

Journal of Management Development & Research

VOLUME-1 ISSUE-2

ISSN NO-2249-023X

DECEMBER-2011

Articles

Impact of In- Store Influences on Impulse Buying

Dr. Monica Khanna, Prof. Manisha Karandikar, Dr. Shelja J Kuruvilla

An empirical study and testing of Efficient Market Hypothesis with reference to the Bombay Stock exchange Sensitivity Index comprising of thirty stocks

Prof. Akshay D. Damani

Consumer Perception About Service Quality In Banking

Prof. Ranjith P.V, Dr. Subhash Kulkarni

Potential Risks & Challenges associated with the Globalization of Higher Education Sector in India

Dr. Sujata Dhopte

Customer Satisfaction of Restaurants – An Empirical Analysis In Indore City

Dr. Ira Bapna, Prof. Harmender Singh Saluja, Prof. Vishal Sood

An Employee Satisfaction Survey at MagicMaster Cellular Services Ltd

Dr. Gowri Joshi, Mr. Hitendra Singh, Ms. Mragank Gangwar

Antecedents of Managerial stress with reference to their age a study conducted in Information Technology Sector

Dr. Bharati Deshpande



Journal of Management Development & Research

Editorial Board :

Dr. H.K Abhyankar

Senior Advisor, Science & Technology, University of Pune,
Former Chairman, UGC, Founder Director of NAAC and Former Vice
Chancellor, University of Pune

Dr. Arun Nigvekar

Director, Vishwakarma Institute of Technology, Pune

Dr. Matthew Liao-Troth

J. Whitney Bunting College of Business, Georgia College & State
University, Georgia

Dr. Vijay Khole

Former Vice Chancellor, University of Mumbai

Chief Editor :

Dr. Subodh Kulkarni

Member Secretary - Kohinoor Education Trust

Editorial Team :

Dr. Bharati Deshpande

Associate Prof. - Kohinoor Business School

Prof. Madhavi Dhole

Prof. Finance - Kohinoor Business School

Prof. Ritika Vohra

Prof. Marketing - Kohinoor Business School

Journal of Management Development & Research

Focus & Scope

Journal of Management Development & Research (JMDR) is a peer reviewed academic journal, the aim of the journal is advancing interdisciplinary and multifunctional academic research and management practices across different sectors and different streams. The focus of the journal is to publish papers and cases on the state of the art business and management practices like marketing, finance, human resource management, organization behavior, supply chain management, information technology. The audience includes researchers, managers, academicians, educators and practitioners.

Journal of Management Development recognizes excellent researcher's from different specialization to disseminate their research work both from academic and industry practitioners in the management. This Journal is a common platform where academicians, corporate managers and practitioner would like to share their work in the field of finance, marketing, human resource management, organization behavior, quantitative techniques, information technology, supply chain management etc across different sectors in India and Abroad.

The main aim of the Journal is to focus on innovation & practical applications to enhance the field of management development thinking practice and research. Contributions will therefore be welcome from practitioners, academicians, professions and expert working in different sectors and different specializations.

Submission: Journal of Management Development is a advancing interdisciplinary and multifunctional academic research journal and will be published quarterly. Manuscript should be submitted to. Electronic submission in Microsoft word format to kjmdr.editor@kbs.ac.in. The paper should be original and should not be published elsewhere, nor should be under consideration by another journal.

Editorial Process: Journal aims to provide author with constructive, fair and timely review. The review will be accepted or rejected on the basis of significance, novelty and usefulness to Journal readers. A paper once rejected will not be considered again for review. Papers for publication in the journal are selected through rigorous peer review, to ensure originality, timeliness, relevance and readability. The review process may take approximate 45 days to be completed. For accepted paper the necessary changes should be informed and resubmitted after 15 days.

Manuscript: Manuscript must be written in English and should be typed with double spacing throughout one side of preferably A4 or letter size paper. The paper should include the title of the article the authors name and institute they are associated with. The title should include a abstract of not more than 200 words. References must follow the journal style requirement. The length of the article should be restricted to 2500 words. Key words should be written after abstract.

References

The Harvard system should be used in referencing. When quoted in the text the style is ...Gary

- 1. Kaplan (2000) References are listed alphabetically after the text. Journal and book titles should be written out in full.*

Examples are:

- Richard Daft (1991), Principles and Practices of Management, Cengage Publication*
- Gene L Roth and Brain Vivona, "Mirth and Murder: Crime scene investigation as a work Context f or examining humour applications, Journal of Human resource development Vol. 9, No. 4, pp 314-332.*

Advertisement and Reprint

Printed by : Magna Graphics, Kandivali (West), Mumbai

Published by : Kohinoor Business School, Kohinoor Corporate House, Senapati Bapat Marg, Dadar (West), Mumbai-200028

Email: Kohinoortimes@kohinoor group.co.in

Journal of Management Development & Research

<u>Contents</u>	<u>Pages</u>
Impact of In- Store Influences on Impulse Buying <i>Dr. Monica Khanna, Prof. Manisha Karandikar, Dr. Shelja J. Kuruvilla</i>	1
An empirical study and testing of Efficient Market Hypothesis with reference to the Bombay Stock exchange Sensitivity Index comprising of thirty stocks <i>Prof. Akshay D. Damani</i>	9
Consumer Perception About Service Quality In Banking <i>Prof. Ranjith P V, Dr. Subhash Kulkarni</i>	18
Potential Risks & Challenges associated with the Globalization of Higher Education Sector in India <i>Dr. Sujata Dhopte</i>	24
Customer Satisfaction of Restaurants – An Empirical Analysis In Indore City <i>Dr. Ira Bapna, Prof. Harmender Singh Saluja, Prof. Vishal Sood</i>	30
An Employee Satisfaction Survey at MagicMaster Cellular Services Ltd <i>Dr. Gowri Joshi, Mr. Hitendra Singh, Ms. Mragank Gangwar</i>	36
Antecedents of Managerial stress with reference to their age a study conducted in Information Technology Sector <i>Dr. Bharati Deshpande</i>	46

Impact of In- Store Influences on Impulse Buying

Dr. Monica Khanna

Professor,

K.J.Somaiya Institute of Management Studies and Research, Vidyavihar, Mumbai
monicak@simsr.somaiya.edu

Prof. Manisha Karandikar

Associate Professor, Fr. C. Rodrigues Institute of Management Studies, Vashi, Navi Mumbai
manisha.karandikar@gmail.com

Dr. Shelja J. Kuruvilla

Associate Professor, Institute for Technology & Management, Navi Mumbai
sheljaj@itm.edu

Abstract :

Retailers carry out a variety of in store activities with the objective of increasing impulse purchases of consumers. Aspects of in store influences like price discounts, branding, perceived crowding have been studied in the past, however a comprehensive scale that looks at multiple parameters which can act as a trigger for impulse buying has not been developed. This paper looks at scale development to measure impact of in-store influences on impulse buying. Using factor analysis, four factors have been developed and their relationship with Impulse buying tendency was checked.

Introduction :

Retailers have always tried to influence the consumer so that he indulges in impulse buying & buys more products than planned by him. Attractive display of products also referred to as Visual Merchandising is an age old tool used in retail. The “kirana” stores ensured that high impulse products like snacks, candy, chocolates, and cold drinks have high visibility. The later retail stores set up by manufacturers in textile sector (Bombay dyeing, Raymonds etc used mannequins to display their products & price discounts were announced to retailers via banners, hoardings etc. With the entry of organised retailers like Food World, Big Bazaar, Pantaloons, Nilgiris, Cross Words, Planet M, there is a drastic increase in use of various promotional offers. Consumers have experienced the ambience, promotional offers, return or exchange policies of the organized retailers (Abhinava S Singh, 2008).

The growth of retail sector in India is phenomenal. India has been rated as the fifth largest retail market in report Global retail Trends 2009 (Yelken, 2009). Further India topped the Global Retail Development Index of AT Kearney in 2009. This increase in organized retail will increase focus on use of in store promotions by retailers. This scale can be used by retailers to understand the importance given by their target audience towards

various in store promotions. This will in turn tell the retailers about the importance of each of the in store promotions & will help them to prioritize their spending.

Literature Review :

Significant amount of research has been carried out in both in - store promotions and Impulse Buying. However a comprehensive scale that will look at multiple parameters that can act as triggers for Impulse Buying has not been developed

In Store influences:

(Kotker & Keller, 2007) defined sales promotion as a collection of short term incentive tools designed with the intention of stimulating quicker or greater purchase of goods or services. Consumer sales promotion comprises of samples, coupons, cash refund offers, price off, premium, prizes, patronage rewards, free trials, point of purchase displays etc. Most of the above mentioned sales promotion tools are often used in retail with the intention of triggering Impulse Buying (Youn & Faber, 2000).

(Ehrenberg, 1994) through their study demonstrated that in grocery brands, price promotions do not affect the sales of the brand after the promotion. This is primarily because such price promotions seldom attract new buyers and only the existing buyers go for such offers. (Huff & Alden,

1998) compared the responses of consumers to coupons & sweepstakes in Malaysia, Thailand & Taiwan that were considered to be newly industrialised collectivist societies. The researchers found that the Taiwanese consumers expressed less embarrassment while using coupons however they reported less favourable attitude towards sweepstakes than consumers in Thailand & Malaysia. The authors conclude that cultural, legal & economic differences may be the reason for this difference in attitudes. (Leone & Srinivasan, 1996) have studied the impact of coupons on the profitability of the brands and have demonstrated that couponing strategy may not be optimal for individual chains in the market place though they may be optimal at the market level. (Gupta, 1988) studied the response of consumers to sales promotion in ground coffee market & concluded that of the total sales increase recorded during promotion, 84% was accounted for brand switching.

Probably the set of in-store influences that have been most extensively addressed in literature on this topic are store environmental variables. Researchers have looked at various store environmental cues like music (Yalch & Spangenberg, 1990), (Chebat, 2001), lights in store (Areni, 1994), (Summers & Hebert, 2001), colors used in a store (Bellizzi Joseph A, 1983), (Middlestandt, 1990), olfactory cues (Eric Spangenberg, 1996), (Gula & Bloch, 1995)

Perceived crowding has also been studied by various researchers to determine its impact on retail (Harrell & Hutt, 1976). (Mattila & Wirtz, 2008) through the research demonstrated that employee friendliness & perceived crowding have a joint impact on impulse buying. (Mattila & Wirtz, 2001) studied the effect of scent and music on the consumers and demonstrated that in presence of both these factors, consumers exhibited higher levels of approach and Impulse buying behaviour.

Impulse buying :

Impulse buying is defined by (Rook, 1987) as a sudden and spontaneous urge to buy something immediately. Impulse buying, as a phenomenon has been widely studied by academicians since early 1950s. The research on impulse buying has seen a change in direction with newer inputs coming in regularly. Early research (Applebaum, 1951, Vol.16), (Kollatt & Willett, 1967), (Stern, 1962) considered Impulse buying to be synonymous with unplanned purchase. Research was focused on

identifying products that can be bought on impulse and looked at factors like price, marginal need of item, advertising, store display etc. (Bellenger, D, 1978) considered impulse buying to be important to a particular type of merchandise.

In 1985, Rook & Hoch actually gave a new direction to research on Impulse buying. According to them (Rook & Hoch, 1985) almost anything can be bought impulsively. Even items that are classified as non impulsive items can also involve impulsive behavior. They concluded by saying that it is individuals and not the products that experience the impulse to consume. Dennis Rook in 1987 defined Impulse Buying as mentioned above and thereby differentiated it from Unplanned Buying.

The research on impulse buying then progressed from individual personality traits to role of self control in impulse buying. According to (Hoch & Loewenstein, 1991), Impulse Buying represents an ever shifting conflict between desire and willpower. When consumer's desire to purchase outstrips consumer's willpower of not to make a purchase, Impulse Buying occurs. Also, (Vohs & Faber, 2007) demonstrated how temporary reduction in self-regulatory capacity can lead to stronger impulsive buying tendencies. Literature also indicates that impulse buying increases between the ages of 18 & 39 and subsequently declines. (Wood, 1998).

There are scales available in literature to measure Impulse Buying Behavior of individuals. One of the popular scales widely used by researchers is the Buying Impulsiveness Scale developed by Rook & Fisher. (Hausman, 2000), (Voh & Faber, 2007), (Chyan Yang, 2008)

Research Gap :

It is evident from the review of literature that Impulse Buying has been extensively studied. Studies also indicate that external cues in retail environment and in-store promotions trigger impulse buying. Various tools of sales promotion, sales environmental variables and situational variables are also seen to have lead customers to indulge in impulse purchases. However there is no integrated scale developed with the intention of capturing the response of customers towards in-store influences. The scale evolved and tested in this paper looks at various parameters with a holistic view in an attempt to sum up the response of customers towards in store influences. This paper also tries to establish relationship between this scale developed for in store influences and Impulse Buying Tendency.

Objectives :

The paper attempts to

1. Evolve a scale to measure the impact of various in-store influences on impulse purchase behavior of consumers
2. Validate the scale for applicability in the context of an integrated study of in-store influences
3. Test the reliability of evolved scale
4. Use the validated scale for understanding the impact of in-store variables on impulse behavior

Methodology :

In order to fulfill the objectives of the research a two phase approach was chosen (Anderson, 1998). The first phase involved the construction of the scale and the second phase involved empirical testing of the scale. Focus Group meetings were conducted to develop the relevant items of the scale. The content validity of the scale was then checked. The Buying Impulsiveness Scale developed by Rook & Fisher was then checked for Validity and Reliability for Indian context.

Phase 1: Construction of the scale :

To understand the role of in store triggers for impulse buying, two focus group meetings were conducted with different consumer segments. Both sets of focus groups were moderated by the first researcher, the proceedings were recorded in audio and written format by the second. The third researcher observed the proceedings and added her comments.

The first focus group comprised of 12 post graduate students in the age group of 22-26 years. In terms of gender, 7 were female students & 5 were male students. This focus group discussion helped in evolving the major store promotional influences including variety, display etc. The group members were of the opinion that if there are branded products offered on discount, then they are more likely to be bought on impulse. Their views were also sought on the ambience & presence of soft music etc.

The second Focus Group was conducted with 14 respondents who were women in the age group of 32 to 40 years. Variables considered to influence impulse behavior by this group were again discounts and display of products in the retail store. They also mentioned that the acceptance of credit cards in these major outlets also lead them in indulging in impulse purchases at times. The group

also mentioned that if they went for shopping with children, then children would nag them into buying things that they had never planned. Hence display of products also acts as trigger for Impulse Buying

The outcomes of these two focus group meetings were compiled and a list of items was prepared. To this list, items like use of coupons, loyalty programs, quantity discounts which find mention in literature were added and the scale was prepared. Some of the items with respect to ambience were also added and a comprehensive 21 item scale was prepared with the intention of measuring the in store influences that may act as triggers of impulse purchases.

Phase 2: Validity and Reliability :

This scale was then checked for face validity and content validity. It was then assessed by a panel of experts. The panel comprised of 2 professors in the field of retail, 2 professors in the field of Research Methodology & Quantitative techniques & 2 practicing managers from the field of retail management. Their views were incorporated and the scale of 21 items was then finalized for administration.

There are scales available in literature to measure Impulse Buying Behavior of individuals. One of the popular scales widely used by researchers is the Buying Impulsiveness Scale developed by Rook & Fisher. (Hausman, 2000), (Voh & Faber, 2007), (Chyan Yang, 2008). This is a nine item Likert scale and for items on the scale refer to Annexure 1 at the end of the paper.

The Buying Impulsiveness Scale was also shown to the above mentioned panel and the content validity was established. The reliability of this scale was also checked by the researcher by administering it to a conveniently picked up sample of 120 respondents. The cronbach alpha was found to be 0.72 as mentioned in Table No.1

Table No.1 : Preliminary Reliability Check of Buying Impulsiveness Scale

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items.
0.722	0.721	9

Phase 2 : Data collection & Analysis : Pilot-1

The initial scale on in-store influences was administered to 189 post graduate students and the responses were tabulated. The sample comprised of 52% male students & 48% female students. In terms of family income, the highest representation was in the middle income groups, with 21%, 30% & 20% in 1.1 to 3 lakhs, 3.1 to 5 lakhs, and 5.1 to 10 lakhs respectively. Refer to Table No. 2 for demographic information of the sample. Since the respondents were students, they were in the age group of 19 to 27 years. The sampling technique used for this preliminary survey was convenience sampling, since this method is considered adequate for the purpose according to previous research (William Bearden, 1989). Factor analysis was used with the intention of reducing the number of items of the scale. Those items with a factor loading above 0.5 on at least one of the factor were retained. The items with factor loading below 0.5 were deleted. The factors that loaded high on multiple factors were also dropped. These items are mentioned in Table No.3 below. The factors with loading above 0.5 were retained and subjected to factor analysis.

Table No. 2 :
Demographic Information of the Sample

	Less than 1 lakh	1.1 to 3 lakhs	3.1 to 5 lakhs	5.1 to 10 lakhs	Above 10 lakhs	Total
20-22	15	18	17	14	7	71
23-25	4	12	19	16	18	69
26-27	3	9	21	8	8	49
Total	22	39	57	38	33	189

Table No.3 :
Items with factor loading below 0.5

Items	Factor loading
The presence of a wide variety of products in a store often influences me to buy impulsively	0.48
The way things are displayed in a retail store often influences me to buy impulsively	0.43
The sales person present in the store often influences me to buy impulsively	0.34
If a see a product bundled with another product I often get influenced to buy impulsively	0.49
Stacks of products displayed in the store stimulates me to buy impulsively	0.39
The facility of home delivery stimulates me to buy Impulsively	0.46

Pilot-2 :

Some of the items of the original scale were found difficult by the respondents to comprehend and hence they were reframed in the new questionnaire. Specifically the items on loyalty cards & spot discount had to be explained to the respondents. Hence they were simplified in the scale and reframed as “The schemes offered by stores like points on membership card influences me to buy impulsively” & “If I know that there is a surprise gift or lucky draw I tend to buy impulsively” This reduced scale was then administered to sample size of 118 shoppers. This survey was carried out in front of large retail store in Navi Mumbai & was also sent to individuals known to the researcher. The sampling technique used for this survey was quota sampling. The quotas were formed on the basis of age as the major parameter. 80% of the respondents were in the age group 18 -40 years because as per literature, (Woods 1998) this is the age group when Impulse buying tendency is high & beyond this age group, it decreases. The respondents were also administered the Buying Impulsiveness Scale developed by Rook & Fisher. The data collected was tabulated & analyzed using SPSS version 16.

Table No.4 :
Factor Analysis of Scale on In-Store influences

Factor	Items	Factor Loadings	% Variance explained	Eigen Value	Cronbach Alpha
1 (Situational)	Crowd in the store stimulates me to buy on impulse	0.48	39.4	5.91	0.76
	The more time I spend in the store, the more impulsively I tend to buy	0.81			
	Waiting at the billing counter, I tend to pick up products on impulse	0.75			
	If I have discount coupons I tend to shop impulsively	0.65			
2 (Store facilities)	The credit card facility influences me to buy impulsively	0.66	9.44	1.41	0.81
	The schemes offered by the store like points on membership card makes me buy impulsively	0.74			
	If I know there is a surprise gift or a lucky draw I tend to buy impulsively	0.78			
	Facility of exchange/returns stimulate me to buy impulsively	0.69			
3 (Experiential)	The ambience/environment of the store influences me to buy impulsively	0.82	8.77	1.32	0.78
	If I see a new product I tend to buy it impulsively	0.65			
	The packaging of the product stimulates me to buy impulsively	0.61			
	The soft music being played in the store stimulates me to buy impulsively	0.62			
4 (Product related)	Discount in price often influences me to buy impulsively	0.71	7.65	1.15	0.65
	The quality of the product often influences me to buy impulsively	0.76			
	If I see branded products offered on discount I tend to buy impulsively	0.5			

As seen in the above table, the reliability of the each of the factor was found to be above the acceptable level of 0.6 George & Maggery (2003).

Further the inter item correlation was checked for each item within a factor & all the correlations were found to be positive indicating internal consistency.

Buying Impulsiveness Scale :

The reliability of the scale was determined by computing the cronbach alpha. The cronbach alpha was found to be 0.80 which is considered to be good reliability for a scale. Refer to Table No.5 for the cronbach alpha. Further the inter-item correlation was also found to be positive indicating internal consistency.

Table No. 5 : Reliability Statistics for Buying Impulsiveness Scale

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.802	.802	9

Relationship of the scale with Impulse Buying Tendency :

The relationship of the four factors generated above was tested with Impulse buying. As mentioned earlier the Impulse buying tendency was measured by administering the Buying Impulsiveness Scale. The correlation between the average score on Buying Impulsiveness Scale and each factor was found to be positive indicating relationship between the scale and Impulse buying behavior. Table No. 6 gives the results of this correlation, which is significant at 99%.

Table No. 6 : Correlation of Impulse Buying Score and Factors of In-Store Influences Correlations

		Ibmean	Factor1	Factor2	Factor3	Factor4
Ibmean	Pearson Correlation	1	.467**	.257**	.436**	.337**
	Sig. (2-tailed)		.000	.008	.000	.000
	N	116	104	105	105	105
Factor 1	Pearson Correlation	.467**	1	.592**	.515**	.491**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	104	107	106	107	107
Factor 2	Pearson Correlation	.257**	.592**	1	.505**	.550**
	Sig. (2-tailed)	.008	.000		.000	.000
	N	105	106	107	107	107
Factor 3	Pearson Correlation	.436**	.515**	.505**	1	.494**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	105	107	107	108	108
Factor 4	Pearson Correlation	.337**	.491**	.550**	.494**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	105	107	107	108	108

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

The relationship between Impulse Buying Tendency and the scale developed to understand impact of in-store influences on impulse buying was also tested using Linear Regression Model. Table No. 7 shows the regression model, the R square indicates that the above mentioned factors explain 29% of the variance. This indicates that in store influences is one of the factor that influences impulse buying and other factors mentioned in the literature review like mood of the person, shopping groups, nature of product, age also have a considerable role in influencing Impulse Buying Behavior.

Table No. 7 : Results of Regression Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.539 ^a	.291	.262	.57132

a. Predictors: (Constant), Factor4, Factor1, Factor3, Factor2

b. Dependent Variable: Ibmean

Further Table No. 8 indicates that amongst the four factors, Factor 1 and factor 3 contribute significantly to Impulse Buying Behavior.

Table No. 8 :
Coefficients of Regression equation
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.849	.281		6.583	.000
Factor1 (Situational)	.289	.087	.3683	.307	.001
Factor2 (Store facilities)	-.138	.091	-.179	-1.522	.131
Factor3 (Experiential)	.229	.084	.2942	.716	.008
Factor4 (Product related)	.094	.095	.107	.989	.325

a. Dependent Variable: Ibmean

Conclusion :

This scale can be used as an important tool for retailers to understand their target audience. The significant positive correlation between the factors and impulse buying score indicates that they have a significant role in influencing Impulse buying behavior. Depending upon the importance given to various in store influences, it is possible to adapt the point of purchase promotional activities in a retail strategy. Right use of the in store influences can stimulate impulse buying & thereby help the retailers in increasing sale of their products. This scale can be used by other researchers to identify the role of in store influences on impulse buying.

Limitations & Future Scope :

This scale needs to be used by other researchers to understand whether it can be used in other scenarios and with different set of respondents. The scale has picked up store influences that are relevant in Indian context. Some aspects of in store influences like color and light were not covered. Future studies can look into these factors and try to modify then scale. The respondents in this study were collected on the basis of quota sampling with age as a primary variable. It would be interesting to see whether the responses would differ if it was tested with a group of highly impulsive buyers and a group of very less impulsive buyers. A larger sample size can probably permit that study.

Annexure 1 :

Items in the Buying Impulsiveness Scale developed by Rook & Fisher:

1. I often buy things spontaneously
2. "Just do it" describes the way I buy things
3. I often buy things without thinking
4. "I see it, I buy it" describes me.
5. "Buy now, Think about it later" describes me
6. Sometimes I feel like buying things on the spur of the moment
7. I buy things according to how I feel at the moment
8. I carefully buy most of my purchases
9. Sometimes I am a bit reckless about what I buy

References :

- Anderson, D. G. (1998). *An updated Paradigm for scale development incorporating unidimensionality and its assessment. Journal of marketing Research, Vol. XXV, 186-92.*
- Applebaum. (1951). *Studying Consumer Behaviour in Retail Stores. Journal of Marketing, Vol. 16, 172-178.*
- Areni, Charles S, Kim, David(1994). *The influence of in-store lighting on consumers' examination of merchandise in a wine store. International Journal of Research in Marketing, Vol. 11, Issue 2, p. 117-125.*
- Bearden W., Netemeyer R G. & Teel J E. (1989), *Measurement of Consumer Susceptibility to Interpersonal Influence, Journal of Consumer Research, Vol.15, Issue 4, p. 473-481*
- Bellenger. D, Robertson. D & Hirschman E. (1978). *Impulse Buying varies by Product. Journal of Advertising Research, Vol.18, No.6, 15.*
- Bellizzi Joseph A, Crowley Ayn E & Hasty Ronald W. (1983). *The effects of color in store design. Journal of Retailing, Vol.59, No.1, 21.*
- Chebat Jean-Charles, Claire Gelinas Chebat & Dominique (2001). *Environmental background music and in-store retailing. Journal of Business Research , Vol. 54, Issue 2, p. 115.*
- Eric Spangenberg, A. Crowley Ayn E & Henderson Pamela W. (1996). *Improving the Store Environment : Do Olfactory Cues Affect Evaluations and Behaviors . Journal of Marketing, Vol. 60, 67-80.*

- Ehrenberg A S C, Hammond Kathy & Goodhardt G J, *The after-effects of price related consumer promotions*, *Journal of Advertising Research*, Vol. 34, Issue 4, p.370
- Gula Charles & Bloch Peter H (1995). *Right under our noses: Ambient scent and Consumer Responses*. *Journal of Business and Psychology*, Vol. 10, Issue 1, p. 87-98.
- Gupta Sunil (1988), *Impact of Sale Promotion on When, What & How Much to buy*, *Journal of marketing Research*, Vol.25, issue 4, p.342
- George D. & Mallery, P. (2003). *SPSS for Windows step by step : A simple guide & referenece, 11.0 update*. New York: Boston: Allyn & Bacon.
- Gilbert D C & Jackaria N (2002). *The efficacy of sales promotions in UK supermarkets: a consumer view*. *International Journal of Retail and Distribution Management* , Vol. 30, Issue 6/7, p.315.
- Harrell, G. D., & Hutt, M. D. (1976). *Buyer Behavior under conditions of crowding: An initial framework*. *Advances in Consumer Research* , Vol. 3, Issue 1, p. 36-39, 4p
- Hausman A. (2000), *A multi-method investigation of consumer motivations in Impulse Buying Behavior*, *Journal of Consumer Marketing*, Vol.17, Issue 4/5, p.403
- Hoch Stephen J, & Loewenstein George F (1991). *Time inconsistent preferences and Consumer Self Control*. *Journal of Consumer Research*, Vo. 17, Issue 4, 492-507.
- Huff Lenard & Alden Dana (1998), *an investigation of consumer response to sales promotion in developing markets: A three country analysis*, *Journal of Advertising research*, Vol.38, Issue 3, p.47-56
- Kollatt David T & Willett Ronald P (1967). *Customer Impulse Purchasing Behaviour*. *Journal of Marketing Research*, Vol. 4, 21-31.
- Kotler & Keller (2007), *A Framework for Marketing Management, Third edition*, Pearson Education, New Delhi.
- Leone R & Srinivasan Srini S(1996), *Coupon face Value: Its Impact on Coupon Redemption, Brand Sales and Brand Profitability*, *Journal of Retailing*, Vol. 72, Issue 2, p.273-289
- Maureen Morrin & Jean-Charles Chebat, M. &. (2005). *Person-Place Congruency The interactive effects of shopper style and atmospherics on consumer expenditure*. *Journal of Service Research*, Vol.8, Issue 2, p.181-191.
- Mattila Anna S & Wirtz Jochen (2001). *Congruency of scent and music as a driver of in-store evaluations and behaviour*. *Journal of Retailing*, Vol. 77, Issue 2, 273.
- Mattila Anna & Wirtz Jochen (2008, Vol. 22). *The role of store environmental stimulation and social factors on impulse purchasing*. *The Journal of Services Marketing*, Vol.22, Issue 7, 562.
- Middlestandt, Susan E. (1990). *The effect of Background and Ambient color on product attitudes and beliefs*. *Advances in consumer Research*, Vol. 17, Issue 1, p. 244-249.
- Rajagopal. (2008). *Point of sales promotions and buying stimulation in retail stores*. *Journal of Database marketing and Customer Strategy Management*, Vol.15, Issue 4, p.249-266.
- Rook, Dennis W. (1987). *The buying Impulse*. *Journal of Consumer Research* , Vol. 14, Issue 2, p. 189-199.
- Rook Dennis W & Hoch, Stephen J (1985). *Consuming Impulses*. *Advances in Consumer Research*, Vol.12, Issue 1, 23-27.
- Russell Abratt & Goodey, S, D. (1990). *Unplanned Buying and In-store Stimuli in Supermarkets*. *Managerial and Decision Economics* , Vol. 11, 111.
- Singh Abhinava, Das Siddharth & Mahapatra Mamta. (2008), *Audacious kiranas vs. Organized Retailers*. *SCMS Journal of Indian Management*, July-September, 2008
- Stern, H. (1962). *The Significance of Impulse Buying Today*. *Journal of Marketing*, Vol. 26 , 59-62.
- Summers Teresa & Paulette R Hebert. (2001). *Shedding some light on store atmospherics: influence of illumination on consumer behavior*. *Journal of Business Research* , Vol. 54, Issue 2, p. 145.
- Turley L W & Milliman Ronald E (2000). *Atmospheric effect on shopping behavior: A review of experimental evidence* . *Journal of Business Research* , Vol. 49, Issue 2, p. 193.

- *Vohs Kathleen & Faber Ronald. (2007). Spent resources : Self Regulatory Resource Availability affects Impulse Buying. Journal of consumer Research, Vol. 33, 537-547.*
- *Waarden Lars Meyer (2008, Vol. 42, No. 1/2). The influence of loyalty programme membership on customer purchase behaviour. European Journal of Marketing , Vol. 42, Issue 1/2, p. 87.*
- *Wood. (1998). Socio economic status, delay of gratification and impulse buying. Journal of Economic Psychology, Vol.19, Issue 3, 295.*
- *Yalch Richard & Spangenberg Eric (1990). Effects of store music on shopping behavior. The Journal of Consumer Marketing , Vol. 7, Issue 2, p.55.*
- *Yang C., Wang Y., & Niu (2008), The effect of Idolatory & Personality traits on Impulse Buying: An Empirical Study, International Journal of Management, Vol. 25, Issue 4, p. 633-640.*
- *Youn Seounmi & Faber Ronald. (2000). Impulse Buying : Its Relation to Personality Traits & Cues. Advances in Consumer Research, Vol.27, 179-185.*
- *Yelken, Y. (2009). Global Retail Trends 2009. ystats.*

An empirical study and testing of Efficient Market Hypothesis with reference to the Bombay Stock exchange Sensitivity Index comprising of thirty stocks.

Prof. Akshay D. Damani

Assistant Professor

Thakur Institute of Management Studies and Research, Mumbai

akshaydamani@gmail.com

Abstract

The efficiency of capital markets is an important area of analysis especially for an emerging economy like India. With the exposure of the Indian economy to the vagaries of the global markets studying the stock market efficient becomes essential. Are the Indian stock markets efficient is a questionable question. We attempt to check the efficiency in context with the efficient market hypothesis. The efficient market hypothesis states that movements in securities or stock prices are random as information about securities is easily available and predicting the prices is difficult. That the prices move randomly and do not reflect a pattern led to the model also being called as Random Walk Theory. The study of stock market has always been an attractive proposition. From the subprime crisis to the present euro-crisis, the impact has been felt on the markets thereby making the study of the efficiency of markets an important topic for discussions and debate in current times. Different studies have revealed that markets reflect different forms of efficiency in different time intervals. To expect the least, markets reflect the weak form of efficiency in some form or the other due to the ever-changing global economic scenario. Reilly and Brown (2011) define, an efficient market is one in which security prices adjust rapidly to the arrival of new information and therefore, the current prices reflect all information about the security.

The paper conducts an empirical study to test the weak-form of efficiency of the efficient market hypothesis (EMH) on all the thirty stocks comprising of the Bombay Stock Exchange Sensitivity Index (BSE SENSEX) by applying RUNS test on the collated data.

Keywords : Efficient Market Hypothesis (EMH), Efficient Market, Weak form of efficiency, Runs test

Introduction :

The stock markets are one of the prominent indicators of the health of the economy. A lot of research has gone into understanding the stock markets and their behavior. The study of the efficiency of the stock markets has significant real-world applications for investors and portfolio managers. Additionally, the question of whether stock markets are efficient or not is one of the most controversial areas of investment research (Reilly and Brown, 2011). This leads us to two questions namely, are capital markets efficient and if yes, in what form of efficiency do they exist under the

efficient market hypothesis theory. To understand their form of efficiency we need to look at the Efficient Market Hypothesis theory and the outcomes of this theory which either support or contradict the hypothesis. The efficiency of the capital markets refers to understand how quickly the securities react and adjust for new information about the same. Kendall (1953) examined this proposition and to his great surprise he found that one could not identify predictable patterns in stock prices. Prices seemed to move randomly. Even if one could predict the prices it would be for a short span of time as the information would get reflected

in the prices and thus giving a new price which would be random of the previous price. As soon as there is some new information about a stock, all investors would prefer to buy or sell this stock and this in turn would increase or decrease the price of the stock. This is the basis of the argument that stock prices move randomly or follow a random walk. Hence the theory was also titled as Random Walk theory. According to Nagarajan and Jayabal (2011), efficient market hypothesis states that the capital markets are efficient and since all new prices are absorbed instantaneously by the efficient market, the stock prices also get adjusted instantaneously to a new level. Hence, in an efficient market stock price will always be equal to their intrinsic values at all times. This challenges the very premise of fundamental and technical analysis. Hence the need to understand the efficiency of markets.

The paper consists of four parts, firstly it discusses the Efficient Market Hypothesis theory (EMH) and its types, secondly it describes the different types of tests for analyzing the efficiency of the stock markets, part three covers the research design and methodology, supported by the use of Runs test on the collated data to identify whether a weak form of efficiency exists in the companies forming the BSE SENSEX and part four tabulates the findings and conclusion. The paper attempts to find whether a weak form of efficiency exists in the sensex stocks during the time under study.

1.0 Efficient Market Hypothesis (EMH) :

According to Fama (1970), a market in which prices always “fully reflect” available information is called “efficient”. Further, Snyder (1978) states that the concept of “efficient market” refers to a perfectly competitive market where prices reflect all available information. This implies that no method can be found to predict accurately future security prices or, alternatively to detect securities which are presently undervalued by the market. Khatri (2010) further states that an efficient market is a market in which share prices follow an independent path. This happens due to large number of investors, free flow of information to all investors, ease of interpretation of information, price sensitive information is discounted in the

prices immediately and no one can influence the market unduly. Thus, an efficient market would mean that investors are truly aware of the intrinsic value of the security at a given point of time.

Reilly and Brown (2011), state that a market should be efficient, so that the expected returns at current prices should reflect its risk, which means that investors who buy at these 'informationally efficient' prices should receive a rate of return that is consistent with the perceived risk of the stock. Market efficiency impacts the companies share price in multiple ways. For example when the share price band in the book building process for an IPO is to be decided or if the management compensation is linked to the shareholder value or where ESOPs have been issues, etc. It also impacts the cost of capital especially in cases where the cost of capital is a part of the capital budgeting process. Market efficiency even though rebuts fundamental analysis as a tool but the effectiveness of the efficiency can be associated with the future cash flows of an organization, which in turn becomes a base for the investors investment strategy (Boehme,2010). He further adds that, an important consequence of market efficiency is that the investments in publicly traded financial securities are zero NPV (rdboehme.com). From the above arguments we can see that there is a need for capital markets to be efficient, for, if financial markets are not efficient, then strategies would exist that can systematically give varying levels of return. This leads to generating returns which indicate varying forms of efficiency. Fama (1970) designed EMH theory with an empirical base, and distributed the Efficient Market Hypothesis into three hypotheses based on information. The efficient-market hypothesis was Ph.D. work and published in 1960 and was written by Professor Eugene Fama at University of Chicago Booth School of Business. According to EMH theory it is described that when investors face with new set of information they can overreact and some may under react to the forthcoming situation. In these scenario investors reactions are random behavior and trace a normal distribution pattern so that the net effect on market prices may not be reliably explored to make an abnormal profitable situation, when considering transaction costs i.e.

commissions and spreads (Hamid et al, 2010). Thus efficient market hypothesis is based on the fundamentals that markets are efficient and make an independent movement in these markets. Information is power and hence gets discounted in the prices. In an efficient stock market, the prices have interplay of supply and demand which in turn sets the prices. The price for any given stock effectively represents the expected net present value of all future profits. Price for any stock represents collective expectations about future prospects. Jayaraman and Ramaratnam (2011) state that the word efficiency is quiet difficult to get attached with stock market operations across the globe.

Mathematical Presentation of Efficient Market Hypothesis (Fama, 1970)

Fama (1970) gives the mathematical presentation of EMH in the following equations:

$$E(P_j, t+1 / I_t) = [1 + E(r_j, t+1 / I_t)] P_{jt}$$

(1)Where:

E = Expected value operator.

P_{jt} = Price of Security j at time t.

P_{j, t+1} = Price of Security j at time t+1 (including reinvestment of any intermediate cash income from Securities.

r_{j, t+1} = One period percentage return= (P_{j,t+1}- P_{jt})/P_{jt}.

I_t = symbol of whatever set of information assumed to be "fully reflected" on the share price at time t.

$$Z_{j, t+1} = r_{j, t+1} - E(r_{j, t+1} / I_t)$$

$$(2) E(Z_{j, t+1} / I_t) = 0$$

(3)Where Z_{j,t+1} is the unexpected (or excess) return of security j at time t+1, the difference between the observed return, r_{j, t+1}, and the expected return based on the information set I_t. (Sharma, 2009, pp139)

1.1 Misinterpretations of EMH :

According to Stefan (2009, pp4), it is often difficult to understand the implications of the EMH. The theory is perceived differently by investors, analysts and traders. Opponents of the EMH state that in recent times the theory is losing its relevance. They state that a prime example

contrasting the hypothesis is Warren Buffet's style of Value Investing. However, this interpretation may not be fully correct as the stock market have the inherent limitation of uncertainty of predicting the future, which brings into the picture the luck factor of generating returns. Further they state that with development in technology and in the field of computing tools for doing fundamental and technical analysis have been created and deployed by many organizations. However, EMH indicates that since markets are efficient fundamental and technical analysis fail. Further, they state that EMH must be incorrect as stock prices keep on fluctuating randomly. But supporters of the theory state that constantly changing stock prices themselves are evidences in support of EMH as new information keeps on flowing continuously and brings about changes in share prices.

1.2 Types of efficiency

Fama (1970) defines 'an efficient market as a market in which prices always reflect the recent available information – the weak, the semi-strong and strong form'.

1.2.1 Weak form of efficiency

According to Jensen (1978), the Weak Form of the Efficient Market Hypothesis, in which the information set *t* is taken to be solely the information contained in the past price history of the market as of time *t*. Fama (1970) further explains that stock market efficiency at weak form indicates and suggests that the stock prices incorporate all information which implies that no one can exploit trading opportunities and end up with excess profits. He further states that a close look at stock prices sometimes reveal day-of-the-week effects (stock prices may tend to rise on Monday and fall on Friday), time of the year effects (stock prices may tend to rise in January) and small firm effects (small firm prices may typically rise by more than large firm prices). Many studies undertaken address the issue of whether price behaviour is random or not. Robert (1959) found that stock market price movement follows a random path. According to Sasidharan and Matthews (2011), a technical analyst finds out the

future value of a security through the past price information. Under the weak form of efficient market hypothesis, a security reflects all past price information, thereby leading to the failure of technical analysis. Khatri (2010) states that the weak form of market efficiency level can be tested with RUNS Test, Serial Correlation Test, Filter Test, volatility test amongst others.

1.2.2 Semi-strong form of efficiency

A semi-strong form test of efficiency examines whether or not the prices in a market reflect all publicly available information (Leuthold and Hartmann, 1979). Further Sashidharan and Mathews (2011) state that when all the information related to a company is available for everyone at the same time, fundamental analysis fails. According to Sharma (2009), fundamental analysis helps reach the intrinsic value of a company based on internal factors and external economic factors. On comparing the same with the current market prices, a buy or a sell call is given. However, fundamental analysis is criticized on the premise that all information of a given security is already reflected in the price of a security. The testing of semi-strong form of efficient market hypothesis includes the testing of market reaction to available accounting information of the specified stock, events like stock splits and block trading, mergers and acquisitions, etc. Fama et al (1969) performed the first test for semi-strong efficiency. They used risk-adjusted returns to test for market efficiency with respect to the announcement of stock split and found a considerable high abnormal return prior to the announcement of stock split. On the other hand, after the stock split there is no extraordinary return, and the situation returns to exactly what efficient market hypothesis predicted. They found that the market is efficient with respect to stock split information.

1.2.3 Strong form of efficiency

Finnerty (1976) states that the strong form of efficient market hypothesis assumes available public and private information is reflected in the stock prices. The strong form in the terms of market participants, also assumes that no individual can

have higher expected trading profits than others because of the monopolistic access to information. One possible test of strong form of efficiency is to determine whether insider traders earn better than average profits than others from their market transaction. According to Chandra (2005) to test the strong form of efficiency researchers analyzed the returns earned by certain groups (like corporates, specialists at stock exchanges and mutual fund managers, who have access to information which is not publicly available and / or ostensibly possess greater resources and abilities to intensively analyze information which is in public domain. Empirical evidence broadly suggests that corporate insiders and stock exchange specialists earn superior rates of returns, after adjustment of risk. This calls for a theory that can assist an investor in managing a portfolio. The Efficient market Theory is one that aims to explain the behavior of stock markets.

1.3 Literature review

According to Sharma and Mahendru (2009), many studies have been conducted internationally which have focused on the efficient market hypothesis. The literature published to date is in favour of weak form efficiency, though pockets of inefficiency cannot be suppressed. The general conclusion from numerous studies in different countries is that the weak form of market efficiency prevails. Evidence from stock markets in developing countries is mixed. Dickinson and Muragu (1994) found evidence consistent with the EMH in their study of the Nairobi Stock Exchange. Barnes (1986), on the other hand, in his study of the Kuala Lumpur Stock Exchange provided only limited support of the weak form of the EMH. Zychowicz et al. (1995) concluded that on the Istanbul Stock Exchange, daily and weekly returns diverge from a random walk, while monthly returns are consistent with weak form market efficiency. However, Malkiel (2003) states that by the start of the twenty-first century, the intellectual dominance of the efficient market hypothesis had become far less universal. Many financial economists and statisticians began to believe that stock prices are at least partially predictable. A new breed of economist's

emphasized psychological and behavioral elements of stock-price determination, and came to believe that future stock prices are somewhat predictable on the basis of past stock price patterns as well as certain “fundamental” valuation metrics. Moreover, many of these economists were even making the far more controversial claim that these predictable patterns enable investors to earn excess risk-adjusted rates of return. In a related literature, a number of studies have found evidence of mean reversion in returns on stock portfolios at horizons of three to five years or longer (Poterba and Summers 1988).

2.0 Tests of Efficiency

Brenner (1979), states that tests of EMH are always joint tests of market efficiency, an underlying equilibrium model and a related market model. The formal model includes the Fama’s model to test the weak form of efficiency on the companies comprising the BSE SENSEX for analysis. Khatri (2010) states that the weak form of market efficiency level can be tested with the help of quantitative, as well as qualitative measurements; quantitative test include RUNS Test, Serial Correlation Test, Filter Test amongst others. Qualitative test is done through the method of Observation about the disclosure and transparency measurements. The paper has applied RUNS Test as the quantitative tool for analysis.

2.1 RUNS Test

We use the Wald-Wolfowitz Runs Test for the randomness of the series. Runs testing is a strong test for randomness in investigating serial dependence in share price movements and compares the expected number of runs from a random process with the observed number of runs (Poshakwale, 1996). These are non-parametric tests. These tests can be used to check if a given data set is from a random process. It is a statistical procedure that examines whether a string of data is occurring randomly given a specific distribution. The runs test analyzes the occurrence of similar events that are separated by events that are different. Given a series of stock price changes, each price change is designated as a plus (+) if it

represents an increase or a minus (-) if it represents a decrease. A run occurs when there is no difference between the signs of two changes. When the sign change differs, the run ends and a new run commence (Chandra, 2005). These runs are then complied to undertake the runs test as explained from annexure two onwards.

2.2 Serial Correlation test

Nagarajan and Jayabal (2011) state that, in a serial correlation test, a time interval is chosen and the changes in stock price during successive time intervals are noted by observing the stock prices at the beginning and at the end of each time interval. The correlation is measured by correlation coefficient which takes the values between -1.00 and +1.00. A positive value of correlation coefficient between two successive price changes indicates there is a direct relationship between them and a negative correlation indicates absence of direct correlation. A positive correlation coefficient dependency indicates that the price changes during one period are dependent on the price in change in the preceding period. Such a situation negates weak form of efficiency because weak form of efficiency indicates that price changes are independent or random. However, studies conducted on portfolio of stocks of different markets size indicated that autocorrelation is stronger for portfolio of small market size stocks or smaller markets. The autocorrelation function test is examined to identify the degree of autocorrelation in a time series, in this case the series of stock prices to stock indices over the specified period of time undertaken for research. It measures the correlation between the current and lagged observations of the time series of stock returns (Sashidharan and Mathews, 2011). More recent work by Lo and MacKinlay (1999) finds that short-run serial correlations are not zero and that the existence of “too many” successive moves in the same direction enable them to reject the hypothesis that stock prices behave as random walks. There does seem to be some momentum in short-run stock prices.

2.3 Filter test

According to Vaidyanathan and Gali (1994) Filter rule tests have a direct economic interpretation. We can see the return earned by using a certain trading rule and compare it with the buy-and-hold strategy in the same stock. We can easily make inferences about whether the trading rule is profitable by adjusting the excess returns for transaction costs. According to Nagarajan and Jayabal (2011), the Filter rule uses a mechanical trading rule. The rule fixes a filter point and directs to buy or sell when the limits for the stock price (upper and lower limits) are exceeded beyond the limits fixed by the filter points due to changes in price movements. Sharma and Mahendru further explain the filter rule test as follows: if the daily closing price of a security moves up at least 'x' percentage, buy the security until the price moves down at least 'x' percentage from a subsequent high, at which time simultaneously sell and go short. The short position should be maintained until the price rises at least 'x' percentage above a subsequent low, at which time cover and buy. However, these tests have been criticized on the premise that fixing 'x' percentage is difficult in markets and they have proved to be irrelevant because they have not been able to generate excess returns over the 'buy and hold' strategy.

3.0 Research design

A lot of research has been conducted on different aspects of the stock markets including share price behavior including the efficiency of capital markets. Multiple studies have indicated varying results. Right from the inception of Fama's EMH, researchers have tried to identify the types of efficiency for different markets at different times. However, in the real world no market is a perfect market and hence the paper is an attempt to identify what form of efficiency exists in the Indian capital markets for a sample period. A sample of thirty stocks which comprise the BSE SENSEX have been considered. The BSE SENSEX has also been selected based on the criteria that it is a historically preferred index of investors and traders, is considered as an economic indicator, has high

volumes and company listings than other indices in India.

3.1 Objectives of the study

- a) To test whether the successive index value changes in the sampled indices are independent or not during the short period of time i.e. one year
- b) To test the stock market efficiency at weak form in the selective stock markets using runs test

3.2 Hypothesis

Ho: Null hypothesis – “the movement in daily share price is random and today's price is independent of the preceding daily price”

Ha: alternate hypothesis – “the movement in daily share price is not random and today's price is dependent on the preceding daily price”

Research plan: Judgmental sample design is taken for analysis on the BSE SENSEX which is an important indicator of the global and domestic market confidence in the Indian economy. The study is empirical in nature as it is based on the daily share prices, i.e. secondary data. The data source is the stock market quotations. The data type reflects a time series and hence RUNS test have been applied. The Hypothesis was tested at 5 per cent significance level at which Z value is 1.96.

3.3 Methodology

Step 1: Accumulate RUNS (+, -) on the indices for a given period

Step 2: Calculate Mean as follows:

$$\text{Mean } (\mu) = \frac{2 * N1 * N2}{N1 + N2} + 1$$

Step 3: Calculate Standard Deviation as follows:

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{2 * N1 * N2 * (2 * N1 * N2 - N1 - N2)}{(N1 + N2)^2 * (N1 + N2 - 1)}}$$

Step 4: Set the Upper and lower limits for a specified level of significance as follows:

$$\text{Upper limit} = \mu + Z\text{-value}^*$$

$$\text{Lower limit} = \mu - Z\text{-value}^*$$

Step 5: If the observed runs are between the Upper limit and lower limit, then H0 is accepted, else not accepted. If accepted it indicates the

prices are ransom and the market reflects weak form of efficiency as per the efficient market Hypothesis theory.

Scope of study : The daily closing stock prices are during the financial year 2010-2011 for all the thirty stocks comprising of the BSE SENSEX have been taken for analysis to identify whether weak form of efficiency exists in the said period and thus the result is valid for the same time period.

3.4 Limitations of study

- a) The findings are based on Runs test; hence they are subject to limitations of Runs test i.e. Non-parametric test.
- b) The findings are applicable in the market and economic scenarios of these countries that prevailed during the aforementioned year and hence the findings should be read in accordance to the facts and circumstances in the covered financial year.

4.0 Findings

The study comes out with mix results such that thirteen stocks are in weak form of inefficiency in the aforesaid period under study and seventeen not

in the weak form of efficiency. Therefore, the application of technical analysis and fundamental analysis tools may become applicable on certain stocks. A further analysis would be needed to check the existence of semi-strong and strong form of efficiency in these stocks. The use of RUNS test supports these findings. The details of the methodology is stated in Annexure 1 and summary of the findings is shown in Annexure 2.

Conclusion :

The introduction of the efficient market hypothesis thirty years ago was a major intellectual advance. The hypothesis provided a powerful analytical framework for understanding asset prices, and has been responsible for an explosion of research into their behavior (Ball, 1990). In an efficient market, prices are expected to react to new information as soon as it is made available to all investors; a delayed response is a sign of inefficiency. The findings support the theory and this indicates its application in behavioral investment studies even in today's time. Thus, the EMH, stills appears relevant even in the changing global stock market scenario.

Table showing the Result of Hypothesis testing for all 30 BSE Sensex shares

Company	N1	N2	Mean	Standard Deviation	Upper Limit	Lower Limit	Observed Runs	Hypothesis testing at a given level of significance of 1.96
ACC ltd	120	133	127.17	7.97915	142.8051	127.166	131	H0 accepted
BHEL	121	132	127.26	7.98512	142.9117	127.2609	122	H0 rejected
Bharti Airtel ltd	114	139	126.26	7.92238	141.7927	126.2648	123	H0 rejected
Cipla ltd.	121	132	127.26	7.98512	142.9117	127.2609	128	H0 accepted
DLF ltd.	128	125	127.48	7.99907	143.1604	127.4822	123	H0 rejected
HDFC bank ltd.	125	128	127.48	7.99907	143.1604	127.4822	127	H0 rejected
Hero Motocorp ltd.	122	131	127.34	7.9901	143.0005	127.3399	123	H0 accepted
Hindalco Inds ltd.	132	121	127.26	7.98512	142.9117	127.2607	134	H0 accepted
H.U.L.	130	123	127.4	7.99409	143.0716	127.4032	122	H0 rejected
HDFC ltd.	130	123	127.4	7.99409	143.0716	127.4032	137	H0 accepted
ICICI bank ltd.	133	120	127.17	7.97915	142.8051	127.166	127	H0 rejected
Infosys ltd.	141	112	125.84	7.89549	141.3131	125.8379	137	H0 accepted
ITC ltd.	130	123	127.4	7.99409	143.0716	127.4032	130	H0 accepted
Jaiprakash associates	120	133	127.17	7.97915	142.8051	127.166	117	H0 rejected
Jindal S&P ltd.	131	122	127.34	7.9901	143.0005	127.3399	123	H0 rejected
L&T ltd.	130	123	127.4	7.99409	143.0716	127.4032	127	H0 rejected
M&M ltd.	134	119	127.06	7.97217	142.6808	127.0553	138	H0 accepted
Maruti S.L. ltd.	119	134	127.06	7.97217	142.6808	127.0553	128	H0 accepted
NTPC ltd.	114	139	126.26	7.92238	141.7927	126.2648	127	H0 accepted
ONGC	122	131	127.34	7.9901	143.0005	127.3399	120	H0 rejected
R. Comm	115	138	126.45	7.93433	142.0058	126.4545	121	H0 rejected
R.I.L.	119	134	127.06	7.97217	142.6808	127.0553	133	H0 accepted
R.I.L.L	109	144	125.08	7.84768	140.4605	125.0791	116	H0 rejected
SBI	135	118	126.93	7.96421	142.5387	126.9289	124	H0 rejected
Sterlite inds ltd.	117	136	126.79	7.95524	142.3788	126.7866	119	H0 rejected
TCS ltd	124	129	127.45	7.99707	143.1249	127.4506	122	H0 rejected
Tata Motors	142	111	125.6	7.88055	141.0467	125.6008	127	H0 accepted
Tata power	121	132	127.26	7.98512	142.9117	127.2609	119	H0 rejected
Tata steel	129	124	127.45	7.99707	143.1249	127.4506	138	H0 accepted
Wipro ltd.	136	117	126.79	7.95524	142.3788	126.7866	122	H0 rejected

References :

- Ball, R., (1990). *What do we know about Market efficiency? The University of New South Wales School of Banking and Finance.*
- Barnes, P (1986). *Thin Trading and Stock Market Efficiency: The Case of Kuala Lumpur Stock Exchange. Journal of Business Finance & Accounting, Vol.13, No.4 (winter), pp. 609-617.* Boehme, R.,(2010). *Corporate Finance Lecture Series.* pp1.
- Brenner, M., (1979). *The Sensitivity of EMH to alternative specifications of the Market Model. The Journal of Finance. Vol. XXXIV, No.4. September 1979, pp915.*
- Chandra, P., (2005). *Investment Analysis and Portfolio Management, pp302-303. Second Edition. Tata McGraw Hill Publishing Company. New Delhi. India.*
- Dickinson, J.P., and K. Muragu (1994). *Market Efficiency in Developing Countries: A Case Study of Nairobi Stock Exchange. Journal of Business Finance & Accounting, Vol. 21, No.1 (Jan 1994), pp.133-150.*
- Fama, E., (1970). *Efficient Capital Markets: A review of Theory and Empirical Work. Journal of Finance, Vol.25, Issue 2, Jstor, pp383.*
- Fama, E., Fisher, L., Jensen and Roll (1969). *The Adjustment of Stock Prices to New Information. International Economic Review, Vol. 10, No. 1, pp 1-21.*
- Finnerty, J., (1976). *Insiders and Market efficiency. The Journal of Finance. Vol. XXXI, No. 4 September 1976. American Finance Association.*
- Hamid, K., (2010). *Testing the Weak form of Efficient Market Hypothesis: Empirical Evidence from Asia-Pacific Markets. International Research Journal of Finance and Economics. ISSN 1450-2887. Issue 58 (2010), pp122. Euro Journals Publishing, Inc.*
- Jayaraman and Ramaratnam (2011). *A Study on testing Efficient market Hypothesis with special reference to selective indices in the global context: an empirical approach. Journal of Arts Science and Commerce. Researcher's world. Vol.-II, Issue-1, pp1, January 2011. ISSN2229-4686.*
- Jensen, M., (1978). *Some Anomalous Evidence Regarding Market Efficiency. Journal of Financial economics. Vol. 6 Nos. 2/3 (1978). 95-101, pp4. Harvard Business School.*
- Kendall M., (1953). *'The Analysis of Economic Times Series, part 1: Prices'. Journal of Royal Statistical Society.*
- Khatri, D., (2010). *Security Analysis and Portfolio Management, pp 348-350. First Edition. Macmillan Publishers India ltd. New Delhi, India.*
- Leuthold, R., and Hartmann, P., (1979). *American Journal of Agricultural Economics Vol. 61, No. 3 (Aug., 1979), pp. 482-489.*
- Lo, Andrew W. and A. Craig MacKinlay (1999). *A Non-Random Walk Down Wall Street, Princeton: Princeton University Press, 1999.*
- Malkiel, B., (2003). *The Efficient Market Hypothesis and Its critics. CEPS working paper no. 91. April 2003, pp4.*
- Nagarajan, K., and Jayabal., (2011). *Securities analysis and portfolio management, pp249-250. First Edition. New Age International Publishers. New Delhi. India.*
- Poshakwale, S., (1996). *Evidence of the Weak Form of Efficiency and Day of the Week effect in the Indian Stock Market. Finance India. Vol.X No. 3, September 1996. Pages 605-616.*
- Poterba, J., and Summer L., (1988), *'Mean Reversion in Stock Returns: Evidence and Implications', Journal of Financial Economics, 22(1), pp 27-59.*
- Reilly, F., and Keith, B., (2006). *Investment Analysis and Portfolio Management. Eighth Edition, pp 169-171. Cengage Learning India Private Limited.*

NewDelhi. India.

- Robert, H., (1959). *Stock-market patterns and Financial Analysis: Methodological Suggestions. The Journal of Finance, Vol. 14, Issue 1, pp1-10.*
- Sashidharan, K., and Mathews, A., (2011). *Security analysis and portfolio management, pp376-380. Tata-McGraw Hill education private limited, New Delhi. India.*
- Sharma, G., (2009). *Efficiency Hypothesis of the Stock Markets: A case of Indian Securities. International Journal of Business and Management. Vol. 4, No. 3, pp139. Issue March 2009.*
- Sharma, G., and Mahendru, M., 2009. *Efficiency Hypothesis of the Stock Markets: A case of Indian securities. International Journal of Business and Management, 2009.*
- Sharma, G.D (2009). *Efficiency hypothesis of stock market: a case of Indian Securities. International Journal of Business and Management. Vol.4 No. 3.*
- Snyder, W., (1978). *Horse Racing: Testing the Efficient Markets Model. The Journal of Finance Vol. XXXIII. No. 4, September Issue, pp1109.*
- Stefan, I., (2009). *Testing the Efficient market Hypothesis : A Behavioral Approach to the Current Economic Crisis. University of California, Berkeley.*
- Vaidyanathan, R., and Gali, K., (1994). *Efficiency of the Indian capital market. Indian Journal of Finance and Research. Vol. V, No. 2 July 1994. pp2.*
- Zychowicz, E.J., M. Binbasioglu, and N. Kazancioglu (1995). *The Behavior of prices on the Istanbul Stock Exchange. Journal of International Financial Markets. Vol. 5, No. 4, pp. 89-101.*

Consumer Perception About Service Quality In Banking

Prof Ranjith P V

Senior Lecturer
SIES College of Management Studies,
rv99321@gmail.com

Dr.Subhash Kulkarni

Director
Indira Institute of Management Studies
subhashk1957@gmail.com

Abstract

Service quality is an important dimension in the competitive world of today. Nowadays banks have different products and services like financing ,wealth management insurance, investment options ,mutual funds equity services etc.(Timeseducation.com) At the same time due to severe competition banks nowadays have to excel in their service and that demands commitment from all. In today's highly competitive environment, banks understand the need to focus on service quality as a measure to improve their competitive position. Customer based determinants and perceptions of service quality, therefore, play an important role when choosing a bank... The measuring instrument used in this study is a combination of the SERVQUAL questionnaire and BSQ questionnaire to understand the important parameters for service quality in banks and to classify the respondents based on the perceptions (using factor analysis and cluster analysis). An analysis covering a sample of 66 consumers revealed the important parameters and perceptions of customers. The aim of the study is to reduce the number of statements for service quality and to formulate a questionnaire for studying service quality from customer viewpoint

Design/Methodology-*The study is done on a sample size of 66 consumers using a structured questionnaire consisting of 45 questions for the purpose of data reduction using exploratory factor analysis*

Findings-*The study found out around 12 statements which are essential for service quality and also helped the researcher to reduce the survey instrument from 45 to 37 statements. Also hypothesis testing is done on the 12 statements selected based on factor analysis using age group and gender as the measures*

Practical Implications-*This study will help to identify most important attributes for service quality in bank though sample size is limited. It will give insights to further studies*

Keywords : *Service Quality, SERVQUAL, BSQ, Perceptions, Factor Analysis*

Introduction : Service Quality

Service quality can be defined as the difference between customer's expectations for service performance prior to the service encounter and their perceptions of the service received. Service quality is the main source of customer satisfaction.. Service quality is particularly important in banks and related organizations as service providers are relatively undifferentiated, and so it is a key to competitive advantage (Almossawi, B., 2001; Stafford, 1996).

Service Quality Models

- GAP model-This is based on Parasuraman et al gap analysis
- Technical and Functional Quality Model based on Granroos understanding of service quality
- Service Quality Attributes from Customer's perspectives by Mersha and Adlakha
- Importance-performance analysis and service quality by Ennew et al. (1993)(Modified SERVQUAL)
- Customer service quality scale by Avkiran (1994)-(In bank)
- Service quality model by Blanchard and Galloway (1994)
- Service quality factors based on satisfaction by Johnston (1997)
- Technology in delivery of perceived service quality by Joseph et al. (1999)
- Banking service quality model by Bahia and Nantel (2000)
- Service quality model by Sureshchander et al. (2001)
- SYSTRA-SQ by Aldaigan and Buttle (2002)
- Automated service quality model by Al-Hawari et al. (2005)
- Service quality scale for banking by Karatepe et al. (2005)
- Customer expectations and perceived service quality by Ehigie (2006)

The SERVQUAL scale is the principal instrument widely utilized to assess service quality for a variety of services. Parasuraman et al., (1988) have conceptualized a five dimensional model of service quality such as: reliability, responsiveness, empathy, assurance and tangibility.

Tangibles like appearance, reliability factors like performance of service accurately, responsiveness

of employees, assurance given by employees to customers and empathy

Though SERVQUAL is a good instrument it may not be applied to all settings. For example it may not hold true in retail banking setting. One of the major criticisms of SERVQUAL model is that there is high degree of inter correlation among the various dimensions (Gilmore, 2003). Seth et al. (2005) recognized that the outcome and measurement of SERVQUAL were dependent on type of service setting, situation, time and number of encounter, competitive environment and needs

For the study the Banking service quality scale by Bahia and Nantel is also used along with some statements of SERVQUAL. In this scale the authors prescribe the following dimensions for the purpose of the study

- Effectiveness and assurance;
- Access;
- Price;
- Tangibles;
- Services portfolio; and
- Reliability.

Literature Review :

Aggarwal Navdeep and Gupta Mohit did a research on banking service quality using interviews of managers and using a questionnaire in 2003. Here pre-testing was done with 30 bank customers. Factor analysis was done and factors like service time, interaction with staff, ambience and infrastructure and service& marketing channels were identified. This study took only customer view point (Published in Paradigm-Vol3, No 2, July-Dec 2003)

A study conducted by Singh Fulbag and Kaur Davinder compiled all models of service quality and compared the different interpretations of the models (. Prajanan Vol 39, No 2, 2010-11)

Bhatt and Gani in 2003 conducted a study in service quality on service quality comparison of different banks in different states like J&K, Punjab, Haryana and Delhi. He found the opinions from customers only and the results showed that foreign banks are better than Indian banks, Pradigm, Vol7, No1, and Jan-Jun 2003

Phatak Yogeswari& Abidi Naseem of Prestige institute analysed the gap between perceptions and

expectations using SERVQUAL using purposive sampling in 5 nationalised banks and 3 private banks using customers as target group

Wallace Elaine & Chernatony in 2009 service employee performance analysed the importance of employee commitment for improving customer relationship and service quality, Journal of relationship marketing, 2009

A study by A. Ananth, R. Ramesh and Dr. B. Prabhakaran with respect to service quality gap analysis in private sector banks found out that empathy is having more gaps between customer expectation and perception of service quality. Next gap was found to be in accessibility dimension. The customers of the banks expect to extend the working hours in Saturday for their convenience. It was found out that customers want better service in ATM management. (Indian Journal of Commerce & Management Studies ISSN – 2229-5674)

A study by Mukesh Kumar, Fong Tat Kee and Vincent Charles found out that expectations on competence and convenience are significantly different between conventional banks and Islamic banks, whereas the perceptions on tangibility and convenience are found to be significantly different between these two types of banks. (Comparative Evaluation of Critical Factors in Delivering Service Quality of Banks-International Journal of Quality & Reliability Management Vol. 27 No. 3, 2010)

A study by Firdaus Abudlah, Rosita suhaimi, Gluma saban and Jamil Hamali on Bank service quality index found out the following. The main finding was identifying the factors affecting service quality. This paper also formulated a new 29-item measuring instrument, specifically tailored for the banking sector. The results confirmed that the three dimensions namely systemization, reliable communication and responsiveness were distinct

and conceptually clear. (International Journal of Quality and Reliability Management, Vol 28, No 5 2011)

Objectives Of Study

- To study the service quality in banking
- To identify the parameters or attributes for service quality in banking

Research Methodology

The study is qualitative in nature as it finds out the important parameters why a consumer is doing his transactions but at the same time it attempts to quantify the rating given by consumer to the parameter.

Sampling is done using convenience method. The banks are taken as a whole and the objective is to understand the factors responsible for quality and the parameters in each factor. Sample size is 66 and the sampling area is Navi Mumbai. The sampling unit is customer of bank (generally and not of any particular bank)

The questionnaire consists of the statements form SERVQUAL and parameters from Bahia and Nantel scale (2000). It is a combination scale which is used here. Secondary data is also done to understand works in this area by other researchers

Analysis and Data Interpretations

(Highest factor loading for each statement is given by bold values and statements whose highest values are less than 0.5 and which are eliminated are also given in bold)

Table 1 :

Components And Factor Loadings

Based on the study by Hare et al in 1998 on factor analysis the number of statements are reduced to 37 by eliminating the statements whose highest factor loading is less than 0.5. They are given below along with the component number

Statement	Component	Value
Layout Of Bank	2	0.842
Visually Appealing Bank	2	0.685
Bank Has Modern Facilities	2	0.589.
Location Of Bank Is Convenient	2	0.649
Parking Facility Of The Bank Is Sufficient	1	0.656
Bank Takes Care Of Cleanliness	2	0.563
Decoration Of Facilities Is Good	8	0.719

Work Environment Is Very Efficient	1	0.621
Bank Has Visually Appealing Sign,ads Etc	2	0.724
Bank Has Sufficient Number Of Atm's Per Branch	3	0.851
Bank Has Sufficient Number Of Open Tellers	1	0.735
Customers Do Not Have To Wait Too Long	1	0.736
Technology Used In Bank Is User Friendly	1	0.578
Bank Has Very Convenient Working Hours	1	0.573
Bank Has Facility Opf Phone Banking	2	0.558
Netbanking Provided By Bank Is Error Proof	8	0.692
Time Taken In Cash Transactions Is Less	4	0.581
Bank Employees Have Confidence In Dealing With Customers	4	0.704
Bank Is Highly Efficient In Recognition Of A Regular Client	7	0.815
Confidentiality Of Transactions Is Maintained By The Bank	6	0.833
Bank Employees Are Well Trained	1	0.501
Bank Tries To Maintain Knowledge Of Client On Personal Basis	10	0.733
There Is No Contradiction Between Employees And Management	1	0.505
Bank Tries To Find Out Specific Needs Of Customers	3	0.749
Bank Has Error Free And Hassle Free Processing	1	0.568
Staff Appreciates Customers For Doing Business With Bank	7	0.702
Bank Tries To Deliver When Promised	1	0.632
Bank Tries To Give Right Service For The First Time Itself	5	0.843
Bank Tells Customer When Services Will Be Performed	5	0.757
Grievance Handling Mechanism Of The Bank Is Good	1	0.491
There Are No Delays Due To Bureaucratic Factors And Procedures	4	0.722
Bank Has Range Of Services Consistent With Latest Innovations In Banking	5	0.526
Bank Gives Good Explanations Of Service Fees	1	0.563
Bank Has Reasonable Fees For The Services	9	0.86
Bank Has Very User Friendly Credit Cards And Debit Cards	4	0.574
Bank Charges Reasonale Fees For Credit Cards And Debit Cards	5	0.59
Overall Services Given To Customers Is Good	4	0.689

Table 2
Components and Percentage of Variance

Component	Percentage of variance
1	49
2	7
3	4.6
4	4.4
5	3.8

First 3 components together constitute 60% of the variance which is sufficient for data reduction. This clearly shows that the statements in the first component given above are very important for the study . Statements in the second component are important and the importance reduces as we go to component 10.

Hypothesis 1 :

H0-There is no difference between age groups in terms of perception towards most important statements contributing to service quality

HA-There is difference between age groups in terms of perception towards most important statements

Table 3
Non Parametric Test

Sr.No	Null Hypothesis	Test	Sig.	Decision
1	Parking facility of the bank is sufficient is the same across categories of age group of respondent	Independent Samples Krushkal-Wallis Test	.486	Retain the null hypothesis
2	Bank has sufficient number of open tellers is the same across categories of age group of respondent	Independent Samples Krushkal-Wallis Test	.749	Retain the null hypothesis
3	Bank has sufficient number of open tellers is the same across categories of age group of respondent	Independent Samples Krushkal-Wallis Test	.186	Retain the null hypothesis
4	Technology used in bank is user friendly is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.764	Retain the null hypothesis
5	Customers do not have to wait too long is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.256	Retain the null hypothesis
6	Bank has very convenient working hours is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.682	Retain the null hypothesis
7	Bank employees are well trained is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.377	Retain the null hypothesis
8	There is no contradictions between employees and management is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.295	Retain the null hypothesis
9	Bank has error free and hassle free processing is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.764	Retain the null hypothesis
10	Bank tries to deliver when promised is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.161	Retain the null hypothesis
11	Grivencences handling mechanism of bank is very efficient is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.393	Retain the null hypothesis
12	Bank gives good explanations of service fees is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.396	

The Table 3 above shows that in all statements different age group respondents have given similar rating and HO is accepted

From this we conclude that there is a no significant difference between age group in terms of perception towards parking facility, work environment, technology, working hours and other mentioned parameters in the table above contributing to service quality.

Hypothesis 2 :

H0-There is no difference between gender in terms of perception towards most important statements contributing to service quality

HA-There is difference between gender in terms of perception towards most important statements

Table 4
Non Parametric Test

Sr.No	Null Hypothesis	Test	Sig.	Decision
1	Parking facility of the bank is sufficient is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.218	Retain the null hypothesis
2	Bank has sufficient number of open tellers is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.103	Retain the null hypothesis
3	Bank has sufficient number of open tellers is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.112	Retain the null hypothesis
4	Technology used in bank is user friendly is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.160	Retain the null hypothesis
5	Customers do not have to wait too long is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.459	Retain the null hypothesis
6	Bank has very convenient working hours is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.338	Retain the null hypothesis
7	Bank employees are well trained is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.017	Reject the null hypothesis
8	There is no contradictions between employees and management is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.646	Retain the null hypothesis
9	Bank has error free and hassle free processing is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.097	Retain the null hypothesis
10	Bank tries to deliver when promised is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.088	Retain the null hypothesis
11	Grivencences handling mechanism of bank is very efficient is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.154	Retain the null hypothesis
12	Bank gives good explanations of service fees is the same across categories of age group of respondent	Indepdent Samples Krushkal-Wallis Test	.347	Retain the null hypothesis

The above table shows that in the case of training of bank employees there is a difference of opinion in terms of male and female respondent. In all other cases the ratings given are similar

Conclusion :

The paper discusses the models in Service quality and also tries to come out with different questionnaire for finding out customer satisfaction. It identifies around 37 statements which are vital for the study and also pinpoints 12 statements which are of utmost importance using factor analysis. Hypothesis testing helps the authors to understand influence of gender and age on the perception of customers especially with respect to the 12 most important parameters.

References :

- Aggarwal Navdeep & Gupta Mohit-Paradigm-Multilevel-Multi dimensional Model of Banking Service Quality Vol 3-No.2.July-Dec 2003.
- A.Ananth, R.Ramesh and Dr.B.Prabhakaran-Service quality gap analysis in private sector banks- Indian Journal of Commerce & Management Studies ISSN – 2229-5674-Vol 11-Issue 1-January 2011.
- Asubonteng Et al-Service Quality,1996
- Bhatt & Gani (2003), -Service Quality In Commercial Banks-A comparative Study-Paradigm, Vol VII, NO.1, Jan-Jun 2003
- Firdaus Abdullah, Rosita Suhaimi, Gluma Saban and Jamil Hamali-Bank Service Quality (BSQ) Index -An indicator of service performance-International Journal of Quality & Reliability Management-Vol 28, No.5,2011.
- Jaya Sangeetha & S. Mahalingam-Service Quality Models In Banking-A review-International Journal of Islamic and Middle Eastern Finance and Management-Vol No.1,2011
- Mukesh Kumar,Fong Tat Kee and Vincent Charles-International Journal of Quality and Reliability Mangement –Vol 27,No 3-2010
- Parasuraman.A.Zeithmal,V.A&Berry L. L . (1985)-A conceptual model of service quality and its implications for future research-Journal of Marketing
- Singh Fulbag and Kaur Davinder-Service Quality & Customer Satisfaction in Banks-Prajnan, Vol XXXIX, No.2,2010-11
- Dr.T.Vanniarajan.B, Anbazhagan, SERVPERF Analysis in Retail Banking-International Marketing Conference on Marketing & Society, 8-10 April, 2007, IIMK
- Wallace Elaine & Chernatony Service Employee performance-Its components and antecedents Journal of Service Marketing 2009.

Potential Risks & Challenges associated with the Globalization of Higher Education Sector in India

Dr. Sujata Dhopte

Department of Economics,

M.K.Sanghvi College of Commerce & Economics, Juhu, Vile Parle, West.

sujatadhopte@gmail.com

Abstract

The major impact of globalisation on higher education sector in India is in the form of the immense supply-side expansion by the private providers of higher education services in India raises several relevant questions that are reviewed in the present study. The arrival of foreign private higher education service providers, growing competition; changes in the educational needs of consumers as well as new technological advances require a different scale of innovations in the Indian higher education sector. In the last two decades the structural adjustments are bringing a sea change in the provision of public services across the majority of the world. Loss of Cultural Identity of India , Commoditization of higher education, Quantitative increase in institutions, but quality is neglected, High user charges –fees, Neglect of local / national languages, Brain drain, Resources drain , Homogeneous curriculum and Competition to domestic institution are the main risks associated to the globalization of higher education in India. With the competitive environment of global linkages, there will be more 'niche' marketing, with greater specialization of courses and programmes designed to render services to the target markets. Indian higher education sector is experiencing a paradox. On the one hand there is pragmatic view to adjust with free trade regime while on the other hand there is hard protective policy since internationalization is treated as threat to domestic higher education institutions.

Introduction :

The macroeconomic implications of globalisation in the higher education sector are far reaching, as the State is the dominant supplier as well as a financial backbone of higher education services in India. In the last two decades the structural adjustments are bringing a sea change in the provision of public services across the majority of the world. The private ownerships of the public assets are at the core of economic globalization. In India higher education sector is poised for major changes. The provision of higher education services in India is largely determined and financed by the government. In a comparatively short period, India's higher education system has undergone a historic transformation. The government has opened up tertiary education as a new field of profit making for private investors. The immense supply-

side expansion by the private providers of higher education services in India raises several relevant questions that are reviewed in the present study.

1. Literature Review :

Philip G. Altbach in his paper 'Higher education and the WTO: Globalization Run Amok' has stated that with growing commercialization of higher education, the values of the marketplace intruded into campus. One of the major factors is the change in society's attitude toward higher education- which is now seen as a 'private good'. In these circumstances it is not surprising that those motivated by commerce, in Government and in private sector, would concern themselves with ensuring that "knowledge products" are freely traded in the International marketplace.

The relationship between public higher education institutions and their states is undergoing a profound restructuring. State after state is passing or debating legislation that alters the balance of autonomy, accountability, and public support, placing issues of privatization and the public purposes of higher education firmly on the negotiating table. Against this background, the American Council on Education and the Futures Project convened a meeting of college and university presidents, system chancellors, and leaders of higher education policy organizations in January 2004. The objective of the day long discussion was to examine that changing relationship, explore the essential issues surrounding it, and identify strategies and tactics to help college and university leaders respond effectively. The discussion focused on whether the privatization of higher education threatens public college and university capacity to ensure academic success for an ever-expanding share of the population and to conduct unbiased research that fuels discovery and economic development.

Based on this discussion, Ronald G. Ehrenberg published an essay titled as "The Perfect Storm and the Privatization of Public Higher Education", on August 17, 2006. Ronald expressed that public institutions, especially the land grants, have an obligation to serve the population of the entire state, not just the students attending the institutions. Through agricultural, consumer, and industrial extension services, these institutions have been major transmitters of knowledge to American farmers, consumers, workers, and industry. Cutbacks in state appropriations for the extension and land-grant activities of the institutions have forced these operations to become more entrepreneurial. They can use the "profits" from groups that can pay (such as large corporations) to subsidize providing services to underserved populations, services that were previously financed by the state. However, forced to generate their own revenues, it is natural for extension services to spend a greater share of their time on commercial activities and less on serving the public at large. More generally, public higher education benefits many more citizens of the state than those attending

the institutions or those directly receiving services from the extension activities of the institutions. Research indicates there is a social return to higher education that includes increased income for non-college graduates, increased state tax revenues, increased intergenerational mobility, and lower welfare costs. If a high-tuition policy for public higher education reduces the fraction of the population going on to and completing college, we will all be worse off.

Marijk C. van der Wende (1996) developed the model for NUFFIC as bellow- "The top three risks associated with internationalization are commercialization and commodification of education programs, the increase in the number of foreign "degree mills" and low-quality providers, and brain drain. It will also lead to the loss of cultural or national identity, jeopardy of the quality of higher education, and the homogenization of curriculum."

One of the previous definitions that that been widely used to describe globalization is "the process of integrating an international or intercultural dimension into the teaching, research, and service functions of the institution." Internationalization at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education.

In particular, since the 1990s, progress in economic terms and other forms of E-12 globalization has been accompanied by active exchange among universities in various countries within a limited region, such as European countries, while cross-border internationalization and standardization of curriculums, transnational education, quality assurance of higher education and global linkage and cooperation between higher education institutions are notable.

Arthur Levine from Teachers College, Columbia University in his working paper, 'Privatization in Higher Education' has stated that despite the remarkable rate of change that marks our world today, six forces are undeniably spurring the spread of privatization in higher education: the rise of an information-based economy, changes in

demographics, an increase in public scrutiny, the advent of new technologies, the convergence of knowledge-based organizations, and a decline in public trust in government. Governors can help state postsecondary education systems respond to these forces by helping define academic quality and student achievement, eliminating overlap and duplication, ensuring accountability, and more efficiently utilizing the capacity of private providers of postsecondary learning.

D. Bruce Johnstone and Preeti Shroff-Mehta made an International comparative examination of higher education finance and financial assistance policies. They are referring to the shift in the burden of higher education costs from being borne predominantly by government, or tax payers, to being shared with parents and students. It may come in the form of reduction in the student grants, loan subsidies etc. The shift may come about through public policies shifting enrollments from a heavily subsidized public sector to a much less subsidized, tuition-dependent private sector. But in all these ways thereof, the burden of higher education costs worldwide is being shifted to students and families from governments or taxpayers. In the light of this apparent phenomenon, the impact of increasing cost burdens –mainly tuition and related fees- on access or enrollment is the area that is left unexplored.

Freeman Butts in 1969 describes globalization of higher education as "embracing the programme of activity, which identifiable education organizations deliberately plan and carry out for their members (students, teachers and closely related clientele), with one of (possibly both) two major purposes in mind-a) study of the thought, institutions, technique, or ways of life of other peoples and of their interrelationships, and b) transfer of educational institutions, ideas or materials from one society to other."

2. Research Gap :

It is essential to examine the new actors, new rationales, new programmes, new regulations, and the new context of globalization in the form of higher education sector. There is less data available on globalisation of higher education services at the national level. Again available data regarding

Indian colleges and universities was not adequately documented and hence was not suitable for comparison and analysis. Hence it was important to conduct a comprehensive survey on the topic of risks and challenges associated with globalisation of higher education services in India, which would be of interest to the education community as well as the policymakers

3. Research Objectives :

- To examine the impact of globalization on Indian higher education sector
- To identify the potential risks & challenges of globalisation on the Indian higher education sector.
- To evolve strategies for educational reforms & establish a sustainable competitive advantage in the International market.

4. Research Methodology :

Primary data is collected through structured questionnaire. A qualitative methodology was used in this study. The survey population consists of Indian colleges, universities and Government departments of education. Individual surveys targeted at University of Mumbai and affiliated higher education institutions from graduate level onwards are a sample subset of the larger population. The Survey received responses from 648 respondents from 186 higher education institutions of Mumbai University from all types of institutions. SPSS software is used for analyzing the research data and presenting the findings in clear and compelling way.

5. Hypothesis :

H_{01} - There is no significant difference amongst the opinion of the respondents from higher education institutions in general about Loss of Cultural Identity of India , Commoditization of higher education, Quantitative increase in institutions, but quality is neglected, High user charges –fees, Neglect of local / national languages, Brain drain, Resources drain , Homogeneous curriculum and Competition to domestic institution are the main risks associated to the globalization of higher education in India.

H₁₁- There is no significant difference amongst the opinion of the respondents from higher education institutions in general about Loss of Cultural Identity of India , Commoditization of higher education, Quantitative increase in institutions, but quality is neglected, High user charges –fees, Neglect of local / national languages, Brain drain, Resources drain , Homogeneous curriculum and Competition to domestic institution are the main risks associated to the globalization of higher education in India.

6. Data Analysis :

Collected primary data is analyzed using SPSS software in the following way.

Table 1 :
Ranking of the risks & challenges associated with the globalisation of higher education in India.

Descriptive Statistics

	N	Minim	Maxi	Mean	Std. Deviation
1 Loss of Cultural Identity of India	246	1	8	1.93	1.257
2 Commoditization of higher education	327	1	6	2.18	1.210
3 Quantitative increase in institutions, but quality is neglected	280	1	7	2.13	1.365
4 High user charges –fees	281	1	6	2.36	.846
5 Neglect of local / national languages	142	1	9	3.30	1.502
6 Brain drain	164	1	9	2.24	1.870
7 Resources drain	85	1	8	3.00	1.336
8 Homogeneous curriculum	75	2	8	3.53	2.202
9 Competition to domestic institution	236	1	9	2.79	1.751

Table 2 :
Risks associated with the globalisation of higher education in India - Comparison by set up of institutions

T-Test Group Statistics

	RQ.2. type of set up does your institution has?	N	Mean	Std. Deviation	Std. Error Mean
1 Loss of Cultural Identity of India	Govt Aided	107	2.13	1.408	.136
	Private	133	1.82	1.120	.097
2 Commoditization of higher education	Govt Aided	190	2.19	1.416	.103
	Private	131	2.18	.866	.076
3 Quantitative increase in institutions, but quality is neglected	Govt Aided	127	1.68	.765	.068
	Private	152	2.51	1.623	.132
4 High user charges -fees	Govt Aided	143	2.22	.745	.062
	Private	138	2.49	.922	.078
5 Neglect of local / national languages	Govt Aided	73	3.04	1.148	.134
	Private	69	3.58	1.769	.213
6 Brain drain	Govt Aided	74	2.68	2.365	.275
	Private	85	1.82	1.246	.135
7 Resources drain	Govt Aided	36	2.56	.843	.141
	Private	49	3.33	1.533	.219
8 Homogeneous curriculum	Govt Aided	10	2.00	.000	.000
	Private	65	3.77	2.276	.282
9 Competition to domestic institution	Govt Aided	113	2.58	.623	.059
	Private	123	2.98	2.340	.211

Here there is no significant difference in the opinion of the respondents from higher education institutions in general. As H₀₁ is accepted the totals suggest that the respondents agreed that the Loss of Cultural Identity of India, Commoditization of higher education, Quantitative increase in institutions, but quality is neglected, High user charges –fees, Neglect of local / national languages, Brain drain, Resources drain, Homogeneous curriculum and Competition to domestic institution are the main risks associated to the globalization of higher education in India.

The highest rank (mean=1.93) is given to the Loss of Cultural Identity of India as risk associated to the globalization of higher education in India. Subsequently the risks with better ranking to be followed are Quantitative increase in institutions, but quality is neglected, (mean=2.13), Commoditization of higher education (mean=2.18), Brain drain (mean=2.24), High user charges -fees (mean=2.36), Competition to domestic institution(mean=2.79), Resources drain (mean=3.00), Neglect of local / national languages (mean=3.30) and lowest ranking for the risk factor Homogeneous curriculum(mean=3.53).

7. Major Findings :

- The significant risk identified by the respondents was the loss of cultural identity of India. Erosion of cultural identity of the country hence is the top most fear of the respondents.
- Also there was a fear about compromise on quality of education. The commoditization of education will raise the user charges beyond the reach of the common man; as a result access will be denied to the economically disadvantaged class. It will further increase the drift between haves and have-nots. However, the other risk factors such as Neglect local/national languages; Brain drain; Resources drain; Homogeneous curriculum and Competition to domestic institutions are not considered as more significant by the respondents.
- The perceived risks of the reform process identified by the respondents pose challenges before national policy makers while opening the market access of higher education sector for the free trade.
- The research underlined the importance of coordination between different agencies operating at regional and global level. The actions needed to adapt with changing global scenario are at two levels:
 - a. Domestic Priorities: institutional and regional focus
 - b. Global Goals: nation's integration as per forces of globalization.
- It was observed that even though there is growing interest and efforts for globalization; the respondents were not driven by the desire for creating global educational hub in the Indian region.
- The efforts are needed in the direction to create India most popular destination of higher education. The research showed there is huge potential in the Indian higher education sector for international trade. It is necessary to build a 'Knowledge Hub' overseas and in India by joint initiatives of the Government, higher education institutes and Corporate to attract foreign students and create trade surplus.

8. Conclusion :

Emergence of the knowledge driven economy exposed to the free trade face a number of challenges in the form of Loss of Cultural Identity of India , Commoditization of higher education, Quantitative increase in institutions, but quality is neglected, High user charges –fees, Neglect of local / national languages, Brain drain, Resources drain , Homogeneous curriculum and Competition to domestic institution. In the light of globalization, many external environment changes are taking place in the higher education service sector. With introduction of globalization in the higher education sector there is enhancement in choice, diversity, quality and efficiency. Globalization in higher education services helps to detect and correct the areas of inefficiencies and take up the challenge of competition in higher education sector which brings new set of responsibilities. Innovative education programmes brings greater access and increase in the educational level of the developing countries. Globalization leads to diffusion of technology in higher education sector which in turn has enhanced the efficiency and quality.

References :

- Anne Krueger. 2000. *The WTO as an International Organization*. Oxford University Press.
- Beine Michel, Docquier Frederic; Rapoport Hillel. February 2001. "Brain Drain and Economic Growth: Theory and Evidence", in *Journal -of - Development Economics*; 64(1), pages 275-89.
- Cook, Philip J. and Robert H. Frank. 1993. "The Growing Concentration of Top Students At Elite Schools," in *Studies of Supply and Demand for Higher Education*. Charles T.
- Clotfelter and Michael Rothschild, ed. Chicago: University of Chicago Press.
- Gracia Penalosa Cecilia, Walde Klaus. October 2000. "Efficiency and Equity Effects Of Subsidies to Higher Education", in *Oxford-Economic- Papers*; 52(4), pages 702-22.

- *Humphreys, Brad R. October 2000. "Do Business Cycles Affect State Appropriations to Higher Education?" in Southern-Economic-Journal; 67(2), pages 398-413.*
- *Musgrave, R.A. (1969) 'Provision for Social Goods' in J.Margolis and H.Guitton (eds.), Public Economics. New York: St. Martin's Press.*
- *Philip G. Altbach. New York: Garland Publishing, 1991. "The Costs of Higher Education." International Higher Education: An Encyclopedia.*
- *Samuelson, P.A. (1969) 'Pure Theory of Public Expenditure and Taxation', PP.98-123, in J.Margolis and H.Guitton (eds.), Public Economics. New York: St. Martin's Press.*
- *Sell, Kathleen R. "Coordinating Budgeting and Academic Planning to Affect Institutional Commitment to Teaching and Learning." Prepared for the Professional Development Seminar for State Higher Education Finance Officers, State Higher Education Executive Officers, Denver, and August 19-21, 1993.*
- *The Association of Public Policy Analysis and Management, Chicago, October 1994. Prepared Paper "New Directions in Student Loans: Intergenerational Implications."*
- *Tim Mazzarol, Geoffrey Norman Soutar. 2000. The Global Market for Higher Education. Edward Elgar Publishing Inc.*
- *U.S. Department of Education. 1997. Digest of Education Statistics. Washington: Government Printing Office.*
- *Verspoor, Adrian. "Financing Higher Education: A World View." Presented at the International Association of University Presidents, Annual Meeting of the American Council on Education, Washington, D.C., February 21, 1994.*
- *William Doyle. Higher Education Finance: An Annotated Bibliography. A Technical Report Prepared by the California Higher Education Policy Center, March 1996.*

CUSTOMER SATISFACTION OF RESTAURANTS – AN EMPIRICAL ANALYSIS IN INDORE CITY

Dr. Ira Bapna

Professor,

Sapient Institute of Management, Indore

irabapna@rediffmail.com

Prof. Harmender Singh Saluja

Associate Professor,

Maharaja Ranjit Singh College of Professional Sciences, Indore

harmendersaluja@gmail.com

Prof. Vishal Sood

Associate Professor,

Maharaja Ranjit Singh College of Professional Sciences, Indore

vishal@aol.in

Abstract

India is in the midst of a restaurant mutiny. India's restaurant sector is expected to grow at 5-6 per cent a year, with organized restaurants tripling market share by 2015. In a ruthless industry where there is a broad range of catering establishments from fast food, chain brands, specialized or themed, to high-class Michelin star restaurants, many new businesses fail within the first few years of trading, and those who do succeed need to ensure that they find ways to make the total customer experience memorable and satisfying. Proliferation of nuclear families, demographic changes, increasing per capita and changing food habits will drive more Indians to explore food in restaurants.

Modern Era in Indian food includes an assortment of different cooking style, influenced by various traditions and culture. Every state has its own style of cooking and most have their own recipes. The thrust area for any organization at this globalized platform for successfully attracting and retaining customers is to become customer focused. The businesses wanted to provide an exceptional product or services and experiences from the moment a customer decides to enter the building to the moment they leave and to a certain extent beyond that to ensure they leave wanting more. In the restaurants and hospitality industry, a customer can make or break the business. It is therefore important that owners and managers of these organizations learn to look at the total customer experience.

The present research concentrates to study the factors influencing the customer satisfaction of restaurants of Indore city by the application of factor analysis. Further regression analysis is carried on to check the impact of factors on demographic variable.

Keywords: Restaurants, Customer Satisfaction, Eating Habits.

Introduction :

The eating habits of the people are changing. Indian culture is flexible and adaptive as it mixes with other cultures like salt in food. At the platform of 'Vasudev Kutumbkam' Indian food is a junction of different cooking style of various tradition and cultures. In India itself diverse cultures are there since from the ages of Aryan. Each state and even town, and villages of each state have got their own

unique recipes representing the richness and ages of their culture. Thus, in global era, Indian food is the presentation with characteristic fragrance and flavor of all global dishes with unique specialty. Indian food is rich in wide range of multiple cuisines that are perfectly mouth watering. The style of cooking and ingredients used increases the popularity of Indian food all throughout. Indian cuisine is subjected to various contributions and

influences. Since the origin and concept of consumption of food till the present days, Indian food had experienced a tremendous change. People started following cooking style, and adopting eating habits according to their religion. Religion played a major role in shaping the food habit and thus become inseparable from religious beliefs.

The food of Indore city is at the upper edge in flavor, taste, garnishing and as well as variety, over the Indian subcontinent. The special taste with Indore touch in the varied cuisines is sure to make the lip smacking taste.

Literature Review :

The customer satisfaction level is an integrated assessment response which represents the summation of customers' subjective responses to different attributes of a product. Thus, Integrated Product Satisfaction Level has become an item for measuring customer satisfaction (Czepiel et al. 1974). But this is disagreed with the idea that the best method of measuring customer satisfaction level would be evaluating a product's overall, integrated satisfaction level and thought that using this kind of evaluation method to ask customers to make a quick response while they are facing complex circumstances would result in the loss of relevant information. Hence customer satisfaction level can be measure on each attribute of a product, in addition to the integrated satisfaction level (Handy and Pfaff, 1975). On the basis of providing unique services to the customers the emotional satisfaction of customers in the hospitality industry can be increased. Every individual is unique and this means that services provided to a customer must meet his or her needs in order to be satisfied them (Jacoby and Chestnut, 1978).

Servqual model a theory to customer satisfaction indicated that there are five dimensions used in measuring customer service quality as tangibles, reliability, responsiveness, empathy and assurance. The tangibles include the physical appearance of the facilities, equipment, personnel and materials used to communicate with customers. Overall customer satisfaction being a prime objective was significantly influenced by Transaction-specific satisfaction. Specific aspects of the transaction such as product features (e.g. food quality and restaurant ambience), service features (e.g. responsiveness of the server), as well as price to be satisfied with the overall restaurant experience including price and food quality (reliability), are likely to be considered by customers. Elements of

assurance – knowledge and courtesy – are important but may have contextually modified meanings. The dimension empathy may not be applicable in the restaurant industry context (Parasuraman et al, 1991).

To make certain that, the personnel dealing directly with the customers, perk up their satisfaction, conduction of training and seminars is essential to guarantee that, only best quality services are delivered to the customers (Reichheld, 1993). A study conducted to explain the role of hospitality staff suggested that hospitality staff should not show any biasness, prejudice or discrimination against some customers, to ensure that all customers are satisfied (Restall and Gordon, 1993). Today, emotions form a vital component of loyalty and satisfaction, hence emotional satisfaction cements their loyalty to a company or organization (Dick and Kunal, 1994). The staff needs to be engaged in the collection of customers' opinions about services they receive. The collected data is analyzed and stored in a database that is then used by a company to point out problems and identify where changes can be made to increase customer satisfaction (Bloemer and Kasper, 1995).

The customers being offered the tailor made services, unique as per their needs and requirements correspondingly reflect the willingness with high zeal to pay higher prices in the future due to the positive emotions they felt while experiencing the services (Bagozzi, 1999). The customer satisfaction factors were analyzed based on five-dimensions which are first and last impressions, service excellence, ambience excellence, food excellence and feeling comfortable eating there and reservations and parking (Kivela et al, 2000). The research conducted in Hong Kong found that competitive location, prices, food quality and customer services were among the main determinants of people considering the restaurant services. Another research concluded that, the competitive location, prices, food quality and customer services were among the main determinants of people considering the restaurant services (Pun and Ho, 2001).

A research studied in Spain looks into the main factors concluded that, offering good food and service is not enough to attract and retain consumers. In order to gain a competitive advantage in today's market; restaurants have to offer meals that offer good value in a favorable ambience (Soriano, 2002). The poor treatment leads to lack of satisfaction and such customers will seek services

from another company or organization. There is a big harm to the image of the company, when customers complain to business partners, friend's colleagues or relatives. Improvement in services that are provided in the industry influences the expectations of the customers. The need to meet the demand for better services requires hospitality staff to be flexible and dynamic (Cochran, 2003).

The positive word of mouth associated with positive emotions act as an advertising strategy in the hospitality industry (Gitman and Carl, 2005). A research on experiences from dining in China was based on the Servqual model concluded that many items did not fit within those categories that evolved in terms of customer satisfaction in the restaurants in China including quality of dishes and price (Bartlett and Han, 2007).

Objective :

- To explore the determinants influencing the customer satisfaction of restaurants in Indore city.
- To study the impact of age over customer satisfaction for restaurants in Indore city.
- To study the impact of income over customer satisfaction for restaurants in Indore city.

Hypothesis :

To test the objective of the study following null hypothesis were framed.

Ho₁: There is no impact of age over customer satisfaction in restaurants of Indore city.

Ho₂: There is no impact of income over customer satisfaction in restaurants of Indore city.

Research Methodology :

Type of Study

The study was empirical in nature to find the factors that, influence customer satisfaction for restaurants and also to study the impact of age and income over customer satisfaction for restaurants in Indore city.

Data

The study was based on restoring the primary data. A structured and non-disguised type of questionnaire was prepared to collect the data.

Sample Size

105 respondents from Indore city were taken.

Sampling Method

Convenient Judgmental Sampling was used for collection of the data.

Tools For Analysis

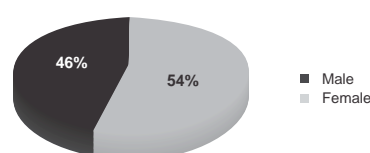
The objective was to identifying factors that influences customer satisfaction for restaurants in Indore city. Factor analysis was carried out to identify the factors influencing customer satisfaction for restaurants. For this, SPSS 17 was applied to analyze the data collected for the study. To find the impact of age and income over customer satisfaction Regression Analysis was used.

Analysis and Interpretation

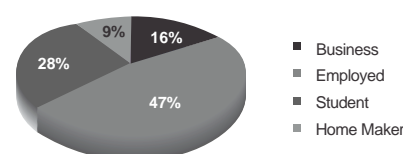
Demographic Profile of The Respondents :

The study was concentrated over 54% males and 46% females. Qualification status of the respondents revealed that, 12% were qualified up to 12th, 31% were under graduate and 57% respondents were post graduate. Apart from this, the category of respondents belongs to the age group up to 30 yrs. were 70% and above 30 yrs. were 30% . The 60% respondents were among the slab of monthly income, less than Rs. 20,000 and 40% were having the income in the slab of 20,000 and above.

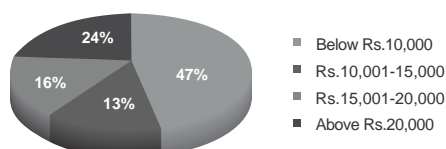
% of Respondents on the Basic of Gender

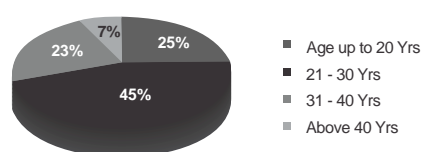


% of Respondents on the Basic of Qualification



% of Respondents on the Basic of Income



% of Respondents on the Basis of Age

Reliability & Validity

Table 1 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.761
Bartlett's Test of Sphericity	Approx. Chi-Square	797.405
	Df	153
	Sig.	.000

To check the reliability of data, KMO and Bartlett's Test was applied. The KMO and Bartlett's value was 0.761 which reflects that data are reliable. According to Kaiser Criterion, only first five factors should be used, because subsequent Eigen values are less than one.

Factor Analysis :

A factor loading represents the correlation between an original variable and its factor.

Table 2 : Factor Analysis

Factor No.	Labels	Factor Name	Statement	Factor Loadings
F1	R1	Food Attributes	Food is served hot.	0.741
	R2		Food is served fresh.	0.582
	R5		The food is tasty and according to my taste.	0.565
	R9		The menu was easy to read.	0.733
	R10		Employees speak clearly.	0.813
	R16		Timely billing.	0.514
F2	R6	Employee	Assistance The order was taken correctly.	0.754
	R11		Employees are courteous.	0.805
	R12		The service is excellent.	0.803
	R15		Parking facility.	0.702
F3	R7	Worth for Money	There were no discrepancies while serving the items.	0.555
	R13		Get value for our money.	0.737
	R14		Ambience.	0.770
F4	R3	Options	The menu has variety of items.	0.627
	R4		The quality of food is excellent.	0.731
	R17		Special discounts given to customers.	0.779
F5	R8	Offers value	Employees are patient when taking orders.	0.713
	R18		Special day offers.	-0.769

Factor1 : Food Attributes (Factor Loading : 3.948)

First factor is food attribute. It is the most important factor, constituted of statements such as Food is served fresh (0.813); employees speak clearly (0.741); the menu was easy to read (0.733); food is served hot (0.582); the food is tasty and according to my taste (0.565); timely billing (0.514). These factors signify that restaurants serving hot and fresh food will give most satisfaction to their customers.

Factor 2 : Employee Assistance (Factor Loading: 3.064)

Second factor is employee assistance. This is second significant factor comprises of four statements viz., employees are courteous (0.805); the service is excellent (0.803); the order was taken correctly (0.754); parking facility (0.702); indicates that, the services to the customers in the restaurants at the best could increase satisfaction level.

Factor 3 : Worth for Money (Factor Loading: 2.062)

Third factor is worth of money. It is constituted of, ambience (0.770); get value for money (0.737); there were no discrepancies while serving the items (0.555). The factor get value for our money is the significant factor. This implies that customer would be satisfied cent- percent on getting the return equivalent to the amount being paid off.

Factor 4 : Options (Factor Loading : 2.037)

Fourth factor is options. Three variables have been loaded on to this factor. The statements, special discounts given to customers (0.779); the menu has a many variety of items (0.627); the quality of food is excellent (0.631), implied that choice of good quality food in a restaurant could satisfy customers needs easily.

Factor 5 : Offers Value (Factor Loading : 0.056)

Fifth factor is offers value. This factor comprises of two statements, employees are patient when taking order (0.713); special day offers (-0.769). It can be concluded that customers often used to visit the restaurants having attracting offers.

Regression Analysis :**Table 4****Variables Entered/Removed****Taking Income As Dependent Variable**

1	r18, r14, r3, r11, r7, r1, r9, r16, r4, r6, r10, r13, r5, r8, r15, r2, r17, r12 ^a .		Enter
---	--	--	-------

R indicates correlation among the observed and predictive variable i.e. there is a moderate relationship among the studied values as it is .484. This shows that there is no significant impact of income over customer satisfaction for restaurants in Indore city. R Square is 0.234 which indicates that the model fit data has low dependency on independent factors and the dependent variable does not relay heavily, where as the F value is significant which means income does not play a good job in explaining the variations in dependent variables as the F statistic value is greater than 0.05.

Taking Age As Independent Variable**Model Summary**

Model	Change Statistics			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503 ^a	.253	.097	.439

a. Predictors: (Constant), r18, r14, r3, r11, r7, r1, r9, r16, r4, r6, r10, r13, r5, r8, r15, r2, r17, r12
b. Dependent Variable: Age

Model Summary

Model	Change Statistics					
	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.253	1.622	18	86	.072	1.850

b. Dependent Variable : Age

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.639	18	.313	1.622	.072 ^a
	Residual	16.609	86	.193		
	Total	22.248	104			

a. Predictors: (Constant), r18, r14, r3, r11, r7, r1, r9, r16, r4, r6, r10, r13, r5, r8, r15, r2, r17, r12
b. Dependent Variable: Age

R indicates correlation among the observed and predictive variable i.e. there is a moderate relationship among the studied values as it is 0.503. This shows that there is no significant impact of age over customer satisfaction for restaurants in Indore city. R Square is 0.253 which indicates that the model fit data has low dependency on independent factors and the dependent variable does not relay heavily, where as the F value is significant which means age does not play a good job in explaining the variations in dependent variables as the F statistic value is greater than 0.05.

Implications :

Additional factors are imperative to stress or hunt for better measures of constructs are of prime importance to study the customer satisfaction in better way. Food quality is the unique factor which has not captured complexity and varied constructs. Another important point to be given thought is to find the reason that, why customers visit restaurants frequently. Apart from meals, business transactions and enjoyment of cherished company of others are also the major reasons of visiting the restaurants. Thus, customer satisfaction factors are dependent over situations. They are different in different situations. In this way results cannot be generalized as sampled area may have different requirements from restaurants (Andaleeb and Conway, 2006). Thus, the existing owners should go through the review process, and implement the necessary requirements. The entrepreneur going for the restaurants Industry should concentrate on the above factors to cater more and more customer base.

Conclusion :

In order to achieve the effective delivery of the services, determination of the customer satisfaction is fundamental. Hospitality manager could have an edge over competitors via implementing the knowledge acquired by successfully judging the satisfaction level of customers through product differentiation, increased customer retention, and positive word of mouth communication. In the evident from the study that majority of the customers have visited different restaurants at different times. So the restaurants owners have to take the steps to retain the customers and make them a permanent customer

The study support the previous study, in the area of service Industry in USA, was to determine the factors that, explain customer satisfaction in the restaurants, analyzed that, restaurants should focus on three elements as service quality (responsiveness), price and food quality (reliability) (Andaleeb and Conway, 2006). Hence quality, tastes and services are three major factors considered by the respondents in selecting a restaurant, so the restaurants owners should not compromise on these aspects at any cost. Customers are more discerning and demanding. Customers always want to experiment with the money they spend. They look for new endeavors and experiences and it has become a challenge to keep them loyal to a particular eat-out. With rapidly shifting loyalties, customers who are ready to experiments look for variety and do not have any specific likes or dislikes. The Indian restaurants industry has become of age by diversifying its services and is trying to cater to the Indian taste and is staying in the competitive arena amongst international giants and is able to provide better services to the customers.

References :

- Aigbedo, H., and Parameswaran, R., (2004). *Importance-Performance Analysis for Improving Quality of Campus Food Service. International Journal of Quality & Reliability Management*, 21, 876-896.
- Andaleeb, Syed Saad and Conway, Carolyn(2006). *Customer Satisfaction in the Restaurant Industry: An Examination of the Transaction-Specific Model. Journal of Service Marketing*, 20(1), 3-11.
- Bagozzi, R (1999) .*The role of emotions in marketing, Journal of the Academy of Marketing Science*, 27(2); 184-206
- Bartlett, J.E., and Han, F. (2007). *Analysis of Service Quality in Restaurants in China: An Eastern Perspective. ABR & TLC Conference Proceedings.*
- Bloemer, M and Kasper, P. (1995). *The Complex Relationship between Consumer Satisfaction and Brand loyalty. Journal of Economic Psychology*, 16,311-29
- Cochran, C. (2003). *Customer Satisfaction; Tools, Techniques and Formulas for Success. Paton Press*
- Czepiel, J.A., L. J. Rosenberg and Adebayo Akerele (1974). *Perspectives on Consumer Satisfaction in AMA educator proceedings.*
- Dick, A and Kunal B. (1994).*Customer Loyalty; Toward an Integrated Conceptual Framework; Journal of the Academy of Marketing Science*, 22(2), 99-113
- Gitman, L and Carl, M. (2005). *The future of Business. The Essentials. Mason; Ohio; South Western.*
- Handy, C. R. and Pfaff, M. (1975). *Consumer Satisfaction with food product and marketing service. Journal of Business Research*, 15(11):49-61.
- Jacoby, J. and Chestnut, W. (1978).*Brand loyalty; Measurement Management. John Wiley and Sons; New York*
- Kivela, J. Reece, J. and Inbakaran, R., (1999). *Consumer Research in the Restaurant Environment. International Journal of Contemporary Hospitality Management*, 11, 269-286.
- Parasuraman, A. Zeithaml, V.A., Berry, L.L., (1991). *Perceived Service Quality as a Customer Based Performance Measure: An Empirical Examination of Organizational Barriers Using an Extended Service Quality Model. Human Resource Management*, 30, 335-364.
- Pun, K.F.and Ho, K.Y. (2001). *Identification of Service Quality Attributes For Restaurant Operations: A Hong Kong Case. Journal of Managing Service Quality*, 11, 233-240.
- Reichheld, F. (1993). *Loyalty-based Management. Harvard Business Review*, 71(2), p 64-73
- Restall and Gorden, W. (1993). *Brands; the missing link; understanding the emotional Relationship. Marketing and Research Today*, May, pp 59-67
- Soriano, D.R., (2002). *Customers' Expectations Factors in Restaurants: The Situation in Spain. International Journal of Quality & Reliability Management*, 19,1055-67.

An Employee Satisfaction Survey at Magic Master Cellular Services Ltd

Dr. Gowri Joshi

I/C Director
GuruNanak Institute of Management Studies, Matunga
drgowrijoshi@gmail.com

Mr. Hitendra Singh

Manager HR (Vertical Head),
Idea Cellular Ltd. UP East, Lucknow.

Ms. Mragank Gangwar

Student GLC - HR
ITM Business School, Kharghar

Abstract:

Motivation in simple terms may be understood as the set of forces that causes people to behave in a certain way. The challenge of every organization is to effectively address the motivational challenges of employees which would eventually increase individual and organizational productivity. Motivated employees are the asset of any organization. The level of satisfaction in different functions of the organization is often seen to be corresponding to the productivity of employees.

This paper basically deals with the employee satisfaction amongst the frontline sales manpower of Magic Master Cellular Ltd in India. A sample of 86 TSE from four zones in UP i.e. Kanpur, Azamgarh, Lucknow and Jhansi has been taken to carry out the study.

Keyword: Motivation, Productivity, Job Satisfaction

Introduction:

MagicMasterCellular Ltd. is India's 3rd largest mobile service operators with 93.75 million subscribers operating in 22 circles, as 31st May 2011. The company was listed in Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) in March 2007. It became a pan-India GSM operator all over the country and expanded its NLD and ILD operations in the FY 2010.

In the year 2011, MagicMaster launched its 3G services in 11 service areas, which generate over 80% of the company's revenue. Amongst all the GSM players MagicMaster has the highest share of rural subscribers as a percentage of total subscribers.

One of the leading GSM technology based cellular services operators, MagicMaster offers service in:

- Pre-Paid
- Post-Paid
- Enterprise Business Unit
- PCO
- Value Added Service

In fact, Idea's innovative and revolutionary VAS (Value Added Services) has the highest revenue share than the industry average. Some of its VAS offerings are mobile TV, Music library in multiple languages, DTs/RBTs; and other content like cinema, music, news, cricket etc.

The company has a partnership with 400 operators around the world and coverage of across over 200 countries. The company has many awards and

recognitions to its credit.

MCSL is a fully owned subsidiary of ICL. All the employees in the frontline sales come under MCSL.

Objective :

The objective of this study is to determine the level of satisfaction amongst the frontline sales manpower of MCSL-UP EAST Circle keeping in consideration six facets of job satisfaction.

Literature Review :

Job satisfaction is a multi-faceted construct (Churchill, Ford, & Walker, 1974; Comer, Machleit, & Lagace, 1989; Lagace, Goolsby, & Gassenheimer, 1993). The most accepted and common facets of satisfaction (Judge, Thoreson, Bono, & Patton, 2001) are satisfaction with pay, promotion opportunities, coworkers, supervision, and the work itself (Smith, Kendall, & Hulin, 1969). These five job facets typically account for a substantial amount of the variance in overall job satisfaction (Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). Still, researchers have continued to work to identify other important and contemporary facets of job satisfaction. Taber and Alliger (1995), for example, emphasized that to understand overall job attitudes, researchers must examine the principal tasks and activities in which employees engage.

Most notably, Brief (1998, p. 179) discussed how the changing nature of work leads us to: (1) question if facets considered most central to job satisfaction are still indeed central and (2) study whether new facets or facets once considered peripheral to job satisfaction have become more central. Judge et al. (2001) contended that job-satisfaction research would benefit from research expanding the range of facets studied. They argued that the breadth of job characteristics needs to include all elements that may have become more salient in contemporary job settings. Similarly, Rogelberg, Leach, Warr, and Burnfield (2006) argued that “to understand components of overall job attitudes, one should consider the principal tasks/activities in which employees are required to spend large amounts of time” (p. 94). By heeding the above calls for research, our theories and talent management

practices can adjust as needed, stay relevant, and maintain impact.

The best way to measure job satisfaction is employee satisfaction survey. An employee satisfaction survey can be much more than a 'tick-box' exercise, and requires only a little additional effort to turn a routine check into a significant source of information for an organisation.

It is one thing to know what your employees think, but it's much more powerful when you also understand how their opinions about the company and their job compare to those of people in similar organisations.

The question that arises now becomes “What facets of employee satisfaction should be considered and examined? “In the present set of studies, a no. of facets have been investigated keeping in mind the nature of job and work environment of frontline sales employees at MCSL-UP EAST.

Research Methodology :

This section deals with the methodology used in the present investigation. It describes the nature of study, details of samples and statistical treatment through which data have been obtained and analyzed.

The data in this study was obtained through a well designed questionnaire. The questionnaire comprised of a total of 13 facets of job satisfaction of frontline sales manpower of MCSL-UP EAST. These are:

1. Salary
2. Entitlements and reimbursements
3. HR Approachability
4. Career and Growth
5. Work life balance
6. Awareness

The questionnaire consisted of 13 questions and was given to the employees of 4 of the 8 zones of MCSL in UPEAST.

Research Design :

Research design refers to the pattern or outline of a research project working. It comprises a series of prior decision hat taken together a master plan of executing a project.

Present study was survey type in the nature which

involved employees at MCSL-UP EAST Circle. Employees chosen under this study belong to, viz. Lucknow, Jhansi, Kanpur and Azamgarh. Employees were given a questionnaire to fill in which contained around 40 questions.

Sample design

A sample size of total 86 TSEs has been taken to carry out this study. These TSEs belong to four zones of UP-EAST CIRCLE, viz. Kanpur, Azamgarh, Lucknow and Jhansi.

Data collection

The data was collected with help of questionnaires, designed on the basis of various facets that influence employee satisfaction at the front sales level. There were a total of 40 questions on aspects like employee supervisor relationship, functionality of HR at MCSL, employee's awareness about his performance and appraisal, training and development, etc.

Data Analysis And Interpretation

The analysis and interpretation of data was done with the help of graphs.

1. Salary

1 (a) Salary credited on the last working day of every month.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	4	86	5%
D (Disagree)	0	86	0%
SA (Somewhat Agree)	2	86	2%
A (Agree)	47	86	55%
STA (Strongly Agree)	33	86	38%

Table 1

Graphical representation of the Data:

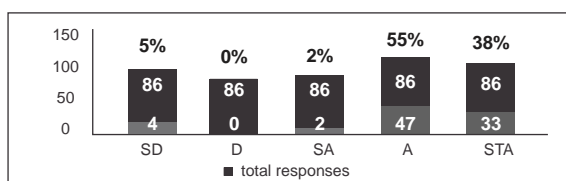


Figure 1

Analysis :

Salary is yet another very important facet of job satisfaction. 55% of the employees were satisfied as they received their monthly salaries rite on time and 38% were highly satisfied. 5% employees were completely dissatisfied with timely approval of monthly salary. Only 2% employees were moderately satisfied.

1 (b) Computation of salary

Responses:

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	6	85	7%
D (Disagree)	4	85	5%
SA (Somewhat Agree)	6	85	7%
A (Agree)	51	85	60%
STA (Strongly Agree)	18	85	21%

Table 2

Graphical representation of the data :

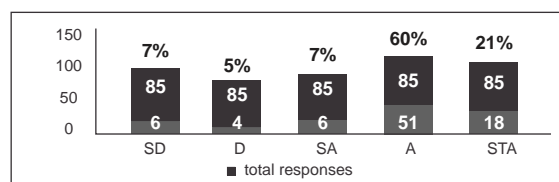


Figure 2

Analysis:

60% of the employees believe that their salaries are computed accurately, and 21% strongly support the statement, which is an impressive figure and shows high level of satisfaction amongst employees on the crucial grounds such as pay. 7% of the employees still are not fully satisfied. Whereas, 7% employees strongly disagree to the matter and 5% show somewhat disagreement.

1 (c) Queries regarding salary are addressed to satisfaction.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	4	85	5%
D (Disagree)	5	85	16%
SA (Somewhat Agree)	11	85	13%
A (Agree)	58	85	68%
STA (Strongly Agree)	7	85	8%

Table 3

Graphical representation of the Data:

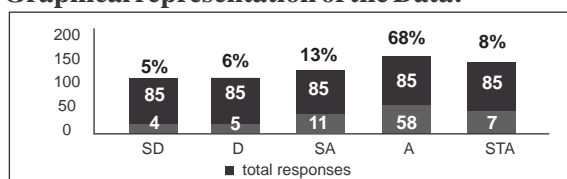


Figure 3

Analysis :

68% of the employees believe that their queries regarding salary are addressed to their satisfaction, 8% of the employees strongly support the matter. 5% are highly dissatisfied with the same, whereas 13% are moderately satisfied.

2. Entitlements and reimbursements

2 (a) Conveyance and tour reimbursements are given on time.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	6	85	7%
D (Disagree)	3	85	4%
SA (Somewhat Agree)	17	85	20%
A (Agree)	49	85	58%
STA (Strongly Agree)	10	85	12%

Table 4

Graphical representation of the data :

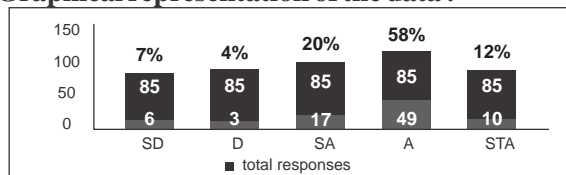


Figure 4

Analysis :

58% of the employees revealed that their local conveyance and tour reimbursements are given to them in time an 125 of the employees strongly support the statement. On the other hand 7% of the employees are highly dissatisfied regarding their reimbursements. 20% of the employees show moderate satisfaction.

2 (b) Claim for reimbursements

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	12	83	14%
D (Disagree)	16	83	19%
SA (Somewhat Agree)	10	83	12%
A (Agree)	40	83	48%
STA (Strongly Agree)	5	83	6%

Table 5

Graphical representation of the Data :

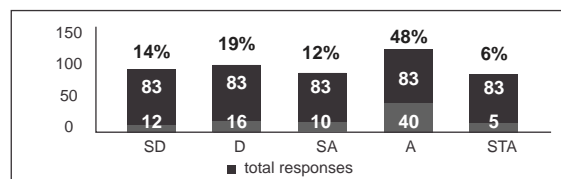


Figure 5

Analysis :

Only 48% of the employees agreed that when they claim for reimbursements as for local conveyance they are paid fully and rite in time. Even the employees strongly agreeing to the statement are quite low with just 6%. On the other hand 14% of the employees are highly dissatisfied with the process and timeliness of reimbursements. 19% are moderately dissatisfied and 12% are moderately satisfied with the same.

2(c) Communication on entitlement and balance of entitlements.

Responses :

	Responses	Total Responses	Percentage
No	22	85	26%
Yes	63	85	74%

Table 6

Graphical representation of the Data :

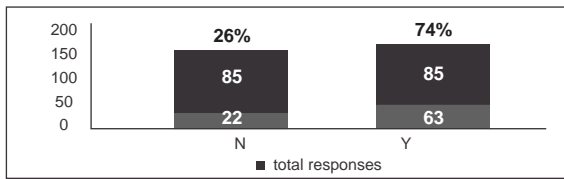


Figure 6

Analysis :

74% of the employees are satisfied with the communication of their benefits entitlement and balance entitlements. 26% refused that their benefits and balance entitlements are not communicated to them.

2 (d) Ease to know the balances of entitlements.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	2	86	2%
D (Disagree)	11	86	13%
SA (Somewhat Agree)	15	86	17%
A (Agree)	52	86	60%
STA (Strongly Agree)	6	86	7%

Table 7

Graphical representation of the Data :

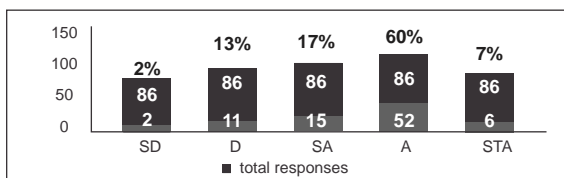


Figure 7

Analysis :

60% of the employees find it easy for them to receive the balance of their entitlements. 7% strongly agree, 17% somewhat agree, 13% disagree and 2% strongly disagree, on the statement.

3. HR Approachability

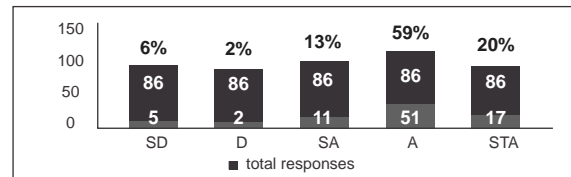
3 (a) HR approachable/ responds to all queries on time

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	5	86	6%
D (Disagree)	2	86	2%
SA (Somewhat Agree)	11	86	13%
A (Agree)	51	86	59%
STA (Strongly Agree)	17	86	20%

Table 8

Graphical representation of the Data :



Fig

ure 8

Analysis :

59% of the employees are satisfied with the HR department, its approachability and efficiency to solve queries, 20% of the employee are highly satisfied, whereas 6% employees showed high level of dissatisfaction. 2% employees were not just satisfied and 13% employees were moderately satisfied.

4. Career and growth

4 (a) Feeling of personal accomplishment.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	1	80	1%
D (Disagree)	8	80	10%
SA (Somewhat Agree)	5	80	6%
A (Agree)	51	80	64%
STA (Strongly Agree)	15	80	19%

Table 9

Graphical representation of the Data :

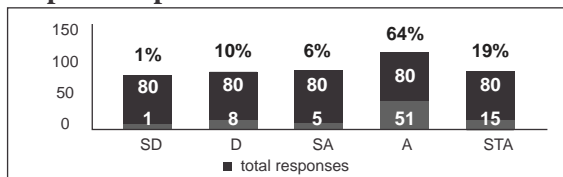


Table 9

Analysis :

64% employees are satisfied with their jobs and relate it to personal accomplishments. 19% are highly satisfied, 6% are somewhat satisfied, 10% are not much satisfied and 1% are highly dissatisfied.

4(b) Feeling optimistic about future success.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	11	85	13%
D (Disagree)	17	85	20%
SA (Somewhat Agree)	12	85	14%
A (Agree)	34	85	40%
STA (Strongly Agree)	11	85	13%

Table 10

Graphical representation of the Data :

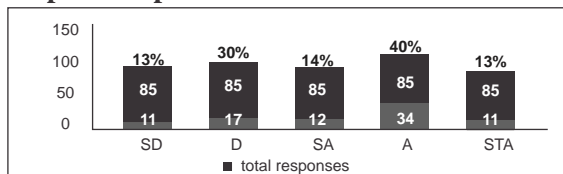


Figure 10

Analysis :

Only 40% employees are secure about their growth and future at MCSL and 13% strongly agree to that. 13% employees feel uncertain about their future at MCSL. 20% of the employees show they are not very sure of their future at the company, whereas 15% believe they feel a little optimistic about their future at MCSL.

5. Work life balance

5 (a) Able to spend quality time with family.

Responses :

	Responses	Total Responses	Percentage
SD (Strongly Disagree)	13	85	15%
D (Disagree)	30	85	35%
SA (Somewhat Agree)	24	85	28%
A (Agree)	18	85	21%
STA (Strongly Agree)	0	85	0%

Table 11

Graphical representation of the Data :

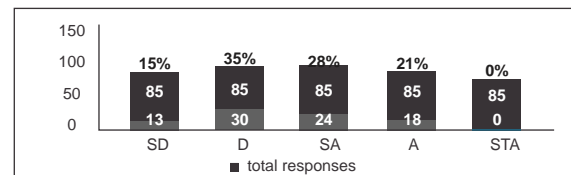


Figure 11

Analysis :

15% of the employees they are not at all able to spend quality time with their families, 35% believe, they don't get as much time to be with their families, 28% say they are able to manage a little between family and work, 21% agree that they are able to take out time for their families and no employee is very much satisfied with the work life balance.

Awareness

5 (b) Awareness of leave balance status.

Responses :

	Responses	Total Responses	Percentage
N	40	85	47%
Y	45	85	53%

Table 12

Graphical representation of the Data :

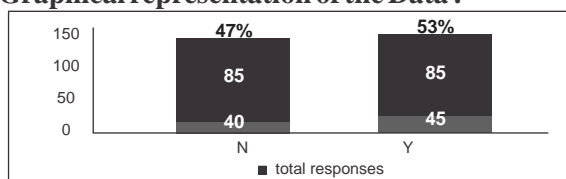


Figure 12

Analysis :

53% employees are aware balance status whereas 47% employees are unaware of the same.

5 (c) Awareness of two new levels/ grade inducted this year in MCSL

Responses :

	Responses	Total Responses	Percentage
N	10	79	13%
Y	69	79	87%

Table 13

Graphical representation of the Data:

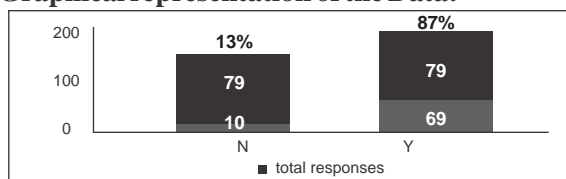


Figure 13

Analysis :

An impressive 87% of the employees are aware of the two new level/ grades inducted at MCSL this year. 13% of the employees are still unaware of the same.

Findings and Recommendations :

Employee Satisfaction Survey containing 38 questions was designed to measure 12 job satisfaction facet scales. During the study of these 12 facets a no. of learning and findings were made, which are tabulated below:

Findings :

S.no.	Facets of satisfaction measurement	Findings
1.	Salary	Moderate level of satisfaction
2.	Entitlements & Reimbursements	Moderate level of satisfaction
3.	HR Approachability	Moderate level of satisfaction
4.	Career and Growth	Moderate level of satisfaction
5.	Work Life Balance	Low level of satisfaction
6.	Awareness	High level of awareness

Recommendations :

During the analysis of survey data a lot of area was found where improvement is needed. These are:

- A good percentage of employees unable to maintain a work life balance. Today's employees have many commitments outside their job, often including responsibility for children, aging parents, chronic health conditions and other issues. The system should be made more flexible when it comes to issuing leaves and transfers.
- From personal comments and also evident from survey data, a lot of employees believe that the local conveyance provided to them is quite low, as compared to the high rise in the price of petrol. A conveyance should be raised to appropriate amount.
- 13% of the employees are not optimistic about their future success with MCSL. . The company should provide adequate advancement opportunities, in order to foster employee satisfaction, implement a career ladder and make sure employees know what they must do to earn a promotion. Should also conduct regular performance reviews to identify employees' strengths and weaknesses, and help them improve in areas that will lead to job advancement. A clear professional development plan not only leads to better employee satisfaction but also gives employees an incentive to stick around.

Limitations :

This research has several limitations that should be addressed :

- Due to time constraints was unable to determine the separate factors of attrition for each region and zone.
- A co-relation could have been found out between various factors responsible for attrition.
- Multiple regression technique could have been used to find out the magnitude of the contribution of different factors to attrition.
- Due to location as well as time constraint the employee satisfaction survey data could only be collected from four zones out of the eight.

- Distortion can occur with any data-gathering technique, all the responses were each sales person's own views, which might vary due to a no. of reasons.

Conclusion :

This study was carried out in order find out the rate of attrition and carry out a detailed analysis, of the rate of attrition at MCSL-UP EAST. It also reflects the various areas of improvement in order to increase the total satisfaction level of the employees at the company, with the help if an employee satisfaction survey.

Attrition is one of the major concerns of the fast developing and rapid changing organization. With an annual attrition rate of 58.1% as of March 2011, for the FY 2010-2011, the major concern at MCSL is to retain the sales manpower. Sales persons of any organization are its most important part, as they are the ones who interact with customers and stake holders, they are in short the face of the organization in the market place. It is important in the today's ever changing and highly unpredictable economy to retain these faces, as they are the makers and destroyers of company relations in the market place. Employee satisfaction is that one facet of organizational behavior which the most stressed upon than any other. As they say, a satisfied employee is a better performer than an unsatisfied one. Job satisfaction leads to higher productivity amongst the employees. An employee satisfaction survey is the best tool to find out the areas to wok upon, in order to maintain a satisfied and highly productive workforce. This study comprises of twelve facets of job satisfaction, which can be considered as parameters to measure overall employee satisfaction. These facets are, Performance Appraisal, Subordinate supervisor relationship, HR Policies, Communication, Training needs, Induction, Salary, Entitlements and reimbursements, HR Approachability, Career and Growth, Work life balance and Awareness.

This study being descriptive in nature tried to cover all the aspects of attrition and employee satisfaction.

A few abbreviations were used throughout the text. These are:

- *MCSL: Magic Master Cellular Services Limited*
- *UP-EAST: Uttar Pradesh East Zone*
- *TSEs: Territory Sales Executives*
- *Sr. TSEs: Senior Territory Sales Executives*

References :

- *Article on Correlates of Objective Performance Among Computer Salespeople: Tenure, Work Activities, and Turnover by Kenneth W. Kerber and James P. Campbell in Journal of Personal Selling & Sales Management, VoL VII (November 1987),*
- *Clark, A.E. (1997). Job satisfaction and gender: why are women so happy at work? Labour Economics, 4, 341–372.*
- *Factors Affecting Employee Attrition: A Multiple Regression Approach The Icfaian Journal of Management Research, Vol. 4 2 VIII, No. 5, 2009.*
- *Relationship between individual and organizational values and employees' job satisfaction by Danuta Diskien 1, Vytautas Goštautas 2 Current Issues of Business and Law, 2010, 5(2)*
- *Judge, T.A., Thoresen, C.J., Bono, J.E., & Patton, G.K. (2001). The job satisfaction – job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 127, 376–407.*
- *Janz, B.D., & Prasarnphanich, P. (2003). Understanding the antecedents of effective knowledge management: The importance of a knowledge-centered culture. Decision Sciences, 34(2), 351–384.*
- *Kaifeng Yang, Kassekert, Antony, “Linking Management Reform with Employee Job satisfaction: Evidence from Federal Agencies. Journal of Public Administration research and theory: April 2010, Vol 20 Issue 2 p413-436*
- *Rucci, A.J., Kirn, S.P., & Quinn, R.T. (1998). The employee-customer-profit chain at sears. Harvard Business Review, 83–97.*
- *Rizwan Saleem ,MS Mohammad Ali Jinnah University, Islamabad, Pakistan, Mohammed*

Ali Jinnah University, "Effect of work motivation on job satisfaction in mobile Telecommunication Service Organizations of Pakistan", *Internal Journal of Business and management*, Volume 5, No 11 Nov 2010.

- Schonberger, R.J. (1990). *Building a Chain of Customers*. New York: Free Press.
- Schulz, M. (2001). *The uncertain relevance of newness: Organisational learning and knowledge flows*. *Academy of Management Journal*, 44(4), 661–681.
- Schiesinger, L.A., & Heskett, J.L. (1991). *Breaking the cycle of failure in services*. *Sloan Management Review*, 17–28.
- Soonhee Kim, "IT employee job satisfaction in the Public Sector", *International Journal of Public Administration* Oct 2009, Vol 32 Issue 12, p 1070-1097, 38 p
- Sheng-Hsun, Yu-Che Wang, "The development and empirical validation of the employee satisfaction Index Model" , *Total Quality Management and Business Excellence*; April 2008, Vol 19 Issue 4, p-353-366
- Slack, Frederick J; Orife, John N; Anderson, Fred P. "Effect of commitment to corporate vision on employee satisfaction with in organization: An empirical study in US" *International Journal of Management*, Dec 2010, vol 27 Issue 3 p 421-436, 16p
- Ybema Jan F.Smulders, Peter G.W, Bongers, Paulein M, "Antecedents and consequences of employee absenteeism: A longitudinal perspective on the role of job satisfaction and burnout, *Europeam Journal of Work and Organizational Psychology*; Feb 2010, Vol 19, Issue 1 p 102-124
- Books:
- *Organization Behavior* by Robbins, Judge and Sanghi, 13th edition
- Allan Bryman & Emma Bell-----*Business Research Methods* (Second Edition)
- Levin & Rubin----*Statistics For Management* (Seventh Edition)
- C.R.Kothari----*Research Methodology*
- Uma Sekaran---*Research Method For Business* (Fourth Edition)

- M.M.Downie & R.W. Heath---*Basic Statistical Methods*(Third Edition)
- V.S.P.Rao-----*Human Resource Management Text and Cases* (Second Edition)

Annexure

Employee Satisfaction Survey Questionnaire

Employee Satisfaction Survey – MCSL

Function – Sales	Sub Function – Prepaid /PCO/ATC/EBU
Zone-	Date -

Salary

1. My salary is credited into my account on the last working day of every month.

a. Strongly Disagree	b. Disagree
c. Somewhat Agree	d. Agree
e. Strongly Agree	
2. My monthly salary is computed accurately.

a. Strongly Disagree	b. Disagree
c. Somewhat Agree	d. Agree
e. Strongly Agree	
3. My queries regarding salary are addressed to my satisfaction.

a. Strongly Disagree	b. Disagree
c. Somewhat Agree	d. Agree
e. Strongly Agree	

Entitlements and Reimbursements

4. My local conveyance and tour reimbursements are given to me on time.

a. Strongly Disagree	b. Disagree
c. Somewhat Agree	d. Agree
e. Strongly Agree	
5. It is easy for me to claim my reimbursements and it got fully paid. Ex. I am getting local conveyance more than Rs. 2500/- if I claim the same.

a. Strongly Disagree	b. Disagree
c. Somewhat Agree	d. Agree
e. Strongly Agree	

6. I receive communication on my benefits entitlement and balance of entitlements.

No Yes

7. It is very easy for me to know the balances of my entitlements.

a. Strongly Disagree b. Disagree
c. Somewhat Agree d. Agree
e. Strongly Agree

Hr Approachability

8. HR approachable/ responds to all my queries on time.

a. Strongly Disagree b. Disagree
c. Somewhat Agree d. Agree
e. Strongly Agree

Career and Growth

9. My work gives me a feeling of personal accomplishment.

a. Strongly Disagree b. Disagree
c. Somewhat Agree d. Agree
e. Strongly Agree

10. I feels optimistic about my future success with MCSL.

a. Strongly Disagree b. Disagree
c. Somewhat Agree d. Agree
e. Strongly Agree

Work Life Balance

11. I am able to spend quality time with my family.

a. Strongly Disagree b. Disagree
c. Somewhat Agree d. Agree
e. Strongly Agree

Awareness

12. I am aware of my leave balance and status.

No Yes

13. I am aware of two new levels/ grade inducted this year in MCSL.

No Yes

Any other suggestions / comment

.....
.....
.....
.....
.....
.....
.....
.....

Antecedents of Managerial stress with reference to their age a study conducted in Information Technology Sector

Dr. Bharati Deshpande

Associate Prof.

Kohinoor Business School, Kurla, Mumbai

bharati.deshpande@kbs.ac.in

Abstract:

The present scenario of Hi-tech economy has brought major changes in the economy. We can see a very positive change but also bring in few issues and worries to the mankind. The present time is a time of 'Survival of the Fittest'. This is across sectors. Globalisation has brought in huge revolution in Information Technology in India. Information technology has helped us to generate revenue, give a good employment but also brought in few worries. The few worries are nothing but Stress. Stress has become the most dangerous risk to business in the 21st century. You find employees in information technology sector with lot of stress due to performance, outbound projects, targets, deadlines and managing work life balance.

This paper attempts to understand the antecedents of stress of managers and to find their relation with reference to their age. The Occupation stress index designed by Dr Srivastava and Dr Singh was used. The present study was conducted on a sample of 500 managers in information technology sector in Mumbai and Bangalore. S.P.S.S was used to analyse the present data.

Introduction :

Stress is likely to become the most dangerous risk to business in the 21st century. Also over the three decades there has been a growing belief in all sector that the experience of stress of managers at work has undesirable consequence for the health and safety of individual and for the health of their organization.

Stress is becoming an increasingly global phenomenon affecting all countries, all professions and all categories of workers, families and society in general. There is evidence that the experience of stress at work is associated with changes in both behaviour and physiological function, which may both be detrimental to employees' health. Stress may contribute to the development of various symptoms of occupational ill health and of physical and psychological disorders. The emerging approach for intervention focuses on a pro-active response to stress, with emphasis on preventive measures and elimination of the causes of stress, rather than on the treatment of its effects. This very complex issue is covered by a broad field of research activities. The Information Technology (IT) is no exception in this respect with an

increasing employment increasing employment employment in recent years. Although general management is a high stress occupation higher due to the conflicting demands of completing a project on time, within budget, to quality, and satisfying stakeholders.

Define Stress

The term stress has been derived from the Latin word "stringer" which means to draw tight. The term was used to refer to hardship, strain, adversity or affliction. Allen, Hitt, and Green (1982) have defined "Occupational stress as disruption in individuals psychological or/and physiological homeostasis that force them to deviate from normal functioning in interaction with their jobs and work environment."

Acute stress and Chronic Stress

Stress is a physical and emotional reaction that everyone experiences as he or she encounters changes in life. These reactions can be positive or negative. Many scientist see stress as a reaction of our body to sudden changes in the environment. Just like animals, people need extra energy to stay and

fight or run away when faced with danger. The body's normal reaction to a somewhat dangerous situation is an increase in heart rate and muscle tension and a higher blood pressure and sweating such physical and emotional reaction help us by increase our concentration and other bodily function in order to prepare for a challenge. After meeting a challenge the body relax as the heart rate, muscle tension and blood pressure return to normal. This gives the body a chance to recover physically and for the person to feel emotionally rewards for overcoming the challenge. This is called good stress or Acute stress.

When situation that causes physical and emotional stress reaction or non stopping or perceived as perceived as non stopping. The body never get a chance to relax. This cause constant tense muscle and a 'Knotted' stomach. This type of situation is called a bad stress or chronic stress.

Stress is an inevitable feature of work and personal life. It is neither inherently bad or destructive. Job stress can occur for everyone in any position in any industry. Stress can affect high level executive, upper and middle manager. The various stress relating problems like coronary heart disease, hypertension, diabetes, gastrointestinal disorders, peptic ulcer, asthma, migraine, alcoholism, drug addiction, depression etc are accountable for poor health. These problems are further affecting organizational performance adversely by contributing to poor productivity, high employee turnover and higher degree of job satisfaction.

The increased stress related costs are fostering the organization to identify the various approaches to study stress at work. The present research will be based on antecedents and consequences of manager's stress in IT sector. This approach views stress as occurring when work characteristics contribute to poor psychological or physical health.

Literature review :

Seyle (1976) used the term stress to describe physiological changes induced by environmental demands. The study of occupational stress has been pursued within a number of occupations, including teaching (Guglielmi and Tatrow,1998), policing (Storch and Panzarella,1996), and managing (Broadbridge 2002). Relatively few studies has been conducted and of these only Gallstedt focus on IT project managers. This reports on research aimed at validating and extending Gallstedt's work by identifying the sources of stress and their outcome that are relevant to IT managers. What are

the stressors faced by IT managers, what are the consequences of them.

MD.W. Pestonjee review person conducted by Torrance(1965) and Petrosko (1983) and speculated on the type of potential stressors a creative person may encounter in an organizational situation. Reviewing one of the earliest notions of the creative process, he noted that the transactional stages of creative process are especially stressful.(stress and coping the Indian experience)

The Yerkes-Dodson law, indicates that stress leads to improved performance up to an optimum point. Beyond the optimum point, further stress and arousal have a detrimental affect on performance. Therefore, healthy amounts of eustress are desirable to improve performance by arousing a person to action. It is in the midrange of the curve that the greater performance benefits from stress are achieved.

Sources of managerial stress have been well documented since the late 1970s. Ivancevich and Matteson (1980) identified four categories of work stressor: Physical environment, individual level(a mixer if climate, structure, job design and task characteristics).Quick and Quick (1984) proposed four categories of stressors: task demands, physical demands and interpersonal demands.Paul E Spector, he mentions the tested three contrasting theories about the sequential process theories about the sequential process of the three dimensions of burnout(i.e exhaustion, Cynicism and professional efficacy) as measured by the Maslach Burnout Inventory- general Survey(MBI-GS). I Shou University Kaohsiung, Taiwan had investigated relationship of work stress and job performance in Hi-tech industry.

Stressors at the individual level have been studied more than any other category. Intrapersonal conflict, Interpersonal relations, Growth issues, Domestic issues is widely examined individual stressor (Mc Grath 1976 Newton and Keenan, 1987).

Research Gap :

As stress is becoming an increasingly global phenomenon affecting all countries, all professions and all categories of workers, families and society in general. Most of the literature either shows the reasons or burnout or stress, or there is a comparative study between countries but not much studies are conducted in Indian IT sector. There is very little work done in IT sector in Indian

context. This paper attempt to study the causes of managerial stress with reference to their age.

Objective :

- To study exactly what stressors are faced by I.T managers
- To find the effect of age on occupational stress

Research Methodology :

The research method followed was primary data was collected by using the Occupational Stress Index. A sample of 500 managers was selected from Mumbai and Bangalore working with Informational Technology. Questionnaire was administered to a Convenient Sample.

Occupational Stress: A well developed and widely used Occupational Stress Index(OSI) in the Indian context (Srivastava and Singh), 1981 was chosen to assess the occupational stress of the sample. The questionnaire is considered of 48 statements with five alternative responses i.e 5for strongly agree,4 for mildly agree,3 agree, 2for disagree and 1 for strongly agree. Total score is considered for the assesment of occupational stress. More the score Higher the stress. Lower the score indicate lower the stress.

Hypothesis :

Ho: There is a no relationship between age and stress

Ho₁: There is a positive relationship between age and stress.

**Table-1 :
Correlation between Age and Stress**

Stressors	Co-relation	Hypothesis
Role overload	-.27	Accepted
Role Ambiguity	-.16	Accepted
Role conflict	-.16	Accepted
Inter Personal Conflict	-.15	Accepted
Job Related Stressor	-.22	Accepted
Powerlessness	-.19	Accepted
Under Participation	-.12	Accepted
Low Status	.07	Rejected

In the present analysis we can interpret that age is independent of age. There is no coorelation between age and stress. Level of stress may vary due to stressors and not based on age.

Descriptive statistic of Age and Stressors :

**Table-2 :
Showing Mean and Standard deviation for 8 sub**

Source	< 25		(A)25-30		(B)30-35		(C)35-40	
	Mean	S.D	Mean	S.D	Mean	S.D		
Role overload	3.09	.666	3.13	.604	2.930	.604	2.858	.584
Role ambiguity	3.571	.404	3.537	.356	3.570	.363	3.559	.351
Role Conflict	3.646	.294	3.611	.262	3.62	0.274	3.644	.290
Inter personnel stressors	3.038	.338	3.069	.344	2.927	.379	2.907	.389
Job related stressors	3.388	.338	3.604	.344	2.927	.379	2.907	.389
Powerlessness	2.731	.625	2.953	.7162	634	.665	2.681	.590
Under participation	6.819	1.391	6.520	1.340	6.644	1.195	6.646	1.226
Low status	6.891	1.391	6.520	1.340	6.644	1.195	6.646	1.226

variables of occupational stress

The result obtained in Table-2 shows that the managers at this age faces less than 25 faces more stress due to role overload, poor peer relation, unprofitability and strenuous working conditions. The middle aged managers do face stress in Role conflict, role overload, role ambiguity, Powerlessness and the adult i.e managers at the age from 25-35 faces less stress compared to the the adult and the senior people. But do face stress than other to in under participation, unreasonable group and political pressure

Hypothesis :

Ho: There is no significant difference between age groups of managers and stress level

Ho₁: There is significant difference between age groups of managers and stress level

		df	F	Sig.
Role overload	Between Groups Within Groups Total	4 507 511	4.707	.001
Role Ambiguity	Between Groups Within Groups Total	4 507 511	.365	.834
Role Conflict	Between Groups Within Groups Total	4 507 511	.445	.776
Interpersonal stressors	Between Groups Within Groups Total	4 507 511	4.936	.001
Job related stressors	Between Groups Within Groups Total	4 507 511	4.936	.001
Powerlessness	Between Groups Within Groups Total	4 507 511	5.471	.000
Under participation	Between Groups Within Groups Total	4 507 511	.979	.419
Low status	Between Groups Within Groups Total	4 507 511	.979	.419

Anova :

Sample says as f value is 4.707 more than significant f value i.e 0.001, we reject the null hypothesis and which means there is a significant difference between age on stress level of managers due to role overload, interpersonal stressors, job stressors, powerlessness and low status. Where in the managers are significant difference between age and stress level of managers due to role ambiguity and role conflict .

Conclusion :

Stress has become pervasive in the modern world though it may vary in degree from individual to individual and also in the same situation and also in the same individual from time to time on his value system and threshold level. Every one these days undergo some or other stress. Thus through this stress index we can say that stress is more at senior management grade as people at the age group 40 and above is such that the managers are at the senior grade and handling to many responsibility. Always have peer pressure profitability worries and strenuous working conditions. At the early age ie at the age of 25 and above stress are more in intrinsic improvement, under participation .

References:

- Cooper and Marshal: *Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health journal of Occupational Psychology*1976
- Dr R. Kumar Bhasker Mr K Vinayak :*Indian Approach to Management of Executive Stress , Personnel Today January-March 2000 pg17-21*
- Jeffery A LePine, Marcie A. Le Pine, and Christine L Jackson University of Florida – '*Challenges and Hindrance Stress: Relationship With Exhaustion Motivation to Learn, and Learning Performance. –Journal of Applied Psychology* 2004, Vol89No5
- John Schaubroeck from Drexel University and Simon S.K. Lam University of Honkong and Jia Lin Xie City of University of Hong Kong "*Collective Efficacy Versus Self Efficacy in Coping Responses to stressors and Control: A Cross- Cultural Study*
- K Chandraiah, S.C.Agrawal, P. Marimuthu and Manoharan :*Occupational stress and Jobsatisfaction Among Managers*
- Keller,R.T *Role conflict and ambiguity: correlates with job satisfaction and values, personnel psychology* 28(1),1975
- Natasja Van Vegchel, Jan De Jonge and Paul A. Landsbergis , '*Occupational stress in (inter) action: the interplay between job demand and Job resources*' in *Journal of Organization Behaviour* 26, 535-5609
- Newton, T. J & Keenen, A *role stress reexamined: An investigation of role stress predictors. Organizational behavior and human decision process* 1987,40 346-348
- Oi-ling Siu Paul Spector, Cary L Cooper, Luo Lu, Shanfa Yu, *Managerial Stress in Greater China: The Direct and moderator Effects of Coping Strategies and Work Locus of Control in Journal Applied Psychology an international review*, 20025 I(4)-
- Reddy, S & Ramamurthy, P.V.: *On the job stress of middle aged and elderly executives. Managerialpsychology*1&2,16-23
- Shou University Kaohsiung, Taiwan, '*Work Stress and job performance in the hi tech industry: a closer view for vocational education. In Journal of World Transactions on Engineering and Technology Education, Vol3. No 1.2004*



Kohinoor
EDUCATION TRUST



Kohinoor Business School

(An institution under Kohinoor Education Trust)

Kohinoor Education Complex, Kohinoor City, Kiroli Road, Off LBS Road, Kurla (W), Mumbai - 400 070.

Tel : 6788 7700 Fax : 6788 7788

E-mail : contact@kbs.ac.in Website : www.kbs.ac.in