to 0.90	.844
Root Mean Square Error of approximation (RMSEA)	Less than .08	.065
P Close		.021

The Chi-Square to degree of freedom fit index with a value of 2.601, CFI with a value of 0.900, GFI with value of 0.90, AGFI 0.902 crossed the threshold indicating a good model fit. Additionally RMSEA was 0.065 and p close was 0.021. CFA model is shown in figure.

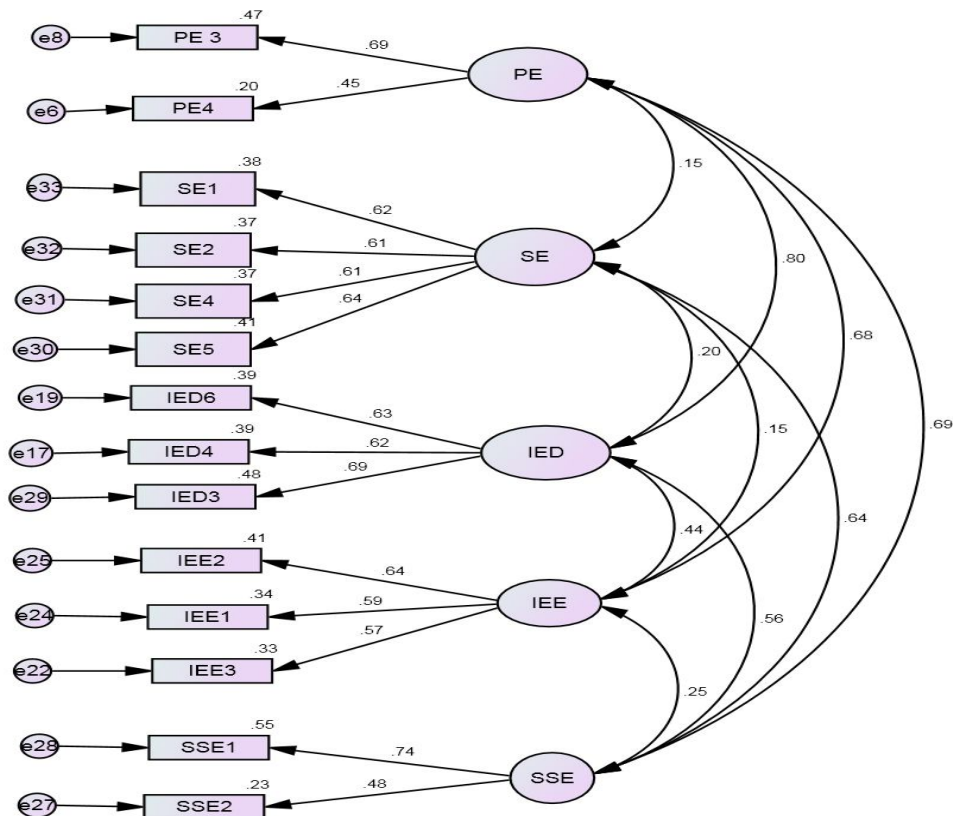
CFA was also used to estimate reliability, discriminant and convergent validity. Construct reliability co-efficient was 0.95 which was above the threshold limit of 0.70. (Chen & Hitt 2002).The standardized factor loading of above items ranged from 0.621 to 0.924. Similarly AVE value was 0.69. Hence it can be concluded that the convergent validity of the established factor was satisfactory. The internal reliability value given in table indicated how strong the measuring items are holding together in measuring the construct for all the four factors, the value of Cronbach’s Alpha exceeds 0.7. Comparing AVE with the squared correlation it can be observed that the maximum squared value of 0.0.64 and average squared of 0.263 was lower than AVE value of 0.69 indicating good discriminant validity (Fornell & Larcker 1981).

**FACTOR LOADING, AVE, CR, MSV & ASV FOR CUSTOMER EXPERIENCE**

Construct	Items	Estimate	Cronbach alpha	AVE	CR	MSV	ASV
Customer Experience				0.69	0.95	0.64	0.263
	<b>Pragmatic Experience</b>		0.721				
	The store updates periodical incorporating the latest product version	0.834					
	I get quality products at a good price in this store	0.687					
	<b>Social Experience</b>		0.715				
	I advise customers who ask my opinion on this store’s product and service	.814					
	I ask the opinion of customers who shop at this store	0.637					

	I interact with the customers who visit the store	<b>0.84</b>				
	I consider myself as a member of the community of customers who shop at this store	<b>0.824</b>				
	<b>Intellectual Experience Through Design</b>		<b>0.709</b>			
	The store has a pleasant entry (spacious and inviting)	<b>0.693</b>				
	Sections design stimulates shopping experience and interacting with the product	<b>0.621</b>				
	Communication materials (display) stimulates imagination ,thought and creativity consumer	<b>0.627</b>				
	<b>Intellectual Experience Through Employees</b>		<b>0.783</b>			
	Employees are always willing to help (provide information, support to decision making) and answer all questions	<b>0.854</b>				
	Employees have great knowledge of what they sell and the experiences that the products provide.	<b>0.824</b>				
	There are enough employees to offer personalized service and explain the experiences provided by the use of the product.	<b>0.638</b>				
	<b>Sensory Experience</b>		<b>0.789</b>			
	I advise customers who ask my opinion on this store's product and service	<b>0.924</b>				
	I ask the opinion of customers who shop at this store	<b>0.744</b>				

**CFA MODEL FOR CUSTOMER EXPERIENCE**



**CONFIRMATORY FACTOR ANALYSIS FOR BEHAVIOURAL INTENTION**

The first CFA examined the factor structure of behavioral intention instrument. The 1<sup>st</sup> step of CFA was used to assess the fit of 4 latent variables measured with 11 observed variables. Based on the factor loading 10 items were retained as only these got a factor loading above 0.5. Based on the several model fit indicators, the behavioral intention measurement model demonstrated good fit.

**FIT STATISTICS OF THE CFA**

Fit statistic	Recommended	Observed Values
Chi- square ( $X^2$ )	-	102.651
$X^2/df$	Less than 5.0	102.651/29=3.549
Goodness of Fit (GFI)	Greater than or equal to 0.90	.900
Adjusted goodness of Fit index (AGFI)	Greater than or equal to 0.90	.911
Normed Fit index (NFI)	Greater than or equal to 0.90	.919
Incremental Fit Index (IFI)	Greater than or equal to 0.90	.941
Comparative fit index (CFI)	Greater than or equal to 0.90	.939
Tucker- Lewis Index(TLI)	Greater than or equal to 0.90	.912
Root Mean Square Error of approximation (RMSEA)	Less than .08	.071
P Close		.001

The Chi-Square to degree of freedom fit index with a value of 3.549, CFI with a value of 0.939, GFI with value of 0.900, AGFI 0.911 crossed the threshold indicating a good model fit. Additionally RMSEA was 0.071 and p close was 0.001. CFA model is shown in figure.

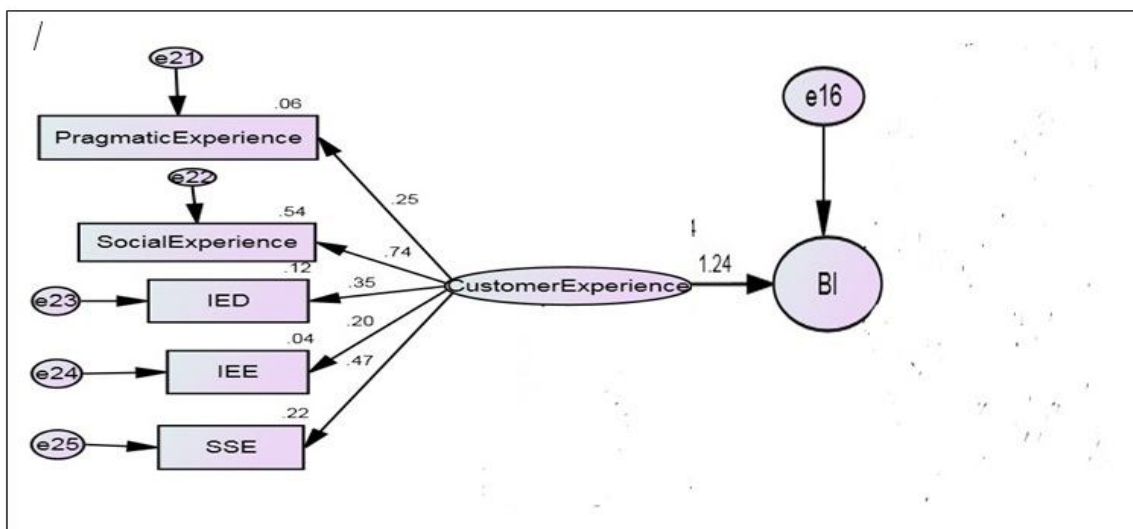
CFA was also used to estimate reliability, discriminant and convergent validity. Construct reliability co-efficient was 0.93 which was above the threshold limit of 0.70. (Chen & Hitt 2002).The standardized factor loading was above 0.5 in all the cases except one. Similarly AVE value was 0.6. Hence it can be concluded that the convergent validity of the established factor was satisfactory.

The internal reliability value given in table indicated how strong the measuring items are holding together in measuring the construct for all the four factors, the value of Cronbach’s Alpha exceeds 0.7. Comparing AVE with the squared correlation it can be observed that the maximum squared value of 0.249 and average squared of 0.13 was lower than AVE value of 0.6 indicating good discriminant validity (Fornell & Larcker 1981).

**ASSESSING THE OVERALL MEASUREMENT MODEL FITNESS**

The result shown in table provides a quick over view of the model fit , which includes the chi-square value (189.63) , together with its degree of freedom 63 and probability value of .000. In SEM relatively a small Chi-square value supports the proposed theoretical model being tested. In this model Chi- Square is small when compared to the value of the independence model as given in Table. Hence Chi-square value is good. For the current model, the value for Chi-square value / by Degree of freedom is 3.01, suggesting an acceptable model fit. It is recommended that this metric does not exceed five for models with good fit. (Bentler,1990).

**SEM MODEL USING AMOS**



**MODEL FIT ASSESMENT**

**MODELS FIT STATISTICS OF THE MODEL**

Fit statistic	Recommended	Observed Values	Criteria Met
Chi- square ( $X^2$ )	-	189.63	Yes
$X^2/df$	Less than 5.0	3.01	Yes
p-value	Greater than 0.05	.000	Not met
Goodness of Fit (GFI)	Greater than or equal to 0.90	0.901	Yes
Adjusted goodness of Fit index (AGFI)	Greater than or equal to 0.90	0.900	Yes
Normed Fit index (NFI)	Greater than or equal to 0.90	0.900	Yes
Incremental Fit Index (IFI)	Greater than or equal to 0.90	0.937	Yes
Comparative fit index (CFI)	Greater than or equal to 0.90	.0935	Yes
Tucker- Lewis Index(TLI)	Greater than or equal to 0.90	0.903	Yes
Root Mean Square Error of approximation (RMSEA)	Less than .08	.058	Yes
P close	Greater than 0.05	.067	Yes

Table indicates the model fit criteria values. The overall fit indices for the proposed model were acceptable, with a  $\chi^2$ -to-df ratio equal to 3.01, CFI equal of 0.935, GFI was 0.901, AGFI was 0.900, RMSEA was 0.058 and PCLOSE was .067. Each and every criteria except p value satisfy the model fit condition for the research study. However the absolute fit index of minimum discrepancy chi-square significant value can be ignored if the sample size obtained for the study is greater than 200 (Hair et al., 1996 ; Joreskog and Sorbom,1996). All the observed variables displayed in the above table substantiates it. Hence it can be concluded that model is of good fit.

**Hypothesis Test Result of the Model**

HYPOTHESIS	TEST RESULT
Ho1: There is a positive relationship between customer experience and behavior intention.	Supported
Ho2: The Pragmatic experience influences the customer experience	Supported
Ho3: The Social experience influences the customer experience	Supported
Ho4: The Sensory experience influences the customer experience	Supported
Ho5: The Intellectual experience through design influences the customer experience	Supported
Ho6: The Intellectual experience with influences customer experience	Supported

**RECOMMENDATIONS**

The results of the study are expected to be valuable for practitioners seeking to improve customer relationships, retention and loyalty. Social and sensory experiences are more valuable to the retailers than pragmatic experiences. When customers go to the store, they want to fully enjoy the activity of shopping. Engaging customers in a retail store requires stimulating positive emotions. Service providers should thus manage stimuli in the store to create pleasant environments that produce good moods, happiness, and optimism in their customers. Emotional experience can be augmented with intellectual experiences. Using a pleasantly designed store to facilitate product display, arouse curiosity and invite product test. The study reveals that consumer perceive the buying process as an experience by which they analyze the assortment of the products from their own as well as others point of view. They are able to socialize and access information offered by the retailer through social network. The practitioner must look into the temperature, cleanliness and good condition rather than lighting, color of walls, music and the smell which is not important to the customers. Stimulating consumer curiosity, creativity and imagination in store can cause good customer experience. The results of the study also provide guidance to the managers for segmenting according to customer experience and the types of behavior they display. The managers need not to waste their time and resources on non-prone or unengaged customers. They can rather concentrate on those customers who exhibit more loyalty outcome. The research clearly indicates that the product is not the end or goal of the customer-firm. The product is not the end or goal of the customer-firm. Rather it is means by which the retailers provide their customers with experiences throughout the various channels of commercialization.

**CONCLUSION**

This study strengthens the idea that the consumer is a social being. For him the experience that he gets from interacting with others consumers, employees, and the environment is important. Retailers must know how to manage these varied experiences and benefit out of it. Companies need to do more than just offer a good product or a good location. To be successful and given the current competitive intensity they have to differentiate themselves from their competitors, and managing customer experience offers a great opportunity to do this. The researcher has developed a complete, precise and robust tool that enables the retailer to analyze the individual customer role in each component. The different combination of these experiences can lead to maximization of experiential –level decision and thus improve the purchase behavior in the retail store.

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**SELF CONTROL OF ADOLESCENTS ON THEIR ACADEMIC ACHIEVEMENT**

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**ABSTRACT**

A sample of 160 students of Rohtak district of Haryana state was selected randomly. The sample was administered through self control scale developed and standardized by Singh and Gupta. Mean, Standard Deviation (S.D), SED, t-test were used for analysis and interpretation of the data. The findings of the study revealed that a) high self-control adolescents are more academic achiever than low self control adolescents. b) High self-control male and female adolescents are similar in their academic achievement. c) High self-control rural and urban adolescents are similar in their academic achievement. d) Low self-control male and female adolescents are similar in their academic achievement.

*Keywords: Self Control, Academic achievement and Adolescents.*

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**SELF CONTROL**

Self-control separates us from our ancestors and the rest of animal kingdom, thank our large prefrontal cortex. It is the ability to undue our impulses in order to achieve longer-term goals. Rather than responding to immediate impulses, we can plan, evaluate alternative actions, and often enough, avoid things we'll later regret. The ability to exert self-control is typically called willpower. It is what allows us to direct our attention, and it underlies all kinds of achievement. There is significant evidence that exercising willpower makes heavy demands on mental energy, notably on reserves of glucose, the brain's preferred fuel, creating ego depletion. The importance of self control patterns that require delay of gratification has been widely accepted by psychologist Freud to the present era so the concept of voluntary postponement of gratification for the sake of more distant, long term gains is fundamental for conceptualization of complex human behavior by late childhood and early adolescence, self-control becomes a vital component of the self-concept, a matter of personal commitment and responsibilities.

**Rothbaum (1982)** "self-control is defined as one's capacity to change and adapt the self to identify the ideal fit between self and the world."

**Hirschi (2004)** defines self-control as the tendency to an individual to consider a broad range of consequences for a particular behavior.

**Mehta (2010)** self-control is one of the strongest and most useful components of human evolution and is defined as one's capacity to change and adapt the self to identify the fit between self and the world (Rothbaum, Weisz, & Snyder, 1982).

Self-control is also treated as one's ability to suppress or change intrinsic reactions and one's capacity to impede and restrain from exhibiting undesired behavioral tendencies (Tangney, Baumeister, & Boone, 2004).

**SELF-CONTROL CAPACITY**

To assess students' self-control capacity as individual differences variable, we used a 25-item scale developed by Bertram and Englert (2013). This scale was originally adapted from the German version of the state Self-control capacity scale (English original original: Ciarocco et al., 2007; Bertram et al., 2011), a state measure that has been shown to be sensitive to situational fluctuations in self-control capacity. In the present study, the student's when asked to choose for each of the statements the answer that applied to them in general to them in general. A sample item is "When I am tempted by something, it is very difficult to resist" (reversely coded). Participants made their responses on a 4-point scale with the labels almost never (1), sometimes (2), often (3), and almost always (4). We administered the self-control capacity scale on both times of measurement, in order to ascertain its test-retest reliability. As can be seen in table 1, the measure demonstrated satisfactory test-retest reliability over a period of 5 months, as high inner consistencies at both times of measurement. The scale was reliable and depicted relatively stable individual differences. Moreover, prior research (Bertram and Englert 2013) and further pretesting yielded evidence for the convergent and divergent validity of the self-control measure.

**ACADEMIC ACHIEVEMENT**

Academic – the academic has been derived from 'academy' which means a school special types of instructions are imparted.

Achievement- achievement means knowledge attained or skill developed by pupils usually in subjects, measured by test scores or the degree of success in any task.

An academic achievement is something you do or achieve at school, college or university, in class, laboratory, library or field work. Academic achievement may be called as “competence of students shown in school subjects for whom they have taken instructions.” It helps in carrier of the individual and planning for future education. It encourages the students to work hard and learn more. Academic achievement plays a significant role in almost all aspects of human life. As in science, technology and agriculture, generally, the students are binge selected or differentiated in the school on the basis of their academic achievement. A good academic record of students is an index of an effective educational system.

The phrase ‘academic achievement has been derived from the word academy’. The meaning of term academy is a school where special types of instruction are imparted. Achievement is synonymous with accomplishment of proficiency as performance. Higher achievement in education facilities better adjustment of pupil teachers. It play a vital roe or importance in almost all walks of life science, medicine education, literature etc.

Academic Achievement means,” Knowledge attained skill developer in the school usually designated by test score or my marks assigned by teacher or both.”

**According to Traw (1960),**”Academic achievement is the attained ability or degree of competence in school tasks usually as measured by standardized test and expressed in age or grade units based on norms derived from a wide sampling pupils.”

**Kumari (2011)** Defined Academic Achievement as the sum of total information gained after completing a caution (partially or fully) in a particular grade that he has obtained on an achievement test.

**According to Amerjan (1981),**”Academic achievement is dependent variable resulting from the dynamic interaction of at least three major groups of variable viz. socio exosmic variables educational variables and public variables. A biological and health variable also has strong influence on academic achievement of child.”

### **JUSTIFICATION OF THE STUDY**

Adolescent age is full of storms. It is the time when personality of the adolescents takes its final shape. The tremendous energy in adolescent age keeps the young ones engaged in activity or the other. The adolescents at this stage have to learn to maintain balance both internally and externally to emerge as a balanced human. Self control emerges as one of the major factors that determine the personality pattern in adolescents at this stage. The period of Matriculation demands more self-control in order to maintain equilibrium in the word of studies and world of play. Constant efforts are required by the adolescents in the field of academics to gain good scores which contribute to better academic achievement and selection in better curses for higher studies. This is only possible by exercising proper self-control by being dedicated to studies.

The present study has been undertaken by the researcher to know how the self-control strategies influence the academic achievement in adolescents

### **OPERATIONAL DEFINITION OF THE TERM**

#### **SELF-CONTROL**

Self-control is the ability to control feeling and desire in difficult situations.

#### **ADOLESCENT**

Adolescence (from Latin: adolescere smearing “to give up”) is a transitional stage of physical and mental human development generally occurring between puberty and legal adulthood (age of majority), but largely characterized as beginning and the ages of 13 and 19.

#### **ACADEMIC ACHIEVEMENT**

Academic achievement refers to the academic performance of the adolescents measured in terms of total marks obtained by the subject in annual examination of 10<sup>th</sup> class.

### **OBJECTVES OF STUDY**

1. To find out difference of high self-control and low self-control adolescents on their academic achievement.
2. To find out difference of high self-control male and female self-control adolescents on their academic achievement.
3. To find out difference of high self-control rural and urban adolescents on their academic achievement.
4. To find out difference of low self-control male and female adolescents on their academic achievement.

5. To find out difference of low self-control rural and urban adolescents on their academic achievement.

### **HYPOTHESES OF STUDY**

1. There exists no significant difference between high self-control and low self-control adolescents on their achievement.
2. There exists no significant difference between high self-control male and female adolescents on their achievement.
3. There exists no significant difference between high self-control rural and urban adolescents on their achievement.
4. There exists no significant difference between low self-control male and female adolescents on their achievement.
5. There exists no significant difference between low self-control rural and urban adolescents on their academic achievement.

### **DELIMITATIONS OF THE STUDY**

1. The study was delimited to 160 students only.
2. A sample was drawn from eight schools of Rohtak district only.
3. Study was delimited to the adolescents between age group 13 to 18 years.

### **REVIEWS RELATED TO SELF CONTROL**

**Aileen (2017)** A two-way repeated ANOVA revealed that university students in the willpower strengthening group reported significantly higher levels of resilience and self-control, and high rate of compliance reported by student to the exercises as per instructions (i.e. every hour, for six hours per day, over seven days) supports the feasibility of using willpower strengthening exercises in programs aimed at increasing resilience.

**Jerzy Osinski et al. (2017)** On the basis of literature on delay discounting, potential mechanisms of relations between self-control and altruism are considered. The discussed possibilities are: cause-and-effect relationship (self-control enabling sacrificing immediate benefits caused by selfish behavior in favor of future benefits associated with altruism, e.g. reciprocation), common mechanism (ability to learn behavioral patterns covering longer time periods) role of intelligence as a factor related both to self and construal level theory). Relations between described perspectives are pointed out, and directions for further research are suggested.

**Alexander et al. (2017)** Studied on "it's time: A meta-analysis on the self-control-deviance link substantial empirical support was found for the main argument of self-control theory and on the Trans disciplinary link between self-control and measures of crime and deviance. In contrast to Pratt and Cullen, but consistency with theory, the effect from cross-sectional versus longitudinal studies did not significantly differ. There was no evidence of publication bias.

### **REVIEWS RELATED TO ACADEMIC ACHIEVEMENT**

#### **Pappattu & Vanitha (2017)**

This research is under taken with a view to examining the family environment and its effect on academic achievement in science among secondary school students with a sample size 300 from 8 schools of palakkad district. Normative server method is used. The study concluded that there doesn't exist any relationship between family environment factors and achievement in science skills among secondary school students.

**Singh (2016)** The investigators has used the of students test (2006) Hindi version, Academic Achievement scores of students at 11<sup>th</sup> level as noticed in the gazette by HP board of school education, Dharamshal and Hindi version of SARASIN'S TEST ANNETERY sample consists of 50 OBC students from urban and rural areas of district Ballarpur of Himachal Pradesh, were selected randomly. The data was analyzed by using Mean, S.D. and t-ratio. The finding of study revealed that urban and rural students do not differ at their intelligence level, Anxiety level and academic achievement.

**Kaur (2016)** The result of the study showed that there was no significant relationship exists between internet addiction between boys and girls also no significant difference found between internet addiction and academic achievement for boys but there exist positive relationship between addiction and academic achievement for girls.

### **METHODOLOGY**

In the present study, Descriptive survey method was employed

**SAMPLE**

In over to achieve the objective stated earlier and to test the corresponding hypotheses, district Rohtak, Haryana state was planned.

**VARIABLES**

Self control and academic achievement

**STATISTICAL TECHNIQUES USED**

The statistical techniques were employed to concise picture of the data, so that it can be easily comprehend . It was employed to test the hypotheses in the study. Mean, S.D., S.Em , t-value and coefficient of correlation were calculated in the present study.

**DATA ANALYSIS AND INTERPRETATION**

**HYPOTHESIS:1.** There exists no significant difference between high self-control and low self-control adolescents on their academic achievement.

**Table-1: Showing the table High control and low self-control Mean, SD, SEd, t-value.**

Level	N	M	SD	SDd	t-value	Level of significance
High self-control	94	363	55.00	9.42	3.74	0.01
Low self-control	66	359.26	61.18			

**P>0.5=1.98, p>0.01=2.61 at df.158.**

**HYPOTHESIS:1.** Above table value shows that obtained t-value (3.74) is grater than the table value at both level of significant i.e. 0.05 (1.98) and 0.01 (2.61) at df. 158. Hence the null hypothesis, “There exists no significant difference between high self-control and low self-control adolescents on their academic achievement.” **has been Rejected .”** it may conclude that high self-control adolescents are more similar academic achiever than low self control adolescents.

**HYPOTHESIS:2.** There exists no significant difference between high self control male and female adolescents academic achievement.

**Table-2: Showing the table high self-control male and female mane, SD, SEd, t-value.**

Level	N	M	SD	SEd	t-value	Level of significance
High self-control male	51	360.07	50.07	9.63	0.173	Null
High self-control female	43	362.42	45.91			

**P<0.05=1.99,p<0.01=2.63 at df. 92**

**HYPOTHESIS:2.** Above table value shows that obtained t-value (0.173) is less than the table value at both level of significant i.e. 0.05 (1.99) and 0.01 (2.63) at df. 94. Hence the null hypothesis, “there exists no significant difference between high self-control male and female adolescents on their academic achievement.” **has been Accepted.** “It may conclude that high self-control male and female adolescents are similar in their academic achievement.

**HYPOTHESIS: 3.** There exists no significant difference between high self-control rural and urban adolescents on their academic achievements.

**Table-3: Showing the table high self-control rural and urban mean, SD, SEd, t-value.**

Level	N	M	SD	SEd	t-value	Level of significance
High Self-control Rural Male	23	369.2	53.81	16.57	0.70	Null
High Self-control Urban male	28	357.5	64.57			

**P<0.05=1.68,p<0.01=2.68 at dt. 49**

**HYPOTHESIS: 3.** Above table value shows that obtained t-value (0.70) is less than the table value at both level of significant i.e. 0.05 (1.68) and 0.01 (2.68) at df. 49. Hence the null hypothesis, “There exists no significant difference between high self-control rural and urban adolescents on their academic achievement.” **has been Accepted.** “it may conclude that high self-control rural and urban adolescents are similar in their academic achievement.

**HYPOTHESIS: 4.** There exists no significant difference between low self-control male and female adolescents on their academic achievement.

**Table-4: Showing the low self-control male and female mean, SD, SEd, t-value**

Level	N	M	SD	SEd	t-value	Level of Significance
Low self-control Male	29	361	68.31	15.84	.460	Null
Low Self-control Female	37	353.70	57.8			

**$P < 0.05 = 2.00, p < 0.01 = 2.66$  at df. 64**

**HYPOTHESIS: 4.** Above table value shows that obtained t-value (0.460) is less than the table value at both level of significant i.e. 0.05 (2.00) and 0.01 (2.66) at df. 64. Hence the null hypothesis, “there exists no significant difference between low self-control male and female adolescences on their academic achievement.” **Has been accepted.** “it may conclude that low self-control male and female adolescents are similar in their academic achievement.

**HYPOTHESIS: 5.** There exists no significant difference between low self-control rural and urban adolescents on their academic achievement.

**Table-5: Showing the table low self-control rural and urban mean, SD, SEd, t-value.**

Locale	N	M	SD	SEd	t-value	Level of significance
Low self-control Rural	42	365.32	61.32	16.49	0.78	Null
Low self-control Urban	24	352.38	66.21			

**$P < 0.05 = 2.00, p < 0.01 = 2.66$  at df.64**

**HYPOTHESIS: 5.** Above table value shows that obtained t-value (0.78) is less than the table value at both level of significant i.e. 0.05 (2.00) and 0.01 (2.66) at df. 63. Hence the null hypothesis, “there exists no significant difference between low self-control rural and urban adolescents on their academic achievement.” **Has been Accepted.** “it may conclude that low self-control rural and urban adolescents are similar in their academic achievement.

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## AN IMPACT OF SHGS ON RURAL WOMEN EMPOWERMENT IN BANASKANTHA DISTRICT

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Assistant Professor<sup>2</sup>, B. L. Parikh College of Business Administration, Gujarat**ABSTRACT**

Self Help Group is groups which is consisted by 10 to 20 people. These groups are prepared for social or economic purpose. Majority of the SHGs have one common purpose and that is financial security among its members. SHGs can exist with or without registration. In the present research study, the researcher has applied descriptive research design to identify the position of women empowerment. In the present study, scope of the research is categorized in two categories. First is fictional scope and second is geographical scope which is described about the total geographical areas covered by researcher. The purpose of the study is to study the effectiveness of self-help group in the empowerment of women, to understand the future and present challenges and to make an appropriate suggestions.

Keywords: Self Help Group, Gujarat State, Empowerment of women and Present Challenges.

**INTRODUCTION**

Self Help Group is groups which is consisted by 10 to 20 people. These groups are prepared for social or economic purpose. Majority of the SHGs have one common purpose and that is financial security among its members. SHGs can exist with or without registration.

**Figure-1.1: Journey towards Empowerment.**  
**Journey towards empowerment**



Self Help Group is basically small group of people. The members of SHG face the same problems. They can help to each other and solve their internal problems.

**LITERATURE REVIEW**

(Saroj & Singh, November (2015)): The paper intends to study the role of micro-finance through Self Help Groups (SHGs) in the socioeconomic empowerment of women. The study has been carried out in Ajmer district of Rajasthan covering a sample containing 75 beneficiaries, 4 villages, 8 SHGs and 2 blocks. The study concludes that Socio-economic empowerment has been considered significant for overall development. Women's empowerment is evidently necessary for escalating socio-economic condition of the women in the society. The SHGs enabled women to aware about their rights, entitlements, taking part in various development programs and economic activities for their substantial development. Thus, SHGs made a noteworthy impact on women empowerment.

(Baghel & Shrivastava, November (2015)): This study deals with the understanding of the impact of Self-Help Group (SHG) on the overall socioeconomic development of rural women of Durg district of Chhattisgarh. The

study considered four independent variables Individual Social Indicators, Community Social Indicators, Individual Economic Indicators and Community Economic Indicators to analyze the socioeconomic development of rural women. The study indicates that economic and social indicators have significant positive impact on Socio-economic Development of rural women of Durg. The background of social respect and communication of Individual Social Indicators have a significant impact on Development of women of Durg district of Chhattisgarh.

(Shettar, (Apr. 2015)): This paper makes an attempt to analyze the position of Women Empowerment in India and highlights the Issues and Challenges of Women Empowerment. The study is based on purely from secondary sources. The study reveals that women of India are relatively disempowered and they enjoy a somewhat lower status than that of men in spite of many efforts undertaken by the Government. The study shows that acceptance of biased gender norms by women is still prevailing in the society. The study concludes with a remark that, access to Employment, Education, and Change in Social Structure are only the enabling factors to Women Empowerment.

**RESEARCH DESIGN**

In the present research study, the researcher has applied descriptive research design to identified the position of women empowerment.

**SCOPE OF THE STUDY**

In the present study, scope of the research is categorized in two categories. First is fuctional scope and second is geographical scope which is described about the total geographical areas covered by researcher.

**OBJECTIVES OF THE STUDY**

1. To study the effectiveness of self-help group in the empowerment of women.
2. To understand the future and present challenges.
3. To make an appropriate suggestions.

**HYPOTHESIS**

**H01:** There is no improvement in the economic empowerment index of women through SHGs.

**SAMPLING DESIGN**

**Population of the Present Study**

In the current study, the different talukas of Banaskantha District were randomly selected.

**Sampling Frame**

The sampling frame was selected different talukas of Banaskantha District were randomly selected.

**Sampling Unit**

Different talukas of Banaskantha District were considered as a sample units.

**Sample Size**

In the current study, researcher has selected 50 samples.

**Sample Elements**

The current study is carried out in the selected areas of Banaskantha District.

**Sampling Techniques**

In the present study, researcher has applied convenient sampling techniques.

**Tools of Data Collection**

Researcher has used primary and secondary data. Primary data were collected by questionnaire and secondary data were collected from library, books, research papers etc.

**Analysis and Interpretation of Data**

Researcher has analyzed this data by using SPSS.

**Table-1.1: Objective of Joining SHG**

<b>Prime Motive</b>	<b>Frequency</b>
To develop saving habits	10
To get extra to credit facilities	12
For achieving economic self-reliance	22
For Socio political empowerment and sustenance	06

**Interpretation**

The above table disclosed that out of 50 respondents, 22 respondents joined SHGs for achieving self-reliance, 12 respondents has joined to get extra credit facilities and only 6 respondents joined for social political empowerment and sustenance.

**Table-1.2: Time of Functioning**

Category	frequency
Less than six months	20
One year to three year	20
More than three year	10

**Interpretation**

Table 1.2 revealed that, out of 50 respondents 20 respondents informed that SHG is operating from less than six months.

**Table: 1.3 Frequencies of Meeting and Discussion**

Category	Frequency
Weekly once	15
Fortnightly once	15
Monthly once	20

**Interpretation**

Out of the 50 respondents, 20 respondents meet on monthly basis, 15 respondents meet once in a week and other meet in fortnight.

**Table: 1.4 Impact of Joining**

Impact	Frequency
Increasing Income	10
Increasing in education	15
Better Nutrition	05
Self-Employment	05
Social Awareness	10
Political Awareness	05

**Interpretation**

The above table revealed that out of 50 respondents, 10 have an experience to increasing income, 15 have an experience to increasing in education, 10 have an experience in social awareness.

**Table-1.5: Average Empowerment**

	N	Range	Min.	Max.	Mean	Std. Deviation	Std. Error
SHG (Before)	50	13.1	10.1	20.09	13.11	2.06	0.20
SHG (After)	50	10.8	12.3	22.11	12.22	1.78	0.17

Source: Primary Data

**Table-3: Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	After	21.30	50	2.620	.1102
	Before	14.74	50	3.056	.1211

**Table-4: Paired Samples Test**

Economic Empowerment Index of SHG Member	Paired Differences	t	df	Sig. (2-tailed)					
					Mean	Std. Deviation	Std. Error Mean	99% Confidence Interval of the Difference	
								Lower	Upper
After - Before	4.228	1.003	.041	2.174	3.444	22.57	49	.000*	

**Interpretation**

The above null hypothesis is rejected and alternative hypothesis is accepted.

**CONCLUSION**

The involvement of women in SHG play very significant role and with the involvement in SHG they can raise their income level, savings, and empowerment. Self Help Group is one of the important activities through which women can empower their inner qualities such as, leadership skills, decision making power, utilities and other skills. Women can also improve their standard of living and develop their skills.

In this research paper, researcher concludes that SHGs always help to increase moral, skills, living standards etc.

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**DEMONETIZATION: AN OPPORTUNITY TO CURTAIL BLACK MONEY AND ENCOURAGE DIGITAL PAYMENTS**

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**ABSTRACT**

*Demonetization is gaining wide attention by government, organizations, employers and media because financial corruption shatters down the economic, social as well as the political stability of a country and thus affects all the sections of the society.*

*On 8 November 2016, the Government of India announced the demonetization of all 500 and 1,000 banknotes of the Series. The government claimed that the action will resolve the issue of parallel economy and would crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism. The sudden nature of the announcement—and the prolonged cash shortages in the weeks that followed—created significant disruption throughout the economy, threatening economic output but the announcement is for the long term benefit of the country.*

*The Purpose of this study is to analyze the impact of Demonetization on curbing the issue of black money and corruption in the country as well as also to understand its impact on the digital payments and e payment portals and its impact on the Indian economy. The research is based on secondary data with more emphasis on the pragmatic approach to research.*

*Keywords: Demonetization, Corruption, Black money, Indian Economy*

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**1. INTRODUCTION**

Demonetization is the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change of national currency: The current form or forms of money is pulled from circulation and retired, often to be replaced with new notes or coins. Sometimes, a country completely replaces the old currency with new currency.

**BREAKING DOWN 'DEMONETIZATION'**

There are multiple reasons why nations demonetize their local units of currency:

- To combat inflation
- To combat corruption and crime (counterfeiting, tax evasion)
- To discourage a cash-dependent economy
- To facilitate trade

**INDIA'S DEMONETIZATION**

In 2016, the Indian government decided to demonetize the 500- and 1000- rupee notes, the two biggest denominations in its currency system; these notes accounted for 86% of the country's circulating cash. With little warning, India's Prime Minister Narendra Modi announced to the citizenry on Nov. 8 that those notes were worthless, effective immediately – and they had until the end of the year to deposit or exchange them for newly introduced 2000 rupee and 500 rupee bills.

Chaos ensued in the cash-dependent economy (some 78% of all Indian customer transactions are in cash), as long, snaking lines formed outside ATMs and banks, which had to shut down for a day. The new rupee notes have different specifications, including size and thickness, requiring re-calibration of ATMs: only 60% of the country's 200,000 ATMs were operational. Even those dispensing bills of lower denominations faced shortages. The government's restriction on daily withdrawal amounts added to the misery, though a waiver on transaction fees did help a bit.

Small businesses and households struggled to find cash and reports of daily wage workers not receiving their dues surfaced. The rupee fell sharply against the dollar (see chart).

The government's goal (and rationale for the abrupt announcement) was to combat India's thriving underground economy on several fronts: eradicate counterfeit currency, fight tax evasion (only 1% of the population pays taxes), eliminate black money gotten from money laundering and terrorist-financing activities, and to promote a cashless economy. Individuals and entities with huge sums of black money gotten from parallel cash systems

were forced to take their large-denomination notes to a bank, which was by law required to acquire tax information on them. If the owner could not provide proof of making any tax payments on the cash, a penalty of 200% of the owed amount was imposed.

### **ALTERNATIVE FUNDS**

Soon after the announcement, people rushed to buy gold, a demand that drove prices up, in some cases even to a 60% premium, prompting the tax authorities to conduct surveys, according to the Business Standard newspaper. The government emphasized the need to furnish PAN (Indian Permanent Account Number) card details on purchases for accountability purposes, and many jewelry shops that were flouting the norms came under crackdowns. Simultaneously, rumors of a gold ban started to float, which led to agencies ramping up the volume of gold imports – to around 100 metric tons during November, the highest since 2015, as reported by Reuters.

Many Indians switched to alternative payment avenues – a big deal in a country of 1.2 billion with only 25.9 million credit cards and 697 million ATM cards as of July 2016. The biggest gainers were mobile wallet companies that offer ease of transactions through a large network of partners. Alibaba (NYSE:BABA)-backed Paytm saw a sevenfold increase in overall traffic and a 10-fold jump in money added to Paytm accounts. It also saw the number of transactions double to five million a day.

App downloads for Paytm increased by 300%. Paytm rival MobiKwik also saw its app downloads quadruple and a 20-fold increase in money added to the wallets, MobiKwik Founder & CEO Bipin Preet Singh, told CNBC-TV18 on November 13.

Prepaid cash cards were another option that customers found useful, and that meant good news for companies like ItzCash. Other alternatives include mobile payments systems linked to e-commerce businesses like Ola Money, FreeCharge, Flipkart Wallet. Ola Money, the payment portal for popular transportation app Ola Cabs, reported a 1500% jump in money added to the accounts in less than four hours.

Interest in Bitcoin also spiked: Sandeep Geonka, co-founder of Zebpay, told Investopedia that his bitcoin exchange was now adding about 50,000 new users per month. "We are seeing an increased demand for bitcoin and India clearly has shortage of supply, making the demand and lack of liquidity push up prices of bitcoin as compared to global exchanges," said Coinsecure CEO Mohit Kalra. The virtual currency was trading at INR 55,735 in India in November (about \$836), compared INR 47,725 (about \$712) (Coindesk) elsewhere.

### **LONG-TERM EFFECTS**

Over 3 trillion rupees, or over \$44 billion in old currency, was deposited with Indian banks in just the first week after the demonetization. There was concern that the uncertainty and short-term liquidity squeeze would take some momentum off the Indian economy, the fastest-growing in the world; in particular, sectors like real estate, notorious as a harbor for cash dealings and black money, were expected to take a hit, with "luxury property prices dipping by as much as 25-30%," said Ashwinder Raj Singh, Ceo of Residential Services, JLL India.

But experts believed any slowdown would only be short-lived once the systems adjusted to the new normal, especially if the government heeded calls to lower interest rates by groups like the Federation of Indian Chambers of Commerce and Industry (FICCI). Credit rating agency India Ratings & Research maintained its GDP growth forecast for India at 7.8% for FY17, albeit with a downward bias.

## **2. OBJECTIVES OF THE STUDY**

1. To analyze the impact of Demonization to restrain Black money.
2. To analyze the impact of Demonization on the usage of Digital Payments.
3. To analyze the impact of Demonization on Digital Wallet.

## **3. METHODOLOGY**

The research paper is an attempt of Descriptive Research, based on the secondary data sourced from various Annual Reports, journals, magazines, articles and media reports

## **4. RESULTS AND INTERPRETATIONS**

As of November 8, high-denomination notes of ₹ 500 and ₹ 1000 were 86.4% of the total currency in circulation, and ceased to be legal tender due to the demonetisation. RBI denotes these demonetized notes as "Specified Bank Notes" (SBN). As per RBI Annual Report 2015-2016, as of March 31, 2016, the value of the total SBN is ₹ 14.18 lakh crores. Volume-wise, it consists of 15,707 million ₹ 500 notes and 6,326 million

₹ 1000 notes, that's a total of 22,033 million notes. Meanwhile, the total currency in circulation value-wise increased to ₹ 17.975 Lakh crores (4/11/2016) from ₹ 16.415 lakh crores (31/03/2016).

Exact information of the amount of SBN as on 8/11/16 is now in public domain, thanks to an answer submitted in the Rajya Sabha, which shows that 17,165 million pieces of ₹ 500 (₹ 8.582 lakh crores) and 6,858 million pieces of ₹ 1000 (₹ 6.858 lakh crores) are in circulation (Total Value: ₹ 15.44 lakh crores; Total Volume: 24023 million pieces).

### **Pros**

One of the biggest benefits of this move is that it is going to drastically affect the corrupt practices. People who are holding black money in cash will not be able to exchange much as they would be in a fear of getting penalised and prosecuted by the authorities. Enemies of the country which are involved in counterfeit currency and terrorism will not be able to continue it further for quite some time at least.

The smuggling of arms and dealing with the terrorist will not sustain further as all of the money will be on record now. Secondly, the banking system will improve as it will slowly head towards a cashless society. Cashless society will increase credit access and financial inclusion. The existing white money of people will be known to the government and it will remain with banks so that it can be put on loan, and interest can be generated from it (though interest rates would fall) with a corresponding fall in Inflation.

Further Banking System will get a boost, as more than Rs 7-8 lakh crore base money (new legal money) will enter the system. However, it needs to be seen how much money actually remains in the system, once the cash withdrawal limits are eased.

Thirdly, it will reduce the risk and cost of cash handling as soft money is safer than hard money. It will also reduce government liability. Since every note is a liability for the government, the old currency will become worthless for those people, who choose not to disclose their income. Thus, this will extinguish government's liability to that extent. It is expected approximately Rs 5 lakh crore may come to the government in the form of extinguished RBI liability, taxes and penalties. This amount is enough to take care of India's entire fiscal deficit for one year or more.

It will also reduce tax avoidance. Whatever money will be deposited or exchanged, authorities will keep a track of it and they will be extra cautious in this period. Dealing in this period in sectors like jewellery and real estate will be on radar and those entering into Loan transactions may also undergo tax scrutiny. Search and Seizure activities of the IT Department will also rise to curb such malpractices. Limits have already been prescribed for reporting to the IT Department those bank accounts in which excess cash deposits are being made in this 50-day window (Rs 2.5 lakh in case of individuals and Rs 12.5 lakh in case of firms).

Importantly, in the longer run, tax and interest rates on loans are expected to come down as higher income tax collections arising from better compliance would offer scope to reduce rates over the long term. This, in turn, will drive up disposable income. This can give a positive impact on consumption demand in long term.

### **Cons**

The liquidity squeeze caused by demonetisation will be negative across sectors with high level of cash transactions. Real estate, jewellery, retailing, restaurants, logistics, consumer durables and luxury brands, cement and some segments in retail/SME lending space will be facing short term instability. Those companies with high level of debt will face more pressure and can face loan defaults.

Secondly, there will be an added replacement costs of currency. We cannot ignore the increased cost of operating ATMs need to be refilled more often and also it will be a huge burden on banks. Initially, it is very difficult to create a cashless society as more than 50 percent of Indian population is not well versed with card transactions. Also for these initial months, it will be very difficult to make cash transactions of a higher amount. But the government is taking steps to improve liquidity into the system and reduce inconvenience as much as possible.

India is certainly going to experience "Acche Din" in Modi's regime. The decision of this surgical strike on black money was not taken in a day or two. Rome was not built in a day and similarly, this plan is the result of Prime Minister's meticulous planning and never ending fight against corruption. As a result, he has successfully made the right stroke at the right time.

Further, the penal provisions are hefty enough to ensure that corrupt practices will find it hard to take roots again. Despite certain short term troubles, demonetization is certainly going to give a boost to the Indian

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economy in the long run. As of now, all of us should stand and support this bold move of our Prime Minister and help those needy, around us.

### **5. CONCLUDING OBSERVATION**

The government's move to suck out 86% value of money in circulation by demonetizing Rs.500 and Rs.1,000 currency notes has adversely affected India's economic growth, at least in the short run. However the demonetization move taken to weed out black money and counterfeit notes in circulation, will have little effect on the economy.

Post demonetisation, the delinquencies in microfinance institutions (MFI) loan books are rising. Ratings agency ICRA recently downgraded its outlook on two prominent MFIs to negative from stable, mainly due to limited currency supply and disruption in borrower cash flows, which hampered overall the collection efficiency of these lenders

ICRA downgraded to negative from stable its outlook on Janalakshmi Financial Services Ltd (JFSL), which has a presence in 222 cities across 17 states and two Union Territories. Janalakshmi has asset under management of Rs12,416 crore and had registered a high compound growth of 130% over the past four years.

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**AMAZON'S STRATEGIC ANALYSIS AND IT'S ENTERPRISE STRATEGY FOR THE CLOUD**

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**INTRODUCTION**

“To be world’s most customer-centric firm, where customers can discover and find anything they want to purchase online and with the lowermost possible prices (Amazon, 2015)” is amazon’s mission and vision statement. Amazon is proud to have taken advantage of the World Wide Web or internet boom as one of the main businesses. The firm has created a global strategy that, when considering technology, has made it a key force. Amazon has accomplished a growing range of services and products while maintaining the well-intentioned customer service that they provide their customers with which they deserve a great deal (Amazon, 2015).

In latest months, AWS (Amazon Web Services) has been moving towards the business sector, with services such as its Glacier storage service, Redshift data warehousing product and others being released. But the issue arises: what is the business play of Amazon right now? AWS claims that despite the fact that many companies are not prepared to fully jump into the public cloud, acceptance in the enterprise sector has "accelerated quickly." In latest months, the AWS has created a concerted attempt to concentrate on the company. Whether that's enough in the years to come will surely be a large question to watch!

The proposed project analyses and describes the main business strategies of Amazon. The project team assesses and evaluates the suitability of approaches that led to the online business achievement of the Amazon. In addition, review will be conducted using industry assessment, strategic description, the assessment of strategy, strategic problems, and strategic suggestions. The generic options for strategy, environment and strategic capacity assessment that will assist describe the strategy of Amazon in detail with regard to the company’s crucial business elements. Amazon's business strategy for the cloud is also evaluated by the research.

**OBJECTIVE OF THE PROPOSED STUDY**

Amazon’s Strategic Analysis and its enterprise strategy for the cloud, and the study will be conducted with the help of various strategic analysis tools and techniques that have been taught as a part of AMP.

**2. INDUSTRY OVERVIEW**

Amazon offers a number of IT services in the Cloud Computing Industry. One of the advantages associated with cloud computing is the opportunity to update the initially-expensive infrastructural expenses with low variable charges that match enterprise specifications. With the Cloud, corporations now not need to plan to acquire servers and other IT infrastructure several months or weeks in advance. Rather, they could immediately spin up several of servers in seconds and deliver consequences as fast as possible (Amazon Web Services, 2019).

Currently, Amazon presents a very dependable, scalable, low-cost infrastructure platform inside the cloud that empowers more that nations globally to continue embracing the technology. Amazon’s has a number of data centres located in different nations including Australia, Singapore, U.S., Brazil, Japan, and Europe. Generally, the cloud computing technology generates numerous benefits for businesses. One of the advantages is low cost. With its pay-as-you-go pricing strategy, Amazon gives low, with no extra charges or prolonged-term commitments. Companies in the cloud-computing industry are able to construct and control international infrastructure at scale, and skip the value-saving benefits associated with price reduction. The other benefit is elasticity and agility. Amazon offers a huge international cloud infrastructure that allows speedy innovation, testing, and iteration. Companies can immediately install new applications right away as tasks to be completed continue to rise as necessary. AWS is open and flexible. It is a programming model and working system with an agnostic platform. It enables companies to choose which services you use, one or numerous, and pick how to use them. This adaptability allows you to attention on innovation, not only focusing on infrastructure (Amazon Web Services, 2019).

**3. COMPETITORS**

AWS is competing against a number of technology companies in the computing industry. One of them is Microsoft Azure. The IT team at Microsoft uses Microsoft Azure to construct, handle and deploy different apps using global networked Microsoft data centers. Microsoft is the only permanent hybrid cloud that can connect information and the app to the cloud. This service can be used by developers to build simple mobile apps for internet solutions. Microsoft Azure handles different platforms of hybrid consistency such as growth of

applications, identity management, safety and information. By using their instruments, Azure offers more than 100 services. Microsoft is regarded a top AWS competitor because of its multiple cloud services (Bhasin, 2018).

The other close competitor of AWS is the Google Cloud. Google's cloud provider (GCP) offers a fantastic infrastructure designed to manage the most data-intensive job, enabling for quicker scale-up flexibility. GCP delivers smooth services, freeing customers from infrastructure management, setting up servers and networks. The company can focus on its primary tasks when the infrastructure is well taken care of. Google is regarded a top competitor for AWS because of its broad range of services supplied to the customer (Bhasin, 2018).

Alibaba Cloud is the other close competitor of AWS. Alibaba Cloud is an Alibaba group subsidiary. It provides a comprehensive cloud services group worldwide. It also provides high performance and elastic computing power in the cloud. Databases, big data processing, data storage and content delivery network are included in their services. Alibaba Cloud has 18 data centers and 42 network areas in a global system. It is the biggest sophisticated cloud network. Alibaba cloud is committed to becoming the biggest cloud service supplier (Bhasin, 2018).

IBM is a leading global company with its headquarters in New York. The company has been providing its services in nearly 170 nations around the world. It supplies computer software and hardware. IBM also offers consulting services ranging from mainframe to nanotechnology for multiple technologies. It also provides cloud computing as a collection of business cloud computing facilities. IBM cloud involves a service infrastructure (IaaS), a service software (SaaS) and a service platform (PaaS). The cloud provides its services through government, private, and hybrid cloud distribution models. IBM is regarded one of the AWS rivals because of its strong cloud architecture. Other AWS competitors include; Oracle, CenturyLink, and Rackspace, among others (Bhasin, 2018).

#### **4. ENVIRONMENTAL ANALYSIS USING PESTEL**

##### **Political Factors**

The e-business hurdles are not the same as traditional companies. Still, the e retail industry is affected by risk variables. Amazon is the industry leader and is influenced by a number of political variables. Even the Asian countries' e-businesses such as Amazon and E-bay bureaucracy can be a big issue. A news article released by Hindustan times noted that red tape and regulatory problems could be a significant headache for any overseas company attempting to do company in India. Taxes and other political problems are also an expensive affair. For growth purposes, the EU has begun targeting American technology companies. While the EU has targeted Google on anti-trust problems, Amazon is also aimed at EU publishers through its e-book deals. These political issues are not restricted, as there are also other issues of political origin. Political stability also contributes to stability in the economy. Political disturbance, on the other side, can interrupt the supply chain, leading to lower revenues (Dastin & Sadam, 2017).

Governments of different countries worldwide are currently enacting legislation that favors innovative products. As a consequence, innovative products have risen worldwide on demand. In many nations, however, taxes are raised on most technology products such as those that are related to cloud computing. Both federal and state policies, therefore, influence the sale of technology products (Dastin & Sadam, 2017).

##### **Economic Factors**

Economic variables always affect the situation of the market and the business in general. If a market's financial situation is good, better sales and greater revenues will realized. The world has been out of a financial turmoil lately. The retail industry was doing well even in recession times. The reason is that individuals are always going to purchase the periodic products whether or not the economy is doing well. Now that the situation of the labor market and the world economy is improved, the trust of clients is also strengthened. People have more disposable income, and the retail industry will benefit from these financial developments. E-retail growth in 2015 was a whopping 23 percent, and much more growth in this industry is anticipated in the coming years. Better financial circumstances, however, will also contribute to current market competition. All these variables show that Amazon will see much more development and a rise in revenues in the coming years (Deagon, 2017).

The rising market pressures and instigating interest rates in the United States and the remainder of the globe have influenced the cloud computing industry. Poor financial circumstances lead to a fall in the sale of products. The United States, however, shows greater sales of technology products relative to under-developing and developing nations. Under bad financial circumstances, demand for innovative technology products is generally affected (Deagon, 2017).

**Social Factors**

Social and cultural developments are a key factor behind e-retail development. In latest years, developments in online shopping have got a boost. Both enhanced internet sales have been fueled by the use of mobile technology and development in digital technology. Now more individuals around the globe have smartphones. A big proportion of individuals have internet-connected smartphones and do a great deal of activities from their devices, including social media and online shopping. 4 G availability and digital technology development has also boosted distributors such as Amazon and e-bay's sales. Changing customer demographics will also have a positive impact on the e-retail industry. Millennials enjoy doing most of their shopping online. They want the best products, at least prices supplied to their gates. Only e-retailers offer this sort of comfort. As such, the evolving customer demographics and shopping patterns must benefit Amazon a lot. In those areas of the globe where AWS has not yet penetrated profoundly into the market, the brand must concentrate on cultural variables in order to better market itself and establish a greater link with the clients (Deagon, 2017).

**Technological Factors**

In the 21st century, technological considerations have become very crucial. Whether it's a traditional company or an online business, to offer better services each has to rely on IT and other types of technology. Technological innovation in the modern era has become the key to achievement. Now, Cloud Computing is also becoming essential to better serve the clients. Customer service is especially essential to maintain clients involved and it is even essential to make better use of AWS in this region. Without good customer service, the millennial generation cannot be involved. It has also become the key to building allegiance to customers. Without marketing, sales, and customer relationship management technology, growth cannot be accomplished either. Social media is another area where retail companies need to concentrate on engaging their clients better (Dastin & Sadam, 2017).

**Environmental Factors**

Environmental sustainability is also a major concern for companies around the world. In order to do promote environmental sustainably, even e-retailers need to concentrate on several fields such as energy consumption packaging, and waste reduction. Amazon has also made significant investments in environmental sustainability and CSR. Amazon has has invested in sustainable waste reduction packaging, and renewable energy. In addition, it has also invested in sustainability initiatives involving the community. Renewable energy is Amazon's main focus area. It has produced significant investments in this region in the long-term acquisition of full liberty from reliance on non-renewable energy (Deagon, 2017).

**Legal Factors**

Legal compliance is equally crucial for companies worldwide. In any aspect of company, adhering to both local and international laws is crucial for large brands like Amazon.

To supervise legal problems and difficulties, Amazon has a distinct legal team. In addition to labor laws, there are several other fields where compliance with the law is crucial. For large businesses like Amazon, any tussle with law can be very expensive. Any error can lead to large penalties and picture loss. There are several regions where Amazon has to cope with important legal difficulties as a consequence of labor to sustainability. Laws can vary from country to country, and without excuse, businesses must stay compliant. Law can, therefore, be a significant pressure on any globally operating business and Amazon must be careful too (Deagon, 2017).

**5. INDUSTRY ENVIRONMENT ANALYSIS USING PORTER'S 5 FORCES**

Porter's five-force assessment describes how the different forces shape AWS's competition in the cloud computing industry and the situation of Amazon with respect to these forces. Michael E Porter created the five-force model. It is an analytical model that can be used to evaluate the nature of competition and the forces influencing the industry's competition. For the purpose of formulating strategy, the model under discussion is commonly applied across business sectors.

For centuries, Porter's assessment of five forces has been used to determine the competitive nature of enterprises in various sectors. Porter's Five Forces Analysis instrument is mostly used by entrepreneurs who aspire to begin a company or enter a fresh sector, according to Michaux, Cadiat, Probert (2015). Generally speaking, the porter's collective effort usually determines the industry's attractiveness and profitability. By concentrating on the notion, it is easy to understand that a company environment's competitive nature depends on the five fundamental forces rather than rivals alone. Porter's five forces include; threats of new entry, bargaining power of buyers, threats of substitute products, bargaining power of suppliers, and rivalry among existing competitors. The sections below give a detailed analysis of the cloud computing industry in which AWS operates.

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**The Threat of New Entry**

Profitable markets usually attract new entries into a specific sector, but there are different obstacles to new entries that tend to maintain incumbents' business security. They include patents, economies of scale, policies of government, and capital requirements. Others include rules and taxes (Michaux, Cadiat, Probert, 2015). Investing in the Cloud computing industry requires a heavy investment. As a result, the sector is experiencing a few admissions and the danger of new sector entries is graded as low to medium. Over the years, businesses such as Amazon have extensive experience, thus reducing costs and improving service is simple for them (Michaux, Cadiat, Probert, 2015). The new entrants require, in addition to the heavy operating costs, insurance, distribution, channels, licenses and other qualifications that may be difficult for the beginners to acquire. Due to the absence of such knowledge, they may not find it easy to fit into the industry.

Due to the big quantity of capital needed and the extremely competitive nature of the pre-existing businesses, entry into the cloud computing industry can be quite difficult (Michaux, Cadiat, Probert, 2015). Moreover, to control new entry from other firms, few legal obstacles have been implemented. Amazon and other companies in the cloud computing industry have also created strong brand images and reputation, and stable customer loyalty, making it easy to suppress new businesses from entering the sectors (Amazon Web Services, 2019). In addition, many governments tend to safeguard their domestic markets by raising taxes on imports to keep some global firms off. It can be difficult to achieve economies of scale because fresh entrants need to meet a specific target to be cost-competitive (Magretta, 2012). Since there is a small threat from new entrants to the cloud computing industry, Amazon will continue to grow its AWS market share and receive more earnings in the near future.

**Bargaining Power of Suppliers**

This force determines how much influence the suppliers of companies may need to increase prices or sell products of low quality. The suppliers' trading capacity is affected, among other factors, by the existence of accessible alternatives, the amount of providers on the market, the uniqueness of the products or services, and the company's switching costs (Magretta, 2012). Suppliers' negotiating power in the cloud computing industry is quite small. The reason is that there are many vendors leading to decreased bargaining power. Technology providers have extended their operations in nations like, Asia, China, Japan, Latin America, and the whole of America and Europe. As a consequence, the number of providers/suppliers has increased, resulting in low bargaining power. Furthermore, the businesses have commonly available replacements for raw materials such as different kinds of software and hardware (Magretta, 2012). AWS's capacity to keep earnings above average can be reduced by low suppliers bargaining power (Amazon Web Services, 2019).

**Bargaining Power of Buyers**

Purchasers' bargaining power can also be called market outputs. Buyers' bargaining power is excellent when there are few clients. They have the authority to impact price modifications and in one manner or another they can put pressure on the business. This power helps to define how simple buyers can bring down prices, according to Cooney & Yacobucci (2018). The number of consumers in the market and the price of changing from one provider to another influences it. Buyers' trading power in the cloud computing industry is very high. Customers in the industry can check online the prices of different businesses to determine their most preferred prices. In addition, switching from one provider to another does not cost clients a lot of money (Michaux, Cadiat & Probert, 2015). Customers have created a tendency to buy distinct brands from distinct firms based on the price of the brand due to low brand loyalty. Buyers can therefore readily choose an alternative brand.

Some technology providers such as Microsoft have come up with approaches for rewarding customers who purchase their products to help attract more customers. Buyers' negotiating power in the cloud computing industry is high, according to Magretta (2012). Many people today are in need of new technologies such as AWS. Governments and corporations that usually purchase in bulk, however, have strong bargaining power. Purchasers' powerful negotiating power drives down prices, thus decreasing AWS's capacity to gain sustainable earnings (Amazon Web Services, 2019). With growing technology, customers' bargaining power has become stronger. Customers can obtain data about a multitude of products and prices as well as access to offers from other businesses via the internet.

**The Threat of Substitute Products**

Substitute products are comparable commodities which are regarded to be branded differently by different businesses. Likewise, even if they are not comparable, products that serve the same requirements are also taken into account (Michaux, Cadiat & Probert, 2015). Considering the case of AWS and the cloud computing industry as a whole, it is obvious that there is quite a range of alternatives, including those services produced by Microsoft and Alibaba Cloud and IBM among others (Magretta, 2012). There are quite a number of substitute

products to AWS as clients are looking for quicker and even more advanced technologies. AWS, however, provides a unique brand which makes it more comfortable in the sector.

### **Competitive Rivalry**

The competition is generally high when there are many competitors who are likely to have the same power and authority in the market. This makes shifting from one competitor to another easy for consumers (Magretta, 2012). In the cloud computing industry, the competitive rivalry is very high. There are a number of rivals that are of the same strength and size, including IBM, Microsoft Azure, and Google Cloud. Considering hard public policies that prioritize environmental security, low-cost carriers, low switching costs, and others, it becomes even more competitive. Strong competition may soon deny AWS the ability to make viable earnings, especially if it does not diversify.

The assessment of Porter's five forces is crucial to organisations as it allows them to develop policies that fit the competitive climate. It is also essential to analyze how various factors affect competition. It helps identify the policies, weaknesses and possibilities of the competitor. This can assist in developing policies that may be used to out-do the close competitors. The restriction of the assessment is that only a few rivals and main success factors were the focus of the research. Therefore, owing to restricted time and resources, some data have been omitted during the assessment. To create a good strategic plan for Amazon Inc, this data will be used and even be applied in the subsequent analyses.

### **6. INTERNAL ENVIRONMENT ANALYSIS USING FINANCIAL TOOLS AND KPIS**

Internal environment analysis encompasses the evaluation of the businesses strengths and weaknesses. Amazon has a number of strengths it can take advantage of and several weaknesses it can solve. The business is reported to have a powerful connection with retailers, better customer accessibility owing to its many stores across operating nations, and an economic position that has been contributing to increased earnings over the past few years. It is therefore evident that that the company's capital expenditure has generated favourable yields. As a consequence, owing to its strong financial strength, Amazon is able to settle its debts, employ qualified workforce and motivate them with good incentives (Amazon Web Services, 2019). As compared to its rivals, Amazon is also able to charge low prices and venture into fresh markets to expand its market share. While the business has used these strengths to; develop better communication with its clients, expand networking, strengthen its assets, and build alliances, it is anticipated that more achievements will still be made with these strengths (Amazon Web Services, 2019). Generally, Amazon should use its strengths to address its weaknesses.

There are a number of weaknesses that Amazon should strive to address. In its structure and culture, Amazon should be more flexible and hire a more diverse workforce to mix smoothly in market dynamics and increase collaboration. In addition, staff diversification will allow the business to tackle problems such as limited legal knowledge, insufficient quality control, elevated employee turnover rates, and low morale and. In this manner, Amazon will be able to accommodate an enormous collection of distinct characters, professionalism, abilities, races, and cultures. In order to adapt to the prevalent modifications in client choice, Amazon should also invest in product diversity and remain top in the competitive arena by exploiting opportunities in the cloud industry (Amazon Web Services, 2019).

The key financial indicators of Amazon with respect to cloud computing include; level of innovation, volume of sales, as well as the percentage of profits and revenue. Evaluation of financial ratios is critical to drawing findings regarding a business' leverage, economic performance, liquidity or solvency, as well as the use of assets. The data collected from Amazon's 2018 financial statement analysis shows a favorable outcome. The leverage ratios are usually small, indicating that the business has less leverage and is financially stable (Amazon Financial Statements, n.d.). The liquidity ratio values are considered positive. This demonstrates that Amazon is a solvent corporation that can readily fulfill its present short-term debt commitments without having to sell inventory. From the financial ratios, Amazon speaks favorably about 20 percent of Asset Turnover Ratio. This shows that the firm is correctly managing its inventory as it produced 20 cents per dollar in assets while at the same time selling more than five times its stock for the year. The profitability ratios show that Amazon makes double profit per dollar it sells and the elevated proportion of return on investments indicates that the business is making good use of its resources to produce revenues (Amazon financial statements, n.d.).

Among the financial ratios, some association can be noted which can tell the company's profitability. Current ratio, for example, is invariably a balance sheet ratio and can be regarded as static. The net profit margin ratio is regarded dynamic as it is typically a ratio of revenue statement / declaration of revenue and represents profitability. Investment returns also indicate positive cash flow and are a mixture of balance sheet proportion and income statement (Nasdaq, n.d.).

7. CURRENT ORGANIZATIONAL LEVEL STRATEGIES – ANSOFF MATRIX, BCG MATRIX, VRIO ANALYSIS

a. ANSOFF Matrix

Ansoff Matrix is a model of market planning that enables the business of e-commerce and cloud computing to determine their product and market strategy. The matrix shows four distinct business strategy alternatives: market penetration, product development, market development, and diversification. Figure 1 below shows the ANSOFF Matrix of Amazon Inc.

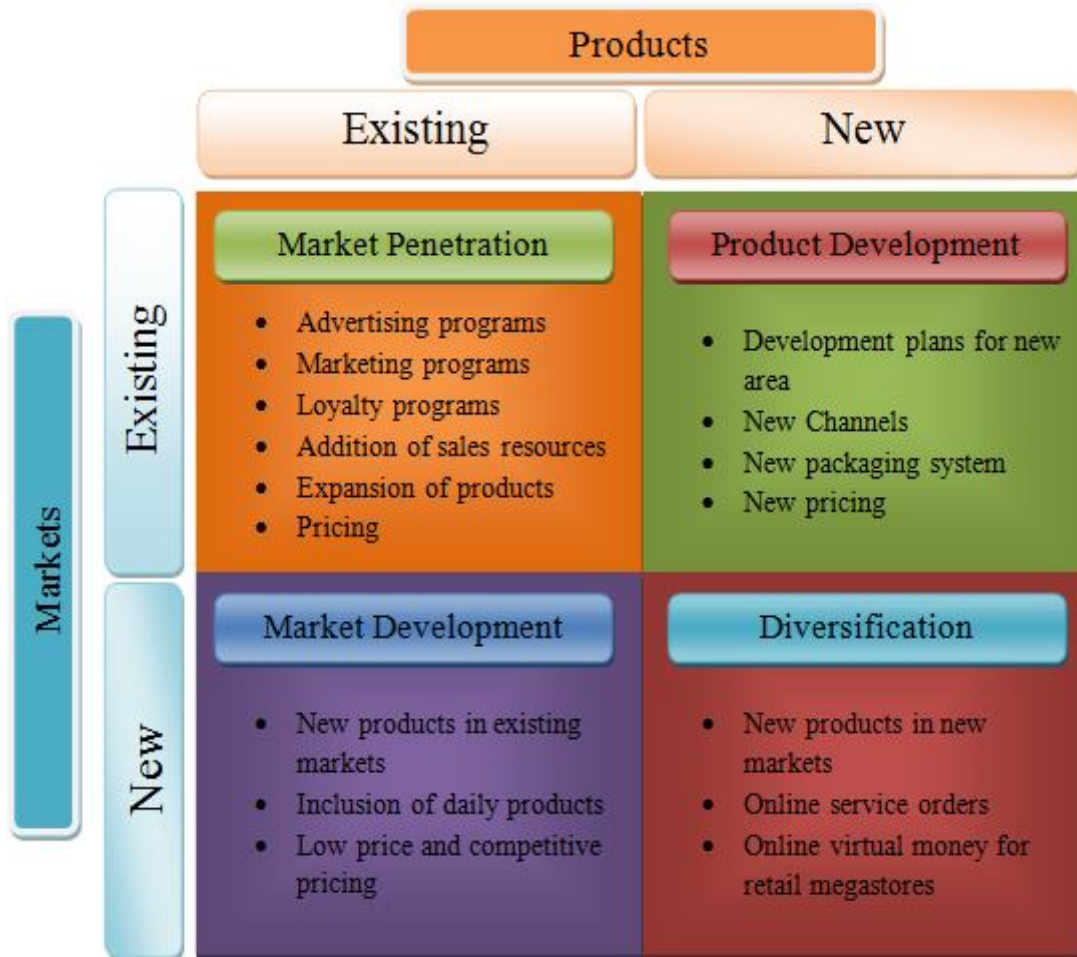


Figure-1: ANSOFF Matric of Amazon Inc.

**Market Penetration**

Selling current products to current markets relates to market penetration. Amazon aggressively utilizes the strategy of market penetration. In general, sophisticated user experience characteristics and recommendations found on the website of e-retailers, in particular, play a significant part in the market penetration strategy implementation. In particular, the e-commerce giant focuses on personalization of user experience, thanks to the effective implementation of data science and machine learning with beneficial effects on the sales volume of current products to current markets (Dudovskiy, 2018).

**Product Development**

This entails the creation of new products for sale to current markets. Product development is one of Amazon's key policies. Started as a company that was selling only physical books online, Amazon is selling anything online today. More than 500 million products are purchased by the world's biggest internet retailer through income, including products sold by third parties on Amazon platform. Electronic devices, outdoor products, clothing, home equipment and many more (Dudovskiy, 2018).

**Diversification**

Diversification includes the development of new products for sale to new markets, which is deemed to be the most risky approach. To some extent, Amazon utilizes diversification. Amazon is presently operating in advertising, media, hardware, and other company sectors as a consequence of its diversification strategy (Dudovskiy, 2018).

**Market Development**

The strategy for market growth is linked to finding fresh markets for current products. Amazon is systematically involved in the growth of the market. Started in the US alone, Amazon now has country-specific locations in 13 nations of the world. The company can explore new markets with its AWS technology (Dudovskiy, 2018).

**b. BCG Matrix**

When the company is interested in examining its product portfolio and differentiating between unprofitable company units and cost-effective, the BCG Matrix is a helpful instrument for conducting this assessment. The Matrix consists of four quadrants namely; cash cows, stars, question marks, and dogs. In regards to these classifications, the identification of a product is based on market share and opportunities for development in the sector. Figure 2 below shows the BCG Matrix of Amazon Inc.

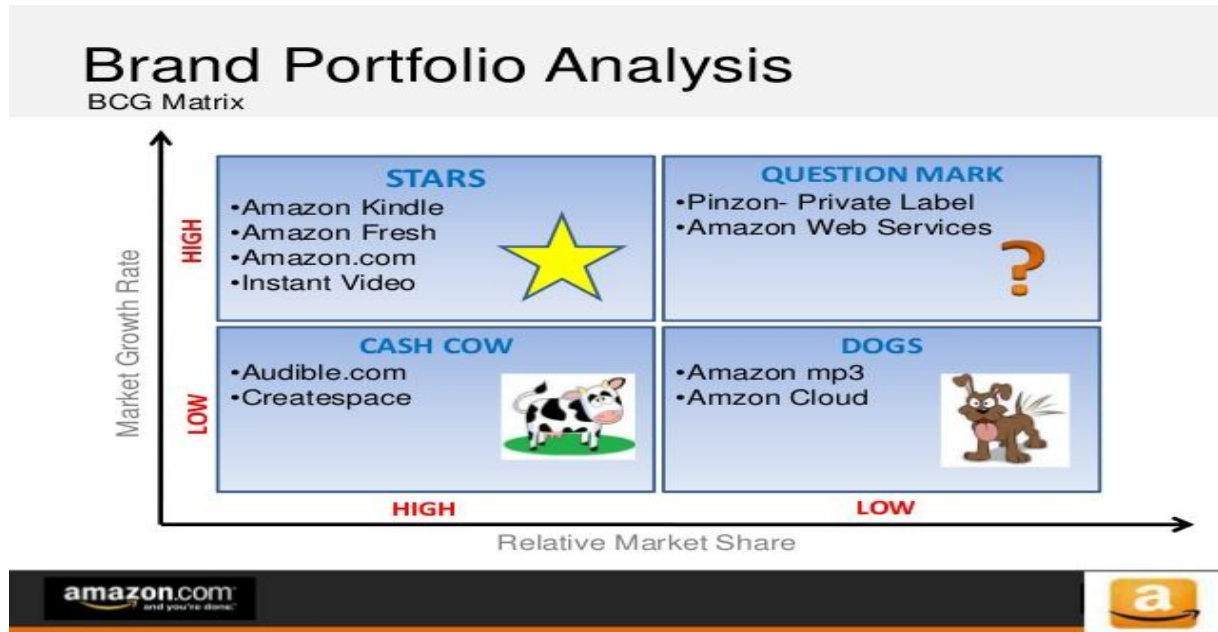


Figure-2: BCG Matrix of Amazon Inc.

**c. VRIO Analysis**

Amazon.com Inc. is an e-commerce firm that initially focused on online retail. However, it has since expanded to provide various internet and cloud computing services. The VRIO evaluation of Amazon helps explain how the business can grow and retain its position in the industry. The VRIO analytical model guides the decision-makers of the company to take appropriate strategic plans and goals to compete against competitors Google, IBM, Microsoft and other close rivals. Amazon takes advantage of its key competencies, despite the fact that it needs to create fresh key competencies and reinforce current ones to minimize disruptions in its multinational business development (Grisworld, 2016). Figure 3 below shows the VRIO analysis of Amazon Inc.

V	R	I	O	
VALUABLE	RARE	INIMITABLE	ORGANIZED	
NO				COMPETITIVE DISADVANTAGE
YES	NO			COMPETITIVE PARITY
YES	YES	NO		TEMPORARY COMPETITIVE ADVANTAGE
YES	YES	YES	NO	UNUSED COMPETITIVE ADVANTAGE
YES	YES	YES	YES	SUSTAINABLE COMPETITIVE ADVANTAGE

Figure-4: Amazon VRIO Analysis

The non-core skills of Amazon.com include the increasing online presence of the company. This ability is important and adds competitive advantage, but it is imitable and not uncommon in view of the powerful market presence of significant companies such as Microsoft. Amazon's increasing variety of internet services is also useful in terms of adding sources of income, but not uncommon and inimitable, as other technology companies provide comparable services. The increasing portfolio of private label products diversifies the offers of the company, improves the presence of the market, and improves earnings. AmazonBasics, for instance, allows the business to compete directly with other online and non-online vendors. Despite the company being valued by personal labelling, it is not uncommon and not inimitable. Private labelling can even be implemented by tiny companies (Grisworld, 2016).

Other non-core skills include the comprehensive distribution network of the company, involving alliances with multiple third-party service suppliers. Such a resource improves the competitive benefits of Amazon, but does not serve as a core competency. The reason is that other companies can create comparable strategic agreements to promote the distribution of their commodities to target clients (Grisworld, 2016).

Amazon's sustainable competitive benefits are derived from the organization's core competencies. There are four resources or capacities in this situation of VRIO assessment that form the basis for long-term competitive benefits. For example, on the worldwide market, the Amazon.com brand has strong equity. The business draws clients through this brand to its present and emerging products. This brand equity on the market is important and uncommon. It is also highly hard to imitate this elevated brand equity, particularly in markets where the business already has a powerful presence. By aligning its business activities around it and using the brand for different products, Amazon maximizes the advantages of this core competency (Grisworld, 2016).

High market capitalization is regarded in this VRIO assessment as a viable source of competitive advantages. The business, corresponding to its elevated market capitalization, is one of the most precious technology firms in the globe. This core competency is important because Amazon.com Inc. is empowered to finance and invest in expanding and diversifying company. Furthermore, for most market players, this amount of market capitalization is rare and hard to imitate. Amazon is structured to take advantage of this competitive position, taking into account its history of company ventures and acquisitions (Grisworld, 2016).

## **8. EVALUATION OF STRATEGIES**

### **a. Corporate-level: Stability strategy**

Amazon has created so many radical adjustments over the previous couple of years. It introduced, for instance, the AWS that was very competitive on the market. These products are still so new on the market and they still need to be promoted and advertised. As a consequence, Amazon will need some rest from innovation to promote and set up fresh products before introducing them to the market. In this situation, where the business is not looking forward to marketing innovative products and wanting to establish and stabilize its present product, it is called a stability strategy according to McDonald and Wilson (2016). This is Amazon's excellent move because it needs sustained development. The CEO and Amazon's founder has pointed out that the firm has no latest research and development plan. Therefore, it is focusing on R&D in order to improve the present product to achieve the stability strategy. Although the approach hinders development, by enhancing the quality of current products and enhancing technology, it enables development because expansion is not the only means of attaining growth. This will give it the benefit of restricting clients to current commodities, slower rate of market entry with new products, along with innovation and development.

### **b. Business-level strategy: diversification**

It is very essential for many businesses to have many clients flogging at a business to buy different products because this allows them to obtain more buyers from their primary products. Many businesses are taking advantage of this approach by incorporating more current goods, market, services, and phases of manufacturing. This approach is called diversification that allows businesses to enter new company lines that vary from current businesses (McDonald & Wilson, 2016). It was very strategic for Amazon to integrate this approach into its scheme to allow it to enter fresh markets and sectors. Amazon's primary objective is to stay competitive on the market. This is already deviating the business from many technology firms that are still producing old-fashioned products. Amazon also sells designer clothes and has constructed an internet network that offers excellent resistance areas for clients. It has also implemented products in such a way that it not only sells normal goods but also provides its clients with other recreational facilities. This allows Amazon to grow its market by aiming to attract buyers of designer clothing and those who enjoy leisure life. Diversification has opened up fresh opportunities and allowed the business to grow. By adopting the business level strategy, Amazon will diversify its markets and broaden its company horizons as well. It will minimize costs even as it strives to boost income and increase volume of sales.

**c. Global-level strategy: Straight product extension**

To expand its market share and create more profit, Amazon will need to grow its global market. The company is now predominantly common in Germany, China, and the United States. However, some market, particularly in Europe, have not been fully exploited. Instead of developing new commodities, the firm can concentrate on extending markets for a majority of its current products, eco-friendly items and even the clothes it is presently designing. For the business, product extension could work well. This approach does not involve the item to be changed or altered but presents it as it is on the worldwide market (Kelly, Woolfson, & Boyle, 2008). Customers are conscious of the item Amazon can deliver. They do not need any extra strategy for marketing or promotion. Most clients will buy them in their original form, but even more clients will be attracted by a slight shift.

Before they join the worldwide market, however, a lot of change can be done to the product. This can be performed for the commodities' labelling and language used by the company (Kelly, Woolfson, & Boyle, 2008). Many businesses use a distinct style of writing and language that is distinct from most nations globally. Therefore, it will be appropriate to adopt their strategies in order for the business to connect to the excellent variety of clients it could meet in the globe. In addition, products such as those related to cloud computing are not culturally sensitive. At the same time, there is a common universality internationally in product designs. Therefore, Amazon products are highly likely to discover excellent reception globally.

**9. GAP ANALYSIS AND SWOT ANALYSIS****a. Gap Analysis**

The next phase involves an assessment of the gap that Amazon needs to fill in its future business plans. This is the phase of identifying gaps. After analysing gaps, tactics and plans will be established to achieve the company's business goals and objectives. The method is even more essential than the policy itself because instead of getting it on paper, it takes the approaches into fulfilment. The phase in the governance process is most challenging and stricter than any other phase. It says how tactics and activities are going to be conducted, who will conduct them, as well as when and where to do accomplish it (Kelly, Woolfson, & Boyle, 2008). Amazon should implement its stability policy at this point to create more manufacturing and distribution on cloud computing. To be successful, the entire organization should work together to ensure that the strategy is implemented.

To execute this approach, Amazon will need to guarantee that all funds are accessible and running to enforce the strategy. The approach can only be feasible if the business has a manufacturing facility where it is feasible to continually manufacture fresh products and the staff working to guarantee that the products are accessible and produced and circulated. The business must also guarantee that it has sufficient suppliers to supply it with appropriate raw materials for the production of contemporary products. It is also necessary to set ready other innovations and facilities in the manufacturing and marketing chain.

Furthermore, Amazon has split the business into branches to guarantee complete execution of the policy, working in synergies towards achieving common organisational objectives. The divisions are supplied with the required training to fulfil their responsibilities in full. The firm has hired skilled and experienced staff from various nationalities, races, religion, and ethnic groups to assist enforce the scheme (Amazon Web Services, 2019). These staff have distinct knowledge and are spread across the distinct branches to guarantee that every goal set to implement the strategy is successful. The division of services has a part to play. Amazon relies strongly on the strategy of online marketing. It has hired IT experts to create and retain a business website where it can advertise all that clients need to understand. The firm has hired customer care staff to continue to monitor the website, read remarks, demands, and feedback from clients to guarantee that they are replied to appropriately (Amazon Web Services, 2019).

The unit in charge of services works closely with other divisions to implement the policy. Service division employees guarantee that data appropriate to the energy division and reaches the staff there so they can tackle it. As an after-sale service, the business offers shipping services to clients and also offers other services. The products are also shipped to reach clients abroad (Grisworld, 2016).

**SWOT Analysis**

Amazon has several strengths it can take advantage of and a number of weaknesses it can solve. The business has a powerful connection with retailers, better customer accessibility owing to its many stores across operating nations, and an economic position that has been contributing to increased earnings over the past few years. It is therefore evident that that the company's capital expenditure has generated favourable yields. As a consequence, owing to its strong financial strength, Amazon is able to settle its debts, employ qualified workforce and

motivate them with good incentives (Amazon Web Services, 2019). As compared to its rivals, Amazon is also able to charge low prices and venture into new business arenas to increase its market share. While the business has used these strengths to; develop better communication with its clients, expand networking, strengthen its assets, and build alliances, it is anticipated that more achievements will still be made with these strengths (Amazon Web Services, 2019). Generally, Amazon should use its strengths to address its weaknesses.

There are a number of weaknesses that Amazon should strive to address. In its structure and culture, Amazon should be more flexible and hire a more diverse workforce to mix effortlessly to address market changes and increase collaboration. In addition, staff diversification will allow the business to tackle problems such as limited legal knowledge, insufficient quality control, elevated employee turnover rates, and low morale and. In this manner, Amazon will be able to accommodate an enormous collection of distinct characters, professionalism, abilities, races, and cultures. In order to adapt to the prevalent modifications in client choice, Amazon should also consider diversifying its products and remain top in competition by exploiting opportunities in the cloud industry (Amazon Web Services, 2019). Figure 5 below shows the SWOT analysis of Amazon Inc.

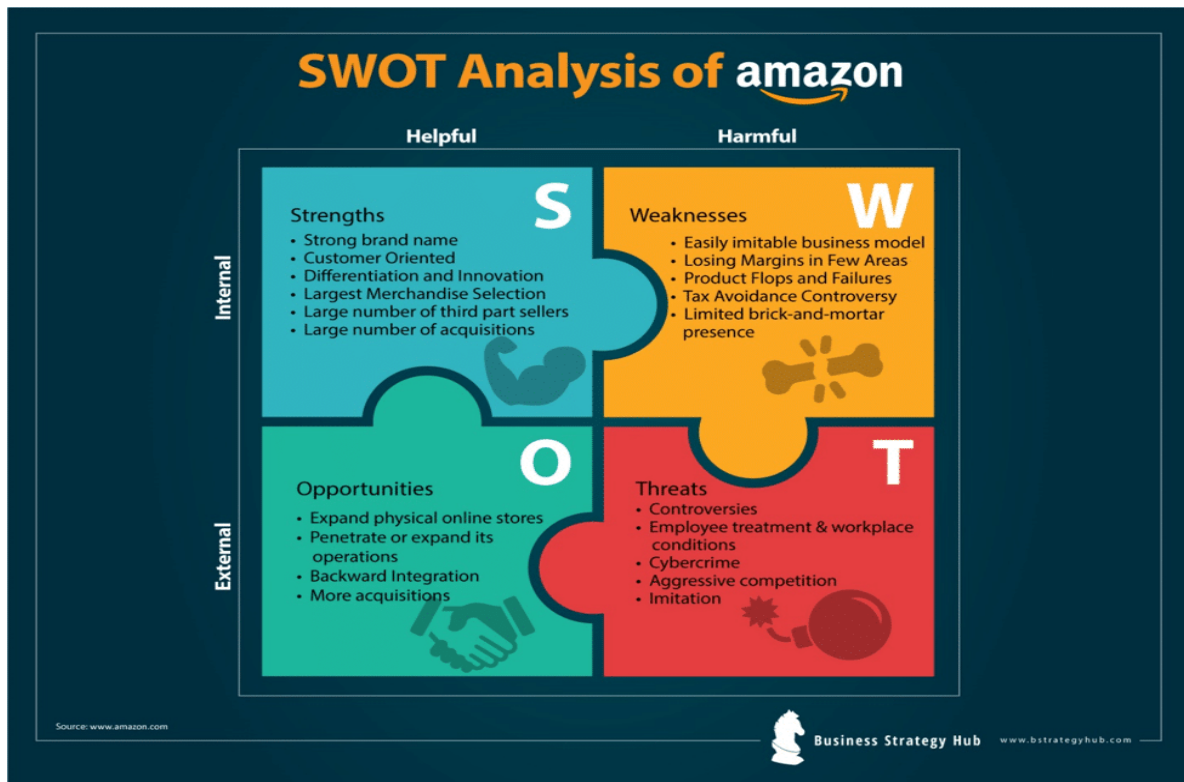


Figure-5: Amazon SWOT Analysis

**10. CONCLUSIONS AND RECOMMENDATIONS**

In summary, all businesses are created to accomplish particular goals and goals. Most companies strive to remain at the top of the competition, expand their market share, enhance their efficiency, and attain their competitive objectives. The competitive movements and actions set out to accomplish these goals are called business strategies. Management develops these policies at multiple levels such as business-level, Corporate-level, global-level, and a company's functional level strategies. The levels describe the particular actions performed by the company's various staff to accomplish the organization's general objectives.

Amazon needs to include alternative approaches in its overall organizational policies to complement them to better fulfil the company's business objectives, particularly in cloud computing. It is possible to adopt many distinct alternative approaches at various levels of the organisation. At a specified moment, landing the correct strategy for a business includes a complicated process of formulating, prioritizing, selecting, implementing, and evaluating strategies. This guarantees that priority is given to only the best approaches and that it is best applied to meet a company's requirements. This method was used by Amazon Inc. to help mark its products and achieve the company's ultimate objectives. Ideally, Amazon enterprise strategy will help it to outperform its competitors in the market.

Marketing is a main feature of a business that is needed to guarantee its development. Companies are looking for fresh possibilities to expand their market share, increase profits, and maintain a competitive advantage in new markets. In this regard, Amazon should continue to develop policies that can best assist it exploit the

possibilities and strengths that are accessible. In doing so, however, certain factors must be regarded because they have excellent influence in determining the feasibility and achievement of the selected strategies.

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**COLLABORATIVE MARKETING: A MARKETING EDGE OVER COMPETITORS**

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**ABSTRACT**

*Collaborative marketing is a marketing strategy that involves working in unison with similar companies to promote brand, minimize costs and increase sales. Collaborative marketing bolsters exposure through side-by-side advertisement with competitors. It has become a popular and effective system, especially in online presences. Collaborative marketing has been defined in a number of ways over the past couple of years. Some have defined it as an internally collaborative process where marketing organizations find alignment with partners and complementary organizations. These are table stakes. A marketing organization that doesn't have any partners will always be at a disadvantage against competitors who know how to work with others.*

*Collaboration in marketing is more important when you are working with your potential customers to design a marketing approach. This is where the true power of social media comes into play. Companies that treat social media solely as a broadcast channel do themselves a disservice because they are still living in the stone age of push marketing. In reality, social users are often providing their key business challenges, their interests, their concerns and their willingness to move forward with projects. All that is left for the marketer*

*Keywords: collaborative marketing, co-marketing, modern marketing*

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**INTRODUCTION**

In many large companies, the marketing function is decentralized and sprawling, leaving executives without a holistic view of their marketing activities and costs. And those costs can be enormous, not just in dollars but also in lost opportunities: lack of consolidation and collaboration can frustrate attempts to develop critical new consumer-focused capabilities, such as social media marketing, and interfere with marketers' ability to focus on high-value tasks, such as generating richer customer segmentations.

Some leading companies have developed a strategy to avoid these pitfalls, by reinventing a model that's been in use for years — shared services. Marketers first adopted shared services more than two decades ago with a specific goal: to slash expenses by consolidating the work they had been giving to a number of advertising agencies for research, media buying, and creative development. They soon added direct marketing execution, performance measurement, customer data processing, and lead management to the mix. Today, marketers are taking this model a step further, to build and share more advanced capabilities — including web 2.0 technologies — that can be leveraged across business units. By creating centers of expertise and scale and freeing up resources that had been dedicated to low-value and often overlapping tasks, companies can deepen their marketing excellence even as they reduce operating costs. This goal is a key imperative for chief marketing officers, who face growing pressure to respond to the digital revolution under increased budget scrutiny. Indeed, some early adopters of this model have achieved efficiency gains of 15 to 20 percent.

**OBJECTIVES**

To understand the various dynamics of collaborative marketing.

To understand the steps in collaborative marketing.

**METHODOLOGY**

The data is collected through secondary sources like websites and journals.

**FINDINGS**

Collaborative innovation allows firms to tap into customer expertise by integrating customers into the firm's new product development process. For instance, procter & gamble has created the "p&g advisors" program to collaborate with customers in developing new products. Customers try new products and provide feedback, allowing p&g to refine products and marketing plans. Before using the internet, p&g would spend \$25,000 to test a new product concept, and it would take two months to complete the test. Now, p&g can do the same test at a cost of \$2,500 and get results in two weeks. P&g is also using the internet to take these new products to market. For example, in launching its physique hair care products, p&g invited consumers to register on its physique.com web site to sample the new products. Within 12 weeks, more than 5 million consumers visited the site, giving a strong start to the product launch. Similarly, the pharmaceutical giant eli lilly has created a web-based community called innocentive, which has attracted 7,000 research scientists to work with the company to solve chemistry problems in return for cash bounties. This is an astounding number, considering that lilly has

only 300 such scientists on its payroll. Lilly plans to create communities of researchers who can collaborate with each other and with the company to solve difficult research problems.

**Collaborative design**

Collaborative design allows firms to become more deeply embedded in their customers' design and development process. For instance, national semiconductor is becoming a virtual design facility for its customers by offering a design tool called webench, which is used by 500,000 design engineers every month to design and test circuits. In 2001, more than 43,000 designs were created on this site, saving customers an estimated \$82 million and creating between \$1.5 million and \$2 million of new design wins for national semiconductor. Similarly, texas instruments dialogued with more than 30,000 high school teachers in developing its new ti-92 calculators. By involving customers in the design process, it ensured that the product accurately met the needs of its customers, and it created a sense of ownership among the customers that leads to intense customer loyalty.

**Collaborative pricing**

Collaborative pricing allows customers to become active participants in defining the prices that they want to pay and adapting prices and services to their changing needs. For instance, computer manufacturer hewlett-packard has introduced a new pricing program, called "partition pricing," for its high-end servers. In this program, customers pay incrementally for capacity as they need it instead of paying upfront for hardware. This flexible pricing approach allows customers to align the timing and amount of their payments with their forecasted growth. By introducing capacity on demand, pay-per-use financing programs, and flexible service offerings, firms can allow customers to better manage their cash flow by aligning costs to their evolving needs.

**Collaborative segmentation**

Collaborative segmentation allows customers to configure offerings to suit their preferences and to self-select into segments. Firms like herman miller, dell, and general motors allow customers to configure, price, and order products, saving time for customers as well as for the companies. Instead of the firm deciding what segments to target with what offerings, customers what they want by choosing from a flexible menu of offerings that they can configure to suit their needs. By making customers active participants in the segmentation process, firms can make segmentation more accurate and more efficient, because customers know their needs better than marketers do.

**Collaborative communication**

Collaborative communication lets firms work with customers to create "just-in-time" marketing communications that are relevant to customers. Automobile companies like gm and toyota are partnering with edmunds.com, an online automobile information provider, to create contextual messages that are triggered by customer activity and facilitate customer decision-making. Contextual messaging turns conventional advertising on its head. Instead of "just-in-case" marketing communications that characterize traditional advertising, contextual messaging becomes "just-in-time" communication, because it is initiated by customers, and it is relevant to their context.

**Collaborative support**

Collaborative support allows firms to reduce support costs while increasing customer satisfaction by allowing customers to dialogue with the firm and among themselves to solve support problems. For instance, cisco's networking professionals connection is an online community that allows customers to get answers to support questions from peers and experts. By making customers a part of the support operation, cisco is able to decrease customer support costs, while increasing customer satisfaction. While the community originally started out as a customer support initiative, it is also becoming a valuable source of new product ideas and competitive intelligence. While the benefits of collaborative marketing are compelling, it is not easy for firms to make the transition from the "command-and-control" mentality that characterized the age of information asymmetry. To the "connect-and-collaborate" mentality that will be needed in the age of information democracy. It will require a fresh approach to designing processes, platforms, products, and pricing.

Marketing leaders may face resistance. The marketing function is traditionally owned by the business units, geographic divisions, and brands that it serves. Those who try to implement a shared-services marketing model may face concerns about losing "local" knowledge, as well as questions about what services should be shared and how they should be structured. To help executives overcome these obstacles, we have identified four key steps: develop a baseline understanding of the company's existing marketing services, define a menu of services, design the future model and make the economic case for its adoption, and devise a holistic but practical transition plan.

**Step 1: understand your current model.** Marketing leaders need to know how much money they spend, and where they are spending it. But getting a consolidated view can be difficult, because marketing budgets are typically controlled by the business units. In addition, many marketing organizations lack a standard framework for defining all their activities, and, as a result, information on how the function's people are deployed is often scattered and incomplete.

To get a clear picture, we recommend that companies establish an enterprise-wide marketing taxonomy that captures activities across the marketing value chain. The taxonomy should then be used to understand how the various groups are allocating their marketing budget against each of the elements. Clearly defined data collection templates can help in gathering this information consistently. The volume of work associated with various marketing activities should also be captured to help determine the optimal size of the future organization.

By then conducting staff surveys and selected interviews, marketing leaders can discern the more nuanced differences among business units and geographies. This is especially critical when companies are thinking of rechanneling their investments in a particular area while gaining efficiencies in more transactional and commoditized marketing activities.

**Step 2: determine a menu of scalable services.** Companies need to consider what the marketing shared-services organization will provide to its internal customers — the business units, geographic divisions, and product lines. Two broad kinds of services should be considered: transactional services and expertise-driven services.

Transactional services are repetitive in nature, and can be consolidated into centers of scale and potentially outsourced or delivered internally from lower-cost locations to reduce labor expenses. Typical activities include media buying, creative development, performance management, customer data management and analytics, market insights and research, trade show management, direct marketing execution, and lead generation. The oracle corporation, for example, has centralized its most repetitive marketing tasks in india, and its local staff reports to a senior director in the united states. Oracle uses standardized systems and processes to make the indian operation accessible to business units around the world.

Expertise-based services require business knowledge and are usually kept in-house or in close proximity to the business units. Typical activities include social media marketing, customer insights, and campaign management. Harrah's, now part of the caesars entertainment corporation, for example, decided to centralize its expert services (web 2.0 marketing and predictive analytics, among other operations) because they were at varying levels of maturity and had been inconsistently adopted at its casinos and other properties. Now, although the individual units still set their own business objectives, the center of expertise, called studio one, is the gatekeeper for those services. To impose consistency, studio one has developed and distributed common tools and templates for the units' use.

**Step 3: lay the groundwork and design the future model.** The different roles for corporate headquarters, the business units, and the marketing shared-services group need to be clearly defined. At royal philips electronics, for example, a bold transformation a decade ago included migrating from a business unit-centric marketing model to a centralized operating model in which activities with the highest economies of scale and the longest time horizon, such as branding and customer or market research, reside at the corporate level; activities with high scale and a medium time horizon, such as direct marketing and trade shows, are assigned to the business sector or segment level; and activities with low scale and short-term results, such as campaign execution, are handled locally.

Automation across the marketing life cycle is essential to successfully implementing and sustaining many of the structural and process changes. Because many companies are playing catch-up on the technical front, leading companies are implementing a core customer relationship management system as the foundational tool and then adding bolt-on applications to support specific processes such as marketing roi analysis and campaign management.

Companies should establish a governance body consisting of senior executives and key marketing stakeholders early on, to ensure executive buy-in and create a model that senior marketers are both invested in and accountable for. The group should be charged with setting the vision and strategy for marketing, and defining the modus operandi and decision rights for various stakeholders. It should review major investments and work with business units and regions to resolve conflicts. The governance body should also instill a pay-for-performance culture with service-level agreements and chargebacks — internal cost transfers to pay for

marketing services. High quality and timely delivery are critical in building confidence in shared services among the business units, and a clearly defined service-level agreement between marketing shared services and the business units will help to ensure compliance. Separately, an effective chargeback mechanism provides cost transparency, enables business units to manage demand for shared-services involvement, and encourages spending efficiencies and accountability.

Developing a sound economic case for the model is essential. There are two ways to go about it. One is to obtain buy-in for the concept of developing a marketing shared-services group, set up the organization, and then go after the benefits over time. The other is to be very clear about the economics from the get-go and then manage the marketing shared-services group in a manner that keeps it on track. A solid business case should include an assessment of whether a service should be kept in-house or purchased externally.

**Step 4: devise a transition plan.** A holistic but practical road map should start with an end state, and spell out intermediate steps to reach it. The transition can take several forms: company leaders can begin with a few processes that are rolled out to business units globally, they can choose a region or market to pilot the concept, or they can select marketing services to be offered to a particular business unit. Executives can decide which approach to use on the basis of their business's structure and past experience setting up shared services in other functions, such as human resources or finance.

It is important to minimize business disruption during the transition. Toward that end, the shift to a new model should come in phases that are tied to key milestones (for example, the end of a quarter or a year). The transition team should focus on areas in which implementation is less complex and there is management buy-in. Finally, the rollout plan should be tailored to meet the specific needs of each geography.

By definition, these transitions are top-down affairs. When the chief marketing officer at Harrah's decided to transform its model, for instance, he set up a management group composed of senior marketing leaders from the company's casinos and other properties. A 360-degree performance evaluation was undertaken to ensure full cooperation from all stakeholders. At Philips, the CEO mandated that business units could not opt out. The CMO then went to work, rounding up the disparate marketing elements into a single integrated group.

Implementing a shared-services model following these four steps enables both the corporate center and the business units to concentrate on strategic marketing, instead of just tactical execution. This will be a key differentiator, as the number of customer segments, brands, product lines, and geographies that marketing executives must serve continues to expand. Companies that get the transformation right will find themselves with a competitive advantage that will prove to be a powerful new engine for growth.

## CONCLUSION

Collaborative marketing helps the organization to explore the untapped potentials of the market. With the help of modern collaborative marketing, it is easier to reach the target audience. Sourcing mutually beneficial collaboration opportunities is a big task if done the old-school way. Traditionally, brand partnerships result from significant research, ideation, pitching, follow-up meetings and negotiation.

Brands and advertisers stand to gain incredible results to their bottom line from collaboration marketing campaigns. It's no longer a long-winded process, global opportunities are at arm's reach, more brands understand the concept and marketing strategies are calling for creatively leveraged, multichannel techniques.

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**REAL ESTATE INVESTMENT TRUSTS (REITS): FOR CONSTRUCTING A ROBUST FOUNDATION FOR HOUSING AND REAL ESTATE SECTOR IN INDIA**

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**ABSTRACT**

*In the context of the national goal of 'Affordable Housing for All by 2022' in India, construction of houses and other residential buildings is of vital significance. Apart from meeting the primary social goal of housing for all, housing investments will lead to faster national economic development too, because of the vast forward and backward linkages resulting from housing investments. The successive Governments in India have been making huge investments, both direct and indirect, for housing development in the country. Large budgetary provisions for housing and extension of various incentives and subsidies to lenders and individual borrowers have been continuing over the years. Given the paucity of Governmental funds, however, there is always the need for participation by the private sector and also the public funds mobilized through capital market. Then only the huge investments required for materializing the dream 'Housing for All by 2022' can be mobilized. There has been appreciable growth in the Indian capital market in the past one decade, particularly in the Mutual Funds (MFs) industry. While the MF industry has been growing fast since the 2000s as it witnessed many innovations, this growth has further accelerated since 2017. Despite the high growth in the MF industry in India, instruments that are very similar to MFs viz. Real Estate Funds (REFs) and its variants like Real Estate Investment Trusts (REITs) are yet to pick up momentum. In India REFs and its variants such as REITs have excellent growth prospects because mortgage penetration in the country is very low. The first REIT issue in India (Embassy Office Parks) has been very successful. If properly developed, REITs can effectively support the growth of housing and real estate sector in India. Securities and Exchange Board of India (SEBI) has been trying to develop innovative financing models like REITs over the years. This paper looks into the need for promotion of REITs in India for greater liquidity in the housing and real estate sector thus facilitating rapid economic development of the nation, and suggests suitable strategies.*

*Keywords: Real Estate, Housing Development, Linkages, REFs, REMFs, REITs.*

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**1. INTRODUCTION**

It is well recognized in the literature that housing and real estate sector has huge potential for economic development of any nation, apart from its social development role. This is particularly true in respect of developing nations like India. Firstly, the vast forward and backward linkages of housing and building construction industry with 269 other industries enable it to promote faster and balanced economic development of a nation. This industry has the potential to kick-start a recession hit economy too, because of the above linkage effects. Secondly, from a social perspective, housing is a primary requisite of human life and hence an essential ingredient in any welfare state. With the initiation of the economic reforms in India since July 1991, the housing sector has been getting added attention and more conducive environment for its growth, notwithstanding the fact that successive Governments used to accord high priority to this sector even before the reforms era, especially since the early 1970s. In the ongoing reforms era there are more business opportunities and added demand for commercial and residential space. This paper looks into the need for promoting real estate investment trusts (REITs) in India for the rapid faster growth of Indian economy.

**2. LITERATURE REVIEW AND RESEARCH GAP**

Kiran Keswani (1997) [11] in his paper, 'The contribution of building centres to low-cost housing in India' in *Building Research & Information* has studied the reasons for the slow growth in low-cost housing projects in India. The author has suggested that the Government should assume the role of a facilitator rather than a provider. A three-pronged strategy has been suggested for promoting low cost housing viz. (i) examining critically the archaic laws on housing, (ii) disseminating information on technical aspects of house building, and (ii) training in updated technologies on low-cost housing. Peer Smets (1999) [30], in his paper 'Housing Finance Trapped in a Dilemma of Perceptions: Affordability Criteria for the Urban Poor in India Questioned' in *Housing Studies* has argued that a definitional issue associated with formal housing finance and 'eligibility' for the same in terms of 'affordability criteria in one go' has resulted in exclusion of the vast majority of the urban poor from availing finance from formal sources of finance. The author has advocated the need for 'incremental housing' and also the need to assess the 'affordability in a phased in manner' and 'not in one go'. Manoj P K

(2003) [13] in his research paper, 'Retail Banking: Strategies for Success in the Emerging Scenario' in *IBA Bulletin* has suggested strategies for the sustained growth of the retail credit portfolio of banks, that mainly comprises of housing finance, as a safer way of increasing business and also kick-starting the then recession-hit industry of India. 'Linkages' – both forward and backward – of housing with large number of other industries, and the positive effect of such linkages for bringing about faster economic growth have been pointed out in the paper. Manoj P K (2004) [14] in his another research paper, 'Dynamics of Housing Finance in India' in *Bank Quest* has pointed out the growing appetite of commercial banks (CBs) towards housing credit, the falling share of housing finance companies (HFCs) in the market, and allied aspects. Some macro level strategies for the sustained and balanced growth of housing finance in India are suggested. The relevance of promoting secondary mortgage market (like, RMBS), alternative models like Housing Micro Finance (HMF) etc. in India has been noted.

In Working Paper 19 titled, *Housing Microfinance: Designing a Product for the Rural Poor*, released by Institute for Finance Management and Research (IFMR) (2007)[7], has noted the utmost importance of promoting Housing Micro Finance (HMF) – an alternative model for housing finance for the poor – for addressing India's chronic housing problem, which in turn is primarily that of the poor and marginalized in the country, like the LIG (Low Income Group) and EWS (Economically Weaker Sections). Only models like HMF could cater to such deprived sections that are not served by the formal sector agencies. So, models like HMF are required to solve India's 'real housing problem'. The IFMR report seeks to design the suitable HMF model for the Indian poor. Manoj P K (2008) [15] in his paper, 'Learning from Cross-country Experiences in Housing Finance: A Microfinance Approach' in *Journal of Global Economy* has suggested suitable macro level strategies for promotion of housing micro finance (HMF) in the Indian scenario by appropriately replicating the successful and time-tested models like HMF or other similar alternative housing finance models prevalent elsewhere in the world. In the edited book by Manoj P K (Ed.) (2009) [16], *Emerging Technologies and Financing Models for Affordable Housing in India* housing finance models and technologies for promoting affordable housing are explained. ICRA (2010) [6] in its research report on Housing Finance Companies (HFCs) in India has discussed the changing landscape of home finance market in the country, the greater growth rate and the gradual comeback of the HFCs vis-à-vis Commercial Banks (CBs), the superior asset quality and profitability of HFCs, etc. The very significant role that HFCs has to play in the emerging scenario to meet the huge housing shortage in the country has been highlighted in the study.

A research paper on HMF by Manoj P K (2010) [21], "Prospects and Problems of Housing Microfinance in India: Evidence from "Bhavanashree" Project in Kerala State" in *European Journal of Economics, Finance and Administrative Sciences* has studied in detail the utmost importance of HMF for balanced and equitable housing development in India, and hence rapid economic development of the country. Strategies for promotion of HMF in India have been suggested, along with specific and category-wise strategies for the HMF based in Kerala and sponsored by the state government namely 'Bhavanashree'. Manoj P K (2010) [18] in his paper, 'Benchmarking Housing Finance Companies in India: Strategies for Enhanced Operational Efficiency and Competitiveness' in *European Journal of Economics, Finance and Administrative Sciences* has made a detailed analysis of the relative competitive position of the leading housing finance companies (HFCs) in India and has suggested strategies for the enhanced operational efficiency and competitiveness of HFCs. The management consultancy organization, KPMG (2010) [11], in its Industry Report (Advisory), 'Affordable Housing – A key growth driver in the real estate sector?' has sought to discuss the immense growth prospects of real estate players in the affordable housing market in India, given the huge demand and grossly under-penetrated market, very favourable Governmental policies etc. The demand and supply constraints, the relevance of PPP in the real estate sector etc. have also been dealt in detail. In a research paper by Manoj P K, (2010) [19] 'Determinants of Successful Financial Performance of Housing Finance Companies in India and Strategies for Competitiveness: a Multivariate Discriminant Analysis' has attempted to find the determinants of superior financial performance of HFCs. Using the tool Multivariate Discriminant Analysis (MDA), Discriminant Function having five distinct parameters (selected from the total 21 parameters used for MDA) which significantly influence the financial performance of HFCs has been derived; these parameters being (i) Total Income to Housing Loan Assets, (ii) Other Income to Total Assets, (iii) Total Expenses to Housing Loan Assets, (iv) Interest Expenses to Housing Loan Assets, and (v) Interest Expenses to Total Expenses. Yet another paper by Manoj P K (2010) [17], 'Financial Soundness Housing Finance Companies in India and Determinants of Profitability: A 'CAMEL' Approach along with ROE Decomposition Analysis' has employed the methodology of 'CAMEL' ranking along with ROE decomposition analysis to identify the determinants of profitability of HFCs. A research paper by Manoj P K (2011) [22], 'Determinants of Profitability of Housing Finance Companies in India and Strategies for Competitiveness: a Multiple

Partial Correlation Approach' has suggested competitive strategies for various groups of HFCs with the help of the basic parameters that significantly influence the respective groups of HFCs.

A joint research paper by Hrushikesh Mallick & Mantu Kumar Mahalik (2015)[5] 'Factors determining regional housing prices: evidence from major cities in India', in *Journal of Property Research* has sought to identify the factors determining the housing prices with respect to 15 major cities in India using data relating to 16 Quarters (4 years, 2010 to 2013). It has been noted that fundamental factors are more significant than speculative factors. In a research paper by Manoj P K (2015) [25], "Socio-Economic Impact of Housing Microfinance: Findings of a Field-based Study in Kerala, India", published in *International Research Journal of Finance and Economics*, the reasons for the failure of 'Bhavanashree' – the HMF initiative of the Government of Kerala have been studied in detail. The author suggests strategies for effective implementation of HMF projects based on the "learning from the failure of 'Bhavanashree' project in Kerala. The research report by the agency IFMR (2015) [8] entitled *Affordable Housing Finance Sector: Overview* makes a detailed analysis of the need, relevance and significance of affordable housing in India in the context when the national goal of 'Affordable Housing for All by 2022' is implemented by the Government of India. The crucial role that HFCs have to play in this context is specially noted in the IFMR report. The fact that there is a gradual re-emergence of HFCs since 2013, thus overtaking the CBs in growth rate and significantly improving their market share has also been specifically pointed out. In a research paper by Manoj P K (2015) [23], "Deterrents to the Housing Microfinance: Evidence from a Study of the Bankers to 'Bhavanashree' in Kerala, India", in *International Research Journal of Finance and Economics*, the major problems associated by the bankers in financing 'Bhavanashree', the HMF initiative sponsored by the Government of Kerala, has been dealt in detail. Various issues like the unclear land tenure, fragile institutional framework of the HMF and its parent (mentor) 'Kudumbashree' etc. have been analysed in detail. The author makes a few suggestions to the Government based on the findings of his study, for the purpose of enabling it to more meaningfully implement HMF initiatives in the future, 'Bhavanashree' initiative being more or less a failure.

In a research article by Manoj P K (2015) [24], "Housing Microfinance: A Study on Quality, Cost and Default Rate with Respect to 'Bhavanashree' in Kerala", published in *International Research Journal of Finance and Economics*, a detailed and critical study of the asset quality, administrative (transaction) costs, and default rates in respect of the HMF initiative of the Government of Kerala viz. 'Bhavanashree' has been made. Accordingly, suggestions for more meaningful implementation of HMF projects by the Government have been made by the author. Another paper by Manoj P K (2016) [26], "Real Estate Investment Trusts (REITs) for Faster Housing Development in India: An Analysis in the Context of the New Regulatory Policies of SEBI" in *International Journal of Advance Research in Computer Science and Management Studies* has sought to make an exploratory study on the utmost relevance of REITs in a developing country like in India for the promotion of its housing and real estate sector and hence the economy as a whole. Industry research agency, India Brand Equity Foundation (IBEF) (2018) [6] in its report on Real Estate industry in India has pointed out the tremendous growth prospects of the real estate industry in India which is estimated to attain the size of USD 1 Trillion by 2030. Its estimated size as of 2019 is 3.7 Million Square feet and it is the fourth largest sector in terms of FDI flows. Rapid urbanization, growing affordability, and Governmental commitment towards 'Affordable Housing for All' etc. brighten the prospects of India's real estate sector.

In view of the foregoing discussions, it is noted that though there are a number of studies on housing in India, studies on REITs are virtually nil. The only exception is a recent study on REITs by Manoj P. K. (2016) [26], and the present study seeks to explore more into the study of Manoj P. K. (2016) [26] in the light of the latest developments like the first launching of REIT in India (viz. Embassy Office Parks REIT) which has been very successful.

### 3. RELEVANCE AND SIGNIFICANCE OF THE STUDY

Large-scale investments in commercial and residential properties in India is possible only through means like REITs. REITs can ensure faster development of housing and real estate sector (both residential as well as commercial) and hence overall economic development of the nation also. This is because of the vast forward and backward linkages associated with housing and construction activities. The very low level of investment in this sector in India at present points to immense growth prospects for REITs in the country. SEBI had initially issued a set of regulations for REITs in India in 2014. Further amendments have been done by SEBI in 2016. Of late, in 2019 SEBI has permitted online registrations for REITs and InvITs (Infrastructure Investment Trusts). With the overwhelming success of the first REIT issue in India on 01 April 2019 viz. Embassy Office Parks REIT, a joint venture between Blackstone and Embassy group, more players in this sector are about to launch

their REITs. This would provide growth momentum for the sector which is currently facing a slump. In this context an exploratory study of the prospects of REITs in India is relevant and significant.

**4. OBJECTIVES OF THE STUDY**

- (i) To study the relevance of REITs in India for providing a growth momentum to the housing and real estate sector which is currently in a stagnant stage;
- (ii) To study the evolution of REITs in India, the latest developments and innovations in the field, the current structure of REITs and also its future prospects and challenges;
- (iii) To suggest strategies for the effective promotion of housing and real estate sector in India through the REIT route, given the success of the first REIT launched in 2018.

**5. METHODOLOGY OF THE STUDY**

The present study is descriptive-analytical as well as exploratory in nature. The study is descriptive to the extent that it describes the developments in the field of real estate sector in India with a focus on the role of REITs in the faster development of this vital sector, and the implications of the latest developments in the field. Ever since the successful launching of the first REIT in India, SEBI has been coming up with innovations like online registrations for REITs and InvITs, relaxations in the norms of REITs etc. The paper is analytical too as it seeks to analyze the prospects as well as challenges of REITs in India in the days to come. The study is based primarily on secondary data from authentic sources like RBI and CRISIL.

**6. NEED FOR INNOVATIONS IN THE REAL ESTATE SECTOR IN INDIA: THE CASE OF REITS**

As the housing and real estate industry in India is currently facing a slump. But, the first issue of REIT has been a grand success and many new players are about to launch REITs. Hence, there is a need to sustain the interest of the investing public in housing and real estate sector. This in turn requires the continuation of constant product innovations. Equally important is the need to promote particular segments in this industry like REITs which have immense growth potential because of the very low mortgage penetration in India. (Table I).

**Table-I: Mortgage to GDP Ratio of India (2012) vis-a-vis Selected Other Countries (In Percentages)**

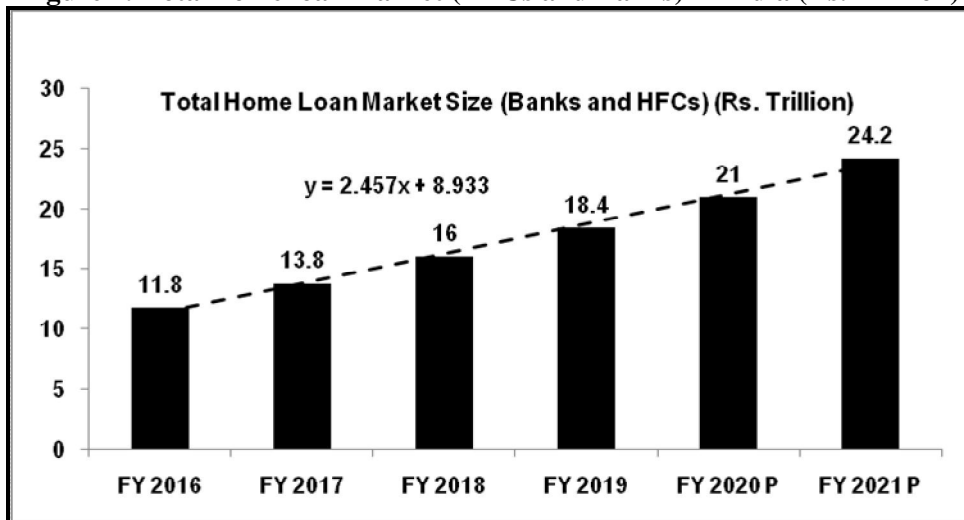
India	China	Thailand	Korea	Malaysia	Singapore	Taiwan	Hong Kong	USA	UK
9.0*	12	17	26	29	32	39	41	80	86

Source: European Mortgage Federation (2007), Asian Development Bank (2007) & NHB (2013).

Note: \* NHB, as of 2012 (approx.), Report on Trend and Progress of Housing in India, 2013, p.105.

The housing loan market in India has been growing over the years and the trend is likely to continue in the future also; the two major players in this market being Commercial Banks (Banks in short) and Housing Finance Companies (HFCs, in short). (Figure I).

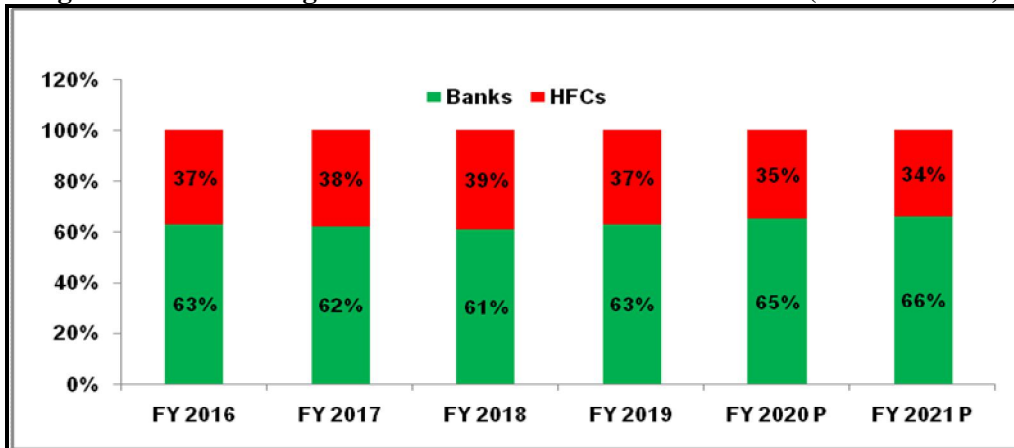
**Figure-I: Total home loan market (HFCs and Banks) in India (Rs. Trillion)**



Source: Computed from CRISIL data (2019) [4]

The market share of Housing Finance Companies (HFCs) in India is estimated to come down because of the growing liquidity crisis among the NBFCs in general and HFCs in particular, since the IL & FS fiasco. For instance, Dewan Housing Finance Corporation (DHFC), a prominent HFC in India, is now in severe financial crisis. The trend of diminishing market share of HFCs is likely to continue in the future. (Figure II)

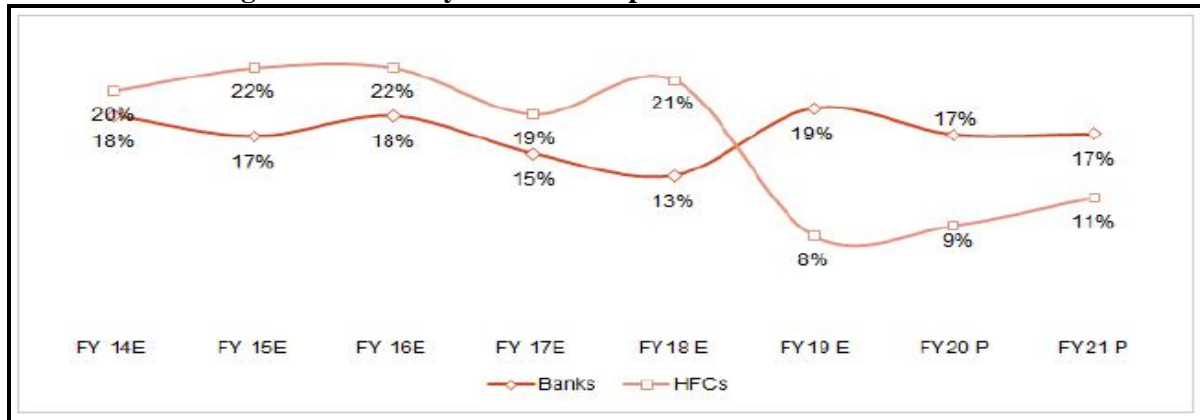
Figure-II: Diminishing market share of HFCs vis-à-vis Banks (Rs. in Trillion)



Source: Adapted from CRISIL (2019) [4]

In view of the liquidity issues of NBFCs (including HFCs) commercial banks will have a greater role in the housing finance market in the days to come. It is noted that banks would have much higher growth prospects than the HFCs, because of a reversal in the growth rates of HFCs vis-à-vis Banks since FY 2019 (Figure III).

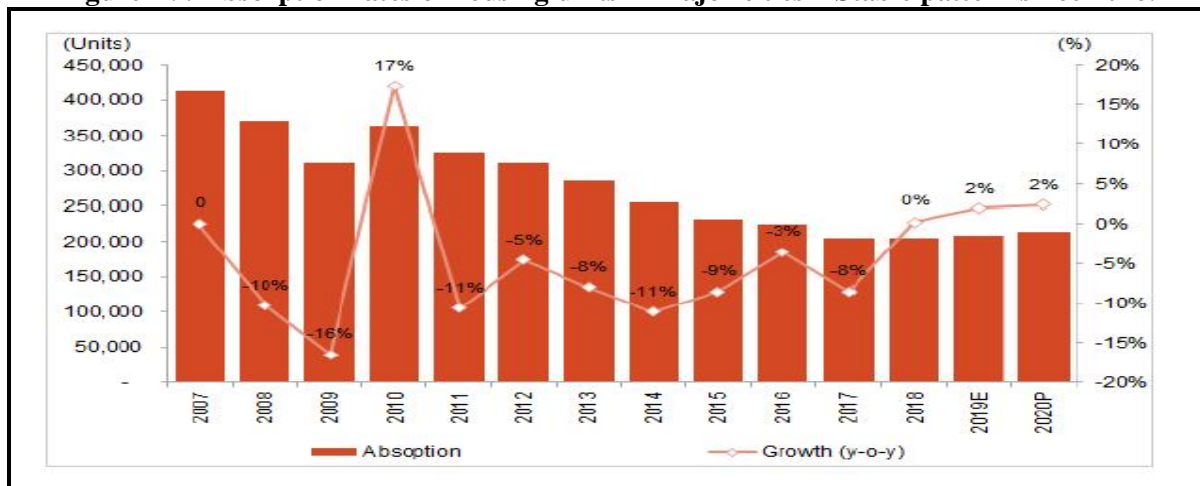
Figure-III: Healthy Growth Prospects of Banks vis-à-vis HFCs



Source: CRISIL (2019) [4]

The growth prospects of the sector, especially in the Tier 2 and Tier 3 cities are high. However, a sudden increase is not anticipated in the near future (CY-2019 or 2020). Rather, a stable trend or marginal increase alone is estimated. This is because the sentiments of the buyers are yet to become positive. As the buyers expect more price cuts, the sector will have to wait for some more time, till its growth to picks up momentum. At present, the absorption rate in respect of the unsold inventory shows a stable trend and the year on year growth rate is only marginal. (Figure IV).

Figure-IV: Absorption rates of housing units in major cities – Stable pattern since 2018.

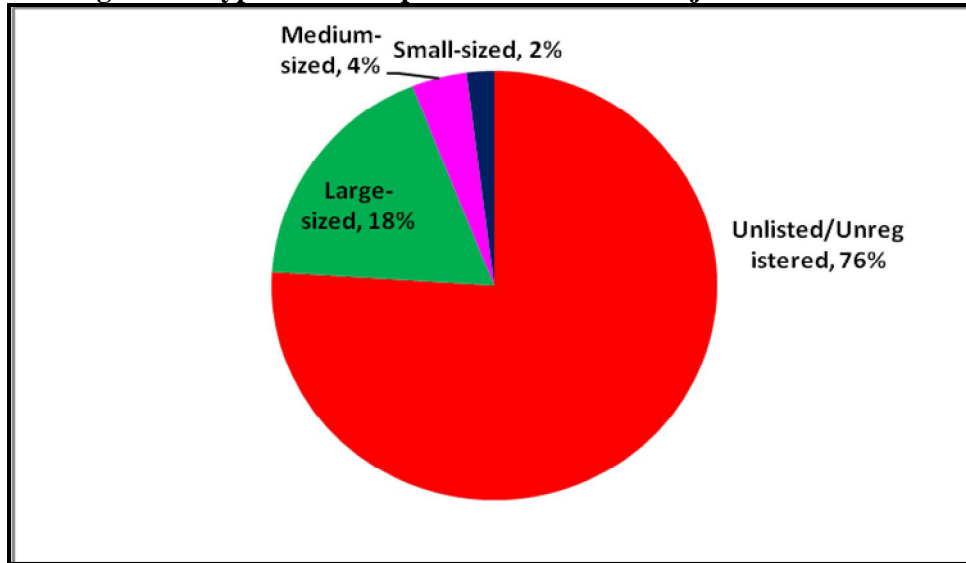


Source: CRISIL (2019) [3]

With the implementation of Real Estate (Regulation & Development) Act, 2016 or RERA in short, a growth momentum is expected across all segments of the housing industry. This is because RERA enhances the transparency in the real estate transactions and protects the interests of the buyers or beneficiaries. In spite of some short-term hassles the developers of housing units, RERA would benefit them also in the long term because of greater business and better confidence of the customers as well as the investor public.

In the ongoing RERA era, a gradual consolidation is also expected leading a greater share for the organized players. At present, only about 24 per cent of the total market is owned by the organized players and the rest 76 per cent belongs to the unlisted and unorganized players. (Figure V). With the advent of RERA and the resultant compulsory registration for the players, the share of organized players would go up and so also transparency in dealings and confidence of the customers and investor public.

**Figure-V: Types of Developers across the Ten Major Cities in India**



Source: Compiled from CRISIL Report (2019) [4]

The above situation points to the high growth potential for REITs in India. The initial public issue by the first REIT (viz. Embassy Office Parks) in April 2019 has been very successful. Other major players are ready to come up with their REITs. The recent developments relating to REITs have been encouraging. SEBI has amended the REIT rules in 2016 and made it more flexible. Many relaxations were made. Of late, in 2019 SEBI has permitted online registration for REITs and this in turn would reduce the processing time and enhance the transparency in REITs dealings. Details are discussed later on in this paper.

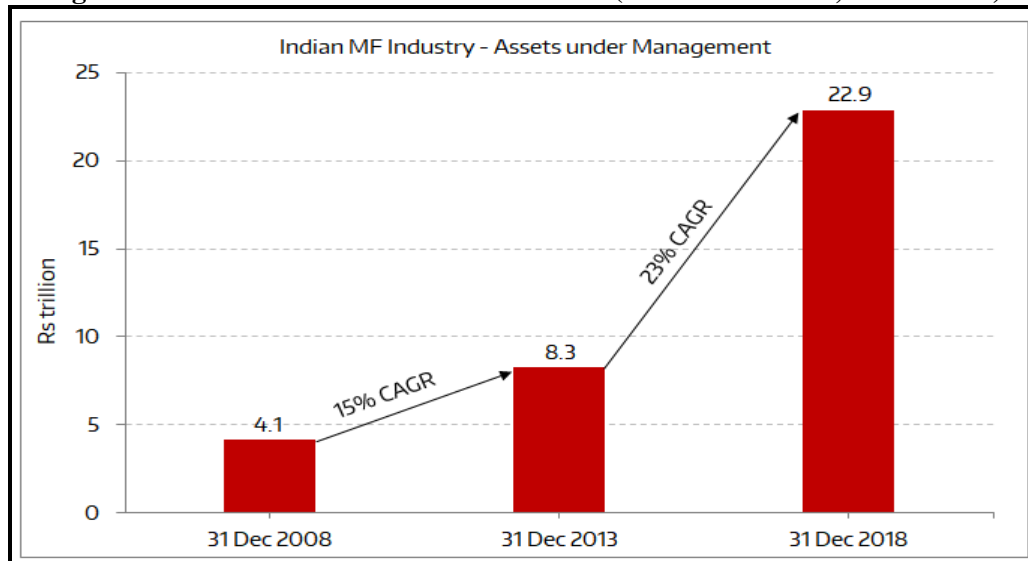
**6. REAL ESTATE MUTUAL FUNDS (REMFS) AND REAL ESTATE INVESTMENT TRUSTS (REITS)**

Real estate funds (REFs) are quite similar to the mutual funds and are founded by a group of real estate professionals to manage property for investors in such funds. Some other real estate funds do not actually own property and instead they opt to invest in bonds or instruments secured by property. In the former case, the investors or unit holders earn money by getting a share in profits from sale of property or from the rentals on property owned by them. In the second case, a coupon rate received on the investment in bonds or instruments is distributed among the investors or unit holders as dividend. The return from such investments is subject to any administration, management, brokerage and/or marketing fee charged by the REFs concerned. REFs have a longer lock-in period than equity funds. Maximum lock-in period for REFs is 6 years. Initially it was required to invest a minimum amount of 25 lakhs in the REFs. Naturally, the retail investors could not enter this segment and the potential investors in the REFs used to be commercial banks, financial institutions, high net worth individuals (HNIs) and corporate entities. However, later on the minimum amount to be invested was reduced to the level of Rs.10 lakhs. Still, REFs are beyond the reach of retail investor’s viz. common investing public in India. Real estate in a broad sense includes commercial, residential, IT development, Hospitality, Malls and SEZ projects. So, REFs may target the development of all or any of the various real estate segments as noted above.

Real estate funds (REFs) or real estate mutual funds (REMFS) are often known, as real estate investment trusts (REITs) internationally. The essential difference between a REIT and a REF (or REMF) is that investments made in REIT are traded in real estate stocks and not invested in stock of companies. It provides a heavier

liquidity than MFs. While there has been appreciable growth in Mutual Funds (MFs) in India over the past one decade or more (Figure VI), it may be noted that REMFs or REITs are yet to pick up momentum.

**Figure-VI: Trend in Growth of MFs in India (in terms of AUM, Rs. Trillion)**



Source: Compiled from AMFI (Association of Mutual Fund Industry in India).

As per an earlier guideline by SEBI, the NAV of REMFs were required to be disclosed daily but later on there was a move for quarterly disclosure of NAV, thus drawing serious speculations in the realty segment. In India, REFs were initially launched in the REMFs format and later on in the form of REITs. Over the last one decade or more, SEBI- the regulatory authority for REFs and its variants in India, has been in the forefront for the regulation of REITs. Most funds operating in India have a lock-in period of 3 to 7 years. At the end of this period, the fund exits the holding by selling it in the secondary market. If the investment is in a commercial property, the fund may rent it out within the lock-in period and exit later. Most funds invest in residential projects and those commercial projects that are nearing completion. While residential projects move faster in the market, there is a rental yield attached to commercial projects. Because of the improved demand for housing and low capital requirement, often REFs focus on residential and income-generating commercial projects. A few funds invest in projects that are still in the initial stages of construction, based on saleability and track record.

## 7. GOVERNMENTAL EFFORTS TOWARDS REMFS AND REITS IN INDIA

In the recent years, the supportive policies of the successive Union governments in India have encouraged the liquidity flow into Indian real estate sector. For instance, Government of India has allowed non-resident Indians (NRIs) to invest upto 100 per cent as Foreign Direct Investment (FDI) in housing and real estate sector. This policy of 100 per cent FDI in the real estate sector in India, setting up real estate mutual funds (REMFS) coupled with other fiscal reforms like rationalization of stamp duty, property taxes etc. initiated by the Government are steps directed at making the real estate a promising investment option in India. As an outcome of the supportive Governmental policies, the foreign contributions to REFs in India have witnessed a steady rise of 40 to 45 per cent per year. The domestic financial institutions have also built up their investments in REFs like their foreign counterparts. This combined participation from both along with contributions of the corporate houses has accelerated the growth of REFs in India. Securities and Exchange Board of India (SEBI), the regulatory authority of securities market in India, has been trying to develop various innovative models for financing real estate market over the last few years.

SEBI's first attempt to bring in REITs in 2007 was not successful. So SEBI went ahead with its second attempt to bring in a REIT regime in the REMF format. But, this was also not very successful for want of adequate interest from the investors. SEBI approved the guidelines for the real estate mutual funds (REMFS) according to which all the schemes having an objective to invest directly or indirectly in real estate property will be governed by the provisions and guidelines under SEBI (Mutual Funds) regulations. SEBI made it clear that the structure of the REMFS, initially, would be close ended. The units of REMFS would be compulsorily listed on the stock exchanges, and NAV of the scheme would be declared daily. The scope of the REMFS was kept wide open, as the guidelines allow these schemes to invest in (i) directly in real estate properties within India, (ii) mortgage (housing lease) backed securities, (iii) equity shares/bonds/ debentures of listed/unlisted companies which deal in properties and undertake property development, and (iv) other securities.

According to SEBI guidelines, REMFs need to appoint a custodian who would grant the certificate of registration to carry on the business of custodian of securities by the Board. The custodian would keep safely the title of real estate properties held by the REMFs. Earlier, in the absence of REMFs, companies setting up REFs had to restrict themselves to financial institutions, corporate sector and high net worth individuals for creating their investor base. The REMFs were supposed to offer the real estate developers another source of funds, as the SEBI guidelines allow the funds to invest in the equity of public listed or privately held real estate developer companies as much as 65 per cent of the fund size.

The minimum investment norms stipulated in the SEBI guideline were thoughtfully designed to promote pure investment in the sector rather than speculation. SEBI guideline said that the REMF would invest at least 35 per cent of the assets in real estate properties that were already completed and usable. Under construction projects, vacant land or properties specified for agriculture use would not be considered as "real estate property" for satisfying the above 35 per cent norm. In addition, minimum 75 per cent investment was earmarked for real estate properties, mortgage-backed securities, equity or bonds or debentures of publicly listed or privately held companies dealing in real estate and in other securities. Here, the other securities would mean only debt and money market instruments. Clearly, SEBI wanted the REMFs to abstain from investing in under-construction projects or vacant land, as such investments were supposed to take a longer period to produce a decent yield and the retail investors were not often willing to wait for that long. In addition, such investments were perceived to have higher risks attached and gray areas about valuations. There were mixed views on the efficacy of REMFs in raising funds for the real estate sector and improving the liquidity of the players, and the impact of such developments on real estate prices. Anyway, the response from the investors towards REMFs was not as impressive as expected by SEBI. So, SEBI's second effort to bring in REFs in the form of REMFs was also not successful.

**8. PROMOTION OF REITS: SEBI REGULATIONS 2014 AND REVISED REGULATIONS 2016**

Failure of its first two attempts to improve liquidity in the real estate market made SEBI to float REFs in the form of REITs (Real Estate Investment Trusts) again, in its third attempt. As part of its third initiative, SEBI was successful in releasing the Draft of its Real Estate Investment Trust Regulations (Draft REIT Regulations) in 2013 and gathering the public comments on the above draft. SEBI did a commendable job in taking into account international models and views of stakeholders. It was envisaged that REITs should likely emerge as a preferred form of asset backed investment with established revenue streams. Also, it aimed at protecting the interests of investors seeking exposure in real estate as an asset class and also to infuse additional transparency and liquidity in the Indian real estate market. With Indian players showing an increased keenness to list Indian real asset listings offshore, especially in SGX, SEBI's move could attract them to such markets onshore and increase depth of Indian real estate capital markets. From a private equity in real estate perspective, REITs could create exit options for developers and financial investors allowing them to move completed assets to REIT and provide much needed liquidity in the market.

As envisaged, SEBI formally flagged off its final version of REIT Regulations in 2014. While developers and lenders welcomed the move, the investors were still not convinced. For developers REITs offered a convenient way to offload their commercial assets and also to reduce debts, while for lenders REITs reduced their business risk and expand their exposure to real estate business further. The poor turn out from the investors was a setback for the REIT Regulations 2014. Though the launch of REIT Regulations was a positive step forward on the part of SEBI, several issues concerning taxation, stamp duty and foreign participation remained. Thus, in spite of the various benefits as contemplated by SEBI, REITs did not take off as expected because specific tax exemptions are not provided. Besides, foreign investment in REITs also did not materialize as expected, because the amendments to the extant exchange control regulations were not carried out. Here, the investors were primarily put off by the governance risks in the asset class and the low liquidity of REIT investments compared to equities or bonds. Returns on REITs depend on the demand and rents for office space, they also compare poorly to other debt instruments during the economic slump. Table II gives the basic details regarding the REITs in their earlier form (REIT Regulations 2014) and the changes in the structure of REITs after effecting the relaxations contemplated by SEBI in June 2016 (SEBI Regulations 2016).

**Table-II: Relaxations by SEBI on REIT Regulations 2014 in REIT Regulations 2016**

<b>Structure of REITs: REIT Regulations 2014</b>	<b>Relaxations by SEBI: REIT Regulations 2016</b>
This is a step that makes more attractive for the investors. Only single-level Special Purpose Vehicle (SPV) is allowed in 2014 Regulations. Rules relating to related party transactions as per these regulations	The 2016 regulations propose to allow REITs to invest in property via multi-layered Special Purpose Vehicles (SPVs) rather than single-level SPVs as in REIT Regulations 2014. Besides, the 2016 regulations seek

are elaborate and hence cumbersome to comply with.	to rationalize the onerous rules regarding the related party transactions.
Only three sponsors are allowed as per the 2014 Regulations	The 2016 Regulations propose to allow upto 5 sponsors.
In under-construction projects investment upto 10 per cent alone is allowed	In under-construction projects investment upto 20 per cent alone is allowed

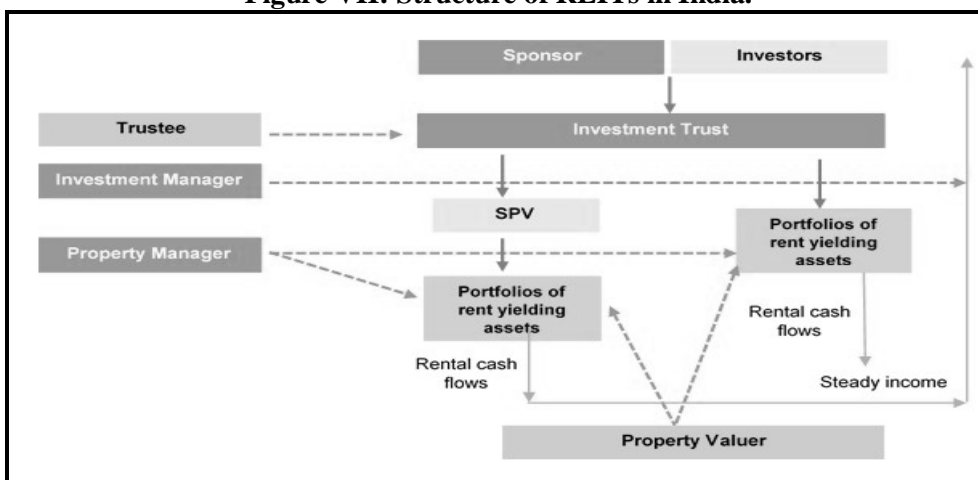
Sources: Compiled by the Authors, from sources like SEBI publications, press releases etc.

It may be noted that various relaxations as per the 2016 Regulations (Table II) would make life easier for the sponsors and managers of REITs. However, these may not out to be undesirable for investors. For instance, a multi-layered structure of SPVs may make it harder for the investors to discern the ultimate assets to held in their REIT portfolio. Allowing more sponsors into REIT may reduce the skin in the game for sponsors. The fact is that REITs can kick off operations based on property assets transferred by their sponsors. This creates conflict of interest between REIT sponsors and the ultimate investors in REITs. As per the 2014 regulations, this risk of investors was addressed by two means (i) elaborate related party rules, and (ii) skin in the game requirements in these regulations. Accordingly, the sponsors were required to invest at least 25 per cent of the outstanding corpus of a REIT for the first three years with a collective networth of at least Rs.100 Crore. As per the revised regulations (2016), as the number of sponsors could go up to 5 (as against 3 as per the 2014 regulations) resulting in dilution in controls, and risk of investors would go up accordingly. There was an attempt to safeguard the interest of the investors against the related party transactions, by stipulating unit-holder approvals and independent valuation reports for such related party transactions. But, the experience with such related party deals in listed companies in India so far shows that often disinterested investors simply favour such proposals resulting in the interests of affected investors getting not protected. The investors’ interests are not properly safeguarded by the provisions of related party transactions.

**9. REITS IN THE NEW REGIME, THE FIRST REIT ISSUE, AND STRUCTURE OF REITS IN INDIA**

The developers who are in the possession of a portfolio of rent generating assets traditionally prefer mobilizing extra funds through debt by way of lease rental discounting (LRD). Of late, a few very reputed developers have raised funds by issuing Commercial mortgage-backed securities (CMBS). But, the attractiveness of CMBS is dependent on the outlook on interest rates and may not be liked by developers in a situation of falling interest rates, as is the prevailing case of India. From the ownership viewpoint, while LRD and CMBS continue to retain developer’s holding in the projects, REIT offers partial exit to developer creating a monetizing opportunity. The first REIT in India (viz. Embassy Office Parks REIT) is in fact a joint venture between Blackstone and Embassy Group. This REIT issue was open in Indian stock market on April 1, 2019. Issue got oversubscribed on the last day of the issue. Embassy’s portfolio consists of seven office parks and four city-centre office buildings totaling 32.6 million square feet (msf) as of March 31, 2018, in cities including Bengaluru, Pune, Mumbai and Noida. The current structure of REITs in India is as given in Figure VII.

**Figure VII: Structure of REITs in India.**



Source: CRISIL Research (2019)

Regarding the assets of REITs, there is a condition that at least 80 percent of value of the REIT assets must be in completed and rent generating properties. However, not more than 20 percent of their assets may be in (i) Under-construction properties (min. 3 years holding), (ii) Completed and not rent generating properties (min. 3 years holding), (iii) Listed or unlisted debt of companies or body corporate in real estate sector, (iv) Mortgage

backed securities (MBS), (v) Equity shares of listed Indian companies which derive at least 75 percent of their operating income from real estate activity, (vi) Government securities, and (v) Money market instruments or cash equivalents.

#### 10. REITS FOR THE REVIVAL OF RESIDENTIAL REAL ESTATE SECTOR IN INDIA: SOME STRATEGIES

The excellent response received for the first REIT gives hopes to the developers for more REIT issues, as they get an option to raise funds and reduce their debt. Some suggestions for promotion of REITs for faster growth of residential real estate sector in India are as follows:

- (i) In general, commercial real estate projects of developers are interested in REITs. While the fact is that most developers have both commercial and residential portfolios and hence funds raised from commercial (non-residential) assets would also help their residential projects, it is advisable that Government should encourage developers to use their residential assets for REIT issues. This will have a direct positive impact on residential projects of developers. Special tax incentives be offered for such REITs.
- (ii) Given the fact that not even one-third of the total residential housing units developed by the major developers qualify for the 'Affordable Housing' tag (which are eligible for various incentives offered by the Government), focused attention is required on the developers of 'Affordable Housing' or 'Budget Housing' projects (say, not less than 50 percent of the total housing units developed) and such developers be selectively granted special concessions and relaxations on tax, permits etc. This is because 'Housing for All by 2022' is a governmental commitment.
- (iii) Besides, incentives and concessions to the developers of Affordable Housing units, financiers to such units like banks and housing finance companies (HFCs) should also be granted similar incentives, like, Priority sector status to such advances etc.
- (iv) Promotion of private equity (PE) funds that invest in real estate sector (particularly residential real estate) is advisable. In calendar year (CY) 2018 the PE funding in the commercial segment had touched a four year high. PE funding in residential real estate should be encouraged by extending them special incentives, given the national goal of 'Housing for All by 2022'.

#### 10. CONCLUDING REMARKS

Because liquidity crunch is a problem for the real estate industry and also the financiers to this industry (like, the NBFCs including HFCs) the demand is yet to pick up momentum. It is expected that developers with both commercial and retail portfolios will be in a better position to sustain compared to other developers. With the regulatory framework for real estate sector in India witnessing substantial developments in the last few years, developers and PE funds (both domestic and foreign) have been rationalizing their commercial and retail portfolios since 2012. This is evident from the PE investments in such real estate properties.

At present, the top six cities (viz. Bengaluru, NCR, MMR, Pune, Chennai, and Hyderabad) are estimated to possess a total inventory of nearly 460-470 mn sq ft (A grade) commercial properties. Not less than 20 percent of the above estimated properties can be used for raising funds through the REIT route, considering the factors such as project locations, developers' brands, ownership of key real estate funds, quality of tenants present, tenure of lease agreements, and so on). Obviously, if REITs emerge from the above REIT-able properties then that itself would provide the requisite level of growth momentum to the real estate sector in India, and this in turn translates into growth of other sectors of the economy given the vast linkages of the real estate sector with nearly 300 allied sectors. Let us hope for the best.

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**APPLICATION OF EPIDEMIOLOGICAL MODEL IN VIRAL MARKETING**

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**ABSTRACT**

*Viral Marketing has been creating a buzz in market for a long time now. It refers to a strategy wherein consumers themselves spread the marketing message in their groups through various platforms. This study aims at investigating viral marketing dynamics through an epidemiological model. In an epidemic, an infectious disease spreads on a large scale to a big amount of individuals within a short time span. The model discussed here is Susceptible- Infected- Recovered (SIR) epidemiological model. Later on, we discuss the interpretation of SIR epidemiological model in viral marketing context. We also discuss marketing implications of the same to balance various elements for successful viral marketing campaign.*

*Keywords: viral marketing, word of mouth, epidemiological model*

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**INTRODUCTION**

Internet is an abundant source of information, people share information which they find interesting or worth-sharing with their friends, family and relatives through emails or messages. Individuals forward daily news articles, YouTube recordings, product reviews, etc. Several companies are taking advantage out of it and recognising the opportunities that can offer them huge success with minimal investment. Viral Marketing (VM) has already been acknowledged as an emerging strategy wherein, the consumers themselves are energized to share their item preferences through their social systems. This sort of communication impact customers the most, since the information was shared by the friends or peer networks, rather than companies themselves. In the event that a marketing effort goes viral, it is practically equivalent to an epidemic wherein the marketing message moves through a population in a moderately fast and self-replicating manner. A mathematical model of Viral Marketing has been presented, using insights from the epidemiology literature. Thus, the aim of the study is twofold:

- (a) To discuss the implications of epidemiological model in viral marketing context.
- (b) Also study the interactions of several elements that may affect the success of a VM campaign.

In the following sections of the paper, we attempt to define the concept of Viral Marketing with relevant literature. Then, we proceed with the SIR epidemiological model along with its marketing implications.

**THEORETICAL FRAMEWORK OF VIRAL MARKETING**

Viral marketing can be defined as a process by which customers exchange and disseminate marketing relevant data, originally intentionally provided by marketers (Van der Lans et al. 2010). It is a strategy whereby individuals forward the message to other individuals on their email records or messages. Grewal and Levy (2010) describe VM as a process that encourages pass along among consumers. Individuals are encouraged to pass along positive and compelling marketing information thereby acting as brand advocates. Since viral marketing campaigns are self-propagating, they tend to be more cost effective than traditional methods of marketing. With the great potential that VM has, it is gaining popularity in the market. In this setting, a divestment within the conventional media by major marketers has been observed and transfer of funds to the digital marketing techniques has been expanding.

VM offers three fundamental points of interest to a firm. To begin with, it incurs exceptionally small cost to market the product since individuals themselves are engaged in sharing the messages. Second, the message sharing process is voluntary in nature rather than paid testimonials and hence may be seen more favourably by the recipients. According to the reports of Nielsen's Global Trust Advertising survey in 2012, people trust their friends' recommendations and online reviews more than the advertisements by the companies." Third, those who share the messages will have a greater chance of knowing who have similar interests. The noteworthy increase in popularity of Fidget spinners in 2017 is an apt example of viral marketing. It was declared "must have office toy for 2017" by Forbes picking up a 400% increment in Google Search and took each spot on Amazon's 20 best vendor list for toys. People were sharing pictures and videos of fidget spinner on their social media handles such as Facebook, Instagram, and YouTube.

The key portion of success of viral marketing is development of engaging campaigns that people find worth-sharing. Certain factors affect the motivation level of the individuals to pass on the message to their peer groups. Also, people don't like to be spammed with excessive emails or messages. The successful campaigns

engage customers in various ways, including rewards and referrals programs, fun activities and interactivity. The Life without Netflix campaign by Netflix promoted with hashtags #LifeWithoutNetflix and #TheNetflixLife created a buzz over social media as they released few short videos featuring famous stand-up comedians highlighting the advantages of Netflix over conventional TV programs providing a wider choice to choose from, thereby motivating people to share the good laugh with their friends and family.

How does the message become viral? There can be innumerable possibilities of spread of a viral message. An epidemiological method of spread of virus among the population can be understood to study how a message becomes viral.

In the later section of the study, we are going to understand the basic epidemiological model and also discuss the application of epidemic model in viral marketing.

**SIR EPIDEMIOLOGICAL MODEL**

In this study, SIR epidemiological model has been presented that explains VM campaigns in the field of marketing. The SIR compartmental modelling approach divides the population into three different classes i.e. represented by S(t), I(t) and R(t) respectively.

S(t) - Susceptible at time t;

I(t) - Infected at time t;

R(t) - Recovered at time t.

The susceptible is the individuals who are exposed to the disease (exposed to the marketing message), the infected is the individuals who can now transmit the disease (actively share marketing message) and the recovered is the individuals who have already been infected and now have been recovered (stopped sharing marketing message i.e. inert group). The dynamics of epidemic model can be described assuming the population size (N) to be constant which means that,

$$N = S(t) + I(t) + R(t)$$

Where, initial conditions are  $S_0 > 0$ ,  $I_0 > 0$  and  $R_0 = 0$ .

The SIR model is governed by following system of differential equations:

$$\frac{dS(t)}{dt} = -\beta \frac{S(t)I(t)}{N}$$

$$\frac{dI(t)}{dt} = \beta \frac{S(t)I(t)}{N} - \Gamma I(t)$$

$$\frac{dR(t)}{dt} = \Gamma I(t)$$

Wherein,  $\beta$  refers to the rate of infectivity which is the product of contact rate among individuals per period of time ( $\delta$ ) and the probability that a contact between a susceptible and an infective result in transmission of the disease ( $\tau$ ).

Therefore,  $\beta$  (rate of infectivity) =  $\delta\tau$

$\Gamma$  refers to the rate at which individuals recover from the disease (here, stops sharing message). The SIR epidemiological model has been represented with the given model:



SIR Epidemiological model (Figure 1)

Within the study of epidemiology, an epidemic is characterized as a circumstance in which the number of infective increases beyond the number initially infected. The basic reproduction number of the disease represented by  $R_0$  is the average number of secondary infection that occur when one infective is presented into a totally susceptible population.

$$R_0 = \frac{\beta}{\tau}$$

Thus, when  $R_0 < 1$ , infection dies out and there is no epidemic which in marketing sense means that the message will not become viral. On the other way, if  $R > 1$ , infection will be built up within the population and therefore, the message becomes viral.

Also, the Equilibrium of the system is attained when  $\frac{dS(t)}{dt} + \frac{dI(t)}{dt} + \frac{dR(t)}{dt} = 0$

**INTERPRETATION OF THE MODEL IN MARKETING**

Interpretation of the SIR epidemiological model can be understood from figure 2, which explains that the Susceptible (target market) comes in contact with the Marketing message and if they find that worth-sharing, they pass on the message to their peer groups and becomes infective with  $\beta$  infectivity rate. The infectivity rate depends upon the rate at which the individuals come in contact with the marketing message per period of time ( $\delta$ ) and the probability that a contact between a susceptible and an infective result in transmission of message sharing disease ( $\tau$ ). Marketers initially need to increase the value of  $\delta$  by certain seeding strategies to ensure that more individuals come in contact with the message per period of time. Sociometric information can be utilised by the marketers to seed their viral marketing campaigns to draw out maximum benefits. Seeding “right” consumers reduces up to eight times as many referrals as seeding the “wrong” ones (Oliver Hinz, 2011). Many

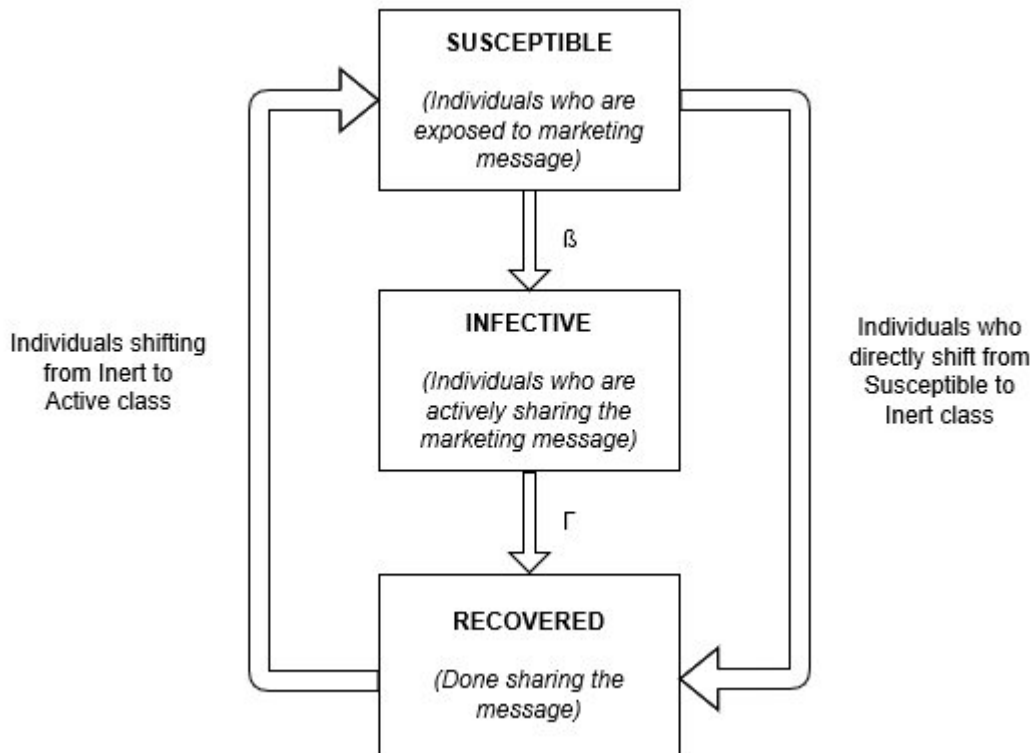


Figure-2

companies such as Microsoft through skype, Google via its Google mail services etc. have indirect access to the data that they can utilise the data obtained this way.(e.g., Hill, Provost, and Volinsky 2006; Aral, Muchnik, and Sundararajan 2009). Marketers should choose highly connected people to seed initially in order to raise awareness and promote transactions through their campaigns for viral marketing. Social networking experience is also valuable for seeding purposes. Therefore, marketers can utilise social media handles to seed their marketing message. For a viral marketing campaign to be successful, marketers should make efforts to raise the value of  $\tau$  i.e. to increase the probability of transmission of message from an infective to the susceptible. Probability of transmission can be increased by motivating the individuals to share the message. The incentives and rewards given to the customers by the advertiser is discovered to have a significant impact on their motivation level to participate in viral marketing campaign. Two way rewards lead to numerous effective referrals as both sides have reason to participate in the program. Another motivating factor is ease of sharing the message and amount of referrals to be made by individuals.

$\Gamma$  depicts the rate at which the individuals lose their interest in campaign and then finally stop sharing the message. Marketers should lower down the recovery rate to ensure prolonged success of the campaign. The

internet now-a-days is flooded with data. There are higher chances of shift of focus from one thing to another without spending much time on forming opinions. Therefore, it generates an inevitable pool of forgotten or distracted customers who might have been involved in the item and could have shared it among their groups. Additionally, customers might lose their interests when the sharing becomes monotonous. To win back the customers and also to keep them engaged in the process, companies may use several methods that may include exclusive deals or incentives for faithful customers, development of distinctive newsletter material, time-limited premium coupons, reminders etc, to encourage them to keep sharing the message.

Individuals who don't show any interest in sharing the message has been represented by a direct shift from Susceptible to Recovered class. These individuals don't participate in the VM campaign because of several defined and undefined reasons. People having trust and security issues may not engage themselves in propagating the message. However, brand associations may surprisingly affect their decisions. Recommendations from friends and peer groups play an important role in decision making process by the individuals. This allows a person change effectively from inert to active state.

### DISCUSSIONS AND CONCLUSION

Marketers have little control over VM phenomenon as it has been referred as a spontaneous ground up occurrence. The study has used SIR epidemiological model to consider the dynamics of viral marketing that translates viral process of spread of a marketing message. Infectivity ( $\beta$ ) and Recovery rate ( $\Gamma$ ) are highly sensitive. Marketers should closely study how they can influence  $\beta$  and  $\Gamma$  values to reap benefits. The movement from the susceptible to infective is a very complex challenge for marketers. The rate of transition from exposed to infected is influenced by several factors such as message content, attitudes and perceptions, motivation, environmental factors, willingness to share message etc. Several managerial implications from our study suggest that the firms should develop their policies to increase customer cognitive change in their own interest by keeping in mind certain relevant considerations such as referral rewards, ease of sharing, entertaining content, security etc. marketers should also take note of the factors such as forgetfulness and diversion to join the project. Missed or diverted customers could be won back by sending them reminders without annoying them. Also, the individuals who directly shifted from exposed to recovered may be influenced to go back from inert to active group by factors such as recommendations by many friends and their reviews. For each case, Marketers should make proper decision about investment in seeding the message in initial group of people.

However, future research can be conducted to estimate size of the seeding for various marketing projects and interactions of the variables. The SIR epidemiological model can be studied with real data of firms to get practical results and interpretations. Viral Marketing case studies may also help in understanding interactions in real scenarios.

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- Sayantari Ghosh, S. B. (2018). Going Viral: The Epidemiological Strategy of Referral Marketing.
  - Siti Suhaila Ismail, K. A. (2017). The Susceptible-Infected-Recovered (SIR) Model for Viral marketing. *AIP Conference Proceedings*.
  - Tewari, S. (2016, july 30). *Netflix India rolls out its first digital brand film*. Retrieved from livemint: <https://www.livemint.com/Consumer/2SbD59bxO3I3kceDdWNznK/Netflix-India-rolls-out-its-first-digital-brand-film.html>

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Fox, S. (1984). Empowerment as a catalyst for change: an example for the food industry. *Supply Chain Management*, 2(3), 29–33.

Bateson, C. D.,(2006), ‘Doing Business after the Fall: The Virtue of Moral Hypocrisy’, *Journal of Business Ethics*, 66: 321 – 335

### • **Multiple author journal article:**

Khan, M. R., Islam, A. F. M. M., & Das, D. (1886). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

Raine, A. (Ed.). (2006). *Crime and schizophrenia: Causes and cures*. New York: Nova Science.

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- **Electronic sources should include the URL of the website at which they may be found, as shown:**

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

- **Website of any institution:**

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