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## Editorial Note

We are glad to present the Volume 9, issue no. 2 of the Biannual research journal GBAMS-Vidushi. The journal established in 2009, has now published of issues; two issues in a year. The journal is now getting indexed in Directory of Open Access Journals and already approved & enlisted in UGC Journal List and also by different academic forums. All these are promising signs. We could reach this stage through the constant support of Editorial Board Members and intellectual generosity of the readers and our contributors.

Our editorial policy is governed by independent quality control. Our endeavor is to make 'GBAMS-VIDUSHI' completely relevant to the present scenario by providing information and informed opinion to provoke thought and innovative ideas.

This journal seeks to publish the highest quality research with questions, evidence, and conclusions that are relevant to management practices. We receive manuscripts with a diverse mix of topics that have a high impact on the management field as a whole and our acceptances reflect this diversity.

The journal encourages new ideas or new perspectives on existing research. We welcome a diverse range of papers from new faculty members, and /or practitioners who need to publish their work for career advancement.

**Dr. Ashutosh Dwivedi & Dr. Rajesh Kumar Singh** in there his paper, “**Human Capital's Perception and Attitude towards Micro Insurance**”, conclude that most of the people in the Mirzapur division had knowledge about life insurance, vehicle insurance, property/asset insurance and crop/agriculture insurance, besides awareness about popular insurance companies. Also indicates that the majority of the rural human capital surveyed considers savings as a device of financial stability. So there is a huge scope for penetrating Micro Insurance in rural India.

**Dr. Ajit Bansal** in his research paper, “**Television Advertisement: Children's Inclination towards Chocolate Products**” clearly indicates that the majority of the purchase decisions in case of children are generally influenced by the advertisements from Television. So it is crucial for marketers to look after the contents & design of children-oriented advertisements which is suitable & non- offensive, sensible and also suggested parents be careful about what their children are watching on television.

**Ms. Shumayela Hasan & Prof S D Sharma** in their paper, “**Self Help Groups as an Instrument of Socio-Economic change in rural areas of Bhopal**”, emphasize the role of SHGs in strengthening the economy of the rural area. The economic activities, viz., assets

acquisition, income generation, welfare activities, household materials, economic power, purchase, income, money lending and savings are the factors influencing the economic empowerment of women through self-help groups.

**Mr. Vinesh Kumar, Dr. Jayant Shekhar & Sunil Kumar** in the technical paper, “**Data Representation in Big data via succinct data structures,**” elaborate data structures to solve problems of big data processing in memory. Use of succinct data structures can allow scalable processing of big data using existing algorithms.

The next paper by **Dr. Mohammad Razi-ur-Rahim** on a literature survey “**Service Quality Measurement in Higher Education**”, is an attempt to highlights the actual services & expected services required in higher education and also explored on the appropriate methodology & tools to measure the dimension of services in Higher education.

Last but not the least **Mr. Pushyamitra Tiwari** in his article, “**Demarcation Of Work- Life: An Edge To Live**”, elaborates work-life balance that it's time to rethink not only the way of organizing the work but also the way of organizing the lives. Instead of pushing back or feeling resentful when work issues interrupt, let's accept that interruptions are a part of life; whether they are caused by usual things.

We are grateful to our chairperson, Mrs. Padma Binani, Mr. Braj Mohan, the chairman, Binani Cements, Mr. R.K Bagri, Secretary, Mr. Pugaliya for their constructive suggestion to make each issue of Vidushi a valuable asset for readers. We acknowledge our Advisory Board and Editorial Board collectively for contributing their valued and precious time in finalizing the journal.

**Prof.Dr. Zeeshan Amir**  
Editor-in Chief

## Human Capital's Perception and Attitude towards Micro Insurance

\*Dr. Ashutosh Dwivedi

\*\* Dr. Rajesh Kumar Singh

### Abstract:

The range of topics for microinsurance market potential research can be broad, depending on the intended use of findings and the time & resources available. Research can be carried out at three levels, namely understanding client needs, including their current risk management behavior, product-specific research and an analysis of the overall market potential. Thus, keeping in view the foregoing discussion on the market potential researches in the area of microinsurance, the present effort subsumes knowledge, perception, and attitude of rural human capital about insurance. The first section of the study elaborates the backdrop/statement of the problem, the second section outlines the objectives, and the third section discusses the Sample Design, Data and Methodology of the Study. Findings of the study have been outlined in the fourth section and the fifth section concludes the study & offers fruitful suggestions for extending microinsurance to the rural poor who are indeed a human capital of the nation.

**Keywords:** human capital, safety mechanism, micro insurance, perception, attitude, market potential studies

### I. Backdrop:

The intangible human capital is an indispensable instrument of promoting comprehensive development of any nation. The rural poor, who are indeed a human capital for rural development, depend largely on agriculture, fishing, forestry, and related small-scale industries and services. However, vulnerability to risks from economic stressors and shocks including illness, injuries, property loss and premature death etc are an everyday reality for the rural human capital. The risks and economic stresses occur frequently in many forms and create a financial pressure to the rural human capital that exacerbates the ever-present stress of meeting regular needs such as food, clothing and school fees etc. In the face of economic globalization, it has become necessary to act innovatively to reduce the vulnerability of poor human capital to shocks and stresses through the provision of safety net mechanism to

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manage risks. This will be driven by creating safety mechanism for managing risks, economic shocks and stressors, establishing local entrepreneurs and strengthening livelihoods, aimed at benefitting rural human capital and low-income groups. This effort could make an important contribution to the development of nascent microinsurance market, especially in rural India for the benefit of rural human capital. An informal mechanism such as savings and other traditional risk management strategies have proven to be too costly and therefore unsustainable as long-term coping strategies. Microinsurance, though relatively new, provides such an option to the working rural human capital. Microinsurance aims to provide protection to low-income people against specific risks and hazards in exchange for premium payments proportionate to the livelihood and costs of the risks involved. It is a safety net mechanism that would, in particular, allows rural human capital to alleviate the economic impact of risks & stressors.

However, the lessons learned from a number of ongoing activities clearly emphasize that microinsurance is a highly technical operation and that it is vital to better understand the market potential for efficient delivery of microinsurance services. Hence, for the sake of rural human capital, there is a need to initiate market potential studies while offering microinsurance. It is hoped that the success of such smaller pilot initiatives would allow microinsurance industry to be taken to scale and achieve wider acceptance and validation. These initiatives will also assist in delineating and creating an enabling environment, and put it in place to ensure that the process is efficient and transparent with minimal transaction costs. In addition, the lessons learned from the market potential studies will provide a value estimate of the extent and nature of capacity development at the human, institutional and system-wide levels that are required for local governments, civil society organizations, and private sector to make microinsurance a viable business aiming at benefitting rural human capital. However, the range of topics for microinsurance market potential research can be broad, depending on the intended use of findings and the time & resources available. Research can be carried out at three levels, namely understanding client needs, including their current risk management behavior, product-specific research and an analysis of the overall market potential. The first level focuses on understanding client's needs and what risks it makes sense to ensure for different groups among the rural human capital. This level of research emphasizes current risk management behavior. The second level, product-specific research, can be carried out in conjunction with the development and testing of a product prototype and/or the actual delivery of an insurance product. The third level of research addresses the size of the potential market for a microinsurance product. It estimates the number of potential policyholders in a particular geographic setting with potential demand and the capacity to pay. This level of market research also addresses the current use and knowledge of insurance, attitude towards insurance concepts and the insurance sector. However, keeping in view the foregoing discussion on the market potential researches in the area of microinsurance, the present effort subsumes knowledge, perception, and attitude of

rural human capital about insurance.

### **II. The objective of the Study:**

The overall objective of the present study is to probe into market potentiality of microinsurance in rural India. The specific objectives of the study are:

- To unfurl the awareness level of the respondents on the basic construct of insurance.
- To examine the acquisition of information on insurance products, their respective benefits, and rights as well as the understanding of different types of insurance policies.
- To assess the rural human capital's perception towards insurance.
- To appraise the rural human capital's attitude towards insurance.
- To propose fruitful suggestions for extending microinsurance products to the rural human capital.

### **III. Sample Design, Data, and Methodology of the Study:**

The scope of present study extends over Bhadohi, Mirzapur and Sonebhadra districts of eastern U.P. From each district five villages have been selected randomly from a chosen block. A sample of 50 households consisting of 25 households belonging to above the poverty line and 25 households falling below the poverty line have been selected from each village. The sampling from the respective village's economic register has been started by the person who was at the top of below poverty line. Subject to availability of respondents, moving simultaneously in the upward and downward direction the population has been sampled. Thus, 50 households from one village represent the households who are just close to the poverty line. Thus, the sample consisted of 250 households from Gyanpur Block of Bhadohi district, another 250 households from Sonebhadra (Myorpur block) and rest 250 households from Patehra Kalan Block of Mirzapur district. The present study is based on primary sources of data and information. For this quantitative study, a survey on a representative sample of the above mentioned 750 household heads has been carried out using face to face method, on the basis of a well-structured interview schedule. The survey work has been done during March-April and October-November, 2017. The data and information so collected have been tabulated, analyzed and interpreted to draw fruitful inferences fulfilling the specific objective of the study. The interpretation has been initiated with the help of relevant averages, percentages, and ratios. Various journals, magazines, and newspapers like Indian Journal of Commerce, Indian Journal of Economics, Finance India, Vikalpa, Times of India, Economic Times etc. have also been adhered to for the preparation of present study, besides the websites of International Labour Organisation, Microwave, and several other Microfinance Institutions.

## IV. Survey Findings:

- **General Profile of the respondents:**

The general profile of the rural human capital surveyed has been analyzed in Table 1

Particulars	No. of Respondents			
	Bhadohi	Mirzapur	Sonebhadra	Total
A. Religion				
Hindu	153 (61.2)	214 (85.6)	204 (81.6)	571 (76.13)
Muslim	90 (36)	30 (12)	38 (15.2)	158 (21.06)
Others	07 (2.8)	06 (2.4)	08 (3.2)	21 (2.8)
B. Caste				
General	122 (48.8)	22 (8.8)	17 (6.8)	161 (21.46)
OBC	104 (41.6)	56 (22.4)	28 (11.2)	188 (25.06)
SC/ST	24 (9.6)	172 (68.8)	205 (82)	401 (53.46)
C. Gender				
Male	147 (58.8)	123 (49.2)	168 (67.2)	438 (58.4)
Female	103 (41.2)	127 (50.8)	82 (32.8)	312 (41.6)
D. Age				
20-30	37 (14.8)	42 (16.8)	26 (10.4)	105 (14)
30-40	33 (13.2)	118 (47.2)	120 (48)	371 (49.46)
40-50	57 (22.8)	71 (28.4)	68 (27.2)	196 (26.13)
Above 50	23 (9.2)	19 (7.6)	36 (14.4)	78 (10.4)
E. Marital Status				
Married	204 (81.6)	209 (83.6)	226 (90.4)	639 (85.2)
Unmarried	32 (12.8)	28 (11.2)	17 (6.8)	77 (10.27)
Widow(er)	14 (5.6)	13 (5.2)	07 (2.8)	34 (4.53)
Divorced				
<b>Total</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>750</b>

**Source: Primary Data**

**Note: Figures in brackets are respective percentages.**

The distribution highlights that 76.13 % human capital interviewed were Hindus and around 21 percent belonged to Muslim Community. The proportion of Muslims was highest in Bhadohi district (36%) while 81.6 percent and 85.6 % of the respondents in Sonebhadra and Mirzapur districts respectively were Hindus. The caste desegregated profile of the respondents reveals that 68.8 % and 82 percent of the respondents belonged to SC/ST category in Mirzapur and Sonebhadra districts respectively, while in Bhadohi districts 48.8 percent of total human capital belonged to general category and 41.6 percent were from Other Backward Classes. In total, 53.46 percent respondents were from Scheduled Caste/ Scheduled Tribe Caste. Out of the sample surveyed, 41.6 percent respondents were female households. In Sonebhadra district, most of the



respondents (67.2%) were male. Nearly half of the respondents were in the age group of 30-40 and only around 10 percent had an age over 50 years. The distribution of sample also reveals that around 10 percent of the respondents were unmarried and 4.53 percent were widows/widowers. The highest proportion of married respondents (90.4%) was registered in Sonebhadra district.(Table.1)

• **Knowledge about Insurance:**

Table.2 unfurls the awareness level of the respondents on the basic construct of insurance, i.e. whether they have seen someone buying and selling any type of instruments such as life insurance, vehicle insurance, property/asset insurance, agricultural/crop insurance, health insurance etc. on the one hand, and knowledge about insurance companies on the other. Around 98 percent of the respondents reported that they have ever heard of 'BIMA' and have seen someone buying or taking any kind of insurance instrument.

**Table.2 Knowledge about Insurance Among Households**

Particulars	No. of Respondents			
	Bhadohi	Mirzapur	Sonebhadra	Total
<b>A. Idea of Insurance</b>				
Yes	248(99.2)	246 (98.4)	243 (97.2)	737
No/No response	02 (0.8)	04 (1.6)	07 (2.8)	(98.27)
				13 (1.73)
<b>B. Knowledge of Various Insurance Products (Multiple Answers Allowed)</b>				
Life Insurance	248 (99.2)	246(98.4)	243 (97.2)	737
Health & Disability Insurance	65 (26)	78 (31.2)	43 (17.2)	(98.27)
Vehicle Insurance	212 (84.8)	217 (86.8)	193 (77.2)	186 (24.8)
Property / Asset Insurance	184 (73.60)	162 (64.8)	171 (68.4)	622
Agriculture/ Crop Insurance	184 (73.60)	162 (64.8)	171 (68.4)	(82.93)
				517
				(68.93)
				517
				(68.93)
<b>C. Knowledge About Insurance Companies (Multiple Answers Allowed)</b>				
LIC	248 (99.2)	246 (98.4)	243 (97.2)	737
GIC	207 (82.8)	216 (86.4)	187 (74.8)	(98.27)
Reliance Insurance	206 (82.4)	185 (74.0)	172 (68.8)	610
Tata AIG	187(74.8)	105 (42.0)	97 (38.8)	(81.33)
Bajaj Allianz	143 (57.2)	102 (40.8)	84 (33.6)	563
Others	107(42.8)	92 (36.8)	67 (26.8)	(75.07)
				389
				(51.87)
				329
				(43.87)
				266
				(35.47)
<b>Total</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>750</b>

**Source: Primary Data**

**Note: Figures in brackets are respective percentages.**

Nearly all the respondents in the sample had awareness about life insurance products. Around 83 percent of the sample households had knowledge about Vehicle insurance and 69 percent were aware of property/asset insurance and agricultural/crop insurance. Only about 25 percent of the respondents had an idea about Health & disability insurance products. All the households were having knowledge about Life Insurance Corporation (LIC). Around 81 percent respondents know about General Insurance Corporation (GIC). A considerable proportion of the respondents in sampled districts know about Reliance Insurance, Tata AIG, Bajaj Allianz and other insurance companies.

- **Sources of Information on Insurance:** In order to examine the acquisition of information on insurance products, their respective benefits and rights as well as the understanding of different types of policies, Table.3 probed into the sources of information of the respondents across the three districts selected for the study.

**Table.3 Source of Information on Insurance**

Source of Information	No. of Households			
	Bhadohi	Mirzapur	Sonebhadra	Total
Friends/Relatives/Neighbours	17 (6.8)	06 (2.4)	11 (4.4)	34 (4.53)
Family	07 (2.8)	04 (1.6)	03 (1.2)	14 (1.87)
Colleagues at Work	00 (0.0)	06 (2.4)	12 (4.8)	18 (2.4)
Newspaper	83 (33.2)	34 (13.6)	11 (4.4)	128 (17.07)
Radio/Television	67 (26.8)	109 (43.6)	122 (48.8)	298 (39.73)
Insurance Agents	74 (29.6)	87 (34.8)	84 (33.6)	245 (32.67)

- **Source: Primary Data**

**Note: Figures in brackets are respective percentages.**

The table exhibited that around 33 percent of the respondents acquire information through insurance agents. Advertisement through Newspaper and Radio/ Television was found to be the primary source of information for around 57 percent of the respondents. Further, advertisements through Newspaper have been found more popular in Bhadohi district whereas advertisement through Radio/Television has served information on insurance to the human capital in Mirzapur and Sonebhadra districts. Friends/relatives/ neighbors, family members, and Colleagues at work exerted a negligible proportion in providing information about insurance to the rural human capital.

- Perception about Insurance:** Under the scheme of insurance an individual or group purchase insurance policy by paying a fee called premium. It is an instrument which helps to defer, delay, reduce or altogether avoid the risks and losses insured against by individuals and households. The insurance remains in force only for an agreed period in return for the purchaser paying an agreed premium. Insurance policies can cover only the policyholder or the policyholder and immediate family members. Table 4 deconstructs the rural human capital's perception regarding various insurance products.

**Table.4 Perception of Households with Insurance**

Perception of Households	No. of Households			
	Bhadohi	Mirzapur	Sonebhadra	Total
Payout Received by Family after the death of the insured	74 (29.2)	87 (34.8)	73 (29.2)	234 (31.2)
Money Back after the complete duration of Insurance	63 (24.8)	54 (21.6)	69 (27.6)	186 (24.8)
Insurance Provides More Money when Required	22 (8.8)	38 (15.2)	41 (16.4)	101 (13.47)
Money back at sudden death of Insured	67 (26.8)	73 (29.2)	62 (24.8)	202 (26.93)
Money return with Interest when premium paid	07 (2.8)	9 (3.6)	7 (2.8)	23 (3.07)

- Source: Primary Data**

**Note: Figures in brackets are respective percentages.**

It was found that around 31 percent of the respondents had the notion that insurance is payout received by family after the death of the insured. Nearly 27 percent of the households reported that insurance is a money back at the sudden death of insured. Another 25 percent were of the opinion that insurance returns the money after the duration for which the insurance is held and around 13 percent respondents reported that insurance provides more money when required. The perception of the rural human capital regarding insurance was found having little variation across the three districts of eastern U.P.

- Attitude towards Insurance and Financial Services:** It is widely believed that there exists a vast potential in the rural areas for insurance products and services. However, insurance has not been able to make inroads in rural areas because of the high cost of delivery and low awareness among the rural human capital about insurance

policies/products and insurers. Table 5 is a further bid to probe the awareness and attitude towards insurance policies/products as well as insurers of the households in the survey area. As it can be seen from the table, around 70 percent of the households reported that they trust insurers. An overwhelming proportion of the households i.e. around 75 percent and 72 percent respectively reported that insurance is a standard service in a civilized society and is socially desirable. Around 87 percent of the respondents were of the opinion that having insurance is prestigious in society. Only around 23 percent of the respondents in surveyed population denied the notion that when somebody is insured he/she can live without worry.

**Table.5 Attitude towards Insurance and Financial Services**

Attitude	No. of Respondents					Total
	I strongly disagree	I rather disagree	I rather agree	Strongly Agree	Hard to Say	
a. I trust Insurer	97 (12.93)	86 (11.47)	220 (29.33)	309 (41.2)	38 (5.07)	<b>750</b>
Bhadohi	32 (12.8)	47 (18.8)	63 (25.2)	105 (42)	03 (1.2)	<b>250</b>
Mirzapur	38 (15.2)	26 (10.4)	50 (20)	113 (45.2)	23 (9.2)	<b>250</b>
Sonebhadra	27 (10.8)	13 (5.2)	107 (42.8)	91 (36.4)	12 (4.8)	<b>250</b>
b. Insurers are socially useful	56 (7.47)	125 (16.67)	277 (36.93)	265 (35.33)	27 (3.6)	<b>750</b>
Bhadohi	16 (6.4)	32 (12.8)	73 (29.2)	123 (49.2)	06 (2.4)	<b>250</b>
Mirzapur	13 (5.2)	65 (26)	111 (44.4)	58 (23.2)	03 (1.2)	<b>250</b>
Sonebhadra	27 (10.8)	28 (11.2)	93 (37.2)	84 (33.6)	18 (7.2)	<b>250</b>
c. Insurance is a standard service in a civilized society	41 (5.47)	131 (17.47)	292 (38.93)	265 (35.33)	21 (2.8)	<b>750</b>
Bhadohi	14 (5.6)	38 (15.2)	83 (33.2)	113 (45.2)	02 (0.8)	<b>250</b>
Mirzapur	18 (7.2)	65 (26)	91 (36.4)	68 (27.2)	08 (3.2)	<b>250</b>
Sonebhadra	09 (3.6)	28 (11.2)	118 (47.2)	84 (33.6)	11 (4.4)	<b>250</b>
d. Having Insurance is Prestigious	24 (3.2)	53 (7.07)	199 (26.53)	449 (59.87)	25 (3.33)	<b>750</b>

Bhadohi	01 (0.4)	24 (9.6)	60 (24)	160 (64)	05 (2)	<b>250</b>
Mirzapur	17 (6.8)	12 (4.8)	52 (20.8)	158 (63.2)	11 (4.4)	<b>250</b>
Sonebhadra	06 (2.4)	17 (6.8)	87 (34.8)	131 (52.4)	09 (3.6)	<b>250</b>
e. When somebody is insured he/she can live without worry	57 (7.6)	113 (15.07)	187 (24.93)	367 (48.93)	36 (4.8)	<b>750</b>
Bhadohi	27 (10.8)	13 (5.2)	64 (25.6)	138 (55.2)	08 (3.2)	<b>250</b>
Mirzapur	12 (4.8)	38 (15.2)	47 (18.8)	142 (56.8)	11 (4.4)	<b>250</b>
Sonebhadra	18 (7.2)	52 (20.8)	76 (30.4)	87 (34.8)	17 (6.8)	<b>250</b>
f. Believe that insurance is similar to monthly thrifts/savings	36 (4.8)	47 (6.27)	353 (47.07)	262 (34.93)	52 (6.93)	<b>750</b>
Bhadohi	13 (5.2)	07 (2.8)	132 (52.8)	84 (33.6)	14 (5.6)	<b>250</b>
Mirzapur	06 (2.4)	18 (7.2)	107 (42.8)	102 (40.8)	17 (6.8)	<b>250</b>
Sonebhadra	17 (6.8)	22 (8.8)	114 (45.6)	76 (30.4)	21 (8.4)	<b>250</b>
g. Think Insurance is an amount you pay to get some compensation if something bad happens	97 (12.93)	86 (11.47)	224 (29.87)	297 (39.6)	46 (6.13)	<b>750</b>
Bhadohi	27 (10.8)	41 (16.4)	69 (27.6)	104 (41.6)	09 (3.6)	<b>250</b>
Mirzapur	32 (12.8)	32 (12.8)	63 (25.2)	89 (35.6)	34 (13.6)	<b>250</b>
Sonebhadra	38 (15.2)	13 (5.2)	92 (36.8)	104 (41.6)	03 (1.2)	<b>250</b>
h. I would need more information on Insurance	19 (2.53)	98 (13.07)	153 (20.4)	465 (62)	15 (2)	<b>750</b>
Bhadohi	03 (1.3)	36 (14.4)	24 (9.6)	185 (74)	02 (0.8)	<b>250</b>
Mirzapur	05 (2)	44 (17.6)	83 (33.2)	117 (46.8)	01 (0.4)	<b>250</b>
Sonebhadra	11 (4.4)	18 (7.2)	46 (18.4)	163 (65.2)	12 (4.8)	<b>250</b>

i. Saving is a device of financial stability	05 (0.7)	45 (6)	265 (35.33)	381 (50.8)	54 (7.2)	<b>750</b>
	00(0)	00(0)	85 (34)	128 (51.2)	37 (14.8)	<b>250</b>
Bhadohi	03 (1.2)	18 (7.2)	107 (42.8)	116 (46.4)	06 (2.4)	<b>250</b>
Mirzapur	02 (0.8)	27 (10.8)	73 (29.2)	137 (54.8)	11 (4.4)	<b>250</b>
Sonebhadra						
j. Saving is essential for protection against contingencies	03 (0.4)	40 (5.33)	73 (9.73)	596 (79.47)	38 (5.07)	<b>750</b>
	00	00	30 (12)	206 (82.4)	14 (5.6)	<b>250</b>
Bhadohi	01 (0.4)	13 (5.2)	08 (3.2)	217 (86.8)	11 (4.4)	<b>250</b>
Mirzapur	02 (0.8)	27 (10.8)	35 (14)	173 (69.2)	13 (5.2)	<b>250</b>
Sonebhadra						
k. Savings can be accumulated through little earnings also	73 (9.73)	97 (12.93)	269 (35.87)	246 (32.8)	65 (8.67)	<b>750</b>
	12 (4.8)	26 (10.4)	102 (40.8)	86 (34.4)	24 (9.6)	<b>250</b>
Bhadohi	23 (9.2)	32 (12.8)	75 (30)	97 (38.8)	23 (9.2)	<b>250</b>
Mirzapur	38 (15.2)	39 (15.6)	92 (36.8)	63 (25.2)	18 (7.2)	<b>250</b>
Sonebhadra						

**Source: Primary Data**

**Note: Figures in brackets are respective percentages.**

The survey findings further revealed that around 82 percent of the households believe that insurance is similar to monthly thrift/savings. Around 70 percent of the households surveyed think that insurance is an amount one pays to get compensation if something bad happens. However, the perusal of the table also highlights that the rural human capital surveyed do not have sufficient/enough information about insurers and insurance policies/products. This is confirmed by 82 percent of households, as they needed more information on insurance. As it is an established fact that saving is pivotal to all the financial services offered to rural poor including insurance. Keeping this view in mind, the study also ascertained the attitude of the

households towards savings. Table 5 makes it clear that around 86 percent of the rural human capital surveyed considers savings as a device of financial stability and around 90% of the respondents were of the opinion that saving is essential for protection against contingencies. A considerable proportion of the rural human capital surveyed (around 68 percent) hold the view that savings can also be accumulated through small/little earnings.

### **V. Conclusion and Suggestions:**

The estimation regarding awareness level, perception and attitude of rural households on the very basic construct of insurance is a pre-requisite for effective delivery of microinsurance services. The present study concluded that most of the respondents in the sample had knowledge about life insurance, vehicle insurance, property/asset insurance and crop/agriculture insurance, besides awareness about popular insurance companies. Radio/television and newspapers have been found popular sources of information among the households surveyed. Insurance is payout received by family after the death of the insured, insurance is the money back at the sudden death of insured, and insurance returns the money after a fixed duration was generally the notion of surveyed rural households. Further, an overwhelming proportion of human capital reported that insurance is standard service, socially desirable and prestigious in the society. Furthermore, the majority of the rural human capital surveyed considers savings as a device of financial stability and essential for protection against contingencies. Most of them hold the view that savings can also be accumulated through small/little earnings. Hence, there exists ample scope for penetrating microinsurance in rural India, however, more than two third of the surveyed human capital needed more information on insurance and insurers. Therefore, the study offers following suggestions to build inroads for microinsurance in rural India.

- Specialized awareness camps and exposure visits should be organized covering consumer education on microinsurance i.e. types of microinsurance products, their feature, coverage, premium amount, payment mode, and benefits etc for benefitting the rural human capital.
- There is a need for wide publicity of various types of microinsurance products in the area. The advertisement through radio, television, and newspapers may be a powerful vehicle in developing insurance culture among the rural human capital.
- The employment of local people/organizations as micro insurance agents, after providing insurance education and proper training, will help better access of agents to rural human capital.

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## Television Advertisement: Children's Inclination towards Chocolate Products

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### Abstract:

The advertisement is the predominant Promotional Mix Variable which is being used in every industry to get noticed by their prospective customer, and thereby turning them into lifetime consumers. These advertisements are also playing their part in shaping the elders, teenagers or children. Especially, these advertisements are influencing the lifestyle of the children in much greater fashion, both in righteous and unrighteous direction. The main objective of this study is to find out, how children are influenced by the television advertisements. The focus of the study is on the effect of television advertisements on children with reference to different chocolate brands and their advertisements, to study the association between preference of children and demographic factors such as Gender and Medium of study. An attempt has been made to know the children's awareness about chocolate brands and preference to buy. The descriptive research design was used as the study followed structured design with predetermined objectives & hypotheses. Primary data have been collected through questionnaire. Chi-square test and Analysis of Variance (ANOVA) was carried out to test the hypotheses. The study comes out with useful insights and recommendations.

**Keywords:** Advertisement, Promotion Mix, Chocolate Brands

### Television Advertisement: Children's Inclination of Chocolate Products

#### 1.1 Introduction:

Science & Technology is playing a phenomenal role in the advancement of human race. Eventually, science brought a lot of gifts to mankind; one such is mass-media. This mass includes Newspapers, Periodicals, Television, and Radio etc. Of all these, Television is playing the influential role in an individual life. Advertisements are used by every industry to get noticed by their prospective customer, and thereby turning them into consumers. And these advertisements are also playing their part in shaping the lifestyle of the individuals at large, whether elders, teenagers or children. Especially, these advertisements are influencing the lifestyle of the children in much greater fashion, both in righteous and unrighteous direction. The degree of impact of advertising on adults has some concern but the outcome on

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children is indeed devastating. Advertisers of children's television used to appeal to the parents earlier but now they appeal directly to children who do not have the emotional or cognitive tools to evaluate what's being sold to them. Television is no more just a source of entertainment for children.

### **1.2: Review of Literature:**

Today, companies spend a massive amount of their earnings in advertising in different media such as television, radio, magazine and etc. And television is one of the common media for this reason. Advertising is the non-personal message containing the information frequently paid for and credible in nature about products, services or ideas by recognized sponsors through the various media (Datta, 2008). The promoter intends to extend his ideas about the products and offerings among the forecast. The popularization of the products is thus, the basic aim of advertising (Ramaswami & Namakumari, 2004). The greater part of the marketers uses mass media for their marketing message. The choice of media is dependent upon the nature of the message and the intended target viewers (Ettel et al, 2008). Television advertising is the best viewed and economical media ever invented. It has a possible advertising impact matchless by any other media (Saxena, 2005). The advantage of television over the other mediums is that it is perceived as a mixture of audio and video features; it provides products with instant validity and fame and offers the greatest chance for creative advertising (Kavitha, 2006).

Over a longer period of time, the TV set has become a permanent fixture in all upper and middle-class households, and it is not infrequent even in the poorer society of urban areas and rural households (Shah & D'Souza, 2008). Reactions to TV advertisements seem to be stronger than the reaction to print advertisements.

The advertisers find it more effective to use television rather than print media to reach consumers, partly due to low literacy rate (Ciochetto, 2004). TV advertising not only changes emotions but give considerable message exerting a far attainment influence on the daily lives of people (Kotwal et al, 2008).

### **1.3: Research Methodology:**

The main objective of this study is to find out, how children are influenced by the advertisements, especially of confectionary products. There is both good and bad impact of advertisement. The focus of the study is on the effect of television advertisements on children with Special reference to confectionary products.

#### **1.3.1: Need for the Study:**

Nowadays kids are spending time in watching TV and they are constantly being targeted by marketers with a large variety of advertisements. Many of these advertisements are aimed at

children as they play an important role in their parent's purchase decision. The advertisement of confectionery products increases the consumption of these products and leads to many health problems in children. Thus the need for the study is to find out the influencing effect of advertisements on children's preferences for products like chocolate, candies, chewing gum and cake/pastries, and their associated problems.

### 1.3.2: Research objective:

This study purports following objectives:

1. To know the children's awareness about confectionery products & their advertisements,
2. To measure the impact of advertisement of confectionery products on children,
3. To study the association between preference of children and demographic factors such as Gender and Medium of study.

### 1.3.3: Sampling:

The descriptive research design was used as the study followed structured design with predetermined. Objectives & hypotheses. Primary data is collected from the respondents with the help of interview schedule. It was mainly directed towards an investigation of the various impacts the advertising has on the children's minds & how advertisements shape their buying habit of chocolate. Well, structured Questionnaire has been randomly administered to 130 children (7 to 15 Years of Age) of different schools of Ambala through schedule method of primary data collection.

**Table: 1.1: Sample distribution**

S No	Nature of Respondents	No of Respondents
1	Boys	61
2	Girls	69
	Total	130

### 1.3.4: Measures:

In order to study the children's preference for the different television programme, they have been asked to rate different kind television programme like the cartoon, movies, reality shows with scale - 1=Never watch, 2= Rarely watch, 3= Sometimes watch, 4=Always watch. In order to know the children's preference for the different chocolate brand, they have been asked to rank the different brands of chocolate. So far as liking of advertisement is concerned, they have been asked to respond to five-point scale - Crazy about advertisement, like very much, like the advertisement, not like much and not at all like advertisement It has been asked to children that do they ask advertised brand of chocolate after watching the advertisement with scale never, rarely, sometimes, always. List of reasons behind asking particular confectionery products have been given to children and they have been asked to rank them.

### 1.3.5: Hypotheses of the study:

#### **TV watching habit of children and Gender**

H0: TV watching habit of children is independent of Gender

H1: TV watching habit of children depends on Gender

#### **TV watching habit of children and Medium of study**

H0: TV watching habit of children is independent of the medium of their study

H1: TV watching habit of children depends on the medium of their study

#### **The medium of Study and Preference for different Programmes**

H0: Hindi and English medium students are not significantly different in their preference for different television programmes.

H1: Hindi and English medium students are significantly different in their preference for different television programmes.

#### **Preference for different Programmes on basis of Gender**

H0: Girls and Boys are not significantly different in their preference for different television programmes.

H1: Girls and Boys are significantly different in their preference for different television programmes.

#### **Impact of advertisement in buying on basis of the medium**

H0: There is no significant difference between English and Hindi medium students regarding the impact of advertisement on chocolate & Biscuit buying

H1: There is a significant difference between English and Hindi medium students regarding the impact of advertisement on chocolate & Biscuit buying.

### 2:1 Data analysis and Interpretation:-

- From the survey, it has been found that number of children (66%) watch television for 1-2 hours a day. There is very less number of children (2 %) who watch television for less than 1 hour a day. Around 33 children watch television for more than 3 hours. There are less than 1 percent children who watch television for more than 4 hours.
- Children like to watch cartoon movies or cartoon serials and movies on television.
- It was also found during the study that majority of children are familiar with the advertisements of Chocolates. Five Star and Cadbury chocolates are their favorite brands.
- Majority of children demand to purchase the confectionary product after watching advertisement of the same.
- It was also found that the reason for purchasing the confectionery product was mainly free gifts like free tattoos etc.

- After watching the commercials of confectionery products, children insist their parents for purchasing the same.
- It was also found during the study that TV watching habit of children and Gender are independent of each other. It means that TV watching habit does not dependent on gender (Refer table-2.1.1).
- Children of both the medium watch the television with the same duration. Therefore, it can be concluded that TV watching habit does not dependent their medium of study. (Refer table-2.1.2).
- Hindi medium students more like to watch cartoon programme while English medium student like to see more movies on television. (Refer table-2.1.3).
- There is no significant difference in case of the impact of advertisement on buying of English and Hindi medium students (refer table-2.1.7).  
Both medium students are moderately influenced by the television advertisement for buying chocolate (Refer table- 2.1.8).

**Table-2.1.1: Cross tabulation TV watching habit of children and Gender**

Duration of Watching TV	Frequency	Gender		Total
		Boys	Girls	
1-2 hrs	Count	39	47	86
	Exp Count	40.4	45.6	86
3-4 Hrs	Count	22	22	44
	Exp Count	20.6	23.4	44
Total	Count	61	69	130
	Exp Count	61	69	130
Pearson Chi-Square Value (.615)				

Source: Primary data

**Table-2.1.2: Cross-tabulation of TV watching habit of children and Medium of study**

Duration of Watching TV	Frequency	Medium		Total
		Hindi	English	
1-2 hrs	Count	32	54	86
	Exp Count	32.4	53.6	86
3-4 Hrs	Count	17	27	44
	Exp Count	16.6	27.4	44
Total	Count	49	81	130
	Exp Count	49	81	130
Pearson Chi-Square Value (.874)				

Source: Primary data

**Table-2.1.3: Medium of Study wise Children Preference for different Programmes**

Programme	Medium	N	Mean	Std Dev
Cartoons	Hindi	49	3.47	0.68
	English	81	3.06	0.857
	Total	130	3.22	0.816
Reality Shows	Hindi	49	1.88	0.971
	English	81	2.07	0.863
	Total	130	2	0.906
Movies	Hindi	49	2.39	0.862
	English	81	2.72	0.869
	Total	130	2.59	0.878
TV Serials	Hindi	49	2.45	0.765
	English	81	2.48	0.91
	Total	130	2.47	0.855
Music	Hindi	49	2.61	0.702
	English	81	2.6	1.021
	Total	130	2.61	0.911
Sports	Hindi	49	1.88	0.726
	English	81	2.15	1.05
	Total	130	2.05	0.947

Source: Primary data

**Table-2.1.4: Medium of Study wise Children Preference for different Programmes ANOVA**

Programme	Medium	Sum of Squares	df	Mean Square	F	Sig
Cartoons	Between Groups	5.074	1	5.074	8.028	0.005
	Within Groups	80.895	128	0.632		
	Total	85.969	129			
Reality Shows	Between Groups	1.179	1	1.179	1.44	0.232
	Within Groups	104.821	128	0.819		
	Total	106	129			
Movies	Between Groups	3.291	1	3.291	4.383	0.038
	Within Groups	96.102	128	0.751		
	Total	99.392	129			

TV Serials	Between Groups	0.32	1	0.32	0.044	0.835
	Within Groups	94.345	128	0.737		
	Total	94.377	129			
Music	Between Groups	0.002	1	0.002	0.002	0.965
	Within Groups	106.991	128	0.836		
	Total	106.993	129			
Sports	Between Groups	2.236	1	2.236	2.521	0.115
	Within Groups	113.488	128	0.887		
	Total	115.723	129			

Source: Primary data

Table- 2.1.5: Gender wise Children Preference for different Programme

Programme	Gender	N	Mean	Std Dev
Cartoons	Boys	61	3.18	0.812
	Girls	69	3.25	0.827
	Total	130	3.22	0.816
Reality Shows	Boys	61	2	0.856
	Girls	69	2	0.955
	Total	130	2	0.906
Movies	Boys	61	2.52	0.868
	Girls	69	2.65	0.888
	Total	130	2.59	0.878
TV Serials	Boys	61	2.41	0.864
	Girls	69	2.52	0.851
	Total	130	2.47	0.855
Music	Boys	61	2.59	0.955
	Girls	69	2.62	0.876
	Total	130	2.61	0.911
Sports	Boys	61	2.11	1.002
	Girls	69	1.99	0.899
	Total	130	2.05	0.947

Source: Primary data

**Table-2.1.6: Gender wise Children Preference for different Programmes - (ANOVA)**

Programme	Gender	Sum of Squares	df	Mean Square	F	Sig
Cartoons	Between Groups	0.141	1	0.141	0.211	0.647
	Within Groups	85.828	128	0.671		
	Total	85.969	129			
Reality Shows	Between Groups	0	1	0	0	1
	Within Groups	106	128	0.828		
	Total	106	129			
Movies	Between Groups	0.527	1	0.527	0.682	0.41
	Within Groups	98.865	128	0.772		
	Total	99.392	129			
TV Serials	Between Groups	0.405	1	0.405	0.552	0.459
	Within Groups	93.971	128	0.734		
	Total	94.377	129			
Music	Between Groups	0.035	1	0.035	0.042	0.837
	Within Groups	106.957	128	0.836		
	Total	106.992	129			
Sports	Between Groups	0.541	1	0.541	0.601	0.44
	Within Groups	115.182	128	0.9		
	Total	115.723	129			

Source: Primary data

**Table- 2.1.7: Impact of advertisement on buying among Hindi and English Medium students (Mean and Standard Deviation)**

Medium	N	Mean	Std Dev
Hindi	49	3.45	0.679
English	81	3.23	0.912
Total	130	3.32	0.836

Source: Primary data



**Table-2.1.8: Impact of advertisement on buying among Hindi and English Medium students (ANOVA)**

Statistics	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.404	1	1.404	2.026	0.157
Within Groups	88.666	128	0.693		
Total	90.069	129			

**Source: Primary data**

## 2.2 Conclusion and Recommendations

Purchase decisions in case of children are generally influenced by the advertisements shown all over the media, billboards, and magazines. Especially for confectionary products (Chocolates) they do not care price of which they want to buy. Also, they do not care whether these products are healthy for them or not. While they are shopping, the first thing comes to their mind is to purchase the advertised products. In this situation, the advertising has a stronger effect on younger children.

Also, this research validated that among many communication tools, television advertisements have more impact on children than the other medium of advertising. It is the duty of parents to see what their children are watching on television and if they are highly influenced by the advertisements especially of confectionary products then parents should try to explain to them what are the pros and cons of that product by using it.

In case of advertisement targeting children there must not be any wrong message or learning passed to the children, there must be the morally right message passed to children. It is not easy to segment the market in case of children because more or less they are similar in their behavior across the gender, the medium of study and such other demographic aspects. So marketers should carefully design its marketing strategies in case of children-oriented products.

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## Self Help Groups as an Instrument of Socio-Economic change in rural areas of Bhopal.

\* Shumayela Hasan

\*\* Prof S D Sharma

### Abstract:

Women in the Indian perspective constitute a more orthodox and conservative section of society and this has been reflected throughout times immemorial. Therefore, their participation and empowerment in any walk of life are viewed as a sign of progress, particularly in the case of an economic field. The concept of SHGs has been a revolutionary breakthrough in the process of women empowerment and has resulted in their upliftment through elevating their status. Microfinance institution started in India in the 1980s through self-help groups (SHGs) model. Since then women empowerment through SHG (Self Help Group) based microfinance has been central to development agenda in India. Self-help group projects were launched by Government of India, with the financial assistance from IFAD & empower rural poor women through microfinance. This paper is an attempt to know, what is the impact SHGs as an instrument of socio-economic change through women empowerment and poverty eradication in the rural areas of Bhopal, In which microfinance plays a pivotal role.

**Keywords:** Women empowerment, Self Help Group (SHG), Microfinance, Development, IFAD (International Fund for Agricultural Development), poverty eradication.

### Introduction:

A self-help group is a homogenous group of poor, women, users etc which voluntarily are formed for the common interest of the development of their members. SHG stands on the pillars of “for the people and of the people” It is a small economically homogenous and affinity group of basically rural people who voluntarily agree to pool in their savings and finance one of the members of the SHG in times of need. The objective of an SHG is to promote a platform for sharing ideas and common views regarding problem-solving of the members. The SHGs aim at promoting their economic status by utilizing the skill and knowledge acquired through training. The members are able to inculcate saving and credit habits.

Another important aim of an SHG is to facilitate relationship building between the SHGs of the poor and the bank. Some of them are government funded but some are not. These SHGs also aim at resolving of socio-economic issues, issues related to cultural and legal dynamics and so on.

Entrepreneurs of micro-enterprises are usually the male-dominated ones and less opportunity

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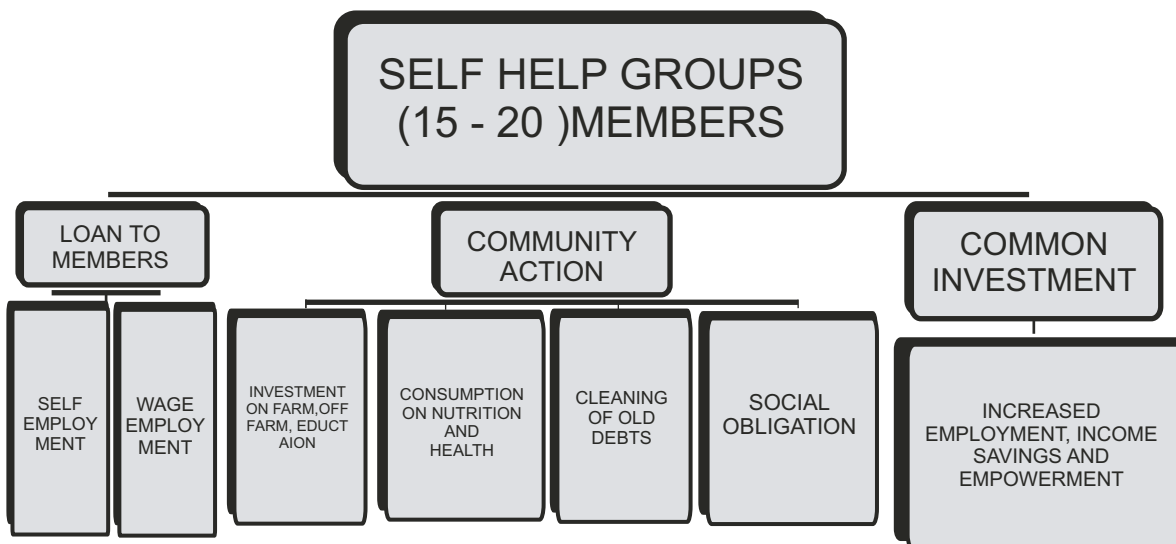
is given to the female counterparts. The SHG model is an initiative to promote the development of the women entrepreneurs and give them a sense of independence in terms of socio-economic matters. Lately, development of SHGs through training and skill development has been central to the development agenda of the central government, state government, and NGOs.

Self-help groups are now being viewed as dependable vehicles for rural credit delivery. SHG's have a number of advantages over the traditional banking system. In the traditional banking system, there has been a strong focus on issues like economic feasibility and loan size, collateral and guarantees, the productiveness of a loan, structured loans, unit costs, scheduled assets, the strict schedule for recovery, recovery rates etc. The transaction costs are also high due to

- (a) inflexible handing terms not geared to the customer's needs.
- (b) poor monitoring due to the absence of marketing information
- (c) high default rate due to political interventions
- (d) high documentation costs for borrowers
- (e) lack market orientation & proper treatment(Karmakar 1999). This system does not cater to specific dynamics of the credit needs of the poor.

The self-help group offers a unique opportunity for dispensing cheap credit at the doorstep of the poor with almost assured repayments at the terms and requirements of the poor. The SHGs follow the collective decision making on an issue like meetings, thrift, and credit decision. The participative nature of the group makes it a responsible borrower. However, the most critical factor, which stands out, is the fact that lending through SHGs focuses exclusively on the poor, who have been circumvented by the formal system. They initiate an empowerment process amongst the poor, especially the women.

**Fig.1: Nature and functions of SHGs operating in India.**



After initial hesitation, the formal financial sector is now opening up to financing SHGs with their own operation. Linking self-help groups with banks has been shown to be a cost-effective, transparent, & flexible approach to improve the accessibility of credit from the formal banking system to the unreached rural poor. The provision of credit through SHGs reduces the direct transaction costs of the banks by 40-60% as a major task of an appraisal, supervision & recovery of loan is taken care of by the group itself.

With over 7.8 million poor households accessing banking services including through their 458 thousand SHGs, the SHG-bank linkage programme of NABARD is now perhaps the largest microfinance programme in the world in terms of its outreach. Over 2,000 NGOs & 17,000 branches of 444 banks are associated with the programme. Besides being vehicles for delivery of micro-credit, self-help groups can also be used to foster solidarity and collectivism among the rural poor, particularly the women. The SHGs can be tools to bring about holistic empowerment of the poor rural women. However, solidarity may be an expensive input for financial services products, as the costs of group formation and interaction may outweigh the benefits of high repayment with group control microcredit has been advocated as the new panacea for reduction of poverty. Its potential for economic empowerment of women has also been variously looked at. It has undoubtedly emerged as one of the entry points in engaging self-help groups of poor women is a dialogical relationship.

### **Statement of the research problem:**

The present paper is an attempt to describe the impact of SHGs as an instrument of socio-economic change through women empowerment and poverty eradication in the rural areas of Bhopal, In which microfinance plays a pivotal role. This paper is written with an objective of bringing out the contribution of the SHGs in the rural areas of Bhopal region. Since microfinance is expected to strengthen the SHGs through financing at the micro level, the impact is therefore studied for the targets already achieved. The study also explains the ways in which the women can be made aware of the current schemes and benefit from it. The findings of the paper will be of help for the policy building by comparing the targets achieved and the future targets, influencing the overall socio-economic welfare of the society at large.

### **Objectives of the study**

The objectives of the study are as follows:

1. To examine the role of development of the SHGs in the development of women enterprises in the rural areas of Bhopal.
2. To study the impact of the women SHGs on the socio-economic and personal empowerment of the rural women of the area under study.

### **Formulation of hypothesis**

The following hypothesis will be tested during the course of the study:

**Null hypothesis ( $H_0$ )**= Microfinance is an effective tool for eradication of poverty in rural women.

**$H_0$ :**  $\mu = \mu_0$

**Alternative hypothesis ( $H_1$ )** = Microfinance is not an effective tool for eradication of poverty in rural women.

**$H_a$ :**  $\mu \neq \mu_0$

**$H_0$ :  $\mu = \mu_0$  against  $H_a$ :  $\mu \neq \mu_0$**

### Area and scope of the study

The broad area of study is the state of Madhya Pradesh which has 51 districts. The whole state is divided into 10 main regions. The study is limited to Bhopal division, Panda block, and berasia block. The scope of the study was limited to the development of micro-enterprises through women SHGs in the Panda and Berasia block.

### Research Methodology:

Data required for the purpose of analysis has been collected through a primary source. Primary data is obtained with the help of a schedule cum questionnaire. The sample was taken on the basis of the convenience sampling. two blocks were selected and two SHGs from each block were selected each consisting of 10 members each. The total no. of respondents selected was thus 40 and 10 respondents were contacted out of each SHG. They are directly engaged in economic activities under the SHGs.

### Literature Review:

Microfinance, SHG, and women Empowerment is a subject that has received growing research attention in recent years. Several organizations have promoted SHGs taking up the philosophy and approach of successful experiments of extending credit to poor women. Since the early 1980s, a large number of studies have been undertaken so far by social scientists, financial institutions and agencies, which highlight the strengths and weaknesses of SHGs, positive trends and impact of self-help groups on empowerment, credit accessibility and social change examined the various dimensions of microfinance programmes and women empowerment. Several international organizations like Action Aid UK, CGAP (Consultative Group to Assist the poorest), and overseas development Authority have conducted case studies and organized workshops in various countries. The workshops had looked mainly into the experiences of different countries and the impact of the microfinance programmes in a cross-cultural perspective. Other sources of information include published and unpublished materials including materials from the Micro-credit Summit (February 1997 and 2001).

Over the years, “the informal sector debate” (Hart, 1973; ILO, 1972) has increased in scope and complexity. Terms such as informality were used interchangeably with informal activity, sector or economy, self-employment, and microenterprise. The popularity of the informal sector concept among policy advisors and governments arose from a convergence of interest in poverty issues and the need for a policy instrument (Tokman, 1987). Governments,

international financial institutions and private foundations found in the concept a common language to coordinate their activities and, in the case of governments, to improve their access to international welfare funds earmarked for income-generating activities. In part, the popularity of the informal sector concept comes from its ability to bridge diverse analytical and policy approaches, while its drawback is the inability to integrate approaches or improve analytical usefulness (**Beattie 1987**).

A large number of studies have been undertaken so far by CGAP, NGOs, and donors of micro-finance programmes highlighting the strengths and weaknesses of the programme in various countries. Few studies conducted on SHGs and Women Empowerment in India which have a direct relevance to the present study are presented below.

It is very difficult to review all the relevant studies since proper documentation of such studies is still to be ensured. Therefore, few studies conducted on SHGs & Women Empowerment in India which have a direct relevance to the present study as presented below.

### **Micro Finance and Women Empowerment: A Great leap forward**

Some evaluations paint a positive picture of the impact of credit programs on women's lives (**Kabeer 2001**). Access to savings and credit can initiate or strengthen series of interlinked & mutually reinforcing „virtuous spirals“ of empowerment (**Mayoux, 2000**). The first set of assessments point out that women can use savings and credit for economic activity, thus increasing incomes and assets and control over their incomes and assets (**Mayoux, 2000**).

**Rahman (1986)** established that “active” women loaners had higher consumption standards and a role in household decision making, either on their own or jointly with their husbands, than “passive” female loanees. Both, in turn, had significantly higher consumption standards and were more likely to take part in household decision-making than women from male loaner households or from households who had not received credit. Similarly, Self-help groups through microcredit have an important role in lessening the vulnerability of poor by creating assets, income, and consumption smoothing, providing emergency assistance, and empowering and making women confident by giving them control over assets and increased self-esteem and knowledge.

During the South East Asian economic crisis, self-help groups proved to be important cushions and safety nets; a high proportion of the funds made available for self-help micro-credit schemes were

utilized by women, facilitating them to meet the subsistence requirements of their families during these hard economic times (**ESCAP 2002**).

Another group of evaluations has tried to establish that economic contribution may increase their role in economic decision making in the household, leading to greater well being for women and children as well as men (**Mayoux, 2000**).



A study by “**Pitt and Khandker**” (1995) in exploring the impact of female membership of credit programs found that women’s preferences carried greater weight in decision-making outcomes including the value of women’s no land assets, the total hours worked per month for cash income by men and women within the household; fertility levels, the education of children as well as total consumption expenditure. It has also been studied that women’s increased economic role may lead to change in gender roles and increased status within households & communities (**Mayoux, 2000**).

The IFAD gender mainstreaming review has reported gains in self-confidence and self-esteem amongst the women, enhanced capacity to articulate their needs and an increased respect in the household (IFAD, 2002).

(**Yunus 2002**) shows there can be a synergistic convergence of inputs (micro-insurance, health services, nonformal education and inputs on nutrition) in “micro-credit plus” programs. A few attempts to link micro-credit with HIV/Aids programmes have been reasonably successful (**UNDP 1999**). The newly set up pension fund of the Grameen Bank II is apparently quite successful.

As **Mayoux (2000)** puts it, these virtuous spirals are potentially mutually reinforcing in that both improved well being and change in women’s position may further increase their ability to increase incomes and so on. This process if empowerment may be further reinforced by group formation focusing on savings and credit delivery as women can access wider information and support networks for economic activity; groups can support women in disputes within the household and community and groups can link to wider movements for change in women’s position may further increase their ability to increase incomes and so on.

**Bhatia and Bhatia (2000)** through few case studies highlighted that recovery of SHG’s is higher than other credit extended to borrowers. Moreover, the involvement of SHG had helped the bank branches in the recovery of old dues. They observed that there have been perceptible changes in the living standards of the SHG members, in terms of ownership of assets, increase in savings and borrowing capacity, income-generating activities and income levels as well.

### **Socio-economic profile of the respondents:**

The paper attempts to deeply examine the relationship between various parametric variables. The main variables under study are as follows:

1. Age of the respondents
2. Level of education
3. Caste of the respondent
4. Occupation of the respondent
5. Size of the land holdings



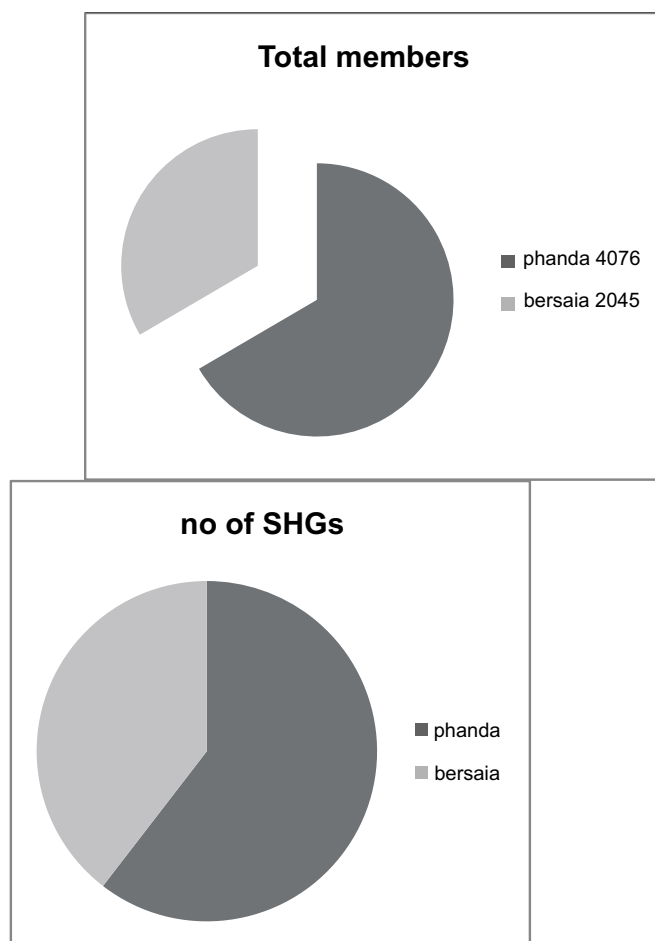
### Results and data analysis:

The data for the purpose of the analysis was collected with the help of questionnaire and schedule. Forty respondents were selected by simple random sampling.

**Table -1: Membership of the SHGs**

Name of the district	Name of the block	No of SHGs	Total members
Bhopal	Phanda	315	4076
	Bersaia	206	2045

**Fig 2&3: Total number of SHGs and no of members in the area of study**



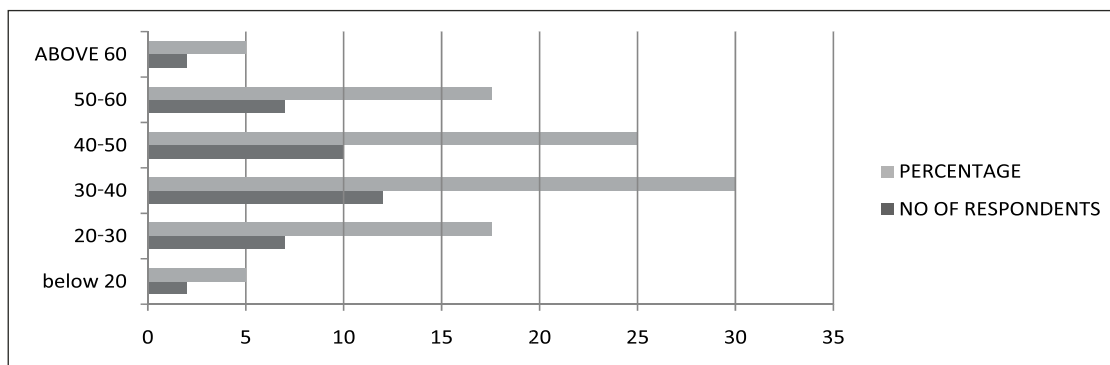
Source: Primary data

**Table 2: Age-group of members**

S.no	Age group	No of respondents	percentage
4	Less than 20	02	05
5	20-30	07	17.5
6	30-40	12	30
7	40-50	10	25
8	50-60	7	17.5
9	Above 60	2	05
	<b>Total</b>	<b>40</b>	<b>100</b>

Source: Primary data

**Fig:2-Age composition and Percentage**



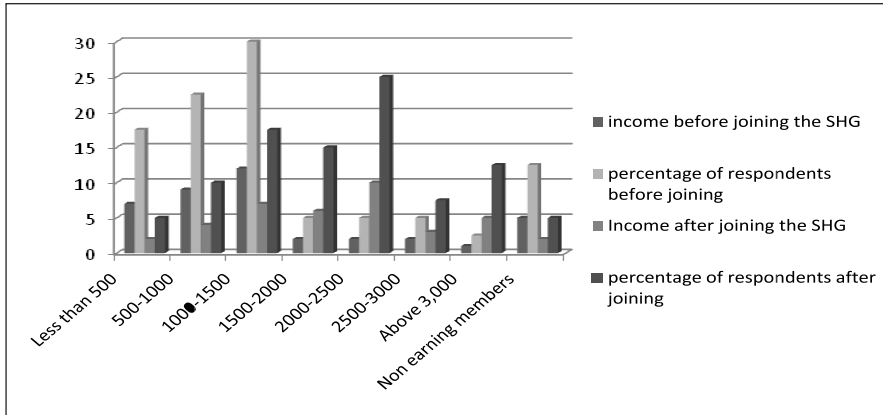
Source: Primary data

The table -2 shows the age group composition of the respondents. The number of respondents was 2 with the age group less than 20 which interprets that the youth is less attracted towards the SHG model. However, the highest is between the age group of 30-40 that is 12 respondents. The age group of 50-60 and 20-30 act as the problem solving and decision making pillars with their enthusiasm and experience respectively.

**Table-3: Monthly income of the members before and after joining SHGs**

S.no	Monthly income	Before joining the SHG		After joining the SHG	
		No of respondents	percentage	No of respondent	percentage
1	Less than 500	07	17.5	02	05
2	500-1000	09	22.5	04	10
3	1000-1500	12	30	07	17.5
4	1500-2000	02	05	06	15
5	2000-2500	02	05	10	25
6	2500-3000	02	05	03	7.5
7	Above 3,000	01	2.5	05	12.5
8	Non earning Members	05	12.5	02	05
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>	

Source: Primary data



Source: Primary data

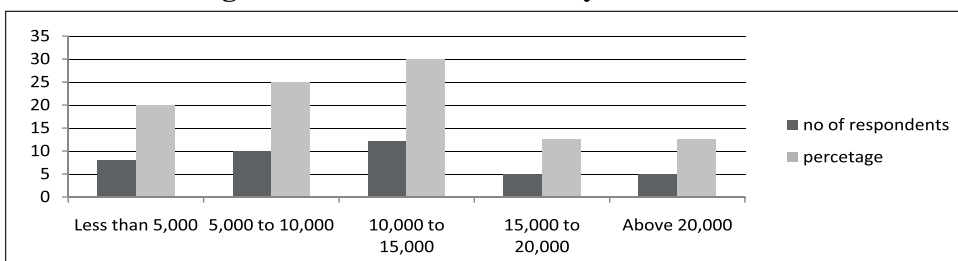
Table 3 shows that there has been an increase in the income level of the members after joining the SHG. Before joining the SHG 17.5 % women were earning less than 500 and the proportion was reduced to only 5% after joining the SHGs. Before joining the SHG the income group of 500-1000 accounted for 22.5% of the respondents which was reduced to 10% after joining the group. If we look at the middle-income group between 2000-2500 the percentage of respondents increased from 5% to 25%, which is a sign of prosperity. This shows that the people are moving from low-income group to higher income groups. It is also seen that the percentage of people earning above 3000 has risen from 2.5 to 12.5% which is an indicator of economic independence and growth of household income.

Table 4: Amount of loan availed by the members

S.no	Amount of loan	No of respondents	percentage
1	Less than 5,000	8	20
2	5,000 to 10,000	10	25
3	10,000 to 15,000	12	30
4	15,000 to 20,000	5	12.5
5	Above 20,000	5	12.5
	<b>Total</b>	<b>40</b>	<b>100</b>

Source: Primary data

Fig 5: loan amount availed by the members



Source: Primary data

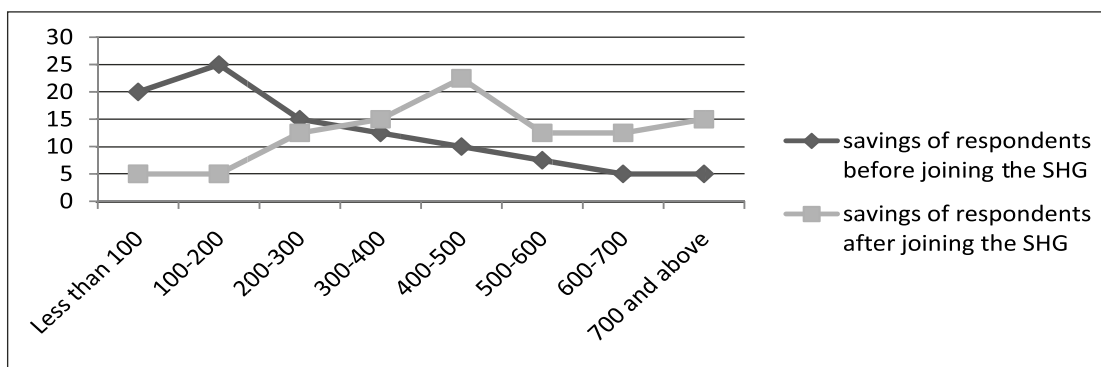
Table 4 shows that in a total 45 % of the respondents are applying for loans between less than 5000 to 10,000, which a small amount in general but very precious for the respondents. The amount of loan sanctioned by the SHG to the members is maximum between 10,000 to 15,000 that are 30%, and this bracket is the most engaged bracket of the respondents that have started with self-employment micro enterprises. The maximum amount of loan to be disbursed is decided by the general body members in the meetings.

**Table 5: Monthly savings of the members before and after joining the SHG.**

S no	Monthly Income	Before joining SHG		After joining SHG	
		No of respondents	percentage	No of respondents	Percentage
1	Less than 100	8	20	2	5
2	100-200	10	25	2	5
3	200-300	6	15	5	12.5
4	300-400	5	12.5	6	15
5	400-500	4	10	9	22.5
6	500-600	3	7.5	5	12.5
7	600-700	2	5	5	12.5
8	700 and above	2	5	6	15
	<b>total</b>	40	100	40	100

Source: Primary data

**Figure 6: Trend of savings before and after joining the SHG.**



Source: Primary data

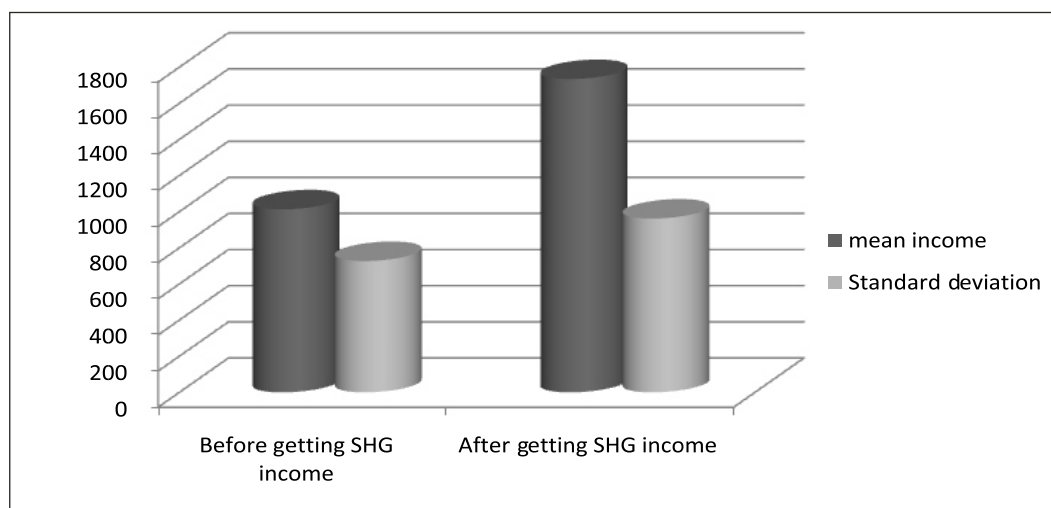
Table 5 shows the trends of savings of the respondents before and after joining the SHG. Prior to joining the SHG the highest no of respondents were saving the 100-200 bracket that is 25%, while the lowest were saving in the 700 and above bracket that is 5%. However, after joining the SHG and availing the loans to increase the income, the highest number of respondents have stated saving in the 400-500 bracket that is 22.5%. Thus SHGs have been instrumental in the stimulation of saving and credit habits.

**Table 6: comparison of income before and after joining SHGs**

S no	Source	mean	S.D	Respondents
1	Before getting SHG income	1013	727	40
2	After getting SHG income	1734	962	40

Source: Primary data

**Fig 7: comparison of income before and after joining SHGs**



Source: Primary data

Table 6 shows the mean income of the respondents before joining the SHGs was Rs 1013 and the Standard deviation is 727 which increased to Rs 1734 after joining the SHG and standard deviation through mean is 962.

### Suggestions:

Considering the findings of the study, the following suggestions are prescribed.

- Women empowerment should be reflected through a direct budgetary commitment rather than a core component of all development agenda. The microcredit as a component should reflect the policies and plans oriented towards women empowerment to enhance women's agency on social-political & economic levels. Women's agency must be given primacy. Women's rights over property rights need to be enhanced and decision making needs to be ensured in all programme components.
- About 20 percent of groups had no place to conduct meetings. They conducted meeting

either on the village roads or under the village trees etc. These calls for strengthening village infrastructure in terms of providing at least one room community halls where these groups can meet & transact their business.

- Only 35 percent of the sample SHGs reported following the practice of rotation or election of leaders. Low leadership rotation may lead to major difficulties & causation of moral hazards. Therefore, it has to be ensured that leadership rotation or election of leaders is strict to be practiced for the future sustainability of the group. Change of leader is a must for sharing the responsibilities of all members.
- The office bearers managing the group should be given financial benefits which will enable them to be more involved in the activities of the group.
- The rate of illiteracy can be further reduced through the existing programmes. Formal education will focus on critical issues needed for functional literacy should be imparted to the women groups so that they can manage their group affairs independently.
- In several cases, banker shows less attitude in promoting SHGs. Occasionally, they point reasons like shortage of staff; time etc. just to avoid dealing with SHG promotion. Training for capacity building and to change their attitude should be thrust upon bankers for strengthening SHGs promoted by bankers.
- NGOs are linked in one way for SHGs. NGOs on an experimental basis should attempt gradual withdrawal and see whether the groups are able to function and transact their day to day operations independently.
- The study observed that few groups have utilized their services for various development works in their village. Efforts should be directed to the SHGs because these SHGs of the villages may be associated effectively in all developmental works such as infrastructure development, construction of schools, roads, buildings, hospitals etc.
- Marketing of new distribution may involve training or community development skills. There is need to evolve training package for entrepreneurship development to enable women as successful business managers. In this task NGOs, Panchayats may be enhanced to impart training skill development & technical knowledge.
- The overlapping of programmes in the same block creates confusion and therefore, this should be discouraged while as the provision of revolving funds for the SHGs may be ensured.

Thus projects need to invest in mobilization participation, leadership, training and education. This will not only maximize income opportunities for women but more importantly, enhance women's potential to mobilize external strengths to bring about fundamental changes.

### **Conclusion:**

The present study concludes that the microfinance has acted as an effective tool in promoting SHGs in rural areas like that of Bhopal. The SHGs have been instrumental in mobilizing the savings of the group members in the form of credit lending and loan disbursement. In order to promote the desired level of transformation in the society, it is important to promote the relevant schemes and in relevant groups. Social, economic and

entrepreneurial development of women will depend upon the success of the microfinance policies that will facilitate their capacity building and skill development. It is thus evident that SHGs are progressively engaged in the upliftment of women by providing them with effective finance that would not be available to them otherwise.

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## Data Representation in Big data via succinct data structures

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### Abstract:

Data Representation in memory is one of the tasks in Big data. Data representation includes several types of tree data structures through the system can access accurate and efficient data in big data. Succinct data structures can play important role in data representation while data in big-data is processed in main memory. Data representation is a very complex problem in Big Data. We proposed some solution of problems of data representation in Big data. Data processing in big data can be utilized to take a decision on data mining. We know the function and rules for query processing. We have to either change the method of processor we can change the way of representation. In this paper, different kind of tree data structures is presented for data representation in main memory of computer system for big data by using succinct data structures. Here we first compare all data structures by the table. Each method has different space and time complexity. We know that Big data information services increasing day by day. So space complexity of succinct data structures is becoming very popular in practice in this era.

**Keywords:** SDS (Succinct data structures), Trees, SDSL, Big data.

### 1. Introduction:

Till now proposed data structure for big data is a Tree as Data for large data sets, which stores abstract of data, is less in space and capable of satisfying most of the queries of the user as well as original data. The Tree is an extension of region quadtree data structure. Regular databases are incapable of handling the data generated by satellites, supercomputer simulations, and other monitoring devices. They proposed a Tree data structure for handling such large datasets. Global Climate Model is used for the research for the reason firstly it is MDD (Raster Data) and climate model data is large in size and didn't have easy access to it. The data structure had been explained under four headings - Subdivision Scheme, Location Codes, Transformation Function, Subdivision Criteria. Here, we are providing some basics of SDS.

A tree is used to solve issues of searching minimum and maximum in a range. It can solve data structure problem in integers in lexicographic order.

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Another tree which is a non-linear data structure used to code strings set. In this representation, we can add the characters of edges along the path from root node to individually descendent leaf.

## 2. Entropy in Context-dependent Messages:

Symbols can be encoded relayed on their condition. In common, the possibility of a symbol can be shown compelling into account symbols that have seemed earlier than it. The perspective of a source symbol  $x$  is a fixed-length series of source symbols foregoing  $x$ . Length  $m$  of this series also referred to as the length of context, defines the direction of the model. Entropy may be described relying on the order of model. Seeing a source alphabet of size  $n$ , designed by using symbols  $s_1, \dots, s_n$ ,  $k$ th-order model entropy is represented  $H_k$  and is defined as below:

- Base-order models assumed that each source symbols are autonomous and correspondingly like to arise. Entropy for these models is represented as  $H_{-1}$ , results  $H_{-1} = \log_2 n$ .
- Zero-order models count on that source symbols are nonetheless impartial, however with a unique range of occurrences. In this situation, zero-order entropy is represented as  $H_0 = -\sum_{i=1}^n p(s_i) \log_{|D|} P(x)$ .
- First-order models assume the possibility of occurrence of a source symbols  $s_j$  accustomed to symbols  $s_i$  ( $P_{s_j|s_i}$ ). Entropy is acquired as  $H_1 = -\sum_{i=1}^n p(s_i) \sum_{j=1}^n P_{s_j|s_i} \log_{|D|} (P_{s_j|s_i})$ .
- Second-order models acquire probability of the existence of a source symbol  $s_k$  conditioned through past existence of series  $s_i s_j$  (that is,  $(P_{s_k|s_j s_i})$ ). Hence, entropy is calculated as
- $H_2 = -\sum_{i=1}^n p(s_i) \sum_{j=1}^n P_{s_j|s_i} \sum_{k=1}^n \log_{|D|} (P_{s_k|s_j s_i})$

## 3. Big Data -A challenge and opportunity:

Today we are living in a sea which is full of data. If we converse about a large variety of application regions, information is being composed at an exceptional level. Judgments that formerly were relayed on estimation, or on assembled models of authenticity. Now it can be prepared relayed on the information itself. Big Data examination provides almost every feature of user up to date culture. These features include mobile facilities, marketing, industrial, economic facilities, life sciences, and physical sciences in our modern life.

Big Data has probable to transform not only research but additionally learning [CCC2011b]. A latest complete quantitative evaluation of distinct methods engaged by 35 charter schools in NYC has established that one of uppermost five rules related with quantifiable educational worth full turned into using statistics to guide instruction [DF2011]. Imagine a universe in which we have to get access to a massive database in which we accumulate each certain measure of every scholar's academic overall performance. This data might be utilized to lay out best techniques for schooling, beginning from reading, writing, and math, to superior, university-level, courses. We are a ways from getting access to such facts; however, there are dominant traits in this direction. In unique, there is a strong trend for vast Web deployment of instructional activities, and this can create an increasingly more massive quantity of detailed data about college students' overall performance. It is extensively meant that using IT can

minimize fee for healthcare whilst enchainning its quality [CCC2011c], through making care more defensive and basing it on more common constant monitoring. McKinsey estimates [McK2011] a savings of three hundred billion dollars each year in the United States alone. In a layer of matching, there had been substantial circumstances made for cost of Big Data for city planning (by mixing of high-constancy geographical facts), vibrant transportation (by examination and exposure of live and targeted road network facts), conservational modeling (through sensor networks all over gathering facts) [CCC2011d], power saving (by presentation designs of utilize), stylish substances. Numerous persons sadly cognizance simply on analysis/modeling phase: at the same time as that phase is essential, it's far from little utilize without opposite levels of data analysis pipeline. Also in analysis stage, which has obtained a good deal consideration, there are sick assumed difficulties within the framework of multi-tenanted clusters where numerous customers' applications run simultaneously. Many foremost demanding situations amplify beyond analysis phase. For instance, Big Data needs to be controlled in context, which may be noisy, heterogeneous and not encompass an upfront model. Doing so increases the requirement to track provenance and to deal with uncertainty and blunders: subjects that are vital to fulfillment, and but not often cited within the same breath as Big Data. Likewise, questions to data analysis pipeline will normally no longer all be laid out earlier. We might also require figuring out exact questions relayed totally on information. Doing this will need smarter framework and also better care for user collaboration with analysis pipeline. In reality, we presently have a prime bottleneck in a number of persons authorized to ask questions of records and examine it [NYT2012]. The user can notably growth this number by helping various ranges of meeting with information, no longer all needing deep database knowledge. Solutions to issues together with this could no longer originate from incremental developments to the commercial enterprise as common together with industry may make on its own. Quite, users need us to basically reconsider how we accomplish information.

### 3.1. Data Integration, Aggregation, and Representation

Given the heterogeneity of flood of information, it isn't sufficient simply to record it and toss it into a repository. Assume, as an instance, information from number scientific investigates. If the user simply has a group of records sets in a repository, its miles unlikely each person will ever be capable of the find, let alone reprocess, any of this facts. With good enough metadata, there's some hope, however, nonetheless, tasks will remain because of differences in investigational info and in data record structure. Data evaluation is substantially extra difficult than truly localizing, figuring out, understanding, and bringing up data. For the effective massive-scale investigation, all of this has to appear in a totally automatic way. These need variations in the data structure to be stated in paperwork that is computer comprehensible, after which “robotically” resolvable. There is a robust body of work in information integration that can offer few of solutions. Nevertheless, a considerable extra work is needed to acquire automatic bug-free distinction resolution.

Even for easier investigates that rely upon single data set; there stays a crucial query of

appropriate database layout. Commonly, there will be numerous other techniques in which to save similar data. Convinced strategies will have benefits over others for positive dedications, and possible disadvantages for different functions. Witness, for example, terrific variety in the structure of bioinformatics databases with data concerning considerably comparable entities, for instance, genes. Database design is these days an artwork and is cautiously achieved in enterprise context with the aid of extraordinarily-paid professionals. We have to allow different professionals, for instance, domain scientists, to generate powerful database layout, either through devising equipment to help them in layout system or by forgoing design procedure entirely and growing strategies in order that databases can be utilized efficaciously within nonappearance of intelligent database layout.

#### 4. Related Work:

Algorithms for A Tree Two types of build algorithms are used with A Tree. The role of build algorithm, which accepts raw data in standard Michael A. Bender et.al. Has stated there is a need for a structure for data which helps to carry out different operations on data efficiently (space and time)(11). The DBMSs has to perform different operations on data like storing, indexing and querying, and for the purpose, it uses different data structures like B+ trees, hashing etc.(12). With increasing size of data, the data structures used by the conventional DBMSs has to be modified, which has been suggested and used by TokuDB. The table below shows the necessity of data structures for handling large datasets. Improved data structures might be an indulgence now, but they will be important by period's end formats like DRS, NetCDF, HDF, and builds A Tree according to the parameters which are shape, location code scheme, a transformation function, subdivision criteria and metadata function. The A Tree is built using two different approaches Top Down Approach and Bottom-Up Approach. Main Features are given as - Data is partitioned, and as per the need, data is chosen Data partitions are organized in archival storing rendering to the predictable usage of information. Data structure permits for hierarchical compression methods to be useful (both lossy or not -lossy). The A Tree data structure can store multi-resolution information. Data structure permits for non -spatial data to be comprised, which enables quick recovery of data founded on non-spatial features (such as, crop types ).(10 )Huuhka et al. has taken a review of the data structures used by powerful search engine 'Google' which handles large datasets. The search engine utilizes data structures optimized for huge data sequences and including more servers to framework simply enhances its overall performance of answering questions. Google's Page Rank algorithm utilizes link structure of WWW to compute qualities of web pages. Utilizing hyperlink structure in the ordering of the search results makes it tougher for everybody to govern Google's search results but not possible. Google additionally has a few ways to prevent manipulation and keep the quality of search outcomes [14]. Data structures used by the Google are - GFS(Google File System, store files in distributed manner which breaks file in different chunks stored on different servers in three copies on three different servers for reliability), Repository (Stores addresses of all web pages used while searching, makes use of stack), Hit Lists (hit corresponds to the words used in website, stores 16 bit information about word), Forward Index (Forward index contains barrels and individually barrel has its personal

range of word IDs, A data in a barrel involves a doc ID tracked by word IDs with their hit lists .)[15], Inverted Index (utilized to discover every file that encompass a given word, and is made from forward index by categorizing data of barrels in order of word IDs.) are major data structures used by the Google. Table 1 shows the comparison of different trees for indexing and data structures in the Big database.

**Table 1: Comparison of Trees and SDS for processing and Indexing in Big Data with Applications**

Data Structures	Database query	Complexity	Data Type	Applications
B-tree	Point query	$O(\log n)$	Linear data	Apple file system, NTFS, LINUX
B+ tree	Point query	$O(\log n)$	Linear data	DBMS
B* tree	Point query	$O(\log n)$	Linear data	File system
UB-tree	Point and range query	$O(\log n)$ for linear data	Linear and MD data	Range
H-tree	Point query	$O(\log n)$	Linear data	LINUX
Compact B-tree	Point query	$O(\log n)$	Linear data	As of B-tree but more efficient
R-tree	Range query	Efficient in Complexity	MD Data	Real world Application (GPS)
R+ tree	Range query	Efficient in Complexity	MD Data	As of R tree
R* tree	Range query	A little bit more than R	Spatial data	Formation of the spatial database
X-tree	Range query	Worst case $O(n)$	MD Data	High dimension data
M-tree	k-NN query	Worst case $O(n)$	Spatial data	Accessing Spatial data
Hilbert R-tree	Search query	28% less than R	MD Data	Cartograp CAD, hy, Robo.
BR-tree	The point, Range, bound query	$O(\leq \log n)$	MD Data	Distributed Database

QR+ tree	Range query	Not redundant	Large scale spatial data	GIS
Suffix tree	Search query	$O( p /B + \log Bn)$ , $O(m \log Bn)$	Linear data/MD data	search for a pattern matching, disk accesses
Range tree	Range query	$O(\log [k])$	Linear data/MD data	Can be used search for a pattern matching in Big Data
Normal trie	Search query	$O(s)$ where $s$ is the length of the longest prefix	Linear data/MD data	Can be used search in Big Data
Succinct tree	k-NN query	$2n + o(n)$ bits and carry operations in constant time	Linear data/MD data	Can be used in Big Data
Dynamic tree	k-NN query	$O(nm \text{ long})$	Linear data/MD data	Can be used in Big Data
K2 tree	k-NN query	Efficient	Linear data/MD data	Can be used in Big Data

## 5. Processing Big Data:

Data in big data must be processed by streaming or parallel manner. During processing of big data, it is necessary that data must be fitted in main memory. It uses complex memory access pattern, which may cause thrashing as a result. Data accessing is a complex method. It is generally represented by a data structure, which supports these access patterns. It is found that data structure is sometimes much larger than data in big data, so we cannot access the data in such case. Example of such data structure, which can be used in big data processing as follows:

Suffix Tree (text pattern search). Range Tree (geometric search). FP-Tree frequent pattern matching). Multi-bit Tree (similarity search). DOM Tree (XML processing).

### 5.1 Succinct versus Compressed Data Structures:

In these data structures, data is stored in compressed form and operations are directly called on it. This data does not require decompression before operating. They provide better use of memory. They are

very close to processor and process memory bandwidth. In this process, the system usually compensates for some overhead during CPU operations [10].

We know that a program is a combination of algorithm and data structures. If compressed data structure implements same ADT to the uncompressed data structure, then we can reuse this existing code in big data.

Query processing in big data requires an index to data. It means the total space required is a sum of space for data structure and space for the index. The index may be larger than the data.

Suffix tree: It is a data structure for indexing a text of  $n$  bytes, which supports much indexing and search operations. We have to implement this suffix tree carefully. This requires  $20n$  bytes of indexed data in worst case complexity.

Range Trees: Data structures for answering 2-D orthogonal range questions on  $n$  points. It shows worst case performance as good, but it needs space.

## 5.2 Space for Data

Lower Bound on Information Theory: If the object  $x$  that We want to represent is drawn from a set  $S$ ,  $x$  must take at least  $\log_2|S|$  bits to represent.

Example: Let  $x$  by the binary tree with  $n$  nodes then  $x$  is from a set of all binary trees on nodes. There are  $\sim 2^n$  distinct binary trees on nodes. Need  $n$  bits, or  $2$  bits per node. A normal representation:  $2n$  pointers,  $2n \log_2 n$  bits, per node.

### Succinct Data Structuring:

Space usage for  $x$  = "space for data" + "space for index." Here, space for data is an ITLB for  $x$  and space for the index is a lower order term, which supports fast operation on  $x$ . It is not really a compression because ITLB applies to random  $x$ .

The "trie" ADT, in this tree, the object is a rooted tree with  $n$  nodes where each node from a parent to child is categorized with different letter  $c$  from an alphabet  $\Sigma$ , where  $\Sigma = \{0, \dots, \sigma - 1\}$ . In this tree, all possible children may not be present. It represents a collection of strings over  $\Sigma$ .

Operations supported by trie ADT are following: Parent( $x$ ); child( $x, c$ ); desc( $x$ ), nextsib( $x$ ), prevsib( $x$ ), . . .

## 5.3 Normal Trie Representations

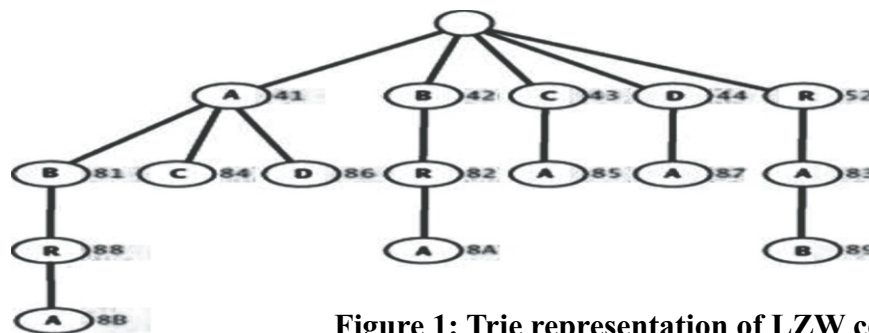


Figure 1: Trie representation of LZ78 code



Figure 1 shows the trie representation of LZW code.

- In above, Each node points to parent, first-child, and next-sibling.
- Space: 3 pointers (192 bits) per node.
- Child:  $O(\sigma)$  time.
- Each node has an array of  $\sigma$  pointers, one to each possible child.
- Space:  $\sigma + 1$  pointer per internal node.
- Child:  $O(1)$  time.

### 5.4 Succinct Tries

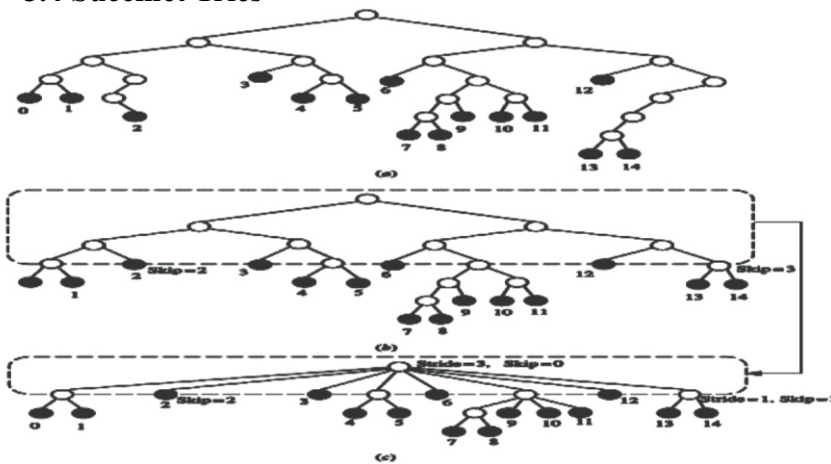


Figure 2: Succinct Tree representation

Figure 2 shows the succinct tree representation that produce the following output.

```
1 1111 1111 1111 1011 1110 1101 1001 0000 0011 0000 1111 0010 1111 1001 1101 1100
00111101 1011 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 00000000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 0000
```

Bit-string is of length bits. It has n 1s.

### 5.5 Dynamic Tries

- Figure 3 represent the dynamic tree as a ADT;  $parent(x)$ ;  $child(x, c)$ ;  $add(x, c)$
- Bonsai tree [Darragh et al., Soft. Prac. Exp'93],[PR, SPIRE'15].
- Data structure: open hash table of entries; nodes of trie reside in hash table ID of a node: location where it resides; ID of a child labeled c of x: Create key and insert.
- Hashtable entries only store “quotients”, require only bits.
- Space usage time.
- Fast in practice (2-3 times slower than TST).

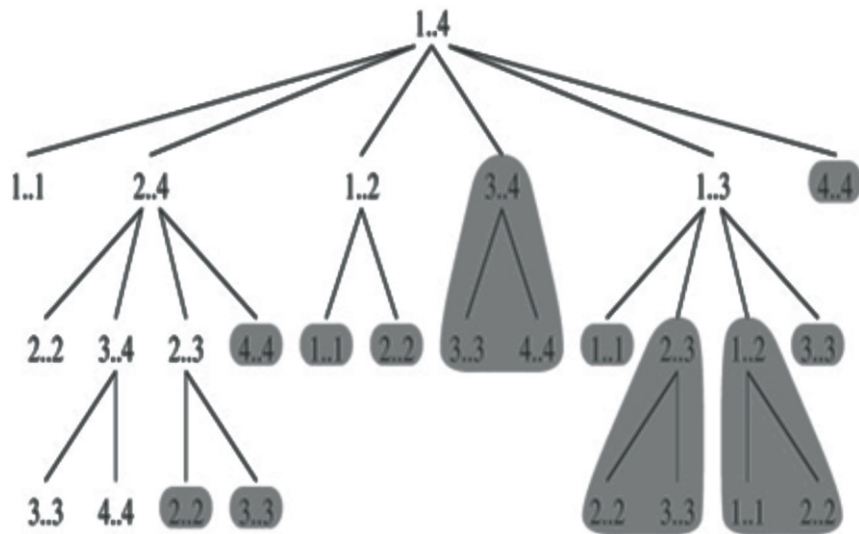


Figure 3: Dynamic Tree as an ADT

## 1. Applications

SDS has been applied in a number of domains:

- Information retrieval for modern Application
- NGS: Bowtie read aligner.
- Representing XML data for internet:
- “XML” project, XML DOM with the order of magnitude less space
- Data store for Zorba XQuery processor.
- Many data mining tasks (papers in KDD'14, KDD'16) in OLAP.

## 7. Library for SDSL-lite

- It is Comprehensive and machine (but low-level) library. [Gog et al., SEA '14 ]
- It is planned to simplify flexible prototyping of novel high-level structures (building upon bases such as bit vectors).
- It is Robust in terms of scale, handling input sets of a random length over arbitrary alphabets.

## 8. Discussions

If we want truly scale to a large database in big data we have a need to make the proposed data structures practically. Here we are not providing an implementation of these ads due to space. We have to design such pseudo code that has min running time. We have to choose a programming language to implement these data structures for big data.



## 9. Conclusion

In this work, we tried to explain data structures to solve problems of big data processing in memory. These different types of trees have different space complexity and running time. These data structures are fast in nature. Now if the system is forming data in main memory then a locality of reference is necessary to increase performance.

Succinct data structures have the capacity to minimize memory necessity of such information during handling big data becomes a more important task. We know that while providing efficient operations over it, SDS is more powerful. As their theoretical performance can match in theory, there is quite a visible gap in preparation. It is an exposed query whether such gap can be locked, thus finding finest of both worlds.

- Use of succinct data structures can allow scalable processing of big data using existing algorithms. it can use with machines with 100s of GB RAM, maybe even Big Data can be processed using compressed data structures. Many of the basic theoretical foundations have been laid, and succinct data structures have never been easier to use. Succinct data structures need to be chosen and used appropriately. Optimized for ADT. Even “simple” operations can't necessarily be added later.

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## Service Quality Measurement in Higher Education

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### Abstract

Quality is an elusive and indistinct construct in higher education. Research has demonstrated the strategic benefits of quality measurement. Basically, there are three quality dimensions which are physical, corporate, and interactive quality. This paper attempts to rectify the situation by reviewing the small number of studies that have investigated service quality in the higher education sector. By combining the different findings paper compares the quality dimensions proposed in service, product, and software quality dimensions. A comprehensive list of service quality dimensions together with proposed interpretations for a higher education environment is presented. Various models and tools are discussed for measuring service quality. A new attempt has to be made to propose a new instrument based on new approaches and techniques.

**Purpose** The purpose of this research article is to examine service quality in Higher Education and various instruments used in the evaluation of service quality in Higher Education.

**Design/methodology/approach** The study uses qualitative methodology involving in-depth study of various research papers.

**Findings** There is a need to determine how quality dimensions/factors are perceived by students' groups. The modifications have been recognized as the new service quality measurement instruments.

**Research limitations/implications** Since the study has used the qualitative methodology, observations and findings need to be validated with empirical data.

**Practical implications** The paper suggests that experimental application of SERVQUAL is quite important for further research.

### Keywords:

Quality, interactive quality, higher education, models, and techniques.

### 1. Quality

Quality is an elusive and indistinct construct and often mistaken for imprecise adjectives. Explication and measurement of quality present problems for researchers. Research has

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demonstrated the strategic benefits of quality. The search for quality is the most important as consumers are demanding higher quality in products than ever before (Leonard and Sasser 1982). Service quality has been discussed in only a handful of writings (Gronroos 1982 and Lehtinen and Lehtinen 1982). The salient features of service quality include (a) inseparability of production and consumption, (b) intangibility, (c) perishability and (d) heterogeneity of services. This paper attempts to rectify this situation by reviewing the small number of studies that have investigated service quality.

## 2. Quality Evaluations Involve Outcome and Processes

Sasser, Olsen, and Wyckoff (1978) discussed three different dimensions of service performance. Service quality is produced in the interaction between a customer and elements in the service organization. The three quality dimensions: physical quality, corporate quality, and interactive quality were proposed by Lehtinen and Lehtinen (1982).

## 3. Determinants of Quality

Quality dimension can be classified into three groups; technical quality, functional quality and corporate image (Gronroos, 1990). This is similar to those proposed by Lehtinen and Lehtinen (1991) i.e. physical quality, interactive quality and corporate quality. The dimensions associated with technical quality are those that can objectively be measured regardless of customer's opinion, while those concerned with functional quality are related to the interaction between the provider and recipient of the service and are often perceived in a subjective manner. The interaction between customers become important, this is true for higher education when considering the influence of students on one another. The corporate image dimensions relate to the overall picture of an organization perceived by the customer, it is the result of a combination of technical and functional quality dimensions as well as factors like the price of the product (or service) and the reputation of the company.

Another categorization observed by Ghobadian et al. (1994) differentiates between those dimensions which are associated with the quality of the final product or outcome of the service and those which related to internal processes within the organization; they are called "outcome" and "process" dimensions respectively. The importance of the process dimensions from the customers' viewpoint depends on the extent to which they participate in the process. In the case of higher education, students and lecturers participate a great deal in the process. In the following sections, the quality dimensions for products, software, and services are examined for consistency with higher education.

### 3.1 Products' Quality Dimensions

Services differ from the quality of manufactured products due to its special characteristics including intangibility, simultaneity, and heterogeneity (Dotchin and Oakland, 1994, Ghobadian et al., 1994; Parasuraman et al., 1985). This is certainly true for higher education since most quality attributes cannot be seen, felt, or touched in advance; production and consumption of the service are inseparable because personal contacts (e.g. between students and lecturer) plays an important role, and quality varies markedly in different circumstances (from class to class, students to students, lecturer to lecturer, etc.).

Garvin (1987) proposed the following eight dimensions for quality as they appear to be more product-oriented:

- i. **Performance:** Performance is concerned with the primary operating characteristics of a product. For an educational environment, performance would be interpreted as the primary capabilities expected of graduates.
- ii. **Features:** those characteristics that supplement the basic performance functions are called features. For higher education, features may mean offering courses like computer programming that are not primary although they can facilitate the application of core skills.
- iii. **Reliability:** Reliability, defined as the probability of a product working fault-free within a specified time period, appears to be more relevant to goods than services. However, in a higher education environment, an example of this feature could be the degree to which the knowledge, information, and skills learned are correct, accurate and up to date.
- iv. **Conformance:** Conformance refers to the extent to which a product meets established standards/specifications. In higher education, it can be defined as the degree to which an institution meets educational standards as well as its own promises to clients.
- v. **Durability:** Durability is a measure of a product life, the degree to which knowledge learned by the students is retained by them, i.e. depth of learning.
- vi. **Serviceability:** Serviceability, concerned with repairs and field services. It is more consistent with products. In higher education, it relates to customers' complaints. The way in which an institution handles complaints from students, staff, industry, government, etc.
- vii. **Aesthetics and**
- viii. **Perceived Quality:** are two dimensions which are subjective to the customers' opinions. They can be compared with the functional and corporate categories.  
Aesthetics can be distinguished from performance as it is a matter of personal judgment. Perceived quality refers to the reputational factors influencing the customers' image of the corporation.

**Table I Garvin's Dimensions of Quality and Higher Education (Garvin, 1987)**

S. No.	Dimensions	The definition in Higher Education
1	Performance	Primary Knowledge/Skills required for graduates.
2	Features	Secondary/supplementary knowledge and skills.
3	Reliability	The extent to which knowledge/skills learned is correct, accurate and up to date.
4	Conformance	The degree to which an institution/programme/course meets established standards, plans, and promises.
5	Durability	The depth of learning.
6	Serviceability	How well an institution handles customers' complaints?
7	Aesthetics	
8	Perceived Quality	

### 3.2 Software Quality Factors

Mc Call et al. (1977) proposed 11 factors for software quality. The characteristics of software, as an intangible product, are felt to be more consistent with higher education.

- i. **Correctness:** The extent to which a piece of software complies with its specifications is referred to as correctness. This is similar to the definition of conformance for products and so the same meaning can be applied to higher education.
- ii. **Reliability:** The definition of reliability corresponds to the degree to which a piece of software is fault-free, i.e. the focus here is on accuracy. The accuracy of information given in courses is, therefore, the equivalent in higher education.
- iii. **Efficiency:** It is “the number of computing resources and code required by a program to perform a function” and includes both execution and storage efficiency. In higher education efficiency is the extent to which the knowledge/skills learned are applicable in the future career of graduates.
- iv. **Integrity (security):** It is an open and easy access to information, although the security of personal information of students as well as staff is an important factor. Integrity/security relates to scientific ethics which is mainly of concern in research activities.
- v. **Usability:** Higher education can relate to the ease of learning and the degree of communication between lecturer and students. The expertise of lecturers plays the dominant role in this dimension.
- vi. **Maintainability:** The handling of customers' complaints can be made for higher education
- vii. **Testability:** How well examination represents the taught subjects can be another criterion for teaching quality.
- viii. **Expandability;**

- ix. Portability;
- x. Reusability;
- xi. Interoperability. All these dimensions are common in reflecting the degree of software flexibility. The “flexibility” or “generality” of higher education can be defined as the degree to which knowledge/skills are applicable in areas other than the main discipline.

**Table II Software Quality factors and Higher Education (McCall *et al.* 1977)**

S. No.	Dimensions	The definition of Higher Education
1	Correctness	The extent to which a programme/course complies with the specified requirements.
2	Reliability	The degree to which knowledge/skills learned is correct, accurate and up to date.
3	Efficiency	The extent to which knowledge/skills learned is applicable to the future career of graduates.
4	Integrity (Security)	The extent to which personal information is secure from unauthorized access.
5	Usability	The ease of learning and the degree of communicativeness in the classroom.
6	Maintainability	How well an institution handles customers’ complaints?
7	Testability	How fair examinations represent a subject of study?
8	Expandability	Flexibility (generality).
9	Portability	The degree to which knowledge/skills learned is applicable to other fields.
10	Reusability	
11	Interoperability	

### 3.3 Service Quality Dimensions

Higher education as a service (Dotchin and Oakland, 1994; Zimmerman and Enell, 1988) can facilitate generalizing service quality dimensions for this sector. More careful generalization is required for the case of higher education regarding its complex characteristics. SERVQUAL developed by Parasuraman *et al.* (1985, 1988) as a basis for an adapted model for higher education.

- i. Reliability: involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honors its promises.
- ii. Responsiveness: concerns the willingness or readiness of employees to provide service. It involves timeliness of service.
- iii. Competence: means possession of the required skills and knowledge to perform the service.
- iv. Access: involves approachability and ease of contact.



- v. Courtesy: involves politeness, respect, consideration, and friendliness of contact personnel.
- vi. Communication: means keeping customers informed in a language they can understand and listening to them. It may mean that the company has to adjust its language for different consumers increasing the level of sophistication with a well-educated customer and speaking simply and plainly with a novice.
- vii. Credibility: involves trustworthiness, believability, and honesty. It involves having he customers' best interest at heart.
- viii. Security is the freedom from danger, risk or doubt.
- ix. Understanding/Knowing: making the effort to understand the customer's needs and
- x. Tangibles: it includes the physical evidence of the service.

**Table III Service Quality Dimensions and Higher Education (Parasuraman *et al.* 1985)**

Dimensions	The definition of Higher Education
Reliability	The degree to which education is correct, accurate and up to date. How well an institution keeps its promises? The degree of consistency in educational processes (teaching).
Responsiveness Understanding Customers	Willingness and readiness of (academic) staff to help students. Understanding students and their needs
Access	The extent to which staff is available for guidance and advice.
Competence	The theoretical and practical knowledge of staff as well as other presentation skills.
Courtesy	Emotive and positive attitude towards students.
Communication	How well lecturers and students communicate in the classroom.
Credibility	The degree of trustworthiness of the institution.
Security	Confidentiality of information
Tangibles	State, Sufficiency, and availability of equipment and facilities.
Performance	Primary knowledge/skills required for students
Completeness	Supplementary knowledge and skills, use of computer
Flexibility	The degree to which knowledge/skills learned are applicable to other fields
Redress	How well an institution handles customers' complaints and solves problems.

### 3.4 Comparing Service, Product and Software Quality Dimensions

Combining the different findings, Table IV compares the quality dimensions proposed in service, product, and software quality dimensions.



**Table IV Service Quality dimensions and their equivalents for Product and Software**

Service	Product	Software
<b>Reliability</b>	<b>Reliability Conformance</b>	<b>Reliability Correctness</b>
Performance	Performance	-
Completeness	Features Durability	-
Handling Complaints Solving Problems	Serviceability	Maintainability
-	Aesthetics Perceived Quality	-
-	-	Efficiency
Security	-	Integrity
Ease of Use	-	Usability
Communication Understanding Customers	-	-
-	-	Testability
Flexibility	-	Expandability Reusability Portability Interoperability
<b>Competence</b> Access Courtesy <b>Credibility</b> Responsiveness Tangibles	-	-

A service is fault-free is attributed to reliability. Other factors concerned are accuracy, keeping promises and consistency, the keeping promises aspect of reliability is similar to the conformance and correctness dimensions of product and software respectively. Consistency is receiving the same service each time. Timeliness, as a quick response to customers, is one of the quality determinants of general services. Competence is related to the knowledge of the academic staff with practical application. Credibility is generally related to the reputation and trustworthiness of an organization as perceived by the customers; it can be grouped into the 'image' category of dimensions considering students as the main customers. The tangibles dimension of service quality seems to be more important in the case of higher education. The quality and quantity equipment and facilities such as workshops, laboratories, library, computer and information systems play a key role in the learning as well as the teaching processes.

### 3.5 Quality Factors in Higher Education

Table V shows a comprehensive list of service quality dimensions together with proposed

interpretations for a higher education environment.

**Table V Quality Dimensions and their corresponding Characteristics in Higher Education**

<b>Dimensions</b>	<b>Characteristics</b>
(1) Tangibles	Sufficient equipment/facilities Modern equipment/facilities Ease of access Visually appealing environment Support services (accommodation, sports,...)
(2) Competence	Sufficient (academic) staff Theoretical knowledge, qualifications Up to date Teaching expertise, communication.
(3) Attitude	Understanding students' needs Willingness to help Availability of guidance and advice Giving personal attention Emotion, courtesy
(4) Content	The relevance of curriculum to the future jobs of students Containing primary knowledge/skills Completeness, use of computer Communication skills and team working The flexibility of knowledge, being cross-disciplinary
(5) Delivery	Effective presentation Sequencing, timeliness Consistency Fairness of examinations Feedback from students Encouraging students
(6) Reliability	Trustworthiness Giving valid award Keeping promises, match to the goals Handling complaints, solving problems.

### 3.6 Quality Dimensions and Customer Groups

There was a problem with some models in which the dimensions of “quality” were mixed with the dimensions of “quality management”. Drawing a line to separate out the two areas is not always easy but a criterion for both are “quality” and not “quality management” dimensions. Another problem was whether or not the beginners' capabilities should be considered in the quality framework as it is seen in some proposed quality factors.

In higher education, the definition of customer is quite different from that in manufacturing or

general services since groups such as students, employers, academic staff, government, and families are all customers of the education system with a diversity of requirements. Investigating the framework developed for these is in Table VI.

**Table VI Quality Dimensions and Customer Groups (Owalia, 1996)**

<b>Dimensions</b>	<b>Customers</b>
(1) Tangibles	Students, Staff
(2) Competence	Students, Staff
(3) Attitude	Students
(4) Content	Students, Staff, employees
(5) Delivery	Students
(6) Reliability	Students, Staff, employees

All six dimensions are relevant to students, but their applicability to academic staff and employers may be more tenuous because they do not have the same level of contact with the corresponding processes. Employers (external customers) of higher education are more concerned with the “product” of the system, i.e. graduates and so the capabilities of graduates (Dimension 4), as well as the reliability of the institution to deliver them (Dimension 6), are of interest. Note that these attributes are important to two other groups of customers, i.e. families and society (government), implying that employers can be regarded as representatives for all external customers.

On the other hand, academic staff use university facilities (Dimension 1), they interact with their colleagues, benefiting from their “competence” (Dimension 2), and they care about the “contents” (Dimension 4) of the courses they teach as well as the “credibility” (Dimension 6) of their institution.

Treating the individual characteristics as the basis for quality improvement, the question is which group of customers should be prioritized for satisfaction. When only one group (e.g. students) is present in the process, no problem arises since there are no contradictory requirements. If the characteristics are to be combined into a total quality score, another difficulty is that customers groups do not provide a homogeneous data set on the characteristics.

### **3.7. Conclusions**

The first step in satisfying customer needs in the determination of how quality dimensions/factors are perceived by each group. This information, to other with the prioritized objectives of a particular institution, will form the platform from which a quality programme can be developed.

## 4. Methods and Tools for Measuring Higher Education Service Quality

### (a) SERVQUAL

“SERVQUAL” is one of the most extensively used service quality measurement instrument because of its easiness to use, possession of a simple structure and capability of generalization (Zeithaml et al., 1990, Parasuraman et al., 1985, Parasuraman et al., 1988). It can be applied to any service organization to assess the quality of service provided (Zeithaml et al., 1990). A conceptual model of the SERVQUAL is based on the assessment if satisfaction is found in situations where perceptions of service quality meet or exceeds consumer expectations. The client satisfaction is a result of the difference between the expectations and performance obtained. ( $SQ = P - E$ ). The SERVQUAL scale compares consumers' perceptions of twenty-two aspects of service quality. In their initial study, Parasuraman and associates found that there were ten determinants which characterize customers' perceptions of the service provided. However, as a result of a later study, they reduced the ten determinants of service quality to five. They were able to identify the following five dimensions of service quality: reliability, tangibility, responsibility, security, and empathy (Parasuraman et al., 1988, Ruby 1998, Otavio and Euriane 2009). The questions to measure SERVQUAL should be scored on a Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Poor reliability and inter-factor correlations of SERVQUAL leads to proposing SERVPERF (perception-only model) and HEdPERF (Higher Education PERFORMANCE) for efficient measurement of service quality (Khan 2007, Cronin 1994, Abdullah 2005).

### (b) SERVPERF

Due to the controversy relating to the SERVQUAL instrument, a more direct approach to the measurement of service quality has been proposed (Cronin 1992) called SERVPERF. But in comparison with SERVQUAL, the SERVPERF tool measures only customers' experience of the service. This instrument makes use of the original SERVQUAL scales. Comparing with SERVQUAL the SERVPERF uses a single set of questions concerning post-consumption perceptions of service quality and does not seek to measure expectations (Cronin 1992).

### (c) HEdPERF

A new industry-scale called HEdPERF (Higher Education PERFORMANCE) has been developed comprising a set of 41 items (Firdaus 2006). This instrument aims at considering not only academic components but also aspects of the total service environment as experience by the student. The author identified five dimensions of the service quality concept.

- i. Non-academic aspects: this dimension includes items that are essential to enable students to fulfill their study obligations, and relates to duties carried out by non-academic staff.
- ii. Academic dimensions: These are responsibilities of the academic.
- iii. Reputation: Responsibility of higher learning institutions to project a professional image.

- iv. Access dimensions: This dimension includes such issues as approachability, ease of contact, availability and convenience.
- v. Programmed issues: This aspect concerns their importance of offering a wide-ranging and reputable academic programmes/specializations with a flexible structure. Consequently, the superiority of the new purposed measurement instrument was concluded (Firdaus 2006).

#### (d) FM-SERVQUAL

FM-SERVQUAL was developed on the basis of original SERVQUAL (Parasuraman et al. 1988). It includes the use of Integrated Facilities Management Framework, a combination of perception and expectation statements, using positive wording solely to avoid the confusion over the development of measurement element according to the appropriateness of rule and function services of the local authority to the community. FM-SERVQUAL instrument is able to measure the service quality in the local authority deliver system (Zahari and Ismail 2008). FM-SERVQUAL is a tool for measuring service quality in local authorities through the comparison between customer perception and expectations of the quality of the services provided. Service Quality through the formula of  $SQ = P/E$ .

#### (e) INITQUAL

The internal service quality measures called INIT QUAL were developed by Caruna and Pitt (Caruana and Pitt 1997) as one of the SERVQUAL adaptation. INIT QUAL model is an internal service quality measure for service organization as an alternative to SERVQUAL. It is an attempt to establish the operational method of the internal service quality measurement.

#### (f) DL-sQUAL

DL-sQUAL was introduced as there were needs for an instrument to measure the quality of online education. Previous SERVQUAL and e-SQ models measured the quality of traditional and e-Commerce services and there were no instruments available to measure the quality of distance learning services. DL-sQUAL instrument has practical implications for distance learning administrators.

#### Conclusions and Remarks:

SERVQUAL is extensively used as a higher education service quality measurement instrument due to its simple structure, generalization capability and the ease of use (Khan 2007, Mahapatra and Khan 2007, Philip and Hazlett 1997). The more complicated modifications have been recognized as the new service quality measurement instruments: SERVPERF, HEdPERF, FM-SERVQUAL, Weighted SERVQUAL, Weighted SERVPERF and Weighted HEdPERF (Mahapatra and Khan 2007, Saleh and Ryan 1991, and Weitzel et al. 1989) were developed. In order to evaluate the higher education service quality fitting to most of the key stakeholders, a new attempt has to be made to propose a new instrument based on new approaches and techniques. At the same time, the long practice and experimental application of SERVQUAL are quite important for further research.

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## Demarcation Of Work- Life : An Edge To Live

\* Pushyamitra Tiwari,

### Abstract

The purpose of this paper was to examine the close association persists between work-life, as both are interconnected and interdependent to each other. There is needed to be an effort from each individual for maintaining a fair division between both of them. The difference between a life well lived and one merely lived is just a word passion. No matter what it is directed towards be it related to money, work-centric or relates to something else, so long as you remain in reasonable control of it. The growing number of responsibilities of family, work, and society can make many a head spin. We need to be able to manage our expectations. Due to competing for demand for both roles, employees are not able to fulfill the responsibility of their work as well as that of home properly. Through literature review, this study is an attempt to explore various emerging solutions which helps in reducing stress to a large extent. Excessive, unbridled stress can be dangerous, and rather than imparting vision, could blind you to reality. It is visualized that lacking in work-life balance affects innovation, problem-solving, productivity and motivation. Right balance contributes to morale, motivation, commitment and impetus of passion, this way there is probably no need for anyone to give up one for the other. The more control you have over your stresses and anxieties, the better off you will be in the long run.

**Keywords:** Work-life Imbalance, Stress, performance, productivity.

### Introduction

Work-life imbalance refers to conflicting situations between the domains, work is one of life's important domains which we must pursue with passion. On one scale is Work and the other scale is Life and the two will always jostle for space. We decided to put all our focus and energy into one domain i.e. work, thinking that the number of hours we spend at work, the more successful we are. Consequently, success will bring happiness to us, I can buy the car that I always dreamed of, to our families, we can finally take that house loan, and our communities, use some of that money to fund an NGO or even to teach. The plan sounds good. Then something goes wrong. Work begins to suffer. We do not enjoy work as much. More we do not enjoy work, the more output suffers. More the work output suffers the more productivity declines. The domains of life are a bit like polo consists of four mounted players, which can be mixed teams of both men and women Work, Life, Community, and Self. All four

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players can contribute to your satisfaction and performance in your life. When only one player, the work is responsible totally for scoring all the goals, it carries undue pressure to give you satisfaction.

### **Managing Work & Life Demands**

The two domains work and life are two incompatible streams of activities; the first domain is your work, which gives you a sense of accomplishment. The second domain is family; those encompass your family is a romantic partner, a parent or grandparent and many others. These are relationships which give meaning to your life. Long hours have always been a part of the job, but today, an inordinate amount of time is wasted on travel, meetings, talking on the phone and answering emails. These time-consuming diversions affect the quality of work and eat up precious hours one could spend relaxing with family or getting away for the weekend. Working up to 50 or 60 hours a week can often lead to decreased productivity, absenteeism, fatigue and lack of fulfillment in the workplace; as result, employees often find themselves torn between the responsibilities to their career and family. The organization can allow flexibility in how the work gets done, but in the end, it's up to each individual employee to figure out how to use that flexibility by thoughtfully and deliberately putting up boundaries between work and the other parts of their lives. They have to determine for themselves how their wellness, personal relationships, personal lives, finances, job skills, networking and the other pieces of their days and their lives fit into or around their work time.

### **Questions to Consider When Assessing for Stress:**

How do you know when you are stressed?

Where do you feel stress in your body?

What do you notice about your body, thoughts, and feelings when things are difficult?

How do you behave when you are feeling stressed out?

How do you react negatively or proactively to stress?

How do you currently cope with stress?

### **Stress Management:**

Stress management means trying to control and reduce the tension that occurs in stressful situations. This is done by making emotional and physical changes. The degree of stress and the desire to make the changes will determine how much improvement takes place.

### **AN INDIVIDUAL STRESS MANAGEMENT PROGRAM**

- Find the positive in situations, and do not dwell on the negative.
- Plan fun activities.
- Take regular breaks.

## Multi-Tasking Can It Help You Get More Done?

Doing two or three tasks simultaneously may seem like the height of efficiency -- and it would be if a person had more than one brain. In the real world, multitasking actually wastes time and reduces work quality. Unfortunately, our brains just aren't equipped for multitasking tasks that do require brainpower. Our short-term memories can only store between five and nine things at once. Actually, multitasking doesn't make us as productive as we think. What's more, it's likely that the quality of our work is worse when we multitask. In fact, it could actually be costing us time instead of creating it. When you're trying to accomplish two dissimilar tasks, each one requiring some level of consideration and attention, multitasking falls apart. Your brain just can't take in and process two simultaneous, separate streams of information and encode them fully into short-term memory. Instead of actually helping you, multitasking works against you. It's making you less efficient, not more.

- A growing body of scientific research shows that multi tasking can actually make you less efficient. Trying to do two or three things at once or in quick succession can take longer time than doing them one at a time, and may leave you with the reduced brainpower to perform each task. That is why most call centres have their agents who take only one call at a time.
- Research shows that multitasking increases stress diminishes perceived control, and may cause physical discomforts such as stomach-aches or headaches not to mention shoddy work, mismanaged time, rote solutions, and forgetfulness. Have you ever noticed that as you are working on one task or one call, thoughts about another task or the caller on hold creep into your consciousness?
- It doesn't mean we can't do several things at the same time, but we're kidding ourselves if we think we can do so without a cost. Our brains allow us to appear as though we can comfortably multitask. We do have an excellent filtering mechanism to switch our attention rapidly from one thought to the next. At the same time, rather than lose unattended thoughts, this mechanism keeps them active in the recesses of the brain. However, the more we juggle, the less efficient we become at performing any one task. And the longer we go before returning to an interrupted task, the harder it is to remember just where we left off. Multitasking diminishes our productivity and makes us work harder just to feel like we are barely keeping up

## SOME GUIDELINES TO SUPERCHARGE YOUR PRODUCTIVITY:

While there is no scientific formula for getting the work-life balance right, while the desire is similar, there are as many ways as there are people on the planet to describe a balanced life. When it comes to balance, we all have our own idea of what is comfortable, tolerable and acceptable. A healthy work-life balance can increase the employees' loyalty and dedication towards their company, and allow them to put in better work for their company. There are a few guidelines to put you in the right frame of mind to get started.

- **Draw the line between work and time for off**  
Deciding when and how often to be available for work is a challenge faced by most professionals, and while emergencies do crop up, always try to keep your professional and personal time separate.
- **Limit time-wasting activities**  
Part of the reason many people spend extra hours at work is that of time spent on activities such as chatting with colleagues or on social media. Every now and again, we all need some time out, just make sure that this is not taking up too much of your work time.
- **Plan ahead and prioritize**  
A great way to increase your free time is to ensure that you use your work time as effectively as possible. When you get to work, immediately write down your top tasks for the day and check off items as you complete them. Writing down a list of tasks according to priority will help you manage your time more effectively.
- **Meditation for a well-rounded approach to living life**  
Meditation balances your state of mind. It balances between the different states of the mind. Through meditation, we are able to tap the full potential that nature has bestowed upon us. Meditation is like a seed; the better a seed is cultivated, the more it flourishes. Similarly, the more we practice meditation, the better it cultures nervous system and the body. You become beautiful yet strong, capable of accommodating different challenges in life without any conditions.
- **Coping Efforts**  
Coping efforts determine how well they handle the situation. This is where control coping and escape coping strategies often come into play.  
It's important to avoid common escape coping strategies, like drinking too much alcohol, lashing out emotionally, and other negative behaviors. Instead, focus on control coping, and think about how you can take control of this situation and create a positive outcome for yourself and for the people around you. People who have a positive outlook find it much easier to engage in control coping. So, use positive thinking techniques like affirmations and visualization to foresee a great outcome.
- **Take full sleep & as far as possible in the time**  
Sleep deprivation among persons causes weight gain and makes them tired very easily. They try to gain regularity in their timings and take complete rest of at least of 7 hours so that they regain their energy.
- **Have a hearty breakfast**  
Not eating breakfast isn't smart it makes you again in gaining weight ! because your

body has been starved of food while you are sleeping, it needs food within an hour of waking up, to get its various systems running smoothly ( including metabolism ). So basically because of some kind of typical work culture among media professionals, they many times skip breakfast; there body panics because it thinks it's starving and stores the next meal you eat in its fat reserves.

- **Some Spiritual diet**

They should go for some weekend classes on studying philosophy. It diverts there mind from stressed work.

- ***Stay positive***

While it is important to be aware of all that could go wrong and take due precautions, high performers at all levels do not usually remain focused on what could go wrong. This only raises stress levels as we worry about all the pitfalls. It helps to keep up a positive law of energy by remaining focused on the goal in a meaningful, positive fashion.

## **Conclusion**

In today's fast-paced world we often find ourselves running our way up to the corporate ladder with little time for anything else. Sometimes, slowing down, switching off and giving more attention to other neglected areas of our lives, can give us the opportunity to enjoy a satisfying work-life balance. In the long run, a work-life balance is beneficial for both employees and employers as well as friends and family members.

Try to visualize other people admiring you, as they see you calm, confident and happy. Now one should make it a habit to get out of bed, read an inspirational, spiritual or entertaining passage in a book. When one would calm, he/she get to know him better. Freedom from one's mind leads to a happier life. Today many of us don't take enough physical exercise to 'burn off' the effects of our response and we're left with stress build up. We learn to control our reactions, but this does not counteract the stress response. It has been well documented that negative and frightening thoughts invariably precede negative and frightening emotions. If the thoughts can be controlled, overall stress levels can be significantly reduced. Thought stopping involves concentrating on the unwanted thoughts and, after a short time, suddenly stopping and emptying the mind. The command "Stop" or a loud noise is generally used to interrupt the unpleasant thoughts. Work-life imbalance among media persons through proper and innovative stress management techniques can be reduced up to a considerable extent. In dealing with your anxieties at your job, learn to take it one day at a time. While the consequences of a particular fear may seem real, there are usually other factors that cannot be anticipated and can affect the results of any situation. Get all of the facts of the situation and use them to your advantage. Challenge your negative thinking with positive statements and realistic thinking. When encountering thoughts that make you fearful or depressed, challenge those thoughts by asking yourself questions that will maintain objectivity and common sense.

**Doing too many things at once is not only unproductive; it can actually make you sick**

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