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Chief Editor Message

As SUMEDHA Journal of Management Twenty ninth issue, We look forward to the momentous growth of our Journal, increasing in their appeal, readership and relevance to the fast-changing world of Business Management. During these six years journey our journal has been critically evaluated by various institutions with similar line of interest and faculty fraternity. We have been consistently seeking advice from experts to continuously improve the quality of the journal. Our journal has got Impact Factor from Index Copernicus value 5.20, ISRA Journal Factor 2.318, Global Impact factor - 0.787. On behalf of the Management, Editorial Board and Editorial Team, I express my profound gratitude to all our authors, reviewers, readers and patrons for offering their overwhelming support and I anticipate a continued and lively partnership for years to come.

All of us recognize the necessity for change, which results in progress. It gives way to new ideas and perspectives reflecting the current and emerging environment, which builds on the solid foundations of the past.

Last but not least valuable would be your response and suggestions on this issue. Kindly send us your views so that we can keep on upgrading our journal.

Thanking you

Dr. A Kotishwar
Chief Editor

Are Women Better Investors??? **(An Analytical Study)**

– Anurag Shukla*

Abstract

Gender stereotypes abound when it comes to finances. One of the most common misconceptions in India is that women don't understand money matters. This is being debunked by many market experts now. There are many out there who believe women make better stock investors than men.

Women are way superior in controlling the emotions of greed and fear, the most essential ingredient for investment success, managing emotions in the investment process is crucial, and women can do this better than men. Women are disciplined savers and tend to chase goals instead of returns. "Once they start investing, women stick to their plans and regularly set aside the amount for the identified goal, Women's interest in not beating the market but rather "meeting" their own personal goals. So there can be many factors justifying that women can be better investor than man.

Keywords: Investors, Savers, Gender, Emotions

Introduction

After the global financial crisis of 2008 and 2009, Indian financial sector has now emerged stronger. The investments and savings are increasing in terms of volumes and number of investors. As the number of investors is increasing, the most common discussion based on gender biasness again becomes the interest of investors. There are number of studies, which have shown that the financial behaviour of men and women differ significantly.

Traditionally, women have generally been more hesitant when it comes to financial investments. They are more cautious when it comes to money. The new women investment clubs take the fear out of investing for women. Saving is a habit specially embodied to women. Even in the past, when mainly depended on their spouse's income, they used to save to meet emergencies as well as for future activities. In those days, women did not have any awareness about various investment outlets. But as time passed, the scenario had totally changed. Now, the present women, who are equally employed, have knowledge about various aspects of investment and as a result they invest in various investment avenues such as shares, debentures, mutual funds, commodities and bank deposits.

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Employed women have a greater propensity to save and invest because of their independent earning power. They are also motivated by the investment behaviour of their colleagues in their work place. They are supposed to be risk adverse, safety oriented and guided by certainty of returns. With increasing level of knowledge and awareness, Women are slowly participating in the risk investment portfolios and they are becoming analytic in their investment behaviour.

There are several things that male investors can learn from women-and vice versa. Women are good at budgeting. Since time immemorial, they have divided money into different jars or envelopes for various expenses such as food, clothing, education, etc. Indian women are strong budget keepers. This basic nature of financial planning is embedded in the psyche. Women can be said as better investors than men because they are more patient, whereas men are more prone to impulsive decisions. Women put in due diligence before they invest, women tend to be wary of making choices based on hunches.

Even Warren Buffet's investment style has been described as 'women-like' because of its cautious approach. Buffet has famously said that his favourite holding period is forever and once a decision is made, he has stuck with it for the long term. All these can be closely related to the thought process of a woman.

In this paper we are studying the investment behaviour of individuals residing in Kanpur (Industrial capital of Uttar Pradesh), dividing them in the strata of male and female with reference to their investment behaviour mainly in financial markets.

Motivation for Study

Investment behaviours are differing from individual to individual based on the acceptance of return and risk and psychological and behavioural factors. As well as the selection of investment sources also differ from men and women. Because men tend not to want too much detail while women want more information. And men and women differ in their approach to the investment game. This is a general fact that Men usually think about return but the women want balance in risk and return in their investment. In most of the cases the women want to earn stable income. While framing investment strategy women are considered about safety, liquidity, and profitably but men are mostly think about profitability alone. In this manner the investment behaviour is varied from men and women. So the descriptive research is decided to find out that the women are adopting better investment strategy than men or not.

Literature Review

Masters and Meier (1988) found no difference in the risk taking propensity of male and female entrepreneurs.

In India there are very few studies which have presented these gender gaps. Madhusoodanan (1997) suggested that risk tolerance serves as an illusion of control and thus overconfidence

Powell & Ansic (1997) find that men have significantly higher preference for risk than women. Males prefer "riskier" investment strategies in order to achieve the highest gains, while women select "safer" strategies that allow them avoiding the worst possible losses

Women give a lot of priority and importance to the advices given by Financial Advisors (FA) and depend on them for guidance than men. Female investors are more detail oriented; and want to read more and understand financial matters better and they ask more questions than male clients (Worley, 1998).

Jianakoplos & Bernasek (1998) test gender differences in investment behaviour on a large data set drawn from the Survey of Consumer Finances (CFS) 1989. The analysis reveals that single women are relatively more risk averse than single men or married couples.

However there exist some studies exist which denies the existence of any gender gap. For example Schubert et al. (1999) find no influence of gender on financial decisions.

Rajarajan (2003) and Shobhana and Jayalaxmi (2005) bought out the fact that there is a strong association between the demographic factors and the risk tolerance of the investors.

Fellner & Maciejovsky (2007) reveal a systematic correlation between gender and risk attitudes.

Further Fellner & Maciejovsky (2007) find that women prefer less volatile investments and exhibit lower market activity, e.g. they submit fewer offers and engage less often in trades.

Research Methodology

Research Design: Descriptive

Sample Size: 124 (The valid number of responses collected from investors residing in Uttar Pradesh by the questionnaire survey)

Sampling techniques: Judgemental and simple random sampling

Formulation of Hypotheses: Hypotheses are formulated considering no difference' exists in the investment behaviour among Male and Female investors.

Ho: There will be no difference between male and female investors' behaviour with regard to various parameter:

Hypothesis 1:

H1 (Null): There is no Impact of gender on the behaviour for Acceptance of mistakes in financial market

H1 (Alternate): There is Impact of Gender on the behaviour for acceptance of mistakes in financial market

Gender * Acceptance of mistake Crosstabulation

			Acceptance of mistake				Total
			sometimes	occasionally	often	always	
Gender	male	Count	32	0	4	28	64
		% within Gender	50.0%	0.0%	6.2%	43.8%	100.0%
	female	Count	22	8	6	24	60
		% within Gender	36.7%	13.3%	10.0%	40.0%	100.0%
Total		Count	54	8	10	52	124

From above table we can clearly observe that majority of females (40 %) agrees they accept the mistake in financial market

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.221 ^a	3	.156
N of Valid Cases	124		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say, there is no influence of Gender on the behaviour for acceptance of mistakes in financial market.

Hypothesis 2:

H2 (Null): There is no significant influence of gender on Preference to take advice from different sources before investing

H2 (Alternate): There is significant influence of gender on the preference to take advice from different sources before investing.

Gender Vs Take Advice Cross Tabulation

			Take Advice				Total
			sometimes	occasionally	often	always	
Gender	Male	Count	20	0	0	44	64
		% within Gender	31.2%	0.0%	0.0%	68.8%	100.0%
	Female	Count	16	2	12	30	60
		% within Gender	26.7%	3.3%	20.0%	50.0%	100.0%
Total		Count	36	2	12	74	124
		% within Gender	29.0%	1.6%	9.7%	59.7%	100.0%

From above table we can clearly observe that majority of females (50 %) agrees that they prefer to take advice from different sources before investing.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.491 ^a	3	.037
N of Valid Cases	124		

From above Chi Square table we can observe that we reject Null hypothesis. Hence, Alternate hypothesis holds true i.e. there is influence of Gender on the Preference to take advice from different sources before investing.

Hypothesis 3:

H3 (Null): There is no significant influence of gender on the Preference to adopt buy and hold strategy for Long term investment.

H3 (Alternate): There is significant influence of gender on the Preference to adopt buy and hold strategy for Long term investment.

Gender * Long term Investment Cross tabulation

			Long term Investment					Total
			Never	Sometimes	Occasionally	Often	Always	
Gender	Male	Count	0	22	4	2	36	64
		% within Gender	0.0%	34.4%	6.2%	3.1%	56.2%	100.0%
	Female	Count	2	20	14	12	12	60
		% within Gender	3.3%	33.3%	23.3%	20.0%	20.0%	100.0%
Total		Count	2	42	18	14	48	124
		% within Gender	1.6%	33.9%	14.5%	11.3%	38.7%	100.0%

From above table we can clearly observe that majority of females (33%) sometime invest in long term, overall it's a mixed approach regarding the Long term Investment.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.346 ^a	4	.010
N of Valid Cases	124		

From above Chi Square table we can observe that we reject Null hypothesis. Hence, Alternate hypothesis holds true i.e. there is significant influence of gender on the Preference to adopt buy and hold strategy for Long term investment.

Hypothesis 4:

H4 (Null): There is no significant influence of gender on the Confidence about stock picking skills

H4 (Alternate): There is significant influence of gender on the Confidence about stock picking skills

Gender * Confidence on stock picking skills Cross tabulation

			Confidence on stock picking skills					Total
			Never	Sometimes	Occasionally	Often	Always	
Gender	Male	Count	2	26	8	16	12	64
		% within Gender	3.1%	40.6%	12.5%	25.0%	18.8%	100.0%
	Female	Count	2	24	12	18	4	60
		% within Gender	3.3%	40.0%	20.0%	30.0%	6.7%	100.0%
Total		Count	4	50	20	34	16	124
		% within Gender	3.2%	40.3%	16.1%	27.4%	12.9%	100.0%

From above table we can clearly observe that majority of males (18.8%) always feel confident regarding stock picking skills, similar kind of response can be observed in the male who often feel confident about the stock picking skills

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.437 ^a	4	.656
N of Valid Cases	124		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say, there is significant influence of gender on the Confidence about stock picking skills.

Hypothesis 5:

H5 (Null): There is no significant relationship between gender and Investment in stocks after intensive research

H5 (Alternate): There is significant relationship between gender and Investment in stocks after intensive research

Gender * Invest after intensive research Cross tabulation

			Invest after intensive research					Total
			Never	Sometimes	Occasionally	Often	Always	
Gender	Male	Count	2	18	6	6	32	64
		% within Gender	3.1%	28.1%	9.4%	9.4%	50.0%	100.0%
	Female	Count	4	10	2	6	36	58
		% within Gender	6.9%	17.2%	3.4%	10.3%	62.1%	100.0%
Total		Count	6	28	8	12	68	122
		% within Gender	4.9%	23.0%	6.6%	9.8%	55.7%	100.0%

From above table we can clearly observe that majority of females (62.1 %) agrees that they invest after extensive research

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.452 ^a	4	.653
N of Valid Cases	122		

From above table we can clearly observe that majority of females (62.1 %) agrees that they invest after extensive research

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say there is no significant relationship between gender and Investment in stocks after intensive research

Hypothesis 6:

H6 (Null): There is no significant relationship between Gender and ability to handle stress situation in stock market with patience

H6 (Alternate): There is significant relationship between Gender and ability to handle stress situation in stock market with patience

Gender * patience in stress situation Cross tabulation

			Patience in Stress Situation					Total
			Never	Sometimes	Occasionally	Often	Always	
Gender	Male	Count	6	34	0	6	18	64
		% within Gender	9.4%	53.1%	0.0%	9.4%	28.1%	100.0%
	Female	Count	2	26	4	2	26	60
		% within Gender	3.3%	43.3%	6.7%	3.3%	43.3%	100.0%
Total		Count	8	60	4	8	44	124
		% within Gender	6.5%	48.4%	3.2%	6.5%	35.5%	100.0%

From, above table we can clearly observe that majority of females (43.3 %) agrees and same percentage of feel sometime that they able to manage the stress situation with the patience.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.202 ^a	4	.267
N of Valid Cases	124		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say there is no significant relationship between Gender and ability to handle stress situation in stock market with patience

Hypothesis 7:

H7 (Null): There is no significant influence of gender on Feelings of discipline in market

H7 (Alternate): There is significant influence of gender on Feelings of discipline in market

Gender * Disciplined investors Cross tabulation

			Disciplined investors			Total
			Yes	No	No Idea	
Gender	Male	Count	20	4	10	34
		% within Gender	58.8%	11.8%	29.4%	100.0%
	Female	Count	34	8	18	60
		% within Gender	56.7%	13.3%	30.0%	100.0%
Total		Count	54	12	28	94
		% within Gender	57.4%	12.8%	29.8%	100.0%

From above table we can clearly observe that majority of females (56.7 %) feels they are disciplined investor.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.031 ^a	2	.985
N of Valid Cases	94		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say, there is no significant influence of gender on feelings of discipline investor.

Hypothesis 8:

H8 (Null): There is no significant influence of gender on tendency to chase goals instead of returns.

H8 (Alternate): There is significant influence of gender on tendency to chase goals instead of returns.

Gender * Chase Goals Cross tabulation

			Chase Goals			Total
			Yes	No	No Idea	
Gender	Male	Count	22	8	6	36
		% within Gender	61.1%	22.2%	16.7%	100.0%
	Female	Count	18	22	20	60
		% within Gender	30.0%	36.7%	33.3%	100.0%
Total		Count	40	30	26	96
		% within Gender	41.7%	31.2%	27.1%	100.0%

From above table we can clearly observe that majority of females (36.7 %) feels they don't have tendency to chase goals instead of return, but there is mix approach in responses.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.518 ^a	2	.104
N of Valid Cases	96		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say, there is no significant influence of gender on tendency to chase goals instead of returns.

Hypothesis 9:

H9 (Null): There is no significant relationship between gender and tendency to frequently changing the portfolio.

H9 (Alternate): There is significant relationship between gender and tendency to frequently changing the portfolio

Gender * change portfolio frequently Cross tabulation

			Change Portfolio Frequently			Total
			Yes	No	Noidea	
Gender	Male	Count	6	22	8	36
		% within Gender	16.7%	61.1%	22.2%	100.0%
	Female	Count	12	18	30	60
		% within Gender	20.0%	30.0%	50.0%	100.0%
Total		Count	18	40	38	96
		% within Gender	18.8%	41.7%	39.6%	100.0%

From above table we can clearly observe that majority of females (50%) are not sure about their tendency to frequently change the portfolio.

Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.873 ^a	2	.087
N of Valid Cases	96		

From above Chi Square table we can observe that we fail to reject Null hypothesis hence, we can say, there is no significant relationship between gender and tendency to frequently changing the portfolio.

Managerial Implications

This research investigates the behavioural patterns of male and female investors in Uttar Pradesh and tries to understand how these patterns guide investment decision. This research offers many useful insights for students, instructors, academicians concerned with financial markets. It facilitates financial advisors to become more effective by understanding their clients psychology. It aids them in developing behaviourally modified portfolio, which best suits their clients' predisposition

Conclusion

In hypothesis 2,3 and 4 it can be concluded that there is influence of Gender on the preference to take advice from different sources before investing, preference to adopt buy and hold strategy for long term investment and confidence on stock picking skills. In other hypothesis we cannot relate gender with other investors' behavioural factors. Results of some hypothesis support that female investors are better like females are not overconfident about their stock picking skills, they generally invest in financial market after extensive research and they are able to manage stress situation efficiently during investment in stock market and some cases data supports male as better investors.

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High Performance Work Practices of Select Apparel Manufacturing and Retail Companies in Bangalore

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Abstract

Purpose- Aim was to measure high performance work practices of apparel manufacturing and retail companies.

Design/methodology/approach- Data was collected from 150 employees of apparel companies in Bangalore through an experimental survey. The data was run through factor analysis.

Findings- The results were in the expected direction and fulfilled the research aims of the current study. During factor analysis, 5 major factors emerged with high factor loadings from 0.40 to 0.7. High factor loadings were indicative of presence of high performance work practices levels.

Practical implications- The company can continue with good practices followed which makes it a good place to work for young employees and practice good leadership to motivate.

Originality/value - This paper uses AMO theory of to explain high performance work practices construct in apparel companies in Bangalore which is a novelty of the paper.

Keywords: HR practices, Monotony, Motivation, RMG sector, Productivity Paper type - Research type

Introduction

Before 2005 apparel companies in India had quota which meant even if the quality of the product was bad, there was huge delay in delivery, the clothing companies had to procure a certain percentage of garments from Indian companies. After 2005, when quotas were abolished as India was a signatory to the WTO, the apparel companies had to face world competition based on quality, cost and delivery. Some Indian companies which flourished before 2005 shut shop with increasing competition from Bangladesh, China etc. who rapidly increased the share in the export market of readymade garments (RMG). With more malls coming up, setting up of BPOs and call centers, the youngsters started having highly disposable income which they used to spend on clothes and accessories, a huge demand for readymade garments was witnessed.

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Some fledgling companies who faced falling exports orders focused on the Indian retail sector which had started to expand to make cloths for local brands. Apart from Indian brands many foreign brands had tie-up with local garment manufacturer to produce for local Indian market . Foreign brands like Tommy Hilfiger, Calvin Klein, UCB started setting up their retail shops which further increased the competition in term of quality, technology, customer service for garment companies. With global sourcing of apparel being the increasing norm, few big players in garment industry like Raymonds, Madura, Laguna clothing with deep pockets cater to these foreign brands. The rest of the retail sector is catered by the largely unorganized sector where proper HR policies are not there, social compliances are not adhered to, underpaid workers work for long hours in extremely bad working conditions.

High work performance practices is the answer for apparel manufacturers which is the need of the hour for every company as it gives a competitive advantage in terms of cost, standardizes procedures, retains talent.

Why is high performance work practices needed for organization

The garment industry is facing increasing pressure due to decreased margins, huge attrition of workers to other industries. With many automotive spare parts, electrical companies, semi-conductor companies being setup in and around Bangalore, the workers from garment industries are shifting to these industries which have less punishing workload, better wages, proper hygienic working conditions. Since the garment industry is labour intensive, huge migration of workers is causing small units to shut shop due to lack of labour. Since the owner does not have much capital to automate processes he is either closing shop or changing to other business which does not need too much labour. The biggest advantage of garment industry was its cheap labour but rising living costs in Bangalore is forcing workers to change track.

These HR practices although require a huge amount of investment from the company, the returns are huge in the long term. Not only does it help a company in building a brand value, it helps to attract and retain good talent, it makes continuous training and learning a compulsory feature for facing the continuously changing work place scenarios.

Significance of HR practices area

With the growing importance of Indian fashion industry in the world, the rmg and retail sector is witnessing a boom. With Indian consumers become more fashion conscious and ready to spend money on clothes, the garment sector will be undergoing lots of changes. The order quantities will lessen, variety will increase, skill levels needed shall increase. The labour shortages may involve more technological upgradations done by big players while big brands will look into social compliances of factories before giving orders to vendors. This in turn will focus on sustainable HR practices in the rmg and apparel retail sector .

Few studies like Mittar,S.et.al (2014) has documented few HR practices being followed in some companies in Delhi.Lake,Henrietta,2007 has discussed about two garment factories. A lot has been covered about the HR practices of Bangladesh. Not much has been covered in the literature review done till date on HR practices in garments industry in Bangalore. Hence this empirical study shall add to the existing body of literature of HR practices in rmg and apparel retail sector.

HPWPs has intended to increase employees productivity by maximizing their competencies, motivation, commitment, communication, involvement and flexibility.

Research Objectives

To measure the level of high performance work practices in apparel sector which includes apparel manufacturing and apparel retail sector.

(D) Review of Literature

In the academic literature, a number of definitions have been provided for the term high work performance practices.

The concept of HPWPs was invented by Huselid, (2010), referred to as a set of human resource practices that are seen as a potential source of competitive advantage for organizations.

Huselid(1995) mentioned in one of his studies that the personnel selection, performance appraisal incentive attitude assessment compensation, job design, grievance procedures, information sharing,labour management participation recruitment efforts, employee training, and promotion criteria are the major HRM practices which prevail in an organisation.

High performance work systems has been defined by Bohlander et. al. (2004) as "a specific combination of HR practices,work structures and processes that maximizes employee knowledge,skills,commitment and flexibility".

Theoretical Underpinning for HR practices- Universalistic Perspective

Every company has some objectives to be achieved for which it takes certain steps and activities to achieve it. These steps are called broadly strategies. Apart from land and capital, human resources are also one big factor of production which can help the organization in achieving its objectives(Becker & Huselid,2006).

Earlier individual HR practices where considered and seen how it impacted the financial performance,turnover etc. But nowadays a multiple HR practices are clubbed together as bundles. Hence HR practices are term as bundles of best practices which can be implemented together at one go to achieve long term organizational strategy. And HR practices which are more aligned with its longterm company strategies enjoy better performance than companies whose practices are not aligned.

The aim of bundling is to achieve high performance through coherence, which is one of the four 'meanings' of strategic HRM defined by Hendry and Pettigrew (1986).

Delery and Doty (1996) has advocated the universalistic perspective of HR practices. Which are best practices to be implemented by all companies to achieve its objectives. There is a universal relationship between individual 'best' practices and firm performance.

A number of lists of 'best practices' have been produced, the best known of which was produced by Pfeffer (1998a), namely:

1. Employment security;
2. Selective hiring;
3. Self-managed teams;
4. High compensation contingent on performance;
5. Training to provide a skilled and motivated workforce;
- 34 Human Resource Management
6. Reduction of status differentials;
7. Sharing information.

The seven HR practices identified by Delery and Doty (1996) are internal career opportunities, formal training systems, appraisal measures, profit sharing, employment security, voice mechanisms and job definition.

The organization can hire from inside or outside the company. Some formal training can be given to employee in line with its strategic goals. Appraisals can be based on behavior or results. Behaviour based appraisals are based on results of employee behavior to perform the job effectively while result oriented is based on results of those behaviours. More profits means more bonus to employees. Certain jobs are more secure than others hence regular employees are more secure and will work more hard than contract worker due to motivation levels. Grievance systems if they are very good employees will remain the organization and improve retention levels. And job clarity assure an employee of his roles and responsibilities and he does not extend beyond his sphere. Hence all these strategic HR practices will help in getting the desired financial performance and turnover.

The model used to explain HPWP is AMO model which states that (Ability, motivation, opportunity) is :

Ability refers to the set of practices that ensure employees are equipped with the skills needed to undertake their jobs. Ability of a person or prospective employee is tested through different series of selection tests. Then it can be enhanced through different trainings (Appelbaum, et al., 2000).

Motivation both intrinsic and extrinsic is the reason for employees actions which can be controlled through different incentives. The HPWPs to motivate employees could be in the form of pay for performance, adequate job security, work life balance opportunities and information sharing with the employees.

Opportunity to participate refers to involvement in the decision-making process of the firm (Appelbaum, et al., 2000). Nowadays employees voice needs to be heard or they need to be involved in decisionmaking process to feel.

Methodology

Research Design

The most common method of generating primary data is through survey(Zikmund 1999).

A detailed questionnaire is designed keeping in view the objectives of the study and administered among samplerspondents. The questionnaire has two sections, with five point Likert rating scale, ranging, 1=strongly disagree,2=disagree, 3=can't say, 4=agree, 5=strongly agree.

The questionnaire consisting of 28 questions was taken from the scale developed by Gisela demo / Elaine Rabelo Neiva/ Lara Nunes / KesiaRozzetta, (2012).

Section A: Personal information of respondents was sought. It constitutes age group, experience, gender, of therespondents.

Section B: This section had, questions were designed about different HR practices. Secondly Semi structured interviews are to be conducted with store managers and department heads to understand the leadership given to the team members and employees at large.

Sampling Frame

Sampling Unit - Employees of eight apparel manufacturing and retail sector.

Sample Size:Samples of **150 responses** was included for this study although questions were sent to 337 respondents. Hence **response** rate was **44%**.All the employees of the company was sent an online questionnaire through googledocs. In some cases, hard copies were distributed.

Sampling Method: Simple random sampling method was adopted. It is a probability sampling technique. Respondentsconsidered for data collection were at various positions at senior, middle and at entry level working eightapparel manufacturing and apparel retail companies having operations in Bangalore.

A personal visit to all the eight companies located in different parts of the city was made by the researcher to meet the HR managers or contact through email and telephone was done to explain the idea behind the survey. Once the permission was granted,emails and phone calls to select department heads and operational heads were also done to ensure maximum participation.

Data Analysis

Tools used for analysis Data Analysis was conducted using (Statistical Package for Social Science) Version 19.0 .The collected data is coded, tabulated and analyzed with the help of SPSS version 19.0 using Kaiser Meyer Olkin sampling adequacy and factor analysis with varimax rotation.

Gender: Table 1.1:showing the frequency of gender

Gender of respondents	Numbers	(%)
Male	95	63%
Female	55	37%
Total	150	100%

Experience

Table 1.2:showing the frequency of experience in organizations

Experience in organizations	0-5 years	5-10yrs years	10-15 years	15-20 years	20 yrs & above	Total
Number	61	57	20	4	8	150
(%)	41	38	13	3	5	100%

Table 1.3: showing the frequency of age

Age	22-26 years	27-32 years	33-38 years	39-44 years	45-50 years	51yrs & above	Total
Number	35	67	29	11	5	3	150
(%)	23	45	20	7	3	2	100%

Table 1.4:showing the Descriptive statistics

	Mean	Std. Deviation
HP1) Individuals in this job are allowed to make decisions.	3.76	0.8875
HP2) Supervisors keep open communications with employee in this job.	3.707	0.9163
HP3) Employees are provided the opportunity to suggest improvements.	3.727	0.8346
HP4) Employees in this job are often asked by their supervisor to participate in decisions.	3.893	0.9841
HP5) Employees are exposed to self directed work teams in performing major part of their role.	3.792	0.7735
HP6) Flexibility is given to employees to perform their work.	3.887	0.9867
HP7) Employees have few opportunities for upward mobility.	3.313	0.9059
HP8) Employees in customer contact jobs who desire promotion have more than one potential position they could be promoted to.	3.34	0.8096
HP9) Promotion in this organization is based on seniority.	3.187	1.1075
HP10) Employees do not have any future in this organization.	2.773	1.2857

HP11) Employees have clear career paths in this organization.	3.147	1.1837
HP12) Extensive training programs are provided for individuals in customer contact or frontline jobs.	3.44	0.9657
HP13) There are formal training programs to teach new hires the skills they need to perform their job.	3.193	1.0278
HP14) Employees in customer contact jobs will normally go through training programs frequently.	3.287	0.8849
HP15) Formal training programs are offered to employees in order to increase their promo ability in this organization.	3.027	1.0424
HP16) Long term employee potential is emphasized.	3.52	0.9175
HP17) Considerable importance is placed on the staffing process.	3.533	0.9171
HP18) Very extensive efforts are made in selection.	3.46	0.9242
HP19) Great effort is taken to select the right person.	3.713	1.0889
HP20) The duties in this job are clearly defined.	3.633	1.0325
HP21) This job has an up to date description.	3.58	0.9917
HP22) The job description for a position accurately describes all of the duties performed by individual employees.	3.513	0.9465
HP23) Performance is more often measured with objective quantifiable results.	3.58	0.8919
HP24) Employees appraisals emphasize long term and group based achievement.	3.6	1.0034
HP25) Employees in this job can be expected to stay with this organization for as long as they wish.	3.72	1.0563
HP26) Job security is almost guaranteed to employees in this job.	3.28	1.0435
HP27) Individuals in this job receive bonus based on the profit of the organization.	3.44	1.1202
HP28) Individual /group in his/their job receive bonus.	3.141	1.1913
Valid N (listwise)		

Table 1.5: showing Reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
.878	28

Factor analysis was employed to confirm the major parameters defining the whole questionnaire. It was used as a data reduction technique to reduce the number of significant parameters or in other words to remove redundant variables from the data files.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in variables that might be caused by underlying factors. KMO measures sampling adequacy which should be greater than 0.5 for a satisfactory analysis to proceed. High values 0.747 indicate that a factor analysis is useful with data.

Bartlett's test of sphericity tests the null hypothesis that correlation matrix is an identity matrix, which would indicate that variables are unrelated and therefore unsuitable for structure detection. Value less than .05 reject the null hypothesis and suggest that all items are perfectly correlated with each other.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	1082.081
	df	171
	Sig.	.000

Values	Factor1	Factor2	Factor3	Factor4	Factor5
HP 19) Great effort is taken to select the right person.	0.798				
HP 20) The duties in this job are clearly defined.	0.748				
HP 21) This job has an up to date description.	0.744				
HP 22) The job description for a position accurately describes all of the duties performed by individual employees.	0.673				
	2.963				
HP 1) Individuals in this job are allowed to make decisions.		0.731			
HP 2) Supervisors keep open communications with employee in this job.		0.7			
HP 4) Employees in this job are often asked by their supervisor to participate in decisions.		0.663			
HP 5) Employees are exposed to self directed work teams in performing major part of their role.		0.679			
HP 6) Flexibility is given to employees to perform their work.		0.735			
		3.508			
HP 11) Employees have clear career paths in this organization.			0.648		
HP 13) There are formal training programs to teach new hires the skills they need to perform their job.			0.809		
HP 14) Employees in customer contact jobs will normally go through training programs frequently.			0.721		

HP 15) Formal training programs are offered to employees in order to increase their promo ability in this organization.			0.768		
HP 18) Very extensive efforts are made in selection.			0.529		
			3.475		
HP9) Promotion in this organization is based on seniority.				0.781	
HP 24) Employees appraisals emphasize long term and group based achievement.				0.764	
				1.545	
HP 7) Employees have few opportunities for upward mobility.					0.638
HP 27) Individuals in this job receive bonus based on the profit of the organization.					0.619
HP 28) Individual /group in his/their job receive bonus.					0.764
					2.021
EIGEN VALUE	5.179	2.514	1.61	1.388	1.238
% OF VARIANCE	27.256	13.231	8.474	7.303	6.513
% OF CUMULATIVE VARIANCE	27.256	40.487	48.961	56.264	62.777

Confirmatory factor analysis, out of the 28 factors selected for measuring HPWP, five were found to be having Eigen values greater than 1. Total variance of 62.77 % of the data is represented by these 5 factors. The component matrix gives the factor loading loadings above '0.6' are considered high and below '0.5' are considered low. Rotated component matrix suppresses all loadings lesser than 0.5.

Factor loadings were identified using rotated component matrix.

Interpreting and renaming the extracted factors in PCA.

Factor 1 had been extracted based on 4 factors. Those were based on the high to low factor loading --"right person"(factor loading = 0.798)," clearly defined"(factor loading =0.748),

"up to date description"(factor loading = 0.744)," accurately describes" (factor loading = 0.673). From the communality values, It can be said that factor solution accounted for 77.5% of variability in efforts for right fit, 67.7% of clear roles, 78.8 % of updated description, 69.3% of accurate description.**Factor 1,thus was renamed as "Proper selection,clearly defined roles".**

Factor 2 based on high to low factor loading, consisted of "Flexibility "(factor loading=0.735), " autonomy"(factor loading =0.731)," open communications"(factor loading=0.70),"self directed work teams"(factor loading=0.679)," participate in decisions"(factor loading=0.663). From the communality values,it can be said that factor solution accounted for 64.3% of job flexibility, 73% of autonomy, 62%

of open communication, 70.4% of involved in decision making, 61.7% of selfdirected work team. **Factor 2, thus was renamed as "Job autonomy and decisionmaking".**

Factor 3 based on high to low factor loading, consisted of "formal training"(factor loading=0.809)," increase promotability"(factor loading=0.768),"service jobs more training "(factor loading=0.721).From the communality values, it can be said that factor solution accounted for 67.2% of formal training programs,61.8% to increase promotability , 67.6% of customer contact job have more training ,62.5% have clear career paths, 71.8% is related to efforts for right selection.**Factor 3,thus was renamed as "Frequent training".**

Factor 4 based on high to low factor loading, consisted of "seniority "(factor loading=0.781)," group based achievement."(factor loading=0.764).From the communality values, it can be said that factor solution accounted for 53.8% of seniority based promotions ,66.3% of group achievement.**Factor 4,thus was renamed as "Seniority focus and group performance".**

Factor 5 based on high to low factor loading, consisted of "bonus."(factor loading=0.764)," less upward mobility"(factor loading=0.638),"individual bonus "(factor loading=0.619).From the communality values, it can be said that factor solution accounted for 74.10% of individual bonus ,51.2% of less upward mobility, 55.20% of bonus based on company profit.**Factor 5,thus was renamed as "Performance bonus".**

Assessing statistical significance of findings of PCA. Findings revealed that range of factors loadings varied from 0.42 to 0.79 which were found significant with N=150 (Hair et.al. 2011,p.152.

E. Discussion and conclusions

As per the literature, frequent training, clear cut job roles, performance bonus, job autonomy and decision making goes a long way in enhancing satisfaction in the workplace. Our empirical study taking apparel manufacturer as an example has affirmed it.

Garment industry is a process based industry which has been segregated into major functions like cutting, sewing and finishing.Since the output of one activity is the input of other activity delay in one section causes delay in other section causing lots of blamegame and non accountability. With a largely uneducated workforce doing the actual execution with few educated just monitoring the whole process, these things are commonplace. Hence proper selection of right candidate with right qualification and work experience will improve accountability.When roles are clearly defined a person when his responsibility starts and finishes a person has clear idea of the work to be done. Manytime roles do overlap or there is a grey area when one person work area starts and others finishing causing clashes. With clear demarcation of duties and responsibilities more congenial work environment is promoted.

With more and more job autonomy given and a free hand in taking decision at different levels employees will be more motivated to do his mechanical work day in and dayout instead of getting frustrated and demoralized and eventually quitting the job.

With small order quantities, varied styles, lots of inspection before and after production of garment and different compliances rules of different customers frequent training is required to service the customers and continuously gain good reputation for being a dependent apparel manufacturer.

To motivate the team for the work done, appreciation both monetary and nonmonetary incentives is being given by many industries to retain talent who have lots of alternative process based industries other than garment industries to work in. Hence motivating the employees with these good practices is the need for the industry. To consider the seniority of a person while giving roles and designation will in a long way help the company in increasing loyalty of the employees.

Some industries have also constituted performance bonus based on targets achieved by the production staff, or customers retained by merchandisers or orders by the sales staff to earn over and above the regular salaries earned to motivate the hard working staff to continue their hardwork.

The bundles of HPWP followed by different industries help in retaining talent, improving productivity and reducing turnover.

Limitations of the Study

Respondents are limited only to Bangalore city, Karnataka due to limitations of time. This study is confined only to employees of only eight companies. It is assumed that the respondents have provided genuine inputs and reflect true experience. Responses were taken only from those who agreed to give their valuable inputs.

More number of companies can be canvassed to generalize the findings of this research.

Scope of Future Research

The study can also be done geographically across different Indian cities where there is concentration of apparel manufacturing and retail sector.

The study conducted can be extended to different age groups to see the level satisfaction with various HR practices. The study was conducted only in one sector but other sectors can also be studied and comparative studies can also be done across different verticals like pharmaceuticals, IT etc. for better representativeness .

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Total Quality Management Practices and Organizational Performance - An MBNQA Model Based Study of Two Hospitals

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– Syeda Amtul Mahaboob

Abstract

Delivering services with quality and to be customer oriented is a major concern for the hospital industry today. The new buzz word for the hospitals today is 'customer centric'. When it comes to quality management for the hospitals, what comes to mind is the total quality management. Almost all the corporate hospitals today maintain the quality department. Although TQM has been adopted by the hospitals in the western countries in the late twentieth century, its adoption in India is quite late. Practicing TQM not only improves the quality of services delivered, but also increases the profits. In view of the above the present paper tries to present a study of two hospitals in Hyderabad where TQM practices are being followed. MBNQA (Malcolm Baldrige National Quality Award) model has been adopted to identify the major TQM practices. The paper shows a relationship between the TQM practices and organizational performance of the two corporate hospitals in the city of Hyderabad where TQM practices are being followed and a quality control department is maintained to look after such practices.

Keywords: Total quality management, MBNQA, customer oriented, organizational performances

Introduction

The Indian healthcare infrastructure is not able to keep pace with the demands of growing population. An increasing number of people choose private hospitals over the government hospitals due to availability of specialist doctors, good diagnostic services and drugs, thereby mounting the expenses. Access to public healthcare facilities is limited by dysfunctional physical infrastructure, poor health financing and lack of adequate human workforce (AHPI Healthcare report 2015).

The rising Indian middle class along with its increasing purchasing power and willingness to pay for quality health care has led to the emergence of quality in healthcare, resulting into high quality corporate hospitals seeking accreditation (Acharyulu and VenkatRamana 2012). The private healthcare sector is expanding at a fast pace. During 1990's , it grew at a compound annual rate of 16 percent .The total value of the sector currently is projected to be more than \$34 billion which accounts for around 6 percent of India's GDP.(Acharyulu and VenkatRamana 2012).

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Quality enters into every aspect of a hospital from the time a patient is admitted until he is discharged. It includes the emergency room, ambulance service, admissions, patient control, patient room, patient's surroundings, food, medicines, monitoring and factors such as personal attention, cleanliness, security, nursing performance, doctor's care and housekeeping (Mohanty and Lakhe 2006). Many researchers are of the view that maintaining quality service leads to good organizational performance (Jain and Gupta 2004). One of the tools implemented in hospitals today to achieve quality is the total quality management (TQM).

"Total quality management is defined as an approach to do business that attempts to maximize an organization's competitiveness through the continual improvement of the quality of its products, services, people, processes and environments". (David L. Goetch, Stanley B. Davis 2010).

Mohanty(2011) identified a number of factors that can influence the implementation of total quality management in healthcare systems which may be classified as organizational factors, interpersonal factors, environmental factors, facilities and economic factors.

Mohanty and Lakhe (2011) identified four primary reasons for adopting total quality management in hospitals which are as follows: 1. To increase the market share and profitability. 2. To improve customer satisfaction. 3. To improve quality of work and reduce costs and 4. To improve the employee relations.

TQM adoption and implementation requires changes in structure, system, and process as a necessary prerequisite to achieve improved business performance and changes in employee behavior (Yang, 2003). It is thus important to identify the critical factors that influence the success of TQM adoption and implementation in service organizations (Taylor and Wright, 2003). Saraph et al. (1989) defined the critical success factors for TQM as "critical areas of managerial planning and action that must be practiced to achieve effective quality management in business unit". There are many research studies which are conducted to identify the critical success factors for total quality management in hospitals. However many hospitals today use quality award models such as MBNQA (Malcolm Baldrige National Quality Award) and EFQM (European Foundation For Quality Management) Excellence model criteria for identifying the critical success factors for TQM implementation and performance evaluation of their business. (Woon, 2000; Rahman, 2001; Prajogo and Sohal, 2004).

The MBNQA has been accepted widely as a service excellence standard developed by NIST (National Institute Of Standards and Technology measured along the lines of leadership, strategic planning, customer and market focus, informational analysis, human resources, process management like those in education and healthcare institutions (Chow and Goh, 2000). The MBNQA criteria provide a system perspective to achieve the organizational performance excellence and to overcome the issues of healthcare quality measures (D'souza and Sequeira 2010).

The present study is done using MBNQA criteria to identify the critical success factors in hospitals and they are linked to organizational performance to study the effect of these factors on organizational performance.



Source: *Total Quality Management* by K. Shridhara Bhat (Himalaya Publishing House)

The above figure shows the Baldrige framework and the eight critical success factors identified for TQM in hospitals using MBQNA criteria are as follows 1. Leadership 2. Strategic Planning 3. Customer Focus 4. Organizational Profile (which includes service culture and servicescapes) 5. Workforce Focus 6. Process Management 7. Organizational Performance

The present study collects the perceptions of the hospital staff in two corporate hospitals of Hyderabad on these factors and the organizational performance and the relationship of these factors on organizational performance is studied.

Research Objective

1. To study the effect of TQM practices on organizational performance in two corporate hospitals of Hyderabad.

Research Question

Is there any relationship between the TQM practices adopted in the hospitals and the organizational performance?

Review of Literature

In most of the developing countries like India, total quality management is a recent phenomenon (Rao et al., 1993). TQM may be defined as managing the entire organization so that it excels in all dimensions of products and services that are important to the customer (Chase and Aquilano 1992). While the total quality management philosophy has its roots in manufacturing industry, it is based on

many techniques, which could easily be transferred to the healthcare setting (Usha Manjunath, Bhimaraya A. Metri and Shalini Ramachandran 2007).

Health services include a wide variety of quality aspects, all of which are important. The buyer is the patient who wants acceptable quality services, which must conform to predetermined norms. Acceptable quality services not only include the direct medical services but also indirect operations such as administration and purchasing, whose costs are reflected in what the buyer pays (Mohanty and Lakhe 2011).

The healthcare industry being service driven, many of the current performance management tools and methods which work well in other industries may not be directly applicable to the healthcare industry. An appropriate model for managing performance in the healthcare industry should be flexible, adaptable and responsive to changes in the healthcare industry (D'Souza and Sequeira 2011).

The MBNQA is widely used as a model for improvement and currently there are newly established criteria for performance excellence that have been specially tailored for healthcare providers (Usha Manjunath, Bhimaraya A. Metri and Shalini Ramachandran 2007). MBNQA has been recognized as a valuable award demonstrating service quality excellence in the health-care industry since 1999. The 2011 MBNQA recipients were selected from a pool of 69 applicant organizations. Among the 69 applications filed, 40 were from the health-care industry, 6 of the 11 site visits were conducted in hospitals, and 3 of the eventual four awards were presented to hospitals (NIST 2012).

MBNQA is updated timely and contains leadership, strategic planning, customers, workforce, operations, measurement, analysis and knowledge management and business results (NIST 2017). Many researchers in the west highlighted the importance of MBNQA in healthcare to improve the organizational performance (DeJong, 2009; Goldstein & Schweikhart, 2002; West 2001; Meyer & Collier, 2001; Minkman et al., 2007; van Matre & Koch, 2009).

Many Indian researchers also made use of the MBNQA model to evaluate the performance of hospitals in India (R. Rohini 2006; Manjunath Usha 2007; Sunil C. D'Souza, A.H. Sequeira 2011; Ali Morad Heidari Gorji and Jamal A Farooque 2011).

D'souza and Sequeira (2011) also performed a research to study the relationships between the variables in MBNQA model and the organizational performance.

Manjunath Usha (2007) performed a case study of a multispeciality hospital in a non metro city of South India. She utilized MBNQA model to study the TQM practices implementation and evaluate the performance of the hospital. Responses were collected from senior and middle level managers.

The above review of literature proves that TQM practices have been adopted successfully not only in the west healthcare but also in the Indian hospitals (Syeda Amtul Mahaboob 2017). This made the author to perform a research studying the relationship between such practices and organizational performance in two hospitals in the city of Hyderabad.

Research Methodology

Two private corporate hospitals in the city of Hyderabad were chosen to study the effect of TQM practices identified by MBNQA criteria on organizational performance.

Primary Data: Perceptions of the administrators, doctors, nurses and supporting staff regarding various TQM practices and organizational performance was used as the primary data.

Independent Variables: Various TQM practices such as 1.Leadership 2.Strategic Planning 3.Worforce Focus 4.Process Management 5.Service Culture 6.Servicecapes 7.Measurement, Information and Analysis and 8. Customer Focus was taken as independent variables.

Dependent Variable: Organizational performance was taken as a dependent variable.

Research Design: A descriptive study design was chosen for the study.

Sampling Technique: The staff of the hospital was divided into four strata i.e. administrators/managers, doctors, nurses, supporting staff and stratified random sampling technique is chosen to collect the sample from each strata.

Scale : Two tested structured questionnaires prepared by Manjunath Usha(2007) and Sunil C. D'Souza and A.H. Sequeira(2011) had been utilized to collect the perceptions of the respondents. The first part of the questionnaire collects the demographic profile of the respondents. The second part of the questionnaire collects the perceptions of the respondents about the various TQM practices implemented and the third part of the questionnaire is about the organizational (hospital) performance.

Statistical tools used: The tools of correlation and cronbach alpha had been used for the study.

Hypothesis: To address the research question eight hypothesis were formulated which are as follows:

1. **H₀1:** There is no significant relationship between leadership and organizational performance
H1: There is a significant relationship between leadership and organizational performance
2. **H₀2:** There is no significant relationship between strategic planning and organizational performance
H2: There is a significant relationship between strategic planning and organizational performance
3. **H₀3:** There is no significant relationship between customer focus and organizational performance
H3: There is a significant relationship between customer focus and organizational performance
4. **H₀4:** There is no significant relationship between measurement, analysis, knowledge management and organizational performance
H4: There is a significant relationship between measurement, analysis, knowledge management and organizational performance

5. **H₀5:** There is no significant relationship between workforce focus and organizational performance
H5: There is a significant relationship between workforce focus and organizational performance
6. **H₀6:** There is no significant relationship between process management and organizational performance
H6: There is a significant relationship between process management and organizational performance
7. **H₀7:** There is no significant relationship between service culture and organizational performance
H7: There is a significant relationship between service culture and organizational performance
8. **H₀8:** There is no significant relationship between servicescapes and organizational performance
H8: There is a significant relationship between servicescapes and organizational performance

Data Analysis and Interpretation

The data obtained from the perceptions of the respondents was analyzed using IBM SPSS software. Cronbach alpha was calculated separately for each item to check the internal consistency of the items ranging from 0.658 to 0.833

Table 1. Reliability Analysis for TQM Practices and Organizational Performance

Dimensions	No. Of Items	Cronbach Alpha
Leadership	08	0.658
Strategic Planning	08	0.804
Customer Focus	12	0.671
Measurement, Analysis and Knowledge Management	13	0.822
Workforce Focus	16	0.743
Process Management	09	0.833
Service Culture	05	0.754
Services capes	06	0.769
Organizational Performance	10	0.676

The tool of correlation had been used to test the relationships between TQM practices and organizational performance

Correlation Analysis Between Leadership and Organizational Performance

		Leadership	Organizational Performance
Leadership	Pearson Correlation	1	.530**
	Sig. (2-tailed)		.000
	N	80	80
Organizational Performance	Pearson Correlation	.530**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between the leadership and organizational performance is rejected and the r value of 0.530 indicates a positive relationship between leadership and organizational performance

Correlation Analysis between Strategic Planning and Organizational Performance

		Strategic planning	Organizational performance
Strategic planning	Pearson Correlation	1	.661**
	Sig. (2-tailed)		.000
	N	80	80
Organizational Performance	Pearson Correlation	.661**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between the strategic planning and organizational performance is rejected and the r value of 0.661 indicates a substantial positive relationship between strategic planning and organizational performance.

Correlation Analysis between Customer Focus and Organizational Performance

		Customer focus	Organizational performance
Customer focus	Pearson Correlation	1	.295**
	Sig. (2-tailed)		.008
	N	80	80
Organizational performance	Pearson Correlation	.295**	1
	Sig. (2-tailed)	.008	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between the customer focus and organizational performance is

rejected and the r value of 0.295 indicates a low positive relationship between customer focus and organizational performance.

Correlation Analysis between Measurement, Analysis, Knowledge Management And Organizational Performance

		Measurement analysis knowledge management	Organizational performance
Measurement, analysis Knowledge management	Pearson Correlation	1	.695**
	Sig. (2-tailed)		.000
	N	80	80
Organizational performance	Pearson Correlation	.695**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between measurement, analysis, knowledge management and organizational performance is rejected and the r value of 0.695 indicates a high positive relationship between customer focus and organizational performance.

Correlation Analysis between Workforce Focus and Organizational Performance

		Workforce focus	Organizational performance
Workforce focus	Pearson Correlation	1	.515**
	Sig. (2-tailed)		.000
	N	80	80
Organizational performance	Pearson Correlation	.515**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between workforce focus and organizational performance is rejected and the r value of 0.515 indicates a substantial positive relationship between workforce focus and organizational performance.

Correlation Analysis between Process Management and Organizational Performance

		Process management	Organizational performance
Process management	Pearson Correlation	1	.654**
	Sig. (2-tailed)		.000
	N	80	80
Organizational performance	Pearson Correlation	.654**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between process management and organizational performance is rejected and the r value of 0.654 indicates a high positive relationship between process management and organizational performance.

Correlation Analysis between Service Culture and Organizational Performance

		Service culture	Organizational performance
Service culture	Pearson Correlation	1	.626**
	Sig. (2-tailed)		.000
	N	80	80
Organizational performance	Pearson Correlation	.626**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between process service culture and organizational performance is rejected and the r value of 0.626 indicates a significant positive relationship between process management and organizational performance.

Correlation Analysis between Services capes and Organizational Performance

		Services capes	Organizational performance
Services capes	Pearson Correlation	1	.648**
	Sig. (2-tailed)		.000
	N	80	80
Organizational performance	Pearson Correlation	.648**	1
	Sig. (2-tailed)	.000	
	N	80	80

Interpretation: The p value is less than 0.05, therefore the null hypothesis which states that there is no significant relationship between process servicescapes and organizational performance is

rejected and the r value of 0.648 indicates a significant positive relationship between servicescapes and organizational performance

Limitations of the Study

There are two limitations of the study:

1. The study was conducted in two corporate hospitals of Hyderabad and hence the results cannot be generalized to all the healthcare institutions.
2. The perceptions of the hospital staff were measured via structured questionnaires, thus common method variance may have influenced the validity and reliability of the data and the integrity of the findings.

Conclusion

The study was conducted to study the effect of TQM practices on the organizational performance of the hospitals. It has been observed that there exists a positive relationship between the total quality management practices and the organizational performance in two selected hospitals of Hyderabad. It can be concluded from the results of the study that if a healthcare organization wants to improve its performance, it should imbibe the TQM practices and it can be said that the TQM practices are beneficial for the hospitals. The model suggested by the study can be tested in other service organizations like banks, hotels and educational institutions.

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Impact of Motivation Strategies on Retail Job Performance

– Dr. A. Bharathy*

Abstract

Today retailing plays a crucial role in most economies because of its large scale and importance at local, national and even International levels. No wonder the sector has also undergone significant changes over the past few decades. On the other hand huge money is also being spent in recruiting and training retail staffs that play an indispensable role in the delivery of service to the customers. The successful relationship between the sales force and customers is however preceded by a motivated sales team. This study is an effort to understand the motivational influence on retail job performance using Herzberg's two factor theory.

Keywords: Hygiene Factors, Motivational Factors, Work Performance

Introduction

Retailing is a crucial element to most economies, mainly because of its large scale and importance at local, national and even international levels. The retailing sector has undergone continuous and significant changes over the past few decades. New facilities ranging from superstores to retail warehouses have widened the retail landscape across the world. In the retail sector, employees have a direct responsibility on the customer relationship, and this relationship is a powerful factor in a company's success. Salespeople deal directly with their customers, thus their attitudes, behaviours and treatments towards their customers will determine whether customers will become loyal toward the retailers. Companies have been spending millions every year in recruiting, training and compensating their sales personnel so that they would be highly encouraged and inspired to perform well, and hence increased levels of profits accrue to the company (Susan, 2003). In a competitive environment, success of an organization depends on effectiveness of the sales force developing and maintaining customer relationships. In many organizations the sales force compensation costs are between 40% and 75% of the marketing budget (Rouziès, 2011). Having a motivated sales force helps control the costs of an organization which otherwise will incur high expenses due to recruitment, training, wastage of time, loss of customers good will and lower output levels.

Review of Literature

Several scholars and studies have been conducted on motivational strategies and sales force performance. Motivation is defined as the psychological process that gives behaviour and direction

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(Kreitner, 2001). Motivation can be also be defined as those psychological processes that cause the arousal, direction and persistence of voluntary action that are goal directed (Reeve, 2014). Studies point that intrinsic motivation is more important than motivation induced by extrinsic strategies. In the case of the retail setting, Winer and Schiff (1980) have conducted a number of studies using Herzberg's dual factor theory. They found that 'achievement' variable was the highest rated motivator. Likewise, 'making more money' received second highest rating in the study, followed by 'chances of promotion' and 'recognition.' In contrast, Lucas (1985) discovered that 'supervisoremployee relationship' was a significant factor of worker satisfaction in a study of US retail store, and two hygiene factors were reported significantly, namely 'company policy,' and 'relationship with peers'.

The mechanistic theories assume that reward is a major motivator towards a good work performance. While mechanistic theories give no recognition to higher order needs like accomplishment and achievement the cognitive theories focus on what arouses or drives behaviour. Maslow's needs hierarchy theory, Herzberg's two factor theory and Vroom's expectancy theory focus on non financial incentives. Studies conducted in the insurance industry on motivational strategies and sales force performance using the Herzberg's theory in the insurance industry in Kenya also called for further studies on the same line in other industries for comparison and generalization of findings. Hence this study uses the two factor theory to understand the motivational influence on retail sales performance.

Purpose of the Study

The purpose of this study was to analyse the motivational influence on retail sales performance using Herzberg's Two Factor theory.

Research Questions

1. To understand the extent of influence of Herzberg's hygiene factors on retail sales job performance.
2. To understand the extent of influence of Herzberg's motivational factors on retail sales job performance.
3. To explore gender differences in the motivational influences on retail sales job performance.
4. To suggest measures to improve the work performance of retail salesforce.

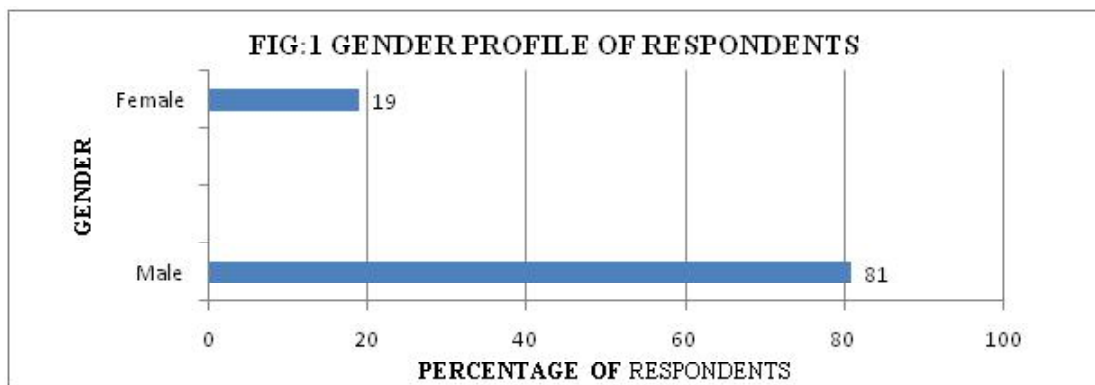
METHODOLOGY OF THE STUDY

The study employs descriptive research design as it portrays accurately the characteristics of an individual, situation or group. Mugenda&Mugenda,2003 explain that this design reports the way things are and keeps bias low while increasing the reliability of the study. Convenience sampling was used to collect the data from the respondents. About 100 retail sales staff was taken for the study. The primary data was collected using well structured questionnaires with open and close ended questions. Likert 5 point scale was used to measure the respondent's opinion. The sample size used for the study

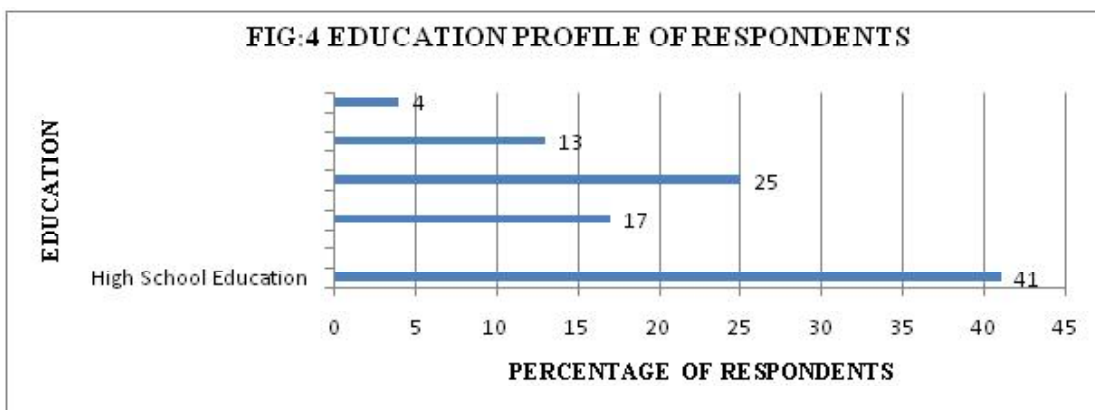
is 10% of the population and this follows the 10% condition in statistics that sample sizes should not be more than 10%.

Discussion & Findings

Gender Profile of Respondents: The study sought to determine the gender profile of the respondents included in the sample and it can be seen from Fig: 1 that 19% were female and 81% were male. This is representative to the ratio of male and female employees at the company and also shows that both genders were included in the sample study.



Education Profile of Respondents: The highest education profile of the respondents can be seen to be PG degree among 13%, UG degree was among 25%, diploma among 17% and High School education among 41%. It is thus understood that majority of the employees doing retail sales job were having only high school education. This is also representative of the industry statistics. Further this shows that the respondents had relevant knowledge and thus had ease in addressing the questions and provided the correct responses for the study.



Age, Income & Experience Profile of Respondents: The study shows that 81% were between 18- 34 years age group and those employed in retail sales job in other age groups were also present in smaller numbers. Thus sample included all age groups. The income analysis showed that majority of respondents employed in retail sales earned an income of Rs.5000 - Rs. 10,000. The salary earned was only a moderate salary. The experience profile shows 32% were having an experience of 1-3 years and 28% had less than 1 year experience, 21% had 6+ years and 19 % had between 3 -6 years experience. This shows respondents with varying experience have been included in the study and thus motivational strategies influence on work performance can be perceived by them and thus this study provides reliable and relevant data.

Table 1: Motivational Influence of Job Factors on Retail Job Performance

Job Factors	N	Minimum	Maximum	Mean	Std.Deviation
Every day I give my best effort	100	1	5	3.98	1.214
I am satisfied with compensation at the company	100	1	5	3.93	.935
I am happy with my work flexibility	100	1	5	4.26	.960
My organization has safe work environment	100	1	5	4.18	.892
I have over all job security	100	1	5	3.93	1.085
Valid N(Listwise)	100				

(Source: Computed from primary data)

Table 1 shows that job factor "I am happy with my work flexibility" has the highest agreement with a mean of 4.26 and standard deviation of 0.960 while the other job factors are also equally agreed to be satisfactory among the respondents in the study. The overall mean is 4.05.

Table 2: Motivational Influence of Supervisory Factors on Retail Job Performance

Supervisor Factor	N	Minimum	Maximum	Mean	Std.Deviation
My communication with superior is good	100	1	5	4.15	.880
Employees cooperate with other employees at work place	100	1	5	3.95	.989
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 2 shows that supervisory factors are also agreed upon by the respondents to be satisfactory among the respondents in the study. The overall mean is 4.05.

Table 3: Motivational Influence of Achievement on Retail Job Performance

Achievement	N	Minimum	Maximum	Mean	Std.Deviation
I am happy with company policies	100	1	5	3.89	.994
I am happy with my company dress code	100	1	5	4.07	1.103
I am a self motivated person	100	1	5	4.03	1.029
My job helps to develop my skills	100	1	5	4.05	1.123
I can achieve my personal goals	100	1	5	3.99	1.124
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 3 shows that achievement is also equally agreed upon by the respondents as satisfactory. The overall mean is 4.02.

Table 4: Motivational Influence of Recognition Need on Retail Job Performance

Recognition	N	Minimum	Maximum	Mean	Std.Deviation
Management recognizes good job performance	100	1	5	4.12	1.131
I have a feeling of personal worth in my job	100	1	5	3.78	1.050
I admire my job	100	1	5	3.98	1.005
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 4 shows that recognition is also equally agreed upon by the respondents as satisfactory. The overall mean is 3.96.

Table 5: Motivational Influence of Responsibility Need on Retail Job Performance

Responsibility	N	Minimum	Maximum	Mean	Std.Deviation
I am dedicated to my job	100	1	5	4.07	1.008
I organize my everyday work	100	1	5	4.13	.917
Valid N (listwise)	100	1	5		

(Source: Computed from primary data)

Table 5 shows that responsibility is also equally agreed upon by the respondents as satisfactory. The overall mean is 4.10.

Table 6: Motivational Influence of Advancement Need on Retail Job Performance

Advancement	N	Minimum	Maximum	Mean	Std. Deviation
I am happy with career advancement opportunities at work	100	1	5	3.78	1.040
I have opportunities to earn more	100	1	5	3.86	.995
I think the appraisal is fair	100	1	5	3.76	1.016
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 6 shows that responsibility is also equally agreed upon by the respondents as satisfactory. The overall mean is 3.8.

Table 7: Motivational Influence of Working Conditions on Retail Job Performance

Work Condition	N	Minimum	Maximum	Mean	Std. Deviation
I am happy with health care facilities in my job	100	1	5	3.8	1.067
I am happy with paid leave facilities	100	1	5	4.11	.989
I am happy with the relaxation methods of my company (Sports, activities/ rest etc...)	100	1	5	4.13	1.051
I am satisfied with the loan facilities at the company	100	1	5	3.89	1.081
I will refer my friend and relatives to the job	100	1	5	3.90	1.133
I am satisfied with skill development programs provided by the company (Hindi class etc...)	100		5	3.97	1.058
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 7 shows that working a condition is also equally agreed upon by the respondents as satisfactory. The overall mean is 3.96.

Table 8: Motivational Influence of Fun @ Work on Retail Job Performance

Fun @ Work	N	Minimum	Maximum	Mean	Std.Deviation
I enjoy my work	100	1	5	4.03	.989
I am happy with the festival celebration at work	99	1	5	4.13	1.017
I am happy with the festival gifts given by my company	100	1	5	4.04	1.109
Valid. N (Listwise)	99	1			

(Source: Computed from primary data)

Table 8 shows that fun at work is also equally agreed upon by the respondents as satisfactory. The overall mean is 4.06.

Table 9: Employee Perception on Retail Job Performance

Work Performance	N	Minimum	Maximum	Mean	Std. Deviation
I am satisfied with my work performance in last 3 months	100	1	5	3.85	1.201
I take initiative when there is a problem	100	1	5	3.95	.989
Valid N (Listwise)	100				

(Source: Computed from primary data)

Table 9 shows that fun at work is also equally agreed upon by the respondents as satisfactory. The overall mean is 3.9.

Summary of Findings

The overall motivational influence of hygiene factors namely job factors and supervisory factors are 4.05 while the overall influence of motivational factors is 3.98 and the mean perception of retail staff work performance is 3.9.

Conclusion & Recommendations for Future

Employee motivation is directly related to the productivity of an organisation. In the long run it helps to build employee morale and helps to retain talented workforce. This study tries to identify the impact of motivational influence on employee work performance using Herzberg's two factors theory. Here the impact of hygiene factors (Job factors and Supervisory Factors) and Motivational factors (Achievement Advancement, Recognition and Responsibility) were studied and all these factors were found to be rated quite good (4) on a Likert scale of 1 to 5 (80%). This is in tandem with studies that

report satisfaction enhances happiness and productiveness among the workforce (Friend, Johnson, Luthans, & Sohi, 2016; Peterson, Balthazard, Waldman, & Thatcher, 2008)

The study clearly shows that both hygiene and motivational factors available at the company are satisfactory to the employee. This shows a positive company work culture prevailing in the company. However the company should identify new policies and programs from time to time to sustain this good morale otherwise employees might get bored and become de-motivated.

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Digital Employer Branding for Enabling Gen Y in ITES Sector in India

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Abstract

In the present 21st century, the nature of work is confronted with many challenges for staffing: knowledge-based work places, greater demands on employee competencies, diverse workforce and growing global shortfalls of qualified and talented applicants (Ployhart, 2006). In today's digital economy, where the business world is shaped and reshaped by digital forces such as Social Media, Mobile (Including Gamification), Analytics, Cloud computing at Work Place. These Digital Platforms brings a sweeping change by helping re-imagine that how the modern business processes operates and interacts with its different stakeholders especially with its customers and employees. The purpose of this article is to examine how in today's economy such forces of digital world play the role for continuous promoting of Employer Branding as to attract current employment markets and others means i.e. in term of brand building, high level of retention, and attachment towards the organization. The study mainly covers the ITes sectors in India. The thought have been analyzed by the help of primary data analysis through random sample survey to know the status of the employer branding concept in India and its effectiveness in the organization.

Keywords: Employer Branding, Digital Economy, Employee, ITes sector, social media.

Introduction

Talent management today has become global challenge in this volatile, uncertain, complex and ambiguous i.e. VUCA business world. Digital Innovations & demographic dividend specifically emergence of next Gen Employees in Gen Y, Gen Z and Millennial are redefining the organizational human capital management practices and employer branding strategy. Viability and sustainability of the organization depends on the talent pool of the employer.

Manpower Group's 2013 Talent Shortage Survey reveals that 35% of employers report difficulty in filling jobs due to a lack of available talent, the biggest shortage since the start of the global recession

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(Manpower Group Survey 2013). Again, the increasing presence of GenY in the workforce (means those who were born in between the years 1980 to 1999 AD) presents new challenges for employers and is causing many businesses to re-think their working practices (Kapoor and Solomon 2011; Harrison A.G. 2010).

One key factor that differentiates GenY is that they have grown up in the age of information technology and Social Media which environment has shaped the way they view the world, including their expectations of the workplace(Kapoor and Solomon 2011).

The employer branding is focused on building the brand name of the employer as a great place to work in the job market. It is focused on developing the positive relationship with existing as well as prospective employee groups. A strong employer brand should be aligned with the organization's vision and values, strategy and culture, becoming a critical factor in creating employee engagement. This engagement has a strong impact on increasing motivation, loyalty, performance and retention of employees, with a strong impact on long lasting people competitive advantage(Backhaus, K., & Tikoo, S. 2004). Therefore, two perspectives of employer branding strategies exist: one toward attraction of new talents through external branding and other one toward retention through active engagement leveraging internal branding of existing talents within organization.

Indian Information Technology (IT) Industry changed the economic landscape of India over the last quarter of century. The industry's revenues grew from USD 100 million in Financial Year 1992 to USD 147 billion in 2015. In 2005, the industry serviced 3.3% of global IT market, serving nearly half of all Fortune 500 companies (Bhatnagar, 2006). In 2015, it constituted 9% of India's Gross Domestic Product (GDP) and a quarter of total exports and provides direct employment to about 3 million people and more than 10 million in indirect employment (Mittal, 2013).

ITeS Project Management deals with certain major issues like undertaking feasibility studies for outsourcing from a different geography, estimation of cost arbitrage, scheduling the transition and transformation related activities, allocation of resources post off shoring of processes, hiring and managing large team of people, analyzing the risk involved and handling such workforce and combating changes that could be challenging or those involving innovation. The management of human resources in all phases and sub phases of the ITeS project lifecycle is not only critical but also impactful with regard to the productivity levels and reputation of the company. Acquisition of right skill sets and managing attrition levels to be very low in order to foster employee commitment, continuity in practices as to deliver one global standard of services delivery for delighting the customer while keeping employees happy and engaged. The industry had a market share of 53% of the worldwide ITeS or BPM spend (Chandrasekhar, 2014, NASSCOM Report, 2015).

Literature Review

The increasing presence of GenY in the workforce presents new challenges for employers and is causing many businesses to re-think their working practices (Kapoor and Solomon 2011). Moreover,

failure to effectively attract and engage these new workers will significantly hamper organizations' competitiveness in the long run (Tulganet 2001). Another factor that differentiates GenY is that they have grown up in the age of information technology and Social Media which environment has shaped the way they view the world, including their expectations of the workplace (Harrison A.G. 2010; Kapoor et 2011). Bearing in mind these complexities and in reviewing research pertaining to GenY, the following are the main GenY characteristics:

- **Digital immersion:** GenY subjects are technologically advanced especially in content creation and engaged interaction (Kapoor and Solomon 2011).
- **Work/life balance:** GenY value and seek work/life balance (Kapoor et al 2011; Broadbridge et al 2009).
- **Formalized procedures:** GenY prefer formalized procedures, systems and structures (Hershatteret 2010).
- **Continuous Feedback:** GenY seek approval and affirmation. They need prompt and continuous feedback (Kapoor and Solomon 2011).
- **Affiliation or social values:** GenY seek less formal interaction with managers but more with peers and friends (Kapoor and Solomon 2011).
- **Developmental opportunities:** GenY seek opportunities for development and prefer varied work (Ng, Schweitzer, and Lyons 2010; Kowske, Rasch, and Wiley 2010).
- **Equality and Diversity:** GenY value and seek equality, fairness and tolerance in the workplace (Broad bridge, Maxwell, and Ogden 2009; Ng, Schweitzer, and Lyons 2010).

Social Media is at the heart of modern communication technologies specially used by Gen Y. For more clear view of what social media is; social media like Face book, Twitter and LinkedIn require users to create profiles and input identifying information, this information may be as benign as name or username, to more specific information like geographical coordinates. Users may then send messages, chat, view user-generated media, and otherwise interact using website as a medium Social media can take many different forms, including text, images, audio and video. Popular social media include blogs, podcasts, wikis and vlogs Some commonly used Web 3.0 based tools are Blogs, Wikis, Podcasts, File sharing tools, Social networking, Second life/virtual reality, etc. (Broughton, A., Foley, B., Ledermaier, S., & Cox, A. 2013).

In today's world many a professional sector are investing heavily on hiring and retaining quality talents being engaged inside the organization at a rationalized cost and enshrined into the values and culture of the said organization since such quality hires and retentions decides on the quality of customer services and experiences that differentiate one firm from others. IT/ITeS companies, software exporting firms are examples of companies that are spending millions of dollars for building themselves as every aspirant's choice through effective communication of the idea that the specific company is an excellent

employment brand. The brand managers focus on two key power messages 1. The compelling differentiator of working in the company and 2. Excellent amplified real story sharing basis trustworthy and believable information sharing. Here the social media on digital platform plays the key role. Let us take the case of Microsoft who is losing the battle very fast where this battle is not for market share of services but for attracting and retaining quality talent in the workplace. Google have already established themselves as the best employer of choice over its competitors including Microsoft. Google have established their digital employer branding strategy on creating consistent global message, managing own employment brand and improving associates experience. Googles new Employment Branding strategy includes Social Medias on digital platform such as Facebook, Twitter, You Tube and Linked In, to actively engage, impress and inspire potential talents consistently which are reachable anytime and anywhere.

Realizing their outdated online recruitment portal failing to attract quality talents globally have restructured their recruitment strategy leveraging Social media on digital platform very quickly and thereby have been able to attract increased number of new talents by leaps and bounds and between 2010 to 2015 such number of global hires have increased by more than 300%. Thus potential impacts of employer branding leveraging social media are least lead-time to hire, reduced cost per hire, communicating company culture, revenue growth and quality of hire and retention (Panda 2010).

Relevance of the Study

In the recent past competition in the market for experienced IT resources and disproportionate increase in wages in the industry raised cost of operations. Overwork and stress related problems were on the rise among the workforce leading to various kinds of health problems, which affected the society in general and quality of work within the industry leading to high rate of attrition of skilled resources.

Questions thus arise on the sustainability of competitive advantage of the IT &ITeS industry in these changing times. Are the factors specially the low cost high skilled graduate English speaking people that contributed to the fast growth of the industry thus far, good enough to provide the leading edge? Thus in the present era, ITeS firms have not competition for customers but also for attracting and retaining the quality people and the best way to combat this situation is by having a clear, identifiable employer brand and communicating it in the marketplace to be the employer of choice.

Presently the business world is shaped and reshaped by digital forces such as 1. Social Media, 2. Mobile, 3. Analytics, 4. Cloud etc. (SMAC) at Work Place . Such SMAC Digital Platforms that brings a sweeping change by helping re-imagine how the modern business processes operates and interacts with its different stakeholders especially with its customers and employees. These forces of digital world being increasingly used for continuous promoting of Employer Branding as to attract and recruit next Gen candidates.

Research Questions

In the present research we are going to examine the different external and internal factors of employer branding help to attract the Gen Y for showing their interest in terms of job offered by the organization and attraction towards organization for applying new jobs. This is especially in the areas of IT &ITeS industries in India. The study will also helps to identify the factors which are more effective in developing employer branding for the generation Y who are deciding to settle their carriers in this industries.

Objectives of the Study:

1. To examine the digital media as an effective communication tools for employer branding of Gen Y.
2. To identify associated factors for developing employer branding of Gen Y.

Research Methodology

The present research is an attempt taken by the researcher to find out the important components of employer branding may attract to the new generation for showing their interest to join in the ITeS sectors and their level of understanding. Which may the causes of the industry for recruiting more skilled workforce? In this context the present study is experimental in nature and data have been collected through structured Interview followed by questionnaire. The respondents of the study are the young graduates of different general degree colleges and professional institutions of West Bengal, Jharkhand and Odisha. Random sampling method has been followed for collection of responses.

Total 410 responses have been collected from Gen Y students who are UG / PG fresher or in Final Year of their study however 303 data have been considered basis reliability of sample to represent the group for the final analysis. In the analysis, we have followed Demography to Responses, chi-square test and Multivariate factor analysis to find out the real scenario of the research.

Analysis of the Data:

Reliability Statistics

Cronbach's Alpha	N of Items
0.798	31

We can see that Cronbach's alpha is 0.798, which indicates a high level of internal consistency for our scale with this specific sample.

Demographic design of the respondents:As mentioned there are total 303 samples collected through direct survey of final year graduates and PG students being the prospective Gen Y employees

for ITeS organization, there are 84.5 % of respondents are in the age bracket of 22 years while 14.2% of them are between 22 to 26 years of age comprising of 98.7% of total survey.

Percent wise Analysis of Demography Responses towards Key Elements of Employer Branding shows that 49.5 % of respondents feel Brand Visibility is important while another 43% feels it is very important to extremely important. It speaks about brand loyalty where 36.3% feels it's very important followed by 30.7% as important.

Table- 1 : Access to Smart Digital Device for Practicing Social Media

Smart Phone/PC /Digital Access	Frequency	Percent
NO	17	5.6
YES	286	94.4
Total	303	100.0

(source- primary data)

Table 1 above depicts that 94.4 % populations have access to smart digital devices for practicing on social media and the major sites surfed on regular basis are Linked In , Face Book, YouTube and this includes job sites such as Times Job, Monster.com, Naukri.com etc

The present data analyze the Final Opinion on Digital Employer Branding. It takes us to the conclusive answer that barring 1.3 % of respondents who feels digital employer branding is not important rest 98.7% feels it is important tools in modern communications and 98% of the respondents agrees that Social Media and other digital platforms are important for effective communication on employer branding to reach the appropriate future employees and hence to be part and parcel of digital communication strategy for ITeS organizations.

Table no-2

Chi-square test of significance between age and digital platform through social & smart mobile

	Response measured	Age			Total	Chi-square
		18 - 22 Years	22 to 26 Years	27 Years & more		
Digital platform through social & smart mobile	Not so important	2.3%	0.0%	0.0%	2.0%	.767 at df 6 Non significant at 0.05 level
	Important	7.0%	7.0%	0.0%	6.9%	
	Very Important	43.4%	51.2%	75.0%	44.9%	
	Extremely Important	47.3%	41.9%	25.0%	46.2%	

(source- primary data)

In the table- 2 we are trying to find out the relationship on age groups wise importance of Social Media as a tool for effective employer branding communication, Highest percentage of opinion recorded 46.2 % as extremely important followed by 44.9% as very important which indicates that there is very strong agreement (in terms of percentage of important and extremely important) of digital media in connection with employees brand. But the chi-square result indicates that there is no association between different age group of respondents and digital platform through social and smart mobile. P value is 0.767 at 6 degree of freedom which is higher than 0.05 at 95 % confidence level. The result signifies that changing the different platform of digital communication does not make impact to change the mindset of the responses specially Gen Y.

Table no-3
Relationship between Gender and the role digital Media for effective communication of Employees Brand

	Response measured	Gender		Chi square
		Female	Male	
Social media, smart mobile etc. as digital platforms for effective communication of Employees Brand to reach appropriate audience	Not so important	2.1%	1.9%	0.447 at 3 df Non significant at 0.05 level
	Important	6.2%	7.6%	
	Very Important	49.7%	40.5%	
	Extremely Important	42.1%	50.0%	

(source- primary data)

In the table- 3, we are trying to find out the relationship between gender and role of digital media as a communication of employees brand. Highest percentage of opinion recorded (very important-male-49.7% and female 40%, extremely important male- 42.1% and 50% female) that there is very strong agreement (in terms of percentage of important and extremely important) of digital media in connection with employees brand. But the chi result indicates that between male and female are not significantly associated because p value is greater than 0.05 at 95% level of confidence. It can be said that male and female graduates have different understanding towards the role of social media i.e changing the structure of digital media cannot change the opinion among Gen Y.

Table No-4

Chi square test of significance between social media as effective communication tools with education of respondents

	Response measured	Educational Attainment				Chi-square
		B Com	B.A.	B.SC	MBA	
Social media, smart mobile etc. as a platforms for effective communication of Employees Brand to reach appropriate audience	Not so important	0.0%	4.2%	1.6%	0.0%	.013 at df 9 Significant at 0.05 level
	Important	10.3%	4.2%	7.2%	0.0%	
	Very Important	33.3%	59.4%	41.6%	25.0%	
	Extremely Important	56.4%	32.3%	49.6%	75.0%	

(source- primary data)

In the Table 4, the analysis based on highest qualification of respondents and their relationship with platform of social media as effective communication. Pearson Chi square result indicates the significance difference between the perceptions of different educational group of respondents with social media. Social media, smart mobile as a platform for effective communication of Employees Brand to reach appropriate audience prove a positive association with different undergraduate and post graduate students. That is social media have an effect on perception of graduates.

Table no-5

Chi square test of significance between social media as an effective communication tools and different region base of respondents

	Response measured	Region wise			Chi-square
		Rural	Semi Urban	Urban	
Digital Media for effective communication of Employees Brand to reach appropriate audience	Not so important	7.3%	1.5%	1.0%	0.001 at df 6 Highly significant at 0.05 level
	Important	2.4%	1.5%	9.6%	
	Very Important	48.8%	61.5%	38.6%	
	Extremely Important	41.5%	35.4%	50.8%	

(source- primary data)

In India, we find the different level of perception, outlook and culture within rural and urban base. It is also observed in terms of information gathering and sharing. In the present data, it shows

that role of digital media as an effective communication make a significant differences between rural and urban Gen Y. The results show strong association between these two. 61.5% of Semi Urban respondents feel Social Media and other digital platforms are important to very important to extremely important for effective communication on employer branding to reach the appropriate future employees and hence to be integrated in the employer branding communication strategy for ITes organizations only 38.6% Urban respondents feel so. The result indicates that changing the role of digital media can change the mindset of Gen Y.

However despite this nominal difference in opinion amongst sub classification of demographics it has to be observed that only 2 % of respondents think digital Employer branding is not important leaving remaining 98 % in favor of it. Thus across demography endorses the fact Employer Branding for Visibility and attractiveness is immensely important and that they prefer Company intranet, Company Face book and social media to be leveraged for the purpose.

Table no-6
Multi Factor Relationship for determining the Underlying Themes of Employer Branding in ITes Sector

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.679
Bartlett's Test of Sphericity	Approx. Chi-Square	5543.322
	Df	465

Table 8 A : Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.607	18.088	18.088	5.607	18.088	18.088	3.699	11.932	11.932
2	3.993	12.882	30.970	3.993	12.882	30.970	3.690	11.905	23.837
3	3.208	10.349	41.319	3.208	10.349	41.319	2.727	8.798	32.635
4	2.550	8.224	49.543	2.550	8.224	49.543	2.632	8.492	41.127
5	1.826	5.891	55.434	1.826	5.891	55.434	2.554	8.239	49.365
6	1.626	5.244	60.678	1.626	5.244	60.678	2.534	8.173	57.539
7	1.476	4.761	65.439	1.476	4.761	65.439	1.888	6.091	63.629
8	1.233	3.978	69.418	1.233	3.978	69.418	1.478	4.769	68.398
9	1.012	3.265	72.682	1.012	3.265	72.682	1.328	4.284	72.682

Extraction Method: Principal Component Analysis.

Multi variant Factor Analysis or Principal Component Analysis based on Eigen values as derived ≥ 1 , identifies 9 broad significant factors which suggests some important themes for designing Digital Employer Branding Strategy as depicted in Table 8- A & B. The 9 broad significant factors hold 73% of information and if we delete remaining components, we may lose 27 % of information.

Table 9 : Rotated Component Matrix^a
Principal Components of Digital Employer Branding

	Principal Components of Digital Employer Branding								
	1. Company Financials	2. Employee Connects - Individual & Intranet	3. Digital Referral - Friends, Peers & Relatives	4. Equal Opportunity Employer	5. Learning Opportunity & Group Connects	6. Leveraging Social Media	7. Higher Study & Onsite Deputation	8. Compensation & Benefits	9. Promotion
Brand Visibility	0.659	0.527	0.004	0.030	-0.020	0.211	0.002	-0.059	-0.086
Brand Loyalty	0.680	0.441	0.117	0.071	0.125	-0.023	-0.205	0.021	-0.153
Brand Attractiveness	0.688	-0.241	0.061	0.160	0.146	0.049	0.278	-0.309	0.070
Revenue	0.728	0.315	0.155	0.028	-0.035	0.022	0.107	-0.027	-0.113
Profit	0.769	0.039	0.078	0.032	-0.005	-0.081	-0.150	0.210	0.049
Market Capitalization	0.540	-0.316	-0.143	-0.064	0.240	-0.395	-0.210	0.030	-0.008
Company Intranet	0.265	0.600	0.205	-0.032	0.013	0.360	-0.247	0.303	0.074
Company Face book e.g. Knome	0.221	0.312	0.185	0.059	-0.009	0.691	0.213	-0.035	0.111
Social Media	-0.101	0.024	0.048	-0.192	0.232	0.717	0.025	0.242	0.246
Friends reference	0.005	0.131	0.856	-0.213	-0.020	0.048	0.096	0.020	-0.029
Relatives reference	0.155	0.052	0.848	0.110	0.210	0.017	-0.040	0.142	0.116
Referred by Peer Group	0.160	0.040	0.573	-0.505	-0.094	0.152	0.242	-0.033	0.176
Digital Platform reference e.g. FB/ Linked in etc.	-0.167	0.102	0.503	-0.586	-0.124	0.171	-0.091	0.119	0.145
Equal Pay for Equal Work	-0.070	0.077	0.081	0.788	0.039	0.071	-0.200	0.349	-0.110

	Principal Components of Digital Employer Branding								
	1. Company Financials	2. Employee Connects - Individual & Intranet	3. Digital Referral - Friends, Peers & Relatives	4. Equal Opportunity Employer	5 Learning Opportunity & Group Connects	6 Leveraging Social Media	7 Higher Study & Onsite Deputation	8 Compensation & Benefits	9 Promotion
No Discrimination basis Caste, Creed and Religion	-0.230	0.310	-0.181	0.503	-0.128	0.266	0.263	0.033	0.005
Safe workplace across caste , creed & religion	0.252	0.092	-0.168	0.730	0.011	-0.115	-0.004	-0.074	0.012
Salary	0.036	0.051	0.145	0.105	-0.129	0.091	0.111	0.840	0.073
Perquisites	0.086	0.256	0.384	0.501	-0.402	0.141	0.081	-0.092	-0.220
Other Benefits such as Higher Study Leave, Travel abroad, Club Membership etc	-0.116	-0.144	0.074	-0.047	0.214	0.249	0.765	0.052	-0.049
Job Rotation	0.256	0.061	0.355	-0.088	-0.127	0.441	0.250	0.197	-0.154
Promotion	-0.087	-0.022	0.143	-0.157	0.085	0.121	0.008	0.056	0.865
Deputation Abroad	0.029	0.570	0.102	-0.031	0.005	-0.048	0.682	0.190	0.067
Web Based	-0.087	0.752	0.189	0.250	0.079	-0.042	0.003	-0.219	0.175
Class Room	-0.009	0.065	0.115	0.031	0.749	-0.371	0.100	-0.161	0.075
Workshops	0.100	0.107	-0.098	-0.053	0.814	0.175	0.055	0.143	-0.032
Town halls	0.021	0.014	0.069	-0.058	0.609	-0.028	0.443	-0.245	0.078
Group Connect	0.221	0.357	0.148	0.294	0.613	0.161	-0.161	-0.206	0.107
One on One	0.051	0.789	0.063	-0.019	0.040	-0.033	0.147	0.107	-0.241
Client Facing	0.340	0.700	-0.071	0.162	0.254	0.049	-0.092	0.064	0.033
Interaction with Top Executives	0.218	0.339	0.097	-0.077	0.109	-0.566	0.001	0.090	0.056
Exposure to Board/ CEO/COO	0.409	-0.075	-0.212	-0.076	0.126	-0.486	0.014	0.044	0.412
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.									
a. Rotation converged in 28 iterations.									

(source- primary data)

Table 9 elaborates on the 9 (Nine) Principal Factors in their order of priority for designing the digital employer branding strategy by ITeS organizations in India are explained here :-

Three components Viz, Job Rotation , Interaction with Top Executives like CEO, COO etc and connect to Board of Directors are proved to be insignificant for Digital employer Branding .

In light of the above analysis on it is possible to hypothesize on how Social Media can be utilized to attract Gen Y in ITeS organizations. Further we believe the above study will throw light on a new conceptual model of the framework for digital employer branding for ITeS companies in India.

Conclusions and Recommendations

Social Media and other digital platforms are important to very much for effective communication on employer branding to reach the appropriate future employees Viz. Gen Y and hence to be integrated in the employer branding communication strategy for ITeS organizations. To attract top talent from GenY, ITeS organizations can use Social Media to highlight their organizational culture in ways that supports what GenY are looking for in a future employer (chi square results show significant relationship between region wise and educational attainment of the respondents here). There are some other factors give us a strong indication on the development of employer brand to Gen Y. These are corporate governance structure, through leveraging company intranet platforms, giving emphasis on employee referrals through friend and peer groups, practice equality at workplace in terms of compensation and other benefits and encouragement towards Diversity, promoting the company culture that promotes social affiliation and work life balance, sponsored higher education for employees and onsite posting opportunities, provide learning opportunities and promotion during employment.

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Default Prediction using Altman Z Score Model - A Study of some Select Retail Firms

– Dr. Archana HN*

Abstract

The ongoing mega process of globalisation characterised by unprecedented liberalisation, privatisation, marketisation and multinationalisation have opened up the markets and businesses like never before. This era has brought with it both challenges and opportunities for the businesses. Businesses are striving hard to tap the opportunities and survive in this hyper competitive market. Finance being the life blood and backbone of the organisation is measured for its soundness, because a financially sound firm can alone survive in such conditions. The most insidious reason for a firm's distress and possible failure is managerial incompetence (Chang et al, 2013). Therefore, investors have to be cautious in predicting the bankruptcy of the firm. In this backdrop, this paper studies the probability of default of select retail firms for five year period (2012-13 to 2016-17). The results reveal that of the five firms selected, three are in distress zone and have the maximum likelihood of going bankrupt, while the stock prices of those firms does not signal any such information.

Keywords: Altman Z Score, Probability of default, Bankruptcy, Stock Prices

1. Introduction

The ongoing mega process of globalisation characterised by unprecedented liberalisation, privatisation, marketisation and multinationalisation have opened up the markets like never before. This era has brought with it changes, challenges and opportunities and also ways and means to face the challenges effectively. Everybody around the globe is affected by this mega process of globalisation. With a view to coping with the new business environment, the organisations have been reengineering and restructuring their approaches to survive. Businesses carry out various activities so as to survive and generate profits for all the stakeholders. Finance being the life blood and backbone of the organisation is measured for its soundness, because a financially sound firm can alone survive in hyper competitive markets. A firm becomes bankrupt/default if it finds itself in a situation where its total liabilities exceed the total assets. The real net worth of the firm is, therefore negative. Organisations find themselves in a mess owing to various reasons such as international competition, managerial inefficiencies, lack of innovation, barriers within the industry to name a few. Among them, the most pervasive reason for a

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firm's distress and possible failure is managerial incompetence (Chang et al, 2013). Hence, investors have to be cautious in predicting the bankruptcy of the firm. One of the measures used to predict corporate default is Altman Z model. The Z-score uses multiple corporate income and balance sheet values to measure the financial health of a company. In this backdrop, this paper attempts to study the financial soundness of select retail firms using Altman Z Score Model. In a way, this paper studies the probability of default of select retail firms.

2. Review of Literature

Literature on bankruptcy prediction has its roots in 1930's, when (Fitz Patrick, 1932) started to analyse financial profile of companies with risk of business failure. More sophisticated analysis on business failure prediction started with research of Beaver (1966).

Beaver (1966) studies if financial ratios can predict the failure of the firm. His research sample constituted 79 failed firms in period 1954 to 1964, both inclusive. Each failed firm was matched with a non failed firm of same industry and similar asset size. He selected 30 ratios in total and grouped them into six categories; one ratio from each category was tested for its predictive power (univariate analysis). Empirical findings indicated that the cash flow to total debt is the best univariate discriminator to discriminate between failed and non failed firms. Classification accuracy of cash flow to total debt ranged from 87% (one year prior to failure) to 78% (five years prior to failure).

In the later study, Beaver observed that changes in the market price of stocks were also good indicators of financial distress. Beaver's model is criticized in terms of using single variable and calculating limited ratio. Instead of univariate analysis used by Beaver, other studies applied multivariate techniques to analyse the ability of financial ratios to predict corporate failure.

Altman (1968) uses multiple discriminate analysis (MDA) to develop a model for bankruptcy prediction. His research sample constituted 33 listed bankrupt firms and 33 listed non bankrupt firms from manufacturing sector. The samples were matched by industry, asset size, year. Altman used 22 financial ratios, in which MDA identified only five ratios as significant bankruptcy indicators, (working capital/total assets, retained earnings/total assets, EBIT/total assets, market value of equity/book value of equity, sales/total assets) and is popularly known as Altman's Z score. Classification accuracy of this model was 95% (one year prior to bankruptcy) and went down to 36% (five years prior to failure).

Numerous studies have documented evidence of the effectiveness of Altman's Z score in predicting financial distress. Recently, Satish & Janakiram (2011), Al Zaabi (2011), Gutzeit & Yozzu (2011), Wang & Campbell (2010), Xu & Zhang (2009)

However, some methodological issues regarding the Altman's model has been raised. (Gharghori et al, 2006 and Deakin, 1972)

Altman Z score model provides a more accurate prediction for US companies in certain periods than others (Begley et al, 1996). Z score performs better with manufacturing companies than with companies in other industries (Grice and Ingram, 2001).

Charles Moyer (1977) re-examined some critical aspects of Altman's model on the basis of: Altman model's success is notable during the first two years prior to bankruptcy but declines substantially for longer lead times. The parameters chosen by Altman are sensitive to either the time span used to develop the model or the firm size of Altman's original sample. Charles sample consisted of 27 bankrupt and 27 non-bankrupt firms during the period 1967 to 1975, and used linear MDA, direct and wilks methods. Empirical results suggested that X1, X2 and X3 (working capital/total assets, retained earnings/total assets, EBIT/total assets) are significant variables in predicting bankruptcy prior to three years, X4(market value of equity/book value of total debt) is significant one year prior to bankruptcy and X5 (sales/total assets) does not have any significance at all

Bhargava et al (1998), studies bankruptcy prediction for retail sector. His study compared bankruptcy predictive power of Altman's Z score and two single performance measures (cash flow and inventory turnover as they are popularly believed to be particularly relevant in the retail sector). The logit model for the retail sector indicated that Z score had better bankruptcy predictive power in comparison with cash flow and inventory turnover. Also, return on assets outperformed cash flow and inventory turnover, while cash flow outperformed inventory turnover in terms of bankruptcy predictive power.

June li (2012) predicted the corporate bankruptcy in US for period 2008 through 2011 using three models: Altman's original Z score model, a re-estimated Z score model and a re-estimated model with an added variable. To address the issue of whether Altman Z score be revised for bankruptcy prediction involving both manufacturing and non-manufacturing firms in different time periods. Altman original model's coefficients were re-estimated using the estimation group and tested for accuracy and finally a new variable "asset volatility" was added to the re-estimated model. The results suggested that Altman Z score model is suitable to predict bankruptcy for both manufacturing and non-manufacturing firms and market value of equity/total liabilities has the highest predictive power. Also, the new variable added does not appear to be a significant factor.

3. Problem Statement

In the realm of finance, where multiplicity of money is involved, the most sensitive and vulnerable players are investors in general and retail investors in particular. The biggest adversity that can happen to investors is corporate bankruptcy, which wipes out the equity of a firm and knocks the stock's investment value down to zero. Investors in order to assess the credibility of investments and issuers often resort to information sources such as offer documents of the issuer(s), research reports of market intermediaries, media reports and financial statements. But the problem is that, a significant chunk of Indian investors do not know how to correctly interpret and analyze the information contained in public financial statements. Apart from it, investors do not even have the required skills, time and other resources to assess the issuers' creditworthiness. In this backdrop, Altman Z Score model can be employed to assess the likelihood of a company filing bankruptcy. This paper attempts to studies the probability of failure of some select retail firms.

4. Objectives

- To identify the different bankruptcy prediction models
- To measure the financial health and viability of the select retail companies using Altman's Z Score

5. RESEARCH METHODOLOGY

5.1 Scope and period of study

Five Retail firms during the period 2012 to 2017 are chosen for the study. The accounting and financial data is obtained for five retail firms during 2012 and 2017.

5.2 Data Sources

The accounting and financial data is obtained from annual reports and stock exchanges.

5.3 Sample Size

Top Five Retail firms based on market capitalisation is considered for the study.

5.4 Methodology

Altman Z Score Model is used to estimate the financial position of a firm. The methodology used in Altman Z Score is discussed below.

6. Bankruptcy Prediction Models

6.1 Altman Z Score

The Z-score formula for predicting bankruptcy was published in 1968 by Edward I. Altman. used to predict the probability that a firm will go into bankruptcy within two years. Z-scores are used to predict corporate defaults and an easy-to-calculate control measure for the financial distress status of companies in academic studies. The Z-score uses multiple corporate income and balance sheet values to measure the financial health of a company.

$X1 = \text{Working Capital} / \text{Total Assets}$

$X2 = \text{Retained Earnings} / \text{Total Assets}$

$X3 = \text{Earnings Before Interest and Taxes} / \text{Total Assets}$

$X4 = \text{Market Value of Equity} / \text{Total Liabilities}$

$X5 = \text{Sales} / \text{Total Assets}$

Z score bankruptcy model:

$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + .999X5$

Zones of Discrimination:

$Z > 2.99$ -"Safe" Zone, $1.81 < Z < 2.99$ -"Gray" Zone, $Z < 1.81$ -"Distress" Zone

Z-score estimated for non-manufacturers

$X1 = (\text{Current Assets} - \text{Current Liabilities}) / \text{Total Assets}$

$X2 = \text{Retained Earnings} / \text{Total Assets}$

$X3 = \text{Earnings Before Interest and Taxes} / \text{Total Assets}$

$X4 = \text{Book Value of Equity} / \text{Total Liabilities}$

Z-Score bankruptcy model:

$Z = 3.25 + 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$

6.2 Ohlson O Score

The logit regression was first applied by Ohlson (1980), as a means of incorporating conditional probabilities into financial distress models. Ohlson used nine financial ratios combined in the following equation, in order to assess the probability of bankruptcy:

O-score = $-1.32 - 0.407*AS + 6.03*LM - 1.43*WCM + 0.757*ICR - 2.37*ROA - 1.83*FTDR - 1.72*DCLM + 0.285*DCRA - 0.521*CINI$

Probability of Failure = $P = \exp(\text{O-score}) / (1 + \exp(\text{O-score}))$

1. **Adjusted Size:** Ohlson measures a company's size as its total assets adjusted for inflation. Smaller companies are deemed to be more at risk of failure.

$AS = \log(\text{Total assets} / \text{GNP price-level index})$

Where GNP price-level index = $(\text{Nominal GNP} / \text{Real GNP}) * 100$

2. **Leverage Measure:** Designed to capture the indebtedness of a company, the more leveraged the more at risk the company is to shocks.

$LM = \text{Total liabilities} / \text{Total assets}$

3. **Working Capital Measure:** Even if a company is endowed with assets and profitability, it must have sufficient liquidity to service short-term debt and upcoming operational expenses to avoid going bust.

$WCM = \text{Working capital} / \text{Total Assets}$

4. **Inverse Current Ratio:** This is another measure of a company's liquidity.

$ICR = \text{Current liabilities} / \text{Current assets}$

5. **Discontinuity Correction for Leverage Measure:** Dummy variable equalling one if total liabilities exceeds total assets, zero otherwise. Negative book value in a corporation is a very special case and hence Ohlson felt the extreme leverage position needed to be corrected through this additional variable.

6. **Return on Assets:** An indicator of how profitable a company is, assumed to be negative for a close to default company.

$$ROA = \text{Net income} / \text{Total Assets}$$

7. **Funds to Debt Ratio:** A measure of a company's ability to finance its debt using its operational income alone, a conservative ratio because it does not include other sources of cash. If the ratio of funds from operations to short-term debt is less than one the company may have an immediate problem.

$$FTDR = \text{Funds from operations} / \text{Total liabilities}, \text{ Where Funds from operations} = \text{pretax income} + \text{depreciation}$$

8. **Discontinuity Correction for Return on Assets:** Dummy variable equalling one if income was negative for the last two years, zero otherwise.

9. **Change in Net Income:** Designed to take into account any potential progressive losses over the two most recent periods in a company's history.

$$CINI = (\text{Net income}(t) - \text{Net income}(t-1)) / (\text{Net income}(t) + \text{Net income}(t-1))$$

The O-score is transformed into a probability using a logistic transformation whereby $P > 0.5$ indicates an at risk company and $P < 0.5$ a safe one.

6.3 CHS (Campbell-Hilscher-Szilagy) Model

The CHS model was developed by a Harvard team in 2010 with the aim of creating a model of corporate failure in which accounting and market-based measures forecast the likelihood of future financial distress.

$$\text{Logit} = -8.87 - 0.09 * \text{SPL} + 0.07 * \text{OF} - 0.005 * \text{RS} + 1.55 * \text{RV} - 7.88 * \text{WRRP} - 2.27 * \text{STL} + 1.6 * \text{LM} - 20.12 * \text{WPM}$$

$$\text{Probability of Failure} = P = 1 / (1 + \exp(\text{logit}))$$

1. **Weighted Profitability Measure:** This is the ratio between a company's net income (losses) and the market value of their total assets. It is most likely to be negative for distressed firms and the formula gives greater influence for the results of the most recent quarters.

$$\text{WPM} = \text{Weighted average (Quarter's net income} / \text{MTA)} \text{ where MTA} = \text{Market value of total assets} = \text{Book value of liabilities} + \text{Market Cap}$$

2. **Leverage Measure:** Designed to capture the indebtedness of a company, distressed businesses are thought likely to be highly leveraged.

$$LM = \text{Total liabilities} / \text{MTA}$$

3. **Short-term Liquidity:** If a firm runs out of cash and cannot secure financing it will fail, hence short-term liquidity should be low.

$$STL = \text{Cash \& Equivalents} / \text{MTA}$$

4. **Weighted Recent Relative Performance:** A measure of a share's excess returns relative to its index, companies close to bankruptcy are expected to have negative returns. Again more weight is given to the most recent returns.

$$WRRP = \text{Weighted average } (\log(1 + \text{share's return}) - \log(1 + \text{FTSE100 return}))$$

5. **Recent volatility:** A shares standard deviation over the previous three months, distressed firms are likely to display a high volatility.

$$RV = \text{StdDev}(\text{price})$$

6. **Relative size:** An indication of the company's size relative to its index. Smaller companies are thought to have harder access to temporary financing to prevent failure.

$$RS = \log(\text{Stock market cap} / \text{FTSE100 total market value})$$

7. **Overvaluation factor:** Aimed at capturing overvalued firms that have recently experienced heavy losses

$$OF = \text{MTA} / \text{Adjusted book value where Adjusted book value} = \text{Book value} + 0.1 * (\text{Market Cap} - \text{Book value})$$

8. **Share price level:** Distressed firms often have very low prices reflecting their equity value. The measure is capped at \$15 as prices above this were not found to influence the result. A company with a share price of \$20 therefore would still be calculated as log(15).

$$SPL = \log(\text{recent share price})$$

Discrimination Zone

The result of the calculation is a number between 0 and 1 where 0-0.05 companies are considered safe and 0.9-1 companies as being at risk of failure.

6.4 Zmijewski Model

This model was developed in 1984 to predict a firm's bankruptcy in two years. The ratio uses in the Zmijewski score were determined by probit analysis. The formula to calculate is given below:

$$X = -4.3 - 4.5X_1 + 5.7X_2 - 0.004X_3$$

X₁ = Profit after tax/total assets

X₂ = Total debt/total assets

X₃ = Current assets/current liabilities

6.5 Springate S Score Model

$$Z = 1.03A + 3.07B + 0.66C + 0.4D$$

A = Working Capital/Total Assets

B = Net Profit before Interest and Taxes/Total Assets

C = Net Profit before Taxes/Current Liabilities

D = Sales /Total Assets

If $S < .862$ then firm will be considered to be predicted as bankrupt, else will be considered solvent

6.6 Fulmer Model (U.S. - 1984)

Fulmer (1984) used step-wise multiple discriminate analysis and arrived at a model which takes the following form -

$$H = 5.528 (V_1) + 0.212 (V_2) + 0.073 (V_3) + 1.270 (V_4) - 0.120 (V_5) + 2.335 (V_6) + 0.575 (V_7) + 1.083 (V_8) + 0.894 (V_9) - 6.075$$

V₁ = Retained Earning/Total Assets

V₂ = Sales/Total Assets

V₃ = EBT/Equity

V₄ = Cash Flow/Total Debt

V₅ = Debt/Total Assets

V₆ = Current Liabilities/Total Assets

V₇ = Log Tangible Total Assets

V₈ = Working Capital/Total Debt

V₉ = Log EBIT/Interest

if $H < 0$; then the firm is classified as "failed" Fulmer reported a 98% accuracy rate in classifying the test companies one year prior to failure and an 81% accuracy rate more than one year prior to bankruptcy.

6.7 Summary of various Bankruptcy Prediction Models

Table 1: Summary of Bankruptcy Prediction Models

Sl. No	Bankruptcy Prediction Models	Determinants	Formula	Zone of Discrimination
1	Altman Z Score	X1 = (Current Assets - Current Liabilities) / Total Assets X2 = Retained Earnings / Total Assets X3 = Earnings Before Interest and Taxes / Total Assets X4 = Book Value of Equity / Total Liabilities	$Z = 3.25 + 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$	Z > 2.6 - "Safe" Zone 1.1 < Z < 2.6 - "Grey" Zone Z < 1.1 - "Distress" Zone
2	Ohlson O Score	AS = log(Total assets/GNP price-level index) LM = Total liabilities/Total assets WCM = Working capital/Total Assets ICR = Current liabilities/Current assets Discontinuity Correction for Leverage Measure = Dummy variable ROA = Net income/Total Assets FTDR = Funds from operations/Total liabilities Discontinuity Correction for Return on Assets = Dummy variable CINI = (Net income(t) - Net income(t-1)) / (Net income(t) + Net income(t-1))	O-score = $-1.32 - 0.407*AS + 6.03*LM - 1.43*WCM + 0.757*ICR - 2.37*ROA - 1.83*FTDR - 1.72*DCLM + 0.285*DCRA - 0.521*CINI$ Probability of Failure = $P = \exp(O\text{-score}) / (1 + \exp(O\text{-score}))$	P > 0.5 indicates an at risk company and P < 0.5 a safe one
3	CHS Model	WPM = Weighted average (Quarter's net income/Market Value of total Assets (MTA)) LM = Total liabilities/MTA STL = Cash & Equivalents/MTA WRRP = Weighted average (log(1+share's return)-log(1+FTSE 100 return)) RV = Stddev(price) RS = log(Stock market cap/FTSE 100 total market value) OF = MTA/Adjusted book value SPL = log(recent share price)	Logit = $-8.87 - 0.09*SPL + 0.07*OF - 0.005*RS + 1.55*RV - 7.88*WRRP - 2.27*STL + 1.6*LM - 20.12*WPM$ Probability of Failure = $P = 1 / (1 + \exp(\text{logit}))$	0-0.05 companies are considered safe and 0.9-1 companies as being at risk of failure
4	Zmijewski model	X1=Profit after tax/total assets X2=Total debt/total assets X3=Current assets/current liabilities	$X = -4.3 - 4.5X1 + 5.7X2 - 0.004X3$	Firms with probabilities ≥ 0.5 were classified as bankrupt. Firms with probabilities < 0.5 were classified as non-bankrupt

5	Springate S Score Model	A = Working Capital/Total Assets B = Net Profit before Interest and Taxes/Total Assets C = Net Profit before Taxes/Current Liabilities D = Sales /Total Assets	$Z = 1.03A + 3.07B + 0.66C + 0.4D$	If $S < .862$ then firm will be considered to be predicted as bankrupt, else will be considered solvent
6	Fulmer Model	V1 = Retained Earning/Total Assets V2 = Sales/Total Assets V3 = EBT/Equity V4 = Cash Flow/Total Debt V5 = Debt/Total Assets V6 = Current Liabilities/Total Assets V7 = Log Tangible Total Assets V8 = Working Capital/Total Debt V9 = Log EBIT/Interest	$H = 5.528 (V1) + 0.212 (V2) + 0.073 (V3) + 1.270 (V4) + 0.120 (V5) + 2.335 (V6) + 0.575 (V7) + 1.083 (V8) + 0.894 (V9) - 6.075$	if $H < 0$; then the firm is classified as "failed"

7. Data Analysis & Interpretation

7.1 Altman's Z-Score for Future Retail Limited

Table 2: Table showing the Altman Z Score for Future Retail Limited

Years	X1	X2	X3	X4	Z Score
2016-17	0.2699	(0.0180)	0.0825	0.0002	2.266474
2015-16	0.2632	(0.0878)	0.0091	0.0003	1.44038
2014-15	0.1246	0.0080	0.0985	0.0001	0.843525
2013-14	0.1038	0.0060	0.0967	0.0001	0.700556
2012-13	0.0802	0.0760	0.1232	0.0002	1.60198

Source: Annual Reports

The Z Score for Future Retail Ltd ranges from 0.700556 to 2.266474. It is found to be highest in 2016-17 and lowest in 2013-14. It is also seen that X2 (Retained Earnings/Total Assets) was negative for two consecutive years, i.e., 2015-16 and 2016-17.

7.2 Altman's Z-Score for Trent Limited

Table 3: Table showing the Altman Z Score for Trent Limited

Years	X1	X2	X3	X4	Z Score
2016-17	(0.1532)	0.1369	0.0505	0.0004	-0.10874
2015-16	(0.0463)	0.0922	0.0525	0.0004	0.350064
2014-15	(0.0183)	0.0671	0.0420	0.0005	0.381463
2013-14	0.1960	0.0531	0.0309	0.0005	1.667039
2012-13	0.1762	0.0443	0.0399	0.0004	1.568838

Source: Annual Reports

Trent Retail Ltd exhibited poor Z score for the year 2016-17. The calculations showed that $X1$ [(Total Assets-Total Liabilities)/Total Assets] is negative for three consecutive years. It is seen from the above table that the Z score is diminishing year on year.

7.3 Altman's Z-Score for Shoppers Stop Limited

Table 4: Table showing the Altman Z Score for Shoppers Stop Limited

Years	X1	X2	X3	X4	Z Score
2016-17	(0.2226)	0.1211	0.1099	0.00002	-0.32692
2015-16	(0.1734)	0.1261	0.1133	0.00002	0.034979
2014-15	(0.2006)	0.1306	0.1070	0.00002	-0.17112
2013-14	(0.1996)	0.1223	0.0928	0.00003	-0.28703
2012-13	(0.1982)	0.1217	0.0909	0.00003	-0.29257

Source: Annual Reports

Altman Z Score for Shoppers Stop Limited shows negative values for four years of the five year period. $X1$ [(Total Assets-Total Liabilities)/Total Assets] is negative for all the years under study.

7.4 Altman's Z-Score for V-Mart Retail Limited

Table 5: Table showing the Altman Z Score for V Mart Retail Limited

Years	X1	X2	X3	X4	Z Score
2016-17	0.2485	0	0.1716	0.0002	2.783522
2015-16	0.2463	0	0.1644	0.0002	2.720706
2014-15	0.2801	0	0.2007	0.0003	3.186475
2013-14	0.2466	0	0.1803	0.0003	2.829627
2012-13	0.3507	0	0.1739	0.0004	3.46962

Source: Annual Reports

V Mart Retail Limited had no retained earnings during the complete period of study. Hence, the variable $X2$ is zero for all the years. Altman Z Score for V Mart Retail Limited ranges from 2.72 to 3.46. The highest Z score is seen in 2012-13 and lowest in 2015-16.

7.5 Altman's Z-Score for Kewal Kiran Limited

Table 6: Table showing the Altman Z Score for Kewal Kiran Limited

Years	X1	X2	X3	X4	Z Score
2016-17	0.3452	0	0.2010	0.0002	3.615442
2015-16	0.4366	0	0.2454	0.0002	4.513394
2014-15	0.2959	0	0.1673	0.0002	3.06557
2013-14	0.6520	0	0.1979	0.0002	5.607218
2012-13	0.6147	0	0.2270	0.0003	4.032913

Kewal Kiram Limited also had no retained earnings during the complete period of study. Hence, the variable X2 is zero for all the years. Altman Z Score for Kewal Kiram Limited ranges from 3.06 to 5.6. The highest Z score is seen in 2013-14 and lowest in 2014-15.

Altman Z Score and the firms classification

Table 7: Table showing the Zone of safety for Future Retail Limited

Company	Year	Z value	Zone
Future Retail	2016-17	2.266474	Grey zone
	2015-16	1.440383263	Grey zone
	2014-15	0.8435255016	Distress zone
	2013-14	0.7005562315	Distress zone
	2012-13	1.601986	Grey zone



Chart 1: Chart showing the movement of stock prices for Future Retail Limited

It is clearly evident from table 7, that Future Retail Ltd was in distress zone and now it is seen in Grey Zone for the past two years. It is also seen in chart 1 that the stock prices have are on increasing trend with the increase in the financials.

Table 8: Table showing the Zone of safety for Trent Retail Limited

Company	Year	Z value	Zone
Trent	2016-17	-0.1087418996	Distress zone
	2015-16	0.350064	Distress zone
	2014-15	0.381463	Distress zone
	2013-14	1.667039	Grey zone
	2012-13	1.568838	Grey zone



Chart 2: Chart showing the movement of stock prices for Trent Retail Limited

The values of Trent Limited clearly indicate that the firm is in distress zone for the past three consecutive years as shown in table 8. But, surprisingly the stock prices are increasing with the deteriorating condition of the firms financials as seen in chart 2. This shows that the investors in stock market are not aware of the firms fading financials.

Table 9: Table showing the Zone of safety for Shoppers Stop Limited

Company	Year	Z value	Zone
Shoppers Stop	2016-17	-0.326921	Distress zone
	2015-16	0.034979	Distress zone
	2014-15	-0.171119	Distress zone
	2013-14	-0.2870305	Distress zone
	2012-13	-0.2925705	Distress zone



Chart 3: Chart showing the movement of stock prices for Shoppers Stop Retail Limited

The values of Shoppers Stop Limited shows the firm to be in distress zone for all the years

under study as highlighted in table 9. In conjunction with the firm's financials, the stock prices have seen a steady movement as shown in chart 3.

Table 10: Table showing the Zone of safety for V Mart Limited

Company	Year	Z value	Zone
V- Mart Retail	2016-17	2.783522	Safe zone
	2015-16	2.720706	Safe zone
	2014-15	3.186475	Safe zone
	2013-14	2.829627	Safe zone
	2012-13	3.46962	Safe zone



Chart 4: Chart showing the movement of stock prices for V-Mart Retail Limited

The values of V Mart Retail Limited highlight that the firm is in Safe zone for the all the years of study as shown in table 10. The chart 4 also shows that the stock prices have seen a continuous increase over the years.

Table 11: Table showing the Zone of safety for Kewal Kiran Limited

Company	Year	Z value	Zone
Kewal Kiran	2016-17	3.615442	Safe zone
	2015-16	4.513394	Safe zone
	2014-15	3.06557	Safe zone
	2013-14	5.607218	Safe zone
	2012-13	4.032912514	Safe zone



Chart 5: Chart showing the movement of stock prices for Kewal Kiran Limited

The values of Kewal Kiran Limited highlight that the firm is in Safe zone for the all the years of study as shown in table 11. Following the improvement in financials, the stock prices have raised continuously for the last three years.

8. Conclusion

The study is directed to study the financial soundness of five retail firms for the period 2012 to 2017 using Altman Z Score Model. The study reveals that the three retail firms (Future Retail, Trent Retail and Shoppers Stop Retail) of the five selected have a greater likelihood of going bankrupt in the near future. However, the stock prices of these firms did not convey any information of deteriorating condition of the firms' financials. Therefore, it is advised that all market participants in general and investors in particular employ Altman Z Score Model to study the financial soundness of firms before investing. In addition to this, the investors can use Z-Score to monitor the safety of their investments.

9. Limitations and Scope for Further Research

This study was directed to know the financial soundness of five retail firms for five year period (2012-13 to 2016-17) using Altman Z Score which uses four variables. Further studies may be conducted to know the financial health of firms in other sectors. In addition to this, studies may also be carried out using other bankruptcy models like Ohlson O Score, CHS Model, Fulmer Model, Springate S Score Model and such others.

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An Empirical Study on Different factors of Talent Management Practices influencing the Employees Satisfaction in Banking Sector (With Special Reference to Private Sector Banks)

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Abstract

This paper takes a cautionary stance to the impact of different factors of talent management practices on employee satisfaction in banking sector. The objective of the study is to find the different factors of talent management practices in banking sector and to analyse the impact of different factors of talent management on employee satisfaction in banking sector. Multiple correlation analysis is used to prove the hypotheses base on the different determinants of talent management practices in banking sector. Results reveal that all the factors of talent management practices have the significant relationship between employee satisfactions in banking sector. These findings contribute to the literature relating to talent management and have HR implications for bringing traffic into banking sector.

Keywords: Talent management, employee satisfaction, banking sector, Management.

Introduction

1.1 Concept of Talent Management

Talent is the requirement of every organisation be it large or small. Without talent no organisation can grow or sustain. Talent is an inborn quality of an individual. It can be any trait an individual possess, which are honed to achieve the desired results. Being skilled is not sufficiently just to be a talent. The skilled employees ought to be focused on the causes and objectives of the organisation and ought to be capable and willing to add to the accomplishment of the organisation.

Talent Management can be "attracting, recruiting, engaging, developing and retaining those people who possess potential and creates value for the organisation and themselves" or

"A conscious, deliberate approach undertaken to attract, develop and retain people with the aptitude and abilities to meet current and future organisational needs"

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Talent Management is tied in with putting the opportune people with the right aptitudes in the right position at the perfect time. Talent Management begins when an individual joins an organisation and continues throughout his tenure.

Talent Management approach focuses on "recruitment, retention, employee development, leadership and high potential employee development, performance management, workforce planning" etc. Success of talent management can be measured through Talent Management Metrics ("overall talent retention rate, cost to hire talent, time it takes to hire talent, average tenure of the new hires, revenue per full time employee.")

Employee Satisfaction

Employee satisfaction has been an important aspect in the organizations. Employee satisfaction can be defined as the effective orientation of an employee towards his/her work. This is related to the work culture that is followed within the organization. It is used to describe that if the employees in an organization are sad or happy, contented and whether they are able to fulfill their needs at work and achieve their aspirations and desires. The major factors influencing the employee satisfaction are supportive work conditions, fairness in the organization, fair chances for promotion, deserving pay, compensation and bonuses, fair work hours and equal treatment of all the employees. Employee satisfaction is the key to success of an organization.

To cope up with the changing environment in the banking sector, it is necessary to break the conventional hierarchical system which increases the differences between the seniors and juniors, old and new employees of the organization. It increases the communication gap between the employees and the management and effective communication is the key to the success of any organization.

Review of Literature

"Behera. R. (2016) Talent Management Practices in the Indian Banking Sector: A Step towards the Growth of Indian Economy"

The motive for this study was to analyse the relationship between "talent management and employee engagement in Indian Banking sector". Study uncovered that organizations are executing the most recent thoughts on management, some of the time to the point of overuse. Key challenge for this sector and other sector is thusly in what way to build up their social intention that creates intellectual capital as the essential driver of progress. Study concluded that there were a significant relationship between talent management practices and employee engagement. Taking the banking industry to the statures of brilliance, particularly even with the forehead-detailed emerging realities, will require a "new technologies, better processes of credit and risk appraisal, treasury management, product diversification, internal control and external regulations and, not the least, human resources".

"Chitra.M (2014) Talent Acquisition in Indian Banking Sector"

This research paper has been tried to distinguish the best origin of talent acquisition and to discover the most important measures of talent acquisition. Concentrate inferred that in banks HR must receive a more compelling part, using the modern thinking in talent management to make recommendations that attract in and retain the correct pioneers. "This study reveals that success of talent acquisition is evident in customer satisfaction and also the best source of talent acquisition is press advertisements".

"Sharma. N. K. (2012) Talent Management: A Formidable HR Challenge"

This paper opens up a way to understand all the complexities and challenges of talent management that companies need to be faced in order to build a solid foundation for the company's future. Research revealed that for organization to succeed in today's rapidly changing and competitive environment, a focused human capital centric approach is required. Although, the road ahead is rampant with obstacles, both hard and strong, the mantra for organization is so strategically plan their talent resources and judiciously utilize them for long term survival growth. In today's dynamic global business environment, highly mobile workforce is the ever growing challenge for a company, and it requires a meticulous and well planned approach towards talent management. Fortunately, HR and business leaders both have recognized that talent is a crucial driver for the performance of a business. It is not a surprise that talent management practices are often considered as a key strategic priority. The future of talent management will need to evolve from where it is today to become a more systematic business process.

"Khoreva. V. (2017) Talent management practice effectiveness: investigating employee perspective"

This research paper highlights the hypothetical and experimental comprehension of the procedure through which talent management practices adequacy impacts "high-potential employees' commitment to leadership competence development". Research concluded that all the best employees of the organisation asserted talent management to urge, so that they will do more efforts towards leadership competence development. The study also found out that the relationship among talent management practices adequacy and sense of duty regarding authority capability improvement works by means of psychological contract fulfillment. At last, the study concluded that female employees had a more grounded response to the viability of talent management practices by showing more elevated amounts of "commitment to leadership competence development than male" employees.

"McDonnell. A., Collings. D. G., Mellahi. K. and Schuler. R. (2017) Talent management: a systematic review and future prospects"

This paper utilizes an orderly and exhaustive survey to follow the development of talent management and propose an examination motivation to propel the field. Two essential streams of literature dominate: the administration of superior performers and high possibilities, and the recognizable strategic positions and talent management frameworks. The theme of worldwide talent management

has gotten huge consideration; notwithstanding, quite a bit of this literature has a tendency to consolidate the two streams up to this time recognized however on a worldwide scale. The review likewise exhibits that there has been constrained consideration set on individual talents as the unit of examination. Early reactions of the disconnected idea of the field remain and we call for more noteworthy clarity around the reasonable limits of talent management. Our research features that most papers draw, to some degree, on essential research. There is however significant need and degree for more complete and nuanced methodological approaches.

Objectives of the Study

- To find the different factors of talent management practices in banking sector.
- To analyse the impact of different factors of talent management on employee satisfaction in banking sector.

Hypothesis

H₀₁: There is no significant impact of different factors of talent management on employee satisfaction in banking sector.

H_A₁: There is a significant impact of different factors of talent management on employee satisfaction in banking sector.

Research Methodology

The present research is exploratory and descriptive in nature. Primary and secondary methods have been utilized for gathering the information for present research work. Structured questionnaire has been managed to collect primary data. The questionnaire was scattered among 90 employees of banking sector. The stratified random sampling technique is utilized for data collection. The questionnaires were designed using 5 point likert's scale. Coding and tabulation were done and analyzed by using SPSS software.

Primary data is collected through questionnaire from 90 respondents. There are three private sector banks in which the sample has been divided:

Private Sector

From the above review it has been exhibited that private banks are pro movers in using different factors of talent management. These banks are also well aware of the term and its usage. Following major banks in private sector has been selected for this study.

ICICI Bank: 30 respondents

HDFC Bank: 30 respondents

Yes Bank: 30 respondents

Universe of Study

The criteria of sampling plan undertaken are as follows:

Table 3

1.	Target Population or Universe	Employees of Banking Sector
2.	Sampling Method	Stratified Random Sampling Method
3.	Sample size	90 Employees of Private Sector Banks
4.	Area of Survey	Jaipur City

Source of Data Collection

Data collection is the technique for gathering and assessing the data or factors of interest, in a precise way that empowers one to answer expressed research question, test hypotheses and measure results.

In the present study primary data is collected with the help of structured questionnaire. Questionnaire will be filled by the employees of selected banking sector of Jaipur City. Primary data is collected through questionnaire from 90 employees of banking sector.

Research Design

Present study is an empirical analysis of "An Empirical Study on Different factors of Talent Management Practices influencing the Employees Satisfaction in Banking Sector". Present study adopted the research design so as to suit empirical analysis based on primary data.

Present research is an empirical analysis of talent management so that various tools and techniques of analysis are used depending upon the nature, need and suitability of the data available and to study the analysis of determinants of talent management practices in banking sector. Findings, suggestions and limitations for the study are also discussed.

"Exploratory Factor Analysis (EFA)"

"Table: KMO and Bartlett's Test"

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	993.143
	Df	276
	Sig.	.000

Source: Output of IBM-SPSS 22

Above table revealed Bartlett's test statistics is significant as the sig. value is 0.000, which indicates the presence of non-zero correlations in the correlation matrix. KMO value in present study is 0.788 which

is more than 0.06. Although both tests met the minimum criteria for carrying out factor analysis in the dataset.

Table: "Total Variance Explained"

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.126	50.523	50.523	12.126	50.523	50.523	6.061	25.253	25.253
2	2.421	10.089	60.612	2.421	10.089	60.612	4.849	20.205	45.458
3	1.331	5.544	66.156	1.331	5.544	66.156	2.935	12.227	57.685
4	1.211	5.045	71.201	1.211	5.045	71.201	2.165	9.020	66.706
5	0.902	4.245	75.446						
6	.877	3.656	79.102						
7	.736	3.066	82.168						
8	.708	2.950	85.119						
9	.611	2.548	87.666						
10	.460	1.917	89.583						
11	.414	1.726	91.309						
12	.343	1.429	92.738						
13	.334	1.390	94.128						
14	.261	1.087	95.214						
15	.239	.996	96.210						
16	.205	.855	97.065						
17	.197	.820	97.885						
18	.136	.567	98.452						
19	.116	.483	98.934						
20	.082	.343	99.277						
21	.070	.290	99.567						
22	.047	.194	99.761						
23	.033	.139	99.900						
24	.024	.100	100.000						

Extraction Method: Principal Component Analysis.

Source: Output of IBM-SPSS 22

SPSS has extracted four components for the present study based on Kaiser's criterion of retaining factors with Eigen value greater than 1.

Table: Results of the Factor Analysis (Rotated Component Matrix)

	Rotated Component Matrix ^a			
	Component			
	1	2	3	4
Do you think that your bank face challenge in Hiring of new employees?	.644			
Do you agree that your bank recruit the employees frequently	.780			
Do you think your bank follow the commitments given at the time of recruitment	.564			

Do you think the bank follows the internal recruitment process for recruiting an employee	.712			
Do you think the bank follows the external recruitment process for recruiting an employee	.819			
Do you think the bank follows the others recruitment process for recruiting an employee	.629			
Do you think that retention of the employees is the challenging task for your bank		.822		
Do you think Exit policy of the bank is the challenge for implementing talent management		.707		
My bank provide opportunities for growth and development		.571		
Does your bank motivates you or provide an environment to retain within the bank		.786		
Does your superior influence you to do the best job in organization		.776		
Does your subordinates motivates you to do the best job in the organization		.704		
Does your inner motivation motivates you to do the best job in the organization		.784		
Do you think your bank follow the commitments given at the time of recruitment		.775		
Is there any policy in your bank to provide job security to the employees		.758		
Are you satisfied with the retention and job security policy of the bank		.627		
My performance is evaluated fairly			.657	
I get rewards for my performance			.825	
My bank follows a matrix for increment and promotions			.597	
Is there any policy of promotion in your bank			.535	
Does your bank provide timely bonus, increment opportunities when an employee excel			.694	
Do you think your bank conduct any development program for higher level managers				.834
My bank organizes regular training programme for existing employees				.655
My bank organizes regular training programme for New employees				.567

Source: Output of IBM-SPSS 22

Above table shows that six variables loaded under factor 1 seem to be associated with equal **recruitment & selection**. The second factor comprises ten variables which related to talent **acquisition & retention**. The five variables under factor 3 represent **increment & promotion**. The three variables under factor 4 signify **training & development**.

Validation of the Data

Table: Reliability Statistics

Reliability Statistics		
Parameters	Cronbach's Alpha	N of Items
Recruitment & Selection	0.723	6
Talent acquisition and Retention	0.712	10
Training & Development	0.763	3
Increment & Promotion	0.752	5
Employee Satisfaction	0.796	3

Source: Output of IBM-SPSS 22

Reliability of Data: From the above table we can observe that Cronbach's alpha is more than 0.700 in all the identified variables"which indicates a high level of internal consistency for our scale with this specific sample".

H₀₁: There is no significant impact of available factors of talent management on employee satisfaction in banking sector.

H_A₁: There is a significant impact of available factors of talent management on employee satisfaction in banking sector.

Table:Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Recruitment & Selection	3.0887	.93241	100
Talent acquisition and Retention	3.0915	.96433	100
Training & Development	3.0936	1.02986	100
Increment & Promotion	2.8582	.93443	100
Employee Satisfaction	3.0408	.88305	100

Table: Results of the Multiple Correlation Analysis

Correlations					
		Recruitment & Selection	Talent acquisition and Retention	Training & Development	Increment & Promotion
Employee Satisfaction	Pearson Correlation	.513**	.602**	.634**	.556**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	100	100	100	100

The above table revealed that there is a significant relationship between all the identified variables of **Talent Management Practices** and **Employee Satisfaction**. It has found that **Training & Development** has highest Pearson correlation 'r' value **0.634** and sig. value (**p value**) is **0.000** which shows that **training & development** and **employee satisfaction** has statistically significant positive correlation.

In case of **Talent acquisition and Retention** the Pearson correlation 'r' value **0.602** and sig value (**p value**) is **0.000** which shows that **talent acquisition and retention** and **employee satisfaction** has statistically significant positive correlation..

Increment & Promotion has Pearson correlation 'r' value **0.556** and **p value (sig value)** is **0.000** which shows that **increment & promotion** and **employee satisfaction** has statistically significant positive correlation.

Recruitment & Selection has Pearson correlation 'r' value **0.513** and **p value (sig value)** is **0.000** which shows that **recruitment & selection** and **employee satisfaction** has statistically significant positive correlation.

Limitations of the study:

- The findings are based on the information given by the employees and can be biased sometimes.
- The resistance of respondents for answering the questionnaire may be another problem
- The time lag between questionnaire sending and actual response from employees may be large that affects actual decision making and analysis.

Discussion & Conclusion

Discussion concludes that determinants of talent management have a significant impact on employee satisfaction in banking sector. Training & development have highest r value 0.634 ($p= 0.000$), talent acquisition & retention have r value 0.602 ($p= 0.000$), increments & promotion have r value 0.565 ($p= 0.000$) and recruitment & selection have r value 0.513 ($p= 0.000$).

As per above discussion we can conclude that talent management practices positively affect the satisfaction of employees as well as the productivity of the organisation. Present study concluded that training & development is a prominent factor that has highest impact on employee satisfaction as compared to other factors of talent management practices in banking sector.

This study reveals that talent management practices of banking sector have directly or indirectly impact on employee satisfaction. Effective talent management practices ultimately effects on the individual performance as well as organisation performance.

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HR Practices in Post Liberalisation Era : An Analysis on Organisational Culture in India

– Anup Kumar Ghosh*

Abstract

Indian economy has been taken a new track after 1990 by the introduction of new industrial policy. This policy brings changes in the shape and structure of Indian business scenario and very popularly known as Liberalisation, Privatisation and Globalisation (LPG). Finally, this policy exposed the Indian economy as a giant hope before the world business tycoons. It is of no doubt that huge foreign investment has been coming to Indian economy with a sharp growth of GDP. It was a concern for debate whether the Indian industries can maintain the HR policies and practices at par with the foreign conglomerates. But after 26 years of its implementation, now it is the time to analyse the HR practices now prevailing in the country, whether it is better or worse than the pre-implementation period and what is the reason behind this change. With this research question this semi exploratory descriptive study has been conducted over 132 employees working at different organisations in India. Here the researcher categorised the organisations into two halves: pre-LPG and post-LPG. After collecting the data through structured questionnaire, it has been analysed and observed that most of the post-LPG organisations are not following different statutory requirements as compared to pre-LPG organisations. For the sake of the law abiding matter, Government is not very strict for these post-LPG organisations as that will make FDP inflow low. Differential policies are adapted by the MNCs in HR matter at different countries and especially for India. At the concluding section, the researcher elaborated the cause behind this type of serious lapses observed in the country and their remedies.

Keywords: Pre-LPG Organisation, Post-LPG Organisation, HR Practices, Indian Economy, New Industrial Policy, Organisational Culture.

Introduction

Following its freedom on August 15, 1947, the Republic of India stuck to socialistic economic strategies till 1980. In the year 1980, Rajiv Gandhi, the then prime minister of India, started a number of economic restructuring measures. In 1991, the country experienced a balance of payments dilemma following the Gulf War and the downfall of the erstwhile Soviet Union. The country had to make a deposit of 47 tons of gold to the Bank of England and 20 tons to the Union Bank of Switzerland. This was necessary under a recovery pact with the IMF or International Monetary Fund. Furthermore, the

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international monetary fund necessitated India to assume a sequence of systematic economic reorganisations. Consequently, the then Prime Minister of the country, P V Narasimha Rao initiated ground breaking economic reforms which the International Monetary Fund looked for. Dr Manmohan Singh was then the finance minister of the government of India. He assisted Narasimha Rao and played a key role in implementing these reform policies.

The New Economic Policy of 1991, was further divided into two different phases viz. A) Pre Liberalization Era (1947-1991) and B) Post Liberalization Era. (1991 onwards).

a. Pre Liberalization Era : This era began at the time of independence in 1947 and lasted till the introduction of New Economic Policy in 1991 by Dr. Manmohan Singh, the then Union finance minister of India. This era is marked by the emergence and growth of popular 'Nehru Model' of development. Pandit Jawahar Lal Nehru is popularly known as chief architect of Indian planning because of his great contributions in this field. His doctrine of 'Democratic Socialism' formed the base of new model of development he envisaged for India. He took over the reigns of governance of a big nation in 1947 as first Prime Minister of free India. India was till then being ruled by foreign invaders for centuries and her people fought a long battle of freedom. People were sick of expositions by the British Colonial rule and wanted socio economic development on their own terms. The general perception at that time was to oppose all the policies of suppression and any foreign interference in domestic matters. Inevitably, there was a reaction against the laissez-faire policies that the colonial government had followed for most of its life, and great caution at first about continued contact with foreign governments and business interests. The sectors which are working at pre liberalization era are steel, power, formal banking, government hospital, government colleges, etc.

b. Post Liberalization Era. (1991 onwards) : The year of 1991 can be treated as the turning point in India's official position on economic policies, with the launch of wide ranging measures to de-regulate the economy and ending of 'quota-license' regime. Bringing economic reforms was the main agenda of the Congress party which again came to power in 1991 under P.V. Narasimha Rao as the new Prime Minister of India. Depleted official reserves, large deficits in balance of payments, and sharp decline in GDP growth which was reflected in similar declines in almost all sectors of the economy demanded urgent attention. The economic reforms were considered as the panacea and a cure-all to combat the economic crisis as had engulfed the country.

Dr. Manmohan Singh, the then Union Finance Minister had a new vision and doctrine based on the logic of economic development. He announced the Statement on Industrial Policy on July 24, 1991. This statement was the New Economic Policy or the New Industrial Policy of 1991. With the announcement of this policy, India entered into the era of new generation economic reforms. The major objectives of this Statement on New Industrial policy were "to build on" the gains already made, correct the distortions or weaknesses that might have crept in, maintain a sustained growth in productively and gainful employment, and attain international competitiveness".

The new policy was for de-regulating the economy in a phased and substantial manner. In pursuit to achieve such objectives, the Government announced a series of initiatives in respect of the policies relating to the following areas: a) Industrial Licensing; b) Public Sector Policy; c) MRTP Act; d) Foreign Investment and Technology.

Later on, a package for the Small and Tiny sectors of industry was announced separately in August 1991. The sectors which have been developed during this phase are IT, Private Educational Institute, Private Insurance Companies, Private Hospital, Hospitality etc. After 1991, India has observed a sea change in its economic scenario. Entrance of different foreign companies makes our country market dynamic. Further, it is also been observed that GDP growth rate is also in upward direction till 2015.

During independence, the industry condition of the country was no doubt very poor but with the passage of time and with different enactment this condition has been modified a lot due to active enforcement mechanism. But with the liberalisation followed by all these rosy pictures and massive increase of industrial activities, it is also been hoped that the employee engagement practices should also be improved a lot.

With this backdrop, this particular study has been aimed to verify the present picture of HR practices or employee engagement practices available before the employees working in different sectors. The researcher also tried to make a comparison between Pre-LPG Sector Vs Post LPG sector in the matter of employee engagement practices.

Literature Review

Human Resource is one of the vital asset for an organisation. Out of the 4 "M", this M (Man) has only brain and can not be controlled as per the will of the employer. Their productivity depends upon many factors both intrinsic and extrinsic. Only extrinsic factors like money, perks and other material benefits could not satisfy them enough to be a motivated workforce. Several research studies has shown the relationship between employee engagement practices with other parameters productivity, leadership etc.

Anand and Banu (2011) studied various factors of Employee Engagement practices like work, rewards and recognition, opportunities, team work, immediate supervisor, communication and observed their impact on intension to stay at the organisation. The study found a strong positive relationship between engagement variables and discretionary effort and a weak negative relationship between engagement variables and intension to stay. Sarkar's (2011) study on the factors contributing to the employee engagement and the various strategies implemented by HR professionals to enhance employee engagement in manufacturing organizations shown that Intrinsic Motivation and Training & Development are affecting in a higher degree to the employee engagement.

Handa and Gulati (2014) studied the relationship between personality traits and employee engagement amongst frontline personnel in the organized Indian retail industry. Their study found that there is considerable scope for improvement in the level of employee engagement amongst the frontline personnel in the organized retail industry. The study also found that personality is a significant predictor of employee engagement. A thriving employee engagement assists to generate a community at the place of work not just an employees. Engaged employees experience a strong emotional connection to the organization. Employee's involvement in companywide initiatives, educational opportunities and open communication are the vital tools of Employee Engagement (Gupta, 2015). Cheema, Akram and Javed (2016) also received a significant relationship of employee engagement, vision guiding and emotional commitment on customer and employee satisfaction. Bhuvanaiah and Raya (2015) conducted a research on Employee Engagement and Intrinsic Motivation as a mechanism of improved employee performance. Their study inferred that people prefer work role that gives psychological satisfaction more than a monetary incentive. Understanding employee preferences and creating a platform to express and employ themselves at work is a major responsibility of management. Once provided, the satisfaction resulted from need fulfilment tremendously motivates employee to engage with task and thereby performance. The association of individual spirituality on employee engagement has been studied by Richard (2013) where major thrust was on the three constructs i.e., vigor, dedication, and absorption. The empirical support for spirituality as a predictor of engagement came out as practical decisions for addressing workplace spirituality and concerned with the potential to assist in countering the declining engagement trend.

Auh (2011) identified that employee evaluations of self (i.e self evaluations) and perceptions of organizational environment (i.e., psychological climate) affect employee engagement. In the same tune Carter and Baghurst (2013) argued for Servant Leadership concept which creates an unique organizational culture where both leaders and followers unite to reach organizational goals without positional or authoritative power. Halbesleben (2003) measured the impact demographic factors over employee engagement level and did not find much variation due to the said factor differences. Investigating the relationship between corporate entrepreneurship and employee engagement, Bakker (2010) found that practicing managers view the relationship between the organisation and employees as a two-way relationship guided by reciprocal exchange and when firm-specific entrepreneurial atmosphere is conducive, employees used to respond by engaging themselves innovatively. The study of Jessica and Helena (2011) identified that leadership is a key antecedent of employee engagement. The study results also indicated that leadership behaviors - relating to effective performance and displaying integrity - may also facilitate employee engagement. There are similar types of research which showed that the organisations focused on presenting a great environment for employees to work and promote programmes that would enhance peer relationships and there the social implication are the determinants of employee engagement connote a healthy working atmosphere that reflects on the social impact (Bakker, Van Emmerik, & Euwema, 2006).

The research findings of Avery, McKay and Wilson(2007) suggested that the employers should recruit staff exhibiting characteristics predicted to generate high employee engagement and organizations should develop supervisors to ensure that they adopt leadership styles(Bogdány, Balogh and Csizmadia, 2014) found to drive employee engagement; and recruiters should consider matching characteristics of employees to the prevailing leadership paradigm in the organization. In a recent study on CSR and Employee Engagement (2015) it has been captured that the role of top management is highly significant to support in linking CSR with employee attitudes. This attitude can be achieved through proper drafting and implementation of HRM practices in the organization.

All these studies have shown the impact of employee engagement practices at various gamut of organisations. Now this study has strived to identify the employee engagement practices adopted by the post LPG organisations in comparison to the pre-LPG organisations.

Research Methodology

To verify the employee engagement practices adopted by the organisations - both pre-LPG and post-LPG, a structured questionnaire has been developed covering different statutory points and other factors normally followed by highly successful companies known as employee organisations. This questionnaire has been administered over 150 employees, selected purposively, from different sectors irrespective of rank & file. The data, so collected, has been entered in MS-Excel file and transferred in IBM-SPSS file . After preliminary data reduction, it has been observed that only 132 responses are complete in all respect. Hence other 18 incomplete responses have been wiped out from the data base. Now this data set has been analysed and represented in the next.

Data Analysis & Interpretation

Types of organisation : As the main aim of this study is to identify the benefits provided by the pre-LPG organisations versus post-LPG organisations, the first information collected in the questionnaire is the type of organisation the respondents working. It has been shown in table 1 .

Table 1 : Sector wise distribution of respondent

Organisation	Category	Frequency	Sector total
State Electricity Board	Pre-LPG	9	55 (42%)
Defence	Pre-LPG	7	
Nationalised Bank	Pre-LPG	9	
Govt Office	Pre-LPG	9	
Govt School	Pre-LPG	7	
LICI	Pre-LPG	6	
Heavy Industry	Pre-LPG	8	
Pvt. Insurance Co.	Post-LPG	9	77 (58%)
IT & ITES Co	Post-LPG	9	
Pvt Bank	Post-LPG	7	
Pvt Hospital	Post-LPG	8	
Pvt Office	Post-LPG	7	
Pvt School	Post-LPG	7	
Pvt. College	Post-LPG	8	
Telecom Industry	Post-LPG	9	
MSME	Post-LPG	8	
Automobile Industry	Post-LPG	5	

Source: Author's own data

Interpretation: This particular table 1 is a true representation of the respondents. Almost all the sectors have been covered here for both the pre and post LPG category.

Age of the respondents.: The age of the respondents is a prime indicator of the sector about its stability. It has been shown in table 2.

Table 2 : Category-wise Age distribution of the Respondents

Age Range	Frequency (Pre-LPG)	Frequency (Post-LPG)	Frequency (Total)
20-25	2	45	47
25-30	2	21	23
30-35	5	8	13
35-40	8	3	11
40-45	18	0	18
Above 45	20	0	20
Total	55	77	132

Source: Author's own data

Interpretation: Table 2 indicates a vital information that pre-LPG sector is mostly represented by aged people whereas post -LPG sector is represented by younger generation. It is obvious that the value system and aspiration of younger generation is quite different to that of elder generation.

Experience of the respondents: The performance of any organisation depends on the experience of the employees by and large. Here Table 3 indicates the category-wise experience distribution.

Table 3 : Category-wise Experience of the Respondents

Experience in Years	Frequency (Pre-LPG)	Frequency (Post-LPG)	Frequency (Total)
0-2	5	47	52
3-5	3	21	24
6-10	7	4	11
11-15	9	4	13
16-20	16	1	17
Above 20	15	0	15
Total	55	77	132

Source: Author's own data

Interpretation: Once again this table indicates that pre-LPG sector is more oriented with experienced persons and working for a longer period. Another indication is that less experienced employees may take challenging decisions in comparison to highly experienced personnel. Less experienced employees have less command over management and they can easily be moulded by management dictates.

Salary range: According to Minimum Wages Act and Payment of Wages Act, no employer can engage any employee in salary lower than the rate fixed by the state Governments and notified after each six months. The last declared rate as notified by Delhi State Government is Rs. 190 per day or Rs. 5700 per month for unskilled work. Under this background, the salary range of the employees have been collected and shown in table 4.

Table 4 Comparative Monthly salary range distribution in pre and post LPG organisation

Monthly salary range	Frequency (Pre-LPG)	Frequency (Post-LPG)	Frequency (Total)
Below Rs.5000	1	22	23
Rs.5000-10000	4	41	45
Rs.10000-15000	11	5	16
Rs.15000-20000	23	6	29
Above Rs.20000	16	3	19
Total	55	77	132

Source: Author's own data

Interpretation: From this table-4, we are getting some astonishing figure that there are 29% organisations in Post LPG sector where Minimum Wages are not been paid. While in pre-LPG sector the salary distribution curve is quite normal, the said distribution for post-LPG sector is skewed towards minimum salary side.

Salary payment mode and salary structure mode : According to different Govt. Orders, Payment of Wages Act, Payment of Bonus Act, Payment of Gratuity Act and other statutory rules, wage or salary administration is one of the important parameter for employee engagement. To identify the picture under these scores, the data collected and jolted down below.

Table 5 : Comparative data related to salary administration in pre and post LPG organisation

Item	Frequency (Pre-LPG)		Frequency (Post-LPG)		Frequency (Total)	
	Yes	No	Yes	No	Yes	No
Salary paid on a fixed date	53	2	7	70	60	72
Salary paid through bank	55	0	23	54	78	54
Salary paid after a delay of more than 10 days	2	53	53	24	55	77
Salary is consolidated basis	11	44	69	8	80	52
There is proper scale of pay for different post / grade	53	2	32	45	85	47
Dearness Allowance declared after an interval	46	9	12	65	58	74
Production/ Profit sharing bonus paid every year	33	22	3	74	36	96
Gratuity paid at the time of exit	55	0	19	58	74	58
ESI coverage and payment deduction is there	25	30	39	38	64	68
Medical allowance / benefits are there	55	0	36	41	91	41
IT deductions are reflected in Govt. website immediately	49	6	28	49	77	55
Pay slip is given in every month detailing the break-up	49	6	14	63	63	69
There is a difference between payment signed and payment Received annual increments	0	55	44	33	44	88
	39	16	8	69	47	85

Source: Author's own data

Interpretation: Table 5 indicates some major observations related to salary administration. In post LPG organisations, pay packages are mostly on consolidated basis without having any pay-grade or salary break-up in comparison to pre-LPG organisations. Payment is made other than bank payment mode in majority and pay date varies from month to month. Even in a large scale there is a delay of salary payment of more than 10 days. Deductions are not been made as per the statute of ESI or Income Tax. These information are indicative that the statutory requirements are not followed by the post-LPG industries while in pre-LPG industries these salary administration are conventional and practiced since long. These younger generation organisations do have less experienced employees as well executive who are not instrumental in following those mandates. Further, delay of payment used to come from the notion of the employers of post-LPG group because they believe on pressure tactics upon the employees. They think that if payment may be made after 10-15 days, then employee can not leave the organisation without formalities due to pressure of that money stored with the employers. Many of the industry deduct Income tax from the employees and do not deposit it to the Income Tax Department till last date of the year.

Employment procedure: The rules and regulations for recruitment, induction, selection, career advancement are pretty old and followed by different organisation to maintain a healthy and sustainable HR . Due to change of technology, the tools have been modified, but the basic concept for HR tool for employee engagement remains same. Now let us see the Employee Engagement practices as depicted in the table 6 below.

Table 6 : Comparative data related to employment procedure in pre and post LPG organisation

Item	Frequency (Pre-LPG)		Frequency (Post-LPG)		Frequency (Total)	
	Yes	No	Yes	No	Yes	No
Recruitment done in formal way	48	7	35	42	83	49
Are you on roll of the organisation (or with some other)	44	11	2	75	46	86
Formal appointment letter issued before joining	54	1	17	60	71	61
Appointment letter contain all the necessary service condition	44	11	16	61	60	72
Organisation do have service condition rules	39	16	17	60	56	76
Organisation do have promotion policy	54	1	11	66	65	67
Organisation do have written down leave policy	54	1	11	66	65	67
Organisation allow for paid maternity leave as per MB Act	50	5	3	74	58	79
Organisation do have retirement & resignation policy	54	1	16	61	70	62
Organisation encourage for career improvement	35	20	31	46	66	66

Source: Author's own data

Interpretation: This table again indicates some eye-catching factors that post LPG organisations are practising. Most of the cases offer of appointment or job description is not clear before the recruiter. They used to ask any candidate to join the post and different types of work load have been given to him / her. Without sustaining that work pressure, the employee, newly recruited, either commit mistake or relinquish the job. Formal service condition, service rules, leave rules etc. are not been framed as all these rules may lead to legal litigation , as conceived by the employers. HR activities are mostly run by general clerks without having formal specialised qualification in HR. Astonishingly, Maternity Benefit is not followed strictly not only in Post-LPG but pre-LPG too, which is very much alarming.

Welfare & Grievance Handling system : Another very important area for employment engagement is welfare activities. There are several acts like Workmen Compensation Act, EPF Act, ESI Act, Factories Act, Shops & Establishment Act etc. According to different provisions of these acts, one employer should be very loyal to their employees to get a reciprocating effect. The information collected in this score is shown in Table 7 below.

Table 7 : Comparative data related to welfare & grievance handling

Item	Frequency (Pre-LPG)		Frequency (Post-LPG)		Frequency (Total)	
	Yes	No	Yes	No	Yes	No
Canteen facilities are available with variety of items at cheap rate	36	19	16	61	52	80
Organisation provides quarters for the employees	47	8	2	75	49	83
Organisation provides health-care facilities to the employees and their family members	40	15	19	58	59	73
Organisation helps in education for the wards of the employees	47	8	13	64	60	72
Organisation provides pick & drop facility from residence	21	34	19	58	40	92
Organisation provides LTC facility	33	22	12	65	45	87
Organisation provides medical insurance	10	45	12	65	22	110
Organisation provides crèches for the female employees	3	52	0	77	3	129
Organisation have proper grievance handling machinery	46	9	44	33	90	42
Organisation have proper women grievance redressal cell	55	0	57	20	112	20
Organisation do not terminate any employee without proper enquiry	46	9	44	33	90	42
Organisation provides different social security schemes	33	22	12	65	45	87
Organisation encourages employees in taking part in different developmental & social activities	33	22	12	65	45	87

Source: Author's own data

Interpretation: The information available in this table 7 is again the repetition of the previous sections. Most of the post-LPG organisations follow bare minimum welfare facilities for their employees or their family members. They do not care for health or education of their human resources and as a result they lost their precious resources very soon. Grievance redressal machinery is also not proper and hence employees dissatisfaction level is very high. Only in one point i.e., women related grievance redressal system is quite better due to direct pressure from supreme court in this particular score. Most of the organisation do not have any social security scheme like gratuity, leave salary, pension, provident fund etc. because there is no eligible candidate to receive these benefits. Most of the employee leave the organisation or forced to leave the organisation before attaining their statutory period completion.

Conclusion

This particular study gives us a very clear cut result. In the result analysis section we received different information wherefrom it is crystal clear that after 26 years of LPG introduction, the Indian business is now divided into two groups. One group is following all those employee engagement practices which are age old traditional HR concept based and in these pre-LPG organisation employee satisfaction level as well employee retention is much better than those of post-LPG organisations.

Most of the employers of the post LPG organisations do not care for employee satisfaction of employee engagement practices because they do believe that there are enormous job seekers. Hence by exploiting an employee will not cause harm on productivity and easy replacement is available. But they never think for better employee engagement may give them different returns as we have seen in different literatures all though out the world.

There is another important factor which may rather provokes these post-LPG organisations careless about employee engagement practices is Government machinery and their pressure on the organisations. At the starting of LPG era, many of the organisations do have question about Government policies and their red-tapism. But to prove their will, Government that time call all the entrepreneurs to start their business without any such hesitation and Government will not be a headache on all these issues. This attitude of Government still prevails and as a matter of fact employee engagement practices now become a farce for these post LPG organisations.

But it is a grave concern for the country that human resources working at different organisations become dissatisfied with their workplace and as a result that will create a negative impact on the society as well on the economy. Already India is known for younger population before the whole world and younger generation represent always more demand, anti establishment anger etc. So these two additive factor may be boomerang for the country, if it is not been properly taken care of immediately.

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A Study on Brand Awareness of Patanjali Products

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Abstract

Consumers of this millennium have become more concerned about brand in FMCG products and also inclined to maintain quality of life which is reflected through the privileged consumption of those products that protects the good state of their health as well as provide maximum satisfaction. In pursuit of a lifestyle Indian have become more inclined to Ayurvedic or Herbal therapy as alternative healthcare for natural cure. In the promotion of the FMCG products, advertisements have the greatest impact and in the Patanjali products, mainly the promotion of these products depend upon the ads specifically. The main purpose of the ads is to create awareness about the brand of the products which have a natural therapy. This particular tendency has been responsible for phenomenal popularity of Baba Ramdev's Patanjali Ayurvedic products. In today's turbulent markets with changing customer needs and growing product variety, Baba Ramdev has developed a unique blend of Ayurveda and Vedic philosophy under the brand Patanjali to pull the market by offering value for his customers. This study is focused on consumers' perception towards measuring effectiveness of brand awareness of Patanjali Products. For the study total 50 consumers were selected from the Indore city. The study is concluded that values, quality, customer engagement, positive inferences, point of purchase, recall the products etc.

Keywords: Brand, values, quality, customer engagement, positive inferences, point of purchase, recall the products.

Introduction

This paper attempts to examine the impact of effectiveness of brand awareness of Patanjali products. There has been a huge comeback of Patanjali products through the ads which compel consumers to aware about brand and its consumption pattern. Ads of Patanjali products are catching everyone's imagination very fast and promise to be the next big thing in the medical and wellness industry. It has the unique advantage of having something to offer for every class of the society. Accordingly he engineered his offerings in tune with the needs of all under the brand Patanjali Ayurved through his expertise on the art of content marketing and mass customization. From March 2012, Patanjali brand marked its entry into the herbal retail market and FMCG with 'Swadeshi' flavour of products ranging from body care, healthcare, home care, digestive, cosmetics, toiletries etc. From

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then onwards Dabur, Sri Baidyanalh, Vicco Laboratories, Charak Pharmaceuticals, The Himalaya Drug Company, Zandu Pharmaceutical, The Emami Group, HUL, P&G are facing intimidation from a home - grown and an absolutely 'Swadeshi' competitor, PatanjaliAyurved Limited.

Having a brilliant future in India as a business venture, its business prospects amounts to a \$20 billion ready market and its gigantic growth rate would make it a \$5 trillion market worldwide by 2050. The total size of the Indian Ayurvedic market is INR 50 billion and it is growing substantially at a rate between 10-15 percent. Indian Ayurved industry is currently perceived as investment worthy by prospective investors since firstly, it is recession proof and secondly, it reaches out to a larger chunk of target consumers across all income groups. The long and successful runs of several brands in this field like Dabur (launched 1884), Amrutanjan (launched 1893), Himalaya (launched 1930), Baidyanalh (launched 1917), VICCO (launched 1952) etc. proves the viability of Ayurveda as a growing business opportunity.

Earlier, most of the Patanjali promotion was dependent on direct marketing which helped Patanjali to avoid 10-15 per cent of adverting budget and offering their products to consumers at a lower price than competitors. But in recent times, Patanjali has invested a loton commercial through television and print media. According to a report of the Broadcast AudienceResearch Council (BARC), Patanjali's advertisements appeared 17,000 times between 23 January and29 January (in 2016) and Patanjali became number one spender on advertisement leaving all traditionalFMCG biggies behind, such as the Hindustan Unilever Limited, Cadbury (Ghosh, 2016). With thisincreased advertisement budget, it will be interesting to see how Patanjali will price its products in thefuture, whether increased advertisement budget leads to increase in their product price or not.

In recent times, Patanjali faced criticisms and the Customer Complaint Council (CCC) receivedcomplaints against Patanjali for misleading advertisements. The PAL's claim of herbal washing powder, cake and dish wash were not substantiated regarding the herbal ingredients used in the products to provide cleaning benefits (ScoopWhoop, 2016). Further, Patanjali also faced criticism for one of its topsellingproducts, that is, Patanjali Honey, as it is not approved by the regulatory body Food Safety andStandards Authority of India (FSSAI). Recently, FMCG giant Dabur has claimed that their honey, that is, Dabur Honey is approved and certified by the food regulator FSSAI and hence, much safer to use. They counter-attacked Patanjali Honey by pointing that safety should be more important for consumers rather than the price tag, as Patanjali advertised its honey as 40 per cent cheaper than Dabur Honey (Chandna, 2016). In future, the certification issues of these products may result in losing their consumerbase due to health and safety issues.

Patanjali's products incorporate a unique blend of three value disciplines - product leadership, operational excellence and customer intimacy. In addition to the distribution network of franchised outlets & distributors Ramdev made his Patanjali's products available at e-commerce site.

Literature Review

Devi, Kanchana and Sebastina, (2014) stated in their study about the impact of ads of Patanjali products which created a need to buy the products as the consumers are aware of the brand and they associated the Patanjali products with brand. The study concluded that Patanjali products are known as generic name. There have been increasing efforts to protect the public interest by regulating the content and the reach of advertising.

In a study by Sujata and Bhawna, (2015) it was seen that television commercials alone are playing a very crucial role in influencing the buyers specially for the brand awareness of Patanjali products for young generation. Such commercials influence the purchase decision of these immature minds to such an extent that they stick to brands shown in commercials with the belief that it would provide same prestige, satisfaction and joy.

Kumar et al. (2016) focused on brand awareness of Patanjali products towards buying behaviour of consumers. They explained that ads of Patanjali products are quite appealing to consumers and infused the cultural spirit among them. This compulsion pushes consumers to buy products as they link the products with brand.

Tiwari, K. (2017) measured the effect of demographic profile for Patanjali products as these products help in generating positive attitude about the brand by involving consumers. These products have the potentiality to create a space in their minds.

Objective of the Study

- To study the effect of gender, age, educational background and occupation on the effectiveness of advertising on brand awareness of Patanjali Products.

Hypothesis of the Study

H₀₁: Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on gender.

H₀₂: Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on age.

H₀₃: Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on education.

H₀₄: Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on occupation.

Research Methodology

Research Type: Descriptive Research.

Research Area: The study was carried out in Indore city. The questionnaires were distributed to the consumers of Indore city.

Universe: Population in the study refers to group of Students of below UG, UG, PG and professionally qualified

Sampling Method: For the purpose of this research, convenience and purposive sampling have been used. It involves selecting sample elements that are most readily available to participate in the research and who can provide the information required to support the research according to the convenience.

Sample Size: Sample is the subset of the population. Sample size selected for the purpose of this study comprised of 50 consumers included self-employed. Professionals, housewife, service class and students.

Tools for data collection: Only primary data has been used for the study. The tool used for the primary data collection is a self-designed questionnaire, which has been made after reviewing the previous literature and consulting with experts of educational field. For the collection of reviews, the researcher has studied national and international journals, articles, books and internet. The secondary data was collected from published National and International Journals. Thereafter the required data were analysed and inferences/interpretations have been made.

Data Analysis

The following data on the profile of respondents (consumers) have been gathered in form of gender, age, education and occupation.

Table 1: Gender of Respondents

S.No.	Gender of Respondent	Frequency	Per cent
1	Male	24	48%
2	Female	26	52%
	Total	50	100%

From the finding on gender, it reveals that 48 per cent were male consumers and 53 per cent were female consumers.

Table 2: Age of Respondents

S.No.	Age of Respondent	Frequency	Per cent
1	<20 Years	09	18%
2	20-30 Years	22	44%
3	30-40 Years	08	16%
4	40-50 Years	05	10%
5	>50 Years	06	12%
	Total	50	100%

Regarding data on age is concerned, it is explained that 18 per cent consumers were less than 20 years, 44 per cent were between 20-30 years, 16 per cent were 30-40 years, 10 per cent were 40-50 years and rest 12 per cent were more than 50 years.

Table 3: Education of Respondents

S.No.	Education of Respondent	Frequency	Per cent
1	Below UG	08	16%
2	UG	12	24%
3	PG	19	38%
4	Professional Qualification	11	22%
	Total	50	100%

As far as education background of consumers are concerned, the study found that 16 per cent consumers were below UG education, 24 per cent were UGs, 38 per cent were PGs and rest 22 per cent were professionally qualified.

Table 4: Occupation of Respondents

S.No.	Occupation of Respondent	Frequency	Per cent
1	Self-employed	09	18%
2	Professionals	13	26%
3	Housewife	07	14%
4	Service	07	14%
5	Students	14	28%
	Total	50	100%

On the occupation of consumers, it was found that 18 per cent were self-employed, 26 per cent were professionals, 14 per cent were housewives, 14 per cent were from service class and remaining 28 per cent were students.

Results on Hypothesis

H_{01} : Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on gender.

Table 5. Gender wise T-Test

Dimensions	t	df	Sig. (2-tailed)
Cultural values	-1.129	48	.265
Swadeshi Theme	-4.84	48	.630
Appealing Ads	-1.624	48	.114
Morality	3.102	48	.003

For the factor of cultural values Gender wise there was no significant difference found. As P value came out .265 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of Swadeshi theme Gender wise there was no significant difference found. As P value came out .630 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of appealing in ads Gender wise there was no significant difference found. As P value came out .114 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of morality Gender wise there was significant difference found. As P value came out .003 which is less than .05, hence the alternate hypothesis was not rejected.

H₀₂: Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on age.

Table 6.:Age wise Analysis of Variance

Dimension		Sum of Squares	df	Mean Square	F	*Sig.
Cultural values	Between Groups	22.500	4	5.625	.589	.672
	Within Groups	429.680	45	9.548		
	Total	452.180	49			
Swadeshi Theme	Between Groups	19.170	4	4.792	.454	.769
	Within Groups	475.310	45	10.562		
	Total	494.480	49			
Appealing Ads	Between Groups	80.790	4	20.197	2.297	.074
	Within Groups	395.710	45	8.794		
	Total	476.500	49			
Morality	Between Groups	50.628	4	12.657	3.211	.021
	Within Groups	177.372	45	3.942		
	Total	228.000	49			

For the factor of cultural values age wise there was no significant difference found. As P value came out .672 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of Swadeshi theme age wise there was no significant difference found. As P value came out .769 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of appealing in ads age wise there was no significant difference found. As P value came out .074 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of morality age wise there was significant difference found. As P value came out .021 which is less than .05, hence the alternate hypothesis was not rejected.

H_{03} : Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on education.

Table 7: Education wise Analysis of Variance

Dimension		Sum of Squares	df	Mean Square	F	*Sig.
Cultural values	Between Groups	34.529	3	11.510	1.268	.297
	Within Groups	417.651	46	9.079		
	Total	452.180	49			
Swadeshi Theme	Between Groups	18.677	3	6.226	.602	.617
	Within Groups	475.803	46	10.344		
	Total	494.480	49			
Appealing Ads	Between Groups	88.532	3	29.511	3.499	.023
	Within Groups	387.968	46	8.434		
	Total	476.500	49			
Morality	Between Groups	52.895	3	17.632	4.632	.007
	Within Groups	175.105	46	3.807		
	Total	228.000	49			

For the factor of cultural values education wise there was no significant difference found. As P value came out .297 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of Swadeshi theme education wise there was no significant difference found. As P value came out .617 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of appealing in ads education wise there was significant difference found. As P value came out .023 which is less than .05, hence the alternate hypothesis was not rejected.

For the factor of morality education wise there was significant difference found. As P value came out .007 which is less than .05, hence the alternate hypothesis was not rejected.

H_{04} : Consumers' perception towards effectiveness of advertising on brand awareness of Patanjali products is significantly dependent on occupation.

Table 8.: Occupation wise Analysis of Variance

Dimension		Sum of Squares	df	Mean Square	F	*Sig.
Cultural values	Between Groups	27.965	4	6.991	.742	.569
	Within Groups	424.215	45	9.427		
	Total	452.180	49			
Swadeshi Theme	Between Groups	23.395	4	5.849	.559	.694
	Within Groups	471.085	45	10.469		
	Total	494.480	49			
Appealing Ads	Between Groups	108.800	4	27.200	3.329	.018
	Within Groups	367.700	45	8.171		
	Total	476.500	49			
Morality	Between Groups	69.709	4	17.427	4.954	.002
	Within Groups	158.291	45	3.518		
	Total	228.000	49			

For the factor of cultural values occupation wise there was no significant difference found. As P value came out .569 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of Swadeshi theme occupation wise there was no significant difference found. As P value came out .694 which is greater than .05, hence the alternate hypothesis was rejected.

For the factor of appealing in ads occupation wise there was significant difference found. As P value came out .018 which is less than .05, hence the alternate hypothesis was not rejected.

For the factor of morality occupation wise there was significant difference found. As P value came out .002 which is less than .05, hence the alternate hypothesis was not rejected.

Conclusion

The study found that four factors have been measured towards the effectiveness of advertising on brand awareness of Patanjali products. These four factors perceived by the consumers as a determinants of effectiveness of advertising on brand awareness of Patanjali products. The findings disclosed that demographic profile of consumers is not significantly dependent on gender, age, education and occupation. The findings revealed that for the gender no difference was found towards effectiveness of advertising on brand awareness of Patanjali products as male and female have similar perception towards ads of Patanjali products for the factors of cultural values, appealing, swadeshi theme except morality in the same way for age the factors of cultural values, appealing, swadeshi theme except morality have no differences among age groups. Regarding education wise, no difference was found for the factors of cultural values and swadeshi theme except appealing and morality. The study also

found that for occupation, the factors of cultural values and swadeshi, consumers perceive similarly towards effectiveness of advertising on brand awareness of Patanjali products except appealing and morality. To conclude, it is revealed that irrespective of demographic profile of consumers, they do not perceive differently towards effectiveness of advertising on brand awareness of Patanjali products.

Suggestions

- The study has given some suggestions as per the findings is as follows:
- Retailers should more focus on other promotional tools for reach the vast numbers of consumers.
- The quality should be matched as per the changing expectations of the consumers.
- Customers should be involved by offering discounts, free samples etc.
- Product should be more appealing so that ads directly motivate them to purchase.

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Research Scholars' Perceptions on Factors Influencing Stress: A Triangular (Family-Work-Research) Horizon

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Abstract

The universal predicament in every individual either in a work place or in a family, where the situational pressures will always lead to 'Stress'; and this stress will affect everyone both psychologically and physically in varied areas of their personal and professional life as well. The common name in the history of balancing the stress that created in work and family is called as "Work-Life Balance". With a step ahead in thought of concentrating on another dimension called "Research" which also creates stress along with the above said two dimensions (family & work), where in this case the individual has to more concentrate on balancing tri-dimensions of his/her life. The present study is aimed to extract the concrete factors causing stress from the three dimensions (Family-Work-Research) among its' impact on research with respect to the research scholars pursuing their Ph.D. in part-time mode from well reputed universities in India.

Keywords: Stress, Research Scholars, Family-Work-Research, Triangular Horizon.

Introduction

The most predictable predicament of an individual life is "Stress" which is a multifarious observable fact. It has been defined in many ways, but simply we can say that it is a wear and tear of everyday life of a human being. The term stress can be defined as a retort to a menace either in real or in assumption, but is convoluted and not glowingly professed and impinge your psychological, physiological and emotional health conditions (Mohsenzadeh, 2007). There are three different views for stress definition. First, stress could be an environmental stimulus. In this case, environmental events that make demands on the person partly are tolerable and not stressful. Second, stress might be a reaction by the person to the extra burden. Finally, stress can be an unknown body reaction to a demand that lead to pressure or stress in reaction or response conditions. In other word, as mentioned, different response of stress in different people and conditions are different (Giga, L.Cooper, & Faragher, 2003, P.281). It is not always easy for scholars to transition from the receiving end, of education, to being the ones who are finding new things about a subject matter. One can spend 5-6 years on a project and end up with no

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result, or be told that someone has already published a paper on the same problem she/he has been pursuing. It is not uncommon to find PhD scholars, in their final years, to reach a state of impasse. Often scholars show symptoms of, what is called, an impostor syndrome. Feeling like they are frauds, pretending to be intellectuals, in academia. With constant intimidation from advisors and bleak job prospects, this feeling is quite understandably reinforced. Questioning, ones' decision to pursue a PhD, becomes a common theme among scholars.

1.1. How to manage Ph.D. stress, nervousness, and cynicism

There are a few ways or techniques that can be followed by a research scholar to reduce or even to manage their stress creating from the three dimensions (Family-Work-Research) of a research scholar. The techniques/ ways to manage stress, nervousness and cynicism are given below (**Rakhi Acharya, 2016, an article on "How to manage Phd stress, anxiety and disillusionment", www.careerizma.com**):

1. Encompass a social life
2. Nurture hobbies and interests
3. Stay healthy
4. Improve relationship with advisors/research supervisors
5. Always have a Plan B if your first attempt was not successful
6. Don't be afraid or hesitate to seek help from others

1.2. Stress Causing Dimensions of a Research Scholar

1.2.1. Research Scholar Stress with respect to Family

One of the most common factors of stress, besides financial qualms and workplace issues, is family difficulties. We all have, at some time or other, experienced circumstances where there has been a family catastrophe, are it bereavement, illness or break up of the family unit. Stress within the family unit can bring the family to a standstill or result in the breakup of an otherwise stable household. During time of family stress, our personal coping resources and consequently our parenting skills may need a boost - or a break. So far, the above said situations are the realistic mirrors that reflect and affect a research scholar which makes him/her to concentrate more on completion of research work.

1.2.2. Research Scholar Stress with respect to Work/Workplace

The universal source or the common place for production of stress among an individual human being is "Work/Workplace". An employee may be effected with different types of stress at his/her workplace due to chaotic job role, high demanding work pressures and working hours with unjustified salaries/wages or other benefits. Now, coming to a research scholar who is already handling family responsibilities and trying balance his/her work stress will obviously feel stress when pursuing a Ph.D. programme from a university. Un-matching work duties and responsibilities the faculties are being

pressurized with their job role and are unable to balance their research work in time. Apart from the regular teaching activities which are on role job responsibility, now-a-days the administration duties and responsibilities in multiple modes of work are also added which in return make them to feel or experience high level of stress. And now in order to stand in the present disarrayed competition among the down lining pattern of teaching fraternity especially engineering, MBA, & MCA programmes, they have build up or even balance their position in the market by enhancing their educational qualifications and for that most of the faculty members are approaching towards to register in the Ph.D. (part-time) programmes from any of the Indian Universities (UGC approved). Once registered with the Ph.D. programme, then the research scholar have to start his/her triangular series by balance his/her duties and responsibilities by overcoming the situational stress that occurs in their research (dimension-3) with respect to their 'family' (dimension-1) & 'work' (dimension-2).

1.2.3. Research Scholar Stress with respect to Research (Ph.D. Program)

In addition to the factors influencing stress among the research scholar, as a Ph.D. scholar there are many stressors that cause stress and show impact in their research work from the point of admission to the submission of thesis work. There are many sources like lack of communication with the supervisors, lack of knowledge on the concept of research, high pressures from the university officials, un-clear instructions about paper publications, finalizing thesis works etc. may cause high level of stress among the research scholars in which sometimes they are becoming nervous with cutthroat psychological pressures resulting in abnormal physical functionalities of body i.e. experiencing common physical problems blood pressure, diabetes, severe headaches, improper digestion and all these will affect a research scholar when they are highly thinking and balancing the three dimensions of their life i.e., 'family-work-research'.

The following model was created by the researcher in order to explain the influence of stress among the research scholars with respect to the above highlighted dimensions:

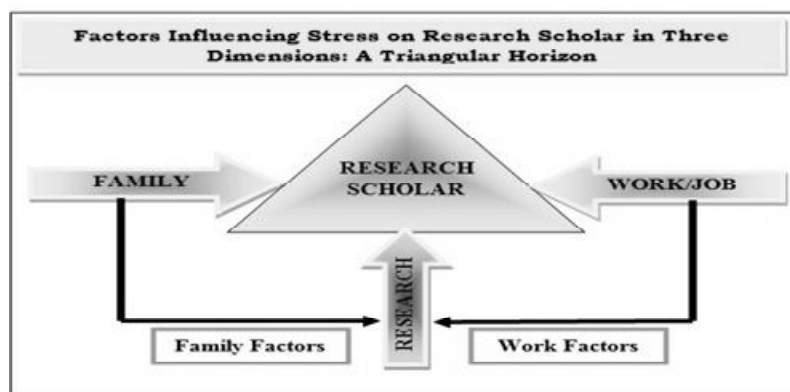


Fig - 1: Factors Influencing Stress among Research Scholars with respect to the Triangular Horizon (Family-Work-Research)

2. Significance of the Study

In everyday's life people are subjected to a wide range of pressures in two common dimensions like 'family' and 'work'. The present study is about to highlight the persons who are facing in stressful situations in family and work, usually we call it as a term 'work-life balance'. Though most of the studies are conducted on this conceptual area, the researchers want to give a try to explode the third dimension of the persons who balances their family & work and pursuing Ph.D. programs. Persons related to this third dimension (Research) mostly are from teaching field in various educational institutions. Though many research works and surveys pointed out numerous numbers of stressors that create stress among the teaching fraternity either in their personal (family) life or in their professional (work) life, but with a gut feeling and expectation the researchers want to initiate a forum for discussing about the stress caused with respect to 'family' and 'work' in the 'research' dimension of the teachers working in professional institutions and pursuing their doctoral programs in part-time. Here, they have to balance the stress created from three dimensions i.e. Family-Work-Research which will be with a limited duration. It means that a teacher or a faculty who is balancing their family and work should balance those two dimensions along with their research work (Ph.D.) from the admission into doctoral program to the date of awarding doctoral degree.

3. Scope of the Study

The present research is only an initial step to explore the sources of stress i.e. stressors that creates stress among the teachers pursuing Ph.D. program in part-time who is commonly called as *Research Scholars*. This study aimed to identify the individual stressors that create stress in individual dimension of a research scholar (teacher) i.e. Family, Work, and Research where there will be high end opportunity for collecting the primary data that reflects the impact of factors causing stress among research scholars with respect to 'family' and 'work'. But, as an open fact the research is not only limited to a person with teaching background, it can also done by any individual from various industries but all with an interest and enthusiasm in research. The individuals apart from teaching sorority are with a passion on research are also there in the society, the present research can be extended with to identify the stressors in the same triangular horizon (Family-Work-Research) among the non-teaching professionals.

4. Review of Literature

In search of existing literature related to the context of the present research, the researcher travelled through online (Google) and paper (text books, reference books, newspapers, business magazines etc) but not found the exact topic related literature except 2 to 3 research papers which are partially helpful for the present study. But, In search of online mode few surveys were conducted on stress management concepts among Ph.D. research scholars from some universities in India. So, making this as clear explanation the researcher continued his work to review the existing literature that reflects on the present topic. *According to a study, conducted at University of California at Berkely*

(2017), nearly 47% of surveyed Ph.D. scholars showed signs of depression, highest numbers being in the humanities and arts departments. Nearly 10% of them had even contemplated suicide during their research programme. The root of these depressive feelings is related to their PhD in more ways than one. Feelings of disillusionment are also woven into the feelings that lead to depression. Uncertainty in future job prospects, financial instability, isolation, lack of clear academic progress, not feeling valued, strained relationship with advisor, health and sleep deprivation, all add fuel to the fire.

The *Indian Institute of Technology (Bombay)* in association with the counseling centre at the institute has organized a stress management programme "*The Research Scholars' Companion Programme (RSCP-2016)*" for Ph.D. scholars. From this RSCP programme it was identified that the research scholars at IIT Bombay has no exclusion in facing stress as the stress levels of every individual are increasing every day. As we know that this is the common problem experiencing by every research scholar of whatever the university and making this as the major reason the researcher generalized this finding to every research scholar who is pursuing their doctoral programme from various public and private universities in India either doing in part-time or full-time mode. *Pratyusha T (2016)*, Coordinator RSCP, opine that pursuing Ph.D. is a time consuming process which requires much patience. The scholars need help in terms of guidance from seniors and supervisors on aspects of time management and stress management. *Shivani M (2016)*, Counseling department, IIT Bombay orates that "stress in Ph.D. scholar's life is very common irrespective of which course are they pursuing along with academics there are also personal life issues in family which are generally common. Bazrafkan, Shokrpour N, Yousefi A, Yamani N (2016), coined a qualitative method using conventional content analysis approach among the 16 PG medical sciences Ph.D. scholars and gathered data through semi-structured and field observations to address the causes and different strategies of coping with this phenomena by Iranian Medical Universities' Ph.D. scholars in medical sciences. The findings of the study concluded that Ph.D. scholars expertise stress and anxiety from a variety of sources and apply different methods of coping in both effective and ineffective ways. The researcher suggested that purposeful supervision and guidance can reduce the cause of stress and anxiety among them.

Indoo (2014) Singh opined that the world is technologically advancing and the expectations of organizations are also increasing with increasing competitive markets and meeting of these challenges have become vital for an organization. In the present study, the researcher has identified that 'role conflict and ambiguity, intrinsic impoverishment, group pressure, under participation and strenuous working conditions were found to be more significant predictors of occupational stress among faculty members. The study resulted that the faculty members of medical and engineering colleges are equally stressed and their perceptions among occupational stress are also common because the everywhere the teaching role is common even if the stressors may varied. **Dr.S.S. Jeyaraj (2013)** from this research says that the occupational stress at workplace has become a major problem in teaching. He opined that the act of reducing occupational stress among teachers will lead efficient and effective service to the society from them. The researcher majorly concentrated on facts of reducing occupational stress which results in some benefits which among them is like it provides pleasurable working

environment, improved teaching morale, reduction in workplace accidents, and decrease in absenteeism and increase in education standards.

4.1. Research Gap

As it was clearly mentioned in the review of literature, there are very less research works undergone in relating the concept of stress with research scholar. Apart from the research papers, very few survey programs were conducted to assess the concept of stress management among Ph.D. scholars in India and in abroad. But, it was clear that no research work has been initiated to identify the impact of factors influencing stress among research scholars (part-time) in three dimensions (Family-Work-Research) and now the researcher has planned to use that gap as the major feed for this study and started the present research study. And the constructed statement of the problem is drafted below: "**A Study on Factors Influencing Stress on Research Scholars: A Triangular (Family-Work-Research) Horizon**".

5. Objectives of the Study

The following are the major objectives of the study that are aimed to interlink the factors influencing stress on research scholars in three dimensions i.e. Family-Work-Research.

1. To identify the factors influencing stress on research among research scholars with respect to their Family.
2. To identify the factors influencing stress on research among research scholars with respect to their Work.
3. To identify the factors influencing stress on research among research scholars with respect to their Research.

6. Hypotheses of the Study

An assumption with a positive perception will always represent the null hypothesis which in other side if the assumption has become negative will automatically become an alternative hypothesis depending on the results of the primary data by applying statistical tools. The below mentioned are the null hypotheses to arbitrate the objectives of the study.

1. H_{0F} : There is no significant difference among the perceptions of the research scholars towards the factors influencing stress on research w.r.t. their family stress.
2. H_{0W} : There is no significant difference among the perceptions of the research scholars towards the factors influencing stress on research w.r.t. their work stress.
3. H_{0R} : There is no significant difference among the perceptions of the research scholars towards the factors influencing stress on research w.r.t. the stress related to research programme.

7. Research Methodology

7.1. Research Design

The formidable problem that follows the task of defining the research problem is the preparation of the design of the research project, popularly known as the "research design". A research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure. The present study is aimed to identify and describe the factors that influence stress on research scholars in their research course with respect to three dimensions i.e. Family-Work-Research. For this, the researcher has to apply descriptive research design to describe the characteristics of a particular dimension (individually) and how it influences the research programme of Ph.D. scholar.

7.2. Sampling Design

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or procedure the researcher would adopt in selecting items for the sample from population. The Non-Probability Sampling has been adopted as this sampling procedure does not afford any basis for estimating that each item in the population has of being included in the sample. Based on the decision taken by the researcher about the population and considering the major limitations of every study i.e. money and time, the 'judgment sampling technique' which is a form of convenience sampling technique has been selected for the study.

7.3. Selection of Population & Sample

For the present study, the working faculty members in various UG & PG streams of Engineering and PG colleges and pursuing Ph.D. (part-time) from the public & private universities located in Telangana State & Andhra Pradesh. As it is a hard task to reckon the number of scholars pursuing their part-time Ph.D. programme in different professional streams in each university, the researcher considered the universal sample size (n) '384' for an indefinite (confirmed due to limited sources like money & time) population. Hence, the by applying quota sampling technique the researcher classified the sample respondents from the public and private universities in both Telugu states.

8. Limitations of the Study

The researchers aimed to concentrate and extract the stress causing factors among the research scholars who are already balancing their family life and professional (teaching) life together. The study is restricted to teaching fraternity only as the researchers of the study are also from the teaching group, they thought of extracting their personal experiences along with their co-research scholars of teaching profession. Due to convenience of time of cost, the study is limited to the Telangana state and Andhra Pradesh.

9. Data Analysis & Interpretation

The analysis of primary data collected through well-structured questionnaire from 384 (n) respondents has been carried out in the following tables. Socio-Demographic factors like gender and age groups of the respondents are considered as the major phases for testing the framed hypotheses according to the context.

To test the null hypotheses, the statistical tools like t-test and ANOVA-One way classification are used to obtain the results and also to check the whether the assumed hypotheses are affiliated to the researcher's decision or not. Though there many factors included in the socio-demographics, the researcher selected only two due to limited content which is enough for a research paper. The data analysis includes two phases with three sections each as mentioned below.

Table - 11.1: Analysis Design of Primary Data to test the Null Hypotheses (H₀)

Phase	Statistical Tool	Section-1	Section-2	Section-3
Gender Analysis	t-test for two independent sample means	Family	Work	Research
Age Group Analysis	ANOVA One-Way Classification	Family	Work	Research

Phase-I: Gender Analysis

In this phase, the researcher tried to test the null hypotheses with respect to the respondents' gender using "t-test for two independent samples" where, male and female respondents are considered as two independent samples collected from the population. To analyse the primary data, SPSS version 16.0 has been taken to test the null hypothesis.

Section-1: Factors influencing Stress on Research Scholars w.r.t. Family**Table - 11.2.: Independent Samples t-Test for Gender Based Respondents**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig	Mean Diff.	S.E. Diff.	95% Conf. Int. Diff.	
									Lower	Upper
F1	Equal variances assumed	0.818	0.366	1.894	382	0.059	0.18	0.095	-0.007	0.366
	Equal variances not assumed			1.877	353.65	0.061	0.18	0.096	-0.009	0.368
F2	Equal variances assumed	2.318	0.129	0.953	382	0.341	0.111	0.116	-0.117	0.338
	Equal variances not assumed			0.965	380.94	0.335	0.111	0.114	-0.115	0.336
F3	Equal variances assumed	0.224	0.636	1.323	382	0.187	0.19	0.144	-0.092	0.472
	Equal variances not assumed			1.319	363.89	0.188	0.19	0.144	-0.093	0.473
F4	Equal variances assumed	1.767	0.185	1.626	382	0.105	0.193	0.119	-0.04	0.427
	Equal variances not assumed			1.62	363.52	0.106	0.193	0.119	-0.041	0.428
F5	Equal variances assumed	0.103	0.748	3.768	382	0.000	0.517	0.137	0.247	0.787
	Equal variances not assumed			3.79	375.70	0.000	0.517	0.136	0.249	0.786
F6	Equal variances assumed	0.637	0.425	1.103	382	0.271	0.158	0.143	-0.123	0.439
	Equal variances not assumed			1.114	378.97	0.266	0.158	0.142	-0.121	0.436

Source: Primary Data analysis using SPSS 16.0 Version

The following table consists of "Levene's Test for Equality of Variances" and "t-test for Equality of Means". The Levene's test tells us which statistic to consider analyzing the equality of the means. It tests the null hypothesis that the two groups have equal variances. A small value of significance associated with Levene's test indicates that the two groups have unequal variances and the null hypothesis is false. A very small value of Levene's test statistic indicates that the two independent samples do not have equal variance and therefore the statistic associated with equal variances not assumed should be used for the t-test for Equality of Means and Vice versa.

Interpretation: In the above table, it was observed that out of 6 variables ranging from F1 to F6, there is no sign of the significant value less than 0.05, which means the significance values for all six variables are above 0.05 and then the null hypothesis can be accepted according to Levene's test. Also, with the help of the results obtained from Levene's test, we have to select the statistics related to Equal variances assumed in "t-test for Equality of Means" for all the variables. From the statistics of Independent samples t-test in the table-I.1, the t-test result (with equal variances assumed) shows the variable "F5: Built-in family financial budget shows effect on meeting expenses relating to research work" obtained the t-statistic of 3.768 with 382.00 degrees of freedom. The corresponding two-tailed

p-value is 0.000, which is less than 0.05. Therefore, we can reject the null hypothesis at 5% significance level, which means that there is a significant difference among the perceptions of male and female research scholars towards the built-in family budget shows effect on meeting expenses relating to research work. Whereas, it was also observed that the other five variables F1, F2, F3, F4, F6 has the significant p-value greater than 0.05 and can be concluded that the null hypotheses can be accepted for those statements/variables.

Section-2: Factors influencing Stress on Research Scholars w.r.t. Work

Table - 11.3.: Independent Samples t-Test for Gender Based Respondents

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig.	Mean Diff.	S.E. Diff.	95% Conf. Int. Diff.	
									Lower	Upper
W1	Equal variances assumed	5.13	0.02	1.64	382	0.10	0.15	0.09	-0.03	0.32
	Equal variances not assumed			1.66	379.7	0.10	0.15	0.09	-0.03	0.32
W2	Equal variances assumed	0.72	0.40	-0.53	382	0.59	-0.05	0.09	-0.23	0.13
	Equal variances not assumed			-0.53	359.5	0.60	-0.05	0.09	-0.23	0.13
W3	Equal variances assumed	1.3	0.26	-1.33	382	0.19	-0.14	0.10	-0.34	0.07
	Equal variances not assumed			-1.30	335.6	0.19	-0.14	0.11	-0.34	0.07
W4	Equal variances assumed	9.64	0.00	-1.36	382	0.17	-0.15	0.11	-0.36	0.07
	Equal variances not assumed			-1.39	381.8	0.17	-0.15	0.11	-0.36	0.06
W5	Equal variances assumed	2.01	0.16	-0.91	382	0.36	-0.10	0.11	-0.31	0.11
	Equal variances not assumed			-0.93	381.6	0.36	-0.10	0.11	-0.30	0.11
W6	Equal variances assumed	5.24	0.02	-2.40	382	0.02	-0.26	0.11	-0.47	-0.05
	Equal variances not assumed			-2.40	370.9	0.02	-0.26	0.11	-0.47	-0.05

Source: Primary Data analysis using SPSS 16.0 Version

Interpretation: In the above table, it was observed that out of 6 variables W1, W4 & W6, there is a sign of the significant p-value less than 0.05 and the null hypotheses can be rejected for these variables, on the other side the significant p-values for the three variables (W2, W3, & W5) are above 0.05 and then the null hypothesis can be accepted according to Levene's test. Also, with the help of the results obtained from Levene's test, we have to select the statistics related to Equal variances not assumed in "t-test for Equality of Means" for the variables W1, F4, F6 whereas, the Equal variances assumed in "t-test for Equality of Means" for the variables W2, W3 & W5 should be selected to know the status null hypotheses.

t - Test for Equality of Means:

Equal variances assumed: The variables W2, W3, W5 are considered for this and the significant p-values for three variables are 0.59, 0.19, 0.36 which are greater than 0.05 at 5% level of significance and hence we can accept the null hypothesis by confirming that there is no significant difference between the opinions of male and female respondents towards the three variables W2, W3 & W5 with respect to the factors influencing stress among research scholars in their research from 'work' point of view.

Equal variances not assumed: The variables W1, W4, W6 are considered for this and the significant p-values for three variables are 0.10 (> 0.05), 0.17 (> 0.05), 0.02 (< 0.05) at 5% level of significance. That means we can accept the null hypotheses for the variables W1 & W4 hence can say that there is no significant difference between the opinions of male and female respondents towards the three variables W1 & W4 with respect to the factors influencing stress among research scholars in their research from 'work' point of view, whereas, we can reject the null hypothesis for the variable W6 and hence can say that there is a significant difference between the opinions of male and female respondents towards the three variables W1, W4 & W6 with respect to the factors influencing stress among research scholars in their research from 'work' point of view.

Section-3: Factors influencing Stress on Research Scholars w.r.t. Research

Table - 11.4.: Independent Samples t-Test for Gender Based Respondents

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig	Mean Diff.	S.E. Diff.	95% Conf. Int. Diff.	
									Lower	Upper
R1	Equal variances assumed	1.73	0.19	-1.87	382.00	0.06	-0.19	0.10	-0.39	0.01
	Equal variances not assumed			-1.88	374.14	0.06	-0.19	0.10	-0.39	0.01
R2	Equal variances assumed	7.88	0.01	0.35	382.00	0.73	0.03	0.10	-0.16	0.23
	Equal variances not assumed			0.36	380.99	0.72	0.03	0.10	-0.15	0.22
R3	Equal variances assumed	1.74	0.19	-1.32	382.00	0.19	-0.14	0.11	-0.34	0.07
	Equal variances not assumed			-1.31	356.09	0.19	-0.14	0.11	-0.35	0.07
R4	Equal variances assumed	8.94	0.00	-5.36	382.00	0.00	-0.57	0.11	-0.78	-0.36
	Equal variances not assumed			-5.34	363.78	0.00	-0.57	0.11	-0.78	-0.36
R5	Equal variances assumed	36.66	0.00	-7.21	382.00	0.00	-0.67	0.09	-0.85	-0.49
	Equal variances not assumed			-7.47	367.54	0.00	-0.67	0.09	-0.84	-0.49
R6	Equal variances assumed	39.77	0.00	-3.35	382.00	0.00	-0.34	0.10	-0.54	-0.14
	Equal variances not assumed			-3.47	367.48	0.00	-0.34	0.10	-0.53	-0.15
R7	Equal variances assumed	29.24	0.00	-2.39	382.00	0.02	-0.27	0.11	-0.49	-0.05
	Equal variances not assumed			-2.48	370.10	0.01	-0.27	0.11	-0.48	-0.06
R8	Equal variances assumed	23.72	0.00	-3.92	382.00	0.00	-0.40	0.10	-0.59	-0.20
	Equal variances not assumed			-4.03	377.18	0.00	-0.40	0.10	-0.59	-0.20

R9	Equal variances assumed	7.08	0.01	-4.90	382.00	0.00	-0.58	0.12	-0.81	-0.34
	Equal variances not assumed			-4.99	381.97	0.00	-0.58	0.12	-0.80	-0.35
R10	Equal variances assumed	51.11	0.00	-3.44	382.00	0.00	-0.37	0.11	-0.58	-0.16
	Equal variances not assumed			-3.58	362.39	0.00	-0.37	0.10	-0.58	-0.17
R11	Equal variances assumed	9.40	0.00	1.08	382.00	0.28	0.13	0.12	-0.10	0.36
	Equal variances not assumed			1.10	381.99	0.27	0.13	0.12	-0.10	0.36
R12	Equal variances assumed	1.02	0.31	-0.11	382.00	0.92	-0.01	0.12	-0.24	0.22
	Equal variances not assumed			-0.11	373.94	0.91	-0.01	0.12	-0.24	0.22

Source: Primary Data analysis using SPSS 16.0 Version

Interpretation: In the above table, it was observed that only 3 variables R1, R3 & R12, there is a sign of the significant p-value greater than 0.05 where the null hypotheses can be accepted for these variables, on the other side the significant p-values for the remaining nine variables are below 0.05 and then the null hypothesis can be rejected according to Levene's test. Also, with the help of the results obtained from Levene's test, we have to select the statistics related to Equal variances assumed in "t-test for Equality of Means" for the variables R1, R3, & R12 whereas, the Equal variances not assumed in "t-test for Equality of Means" for the remaining nine variables (as shown in the table-I.3.) should be selected to know the status of null hypotheses.

t - Test for Equality of Means:

Equal variances assumed: The variables R1, R3, R12 are considered for this and the significant p-values of t-test for three variables are 0.06, 0.19 & 0.92 which are greater than 0.05 at 5% level of significance and hence we can accept the null hypothesis by confirming that there is no significant difference between the opinions of male and female respondents towards the three variables R1, R3, & R12 with respect to the factors influencing stress among research scholars in their research from 'research' point of view.

Equal variances not assumed: The variables with the p-significant values greater than 0.05 are R2 (0.72) & R11 (0.27) and hence we can accept null hypotheses and confirm that there is no significant difference between the male and female research scholars with respect to the factors influencing stress on them from 'research' point of view. Now, the variables with the p-significant values less than 0.05 are R4 (0.00), R5 (0.00), R6 (0.00), R7 (0.01), R8 (0.00), R9 (0.00), & R10 (0.00), by this we can declare that the null hypotheses for these variables can be rejected and confirm that there is a significant difference between the male and female research scholars w.r.t. the factors influencing stress on them from 'research' perspective.

Phase-II: Age-Group Analysis

In this phase, the researcher tried to test the null hypotheses with respect to the respondents' age groups using "ANOVA-One Way Classification" where, the respondents of various age groups are considered for the study. To analyse the primary data, SPSS version 16.0 has been taken to test the null hypothesis.

Section-1: Factors influencing Stress on Research Scholars w.r.t. Family**Table - 11.5.: ANOVA-One Way Classification for varied Age-Group Respondents**

ANOVA			
Factors	F	Sig.	Null Hypothesis (H_{0F})
F1	0.91	0.403	ACCEPT H_{0F1}
F2	3.69	0.026	REJECT H_{0F2}
F3	0.27	0.768	ACCEPT H_{0F3}
F4	2.61	0.075	ACCEPT H_{0F4}
F5	3.47	0.032	REJECT H_{0F5}
F6	5.71	0.004	REJECT H_{0F6}

Source: Primary Data analysis using SPSS 16.0 Version

Interpretation: The table-II.1 gives the result of the analysis for an omnibus hypothesis. The results (F-value and p-sig. value) are collected from the original results of the ANOVA One-way table (not shown here). From the above results, the significant p-values of the factors F1 (0.403), F3 (0.768), and F4 (0.075) are found to be greater than 0.05 and therefore we can accept the null hypothesis of those three factors. Whereas, the p-values for the factors F2 (0.026), F5 (0.032), & F6 (0.004) are found to be less than 0.05 and the null hypothesis of these factors have to be rejected safely.

Section-2: Factors influencing Stress on Research Scholars w.r.t. Work**Table - 11.6.: ANOVA-One Way Classification for varied Age-Group Respondents**

ANOVA			
Factors	F	Sig.	Null Hypothesis (H_{0W})
W1	15.93	0.000	REJECT H_{0W1}
W2	0.066	0.936	ACCEPT H_{0W2}
W3	3.786	0.024	REJECT H_{0W3}
W4	1.094	0.336	ACCEPT H_{0W4}
W5	21.67	0.000	REJECT H_{0W5}
W6	3.029	0.050	ACCEPT H_{0W6}

Source: Primary Data analysis using SPSS 16.0 Version

Interpretation: The table-II.2 gives the result of the analysis for an omnibus hypothesis. The results (F-value and p-sig. value) are collected from the original results of the ANOVA One-way table (not shown here). From the above results, the significant p-values of the factors W2 (0.936), W4 (0.336), and W6 (0.050) are found to be greater than 0.05 and therefore we can accept the null hypothesis of those three factors. Whereas, the p-values for the factors W1 (0.000), W3 (0.024), & W5 (0.000) are found to be less than 0.05 and the null hypothesis of these factors have to be rejected safely.

Section-3: Factors influencing Stress on Research Scholars w.r.t. Research

Table - 11.7.: ANOVA-One Way Classification for varied Age-Group Respondents

ANOVA			
Factors	F	Sig.	Null Hypothesis (H_{0R})
R1	9.27	0.000	REJECT H_{0R1}
R2	0.97	0.382	ACCEPT H_{0R2}
R3	1.03	0.359	ACCEPT H_{0R3}
R4	2.76	0.065	ACCEPT H_{0R4}
R5	1.41	0.245	ACCEPT H_{0R5}
R6	2.99	0.051	ACCEPT H_{0R6}
R7	5.7	0.004	REJECT H_{0R7}
R8	6.92	0.001	REJECT H_{0R8}
R9	0.92	0.399	ACCEPT H_{0R9}
R10	1.29	0.277	ACCEPT H_{0R10}
R11	2.63	0.074	ACCEPT H_{0R11}
R12	3.4	0.034	REJECT H_{0R12}

Source: Primary Data analysis using SPSS 16.0 Version

Interpretation: The table-II.3 gives the result of the analysis for an omnibus hypothesis. The results (F-value and p-sig. value) are collected from the original results of the ANOVA One-way table (not shown here). From the above results, the significant p-values of the factors R2 (0.382), R3 (0.359), R4 (0.065), R5 (0.245), R6 (0.051), R9 (0.399), R10 (0.277), and R11 (0.074) are found to be greater than 0.05 and therefore we can accept the null hypothesis of those factors. Whereas, the p-values for the factors R1 (0.000), R7 (0.004), R8 (0.001), & R12 (0.034) are found to be less than 0.05 and the null hypothesis of these factors have to be rejected safely.

10. Results & Discussion

The objective of the study is to identify the factors that cause stress among the research scholar in three dimensions of his/her research life. In this hunt, the above analysis gives the faithful facts the

perceptions of the research scholars based up on their gender and age groups. The total analysis has been conducted in two phases with 3 sections (Family-Work-Research) each. The following are the individual findings of each phase mentioning the outputs of three different dimensions.

In phase-I, t-test for independent samples have been applied to verify the test hypotheses and the findings are limited to respondents' gender perspective and identified in most of the situations there is a common and similar perception on the family and work factors that cause stress among research scholars and their impact on their research work. There occurs a very less rate similarity in the responses given by the male and female respondents towards the research factors that contribute stress among the research scholars and showing impact on their research work. The results of the analysis shows that among 12 stress contributing research factors, there is only 5 factors which are positively perceived by the scholars whereas, the remaining 7 factors shows disparity among the perceptions of male and female scholars according to the compatibility of the concerned factors with their realistic experiences.

In phase-II, ANOVA One-Way Classification has been applied to check the significant differences among the research scholars of different age groups. In Family point of view, it was observed that there respondents' are in different perceptions with respect to their "*scope for concentrating on research activities*", "*built-in family budget to meet research expenses*" and "*misunderstandings among the family members*". Whereas, in the context of work related stress, there is a significant difference among the opinions of research scholars of varied age groups towards the statements "time factor as a major source in balancing research and work life", "hurdles created by contradictory supervisors", "balancing professional earnings". Coming to the research dimension, the research scholars of varied age groups all together raised their hands in supporting most of the factors (say, 7) which are major sources that create stress among them in their research work, but in four cases there is a significant difference among the scholars with varied responses "*policies & regulations levied by universities*", "*lack of theoretical & practical knowledge*", "*supervisors' higher expectations*", "*unclear instructions about paper publications*".

11. Conclusion

After completing a deep analytical study, the researcher concluded the study basing on the universal truth that no two or more individuals will have similar opinion or perception on a context or concept. And this has been proved again in this study by highlighting the factual findings among the perceptions of varied gender and age grouped research scholars. In one situation, the female scholars may not agree with the opinions of male regarding the factors influencing stress among the research scholars with respect to their research in the selected three dimensions (Family-Work-Research) and vice-versa. Similarly, coming to the diversified age groups, a young (25-35, 35-45) research scholar may be showing with amplified energy levels in his/her Ph.D. programme but the same energy levels are not seen among the scholars from the other age groups like 45-55 & 55+ years due to elderly

family responsibilities, various health and work related constraints. So, finally it has been concluded that though the outputs of the study narrates that a research scholar who is pursuing part-time Ph.D. programme from a public/private university is experiencing stress and has its impact on their research work with respect to the various factors that cause stress in three dimensions (family-work-research) of their life. Further, this study has a key to enlarge its extent to concentrate on more demographic factors and also can make a comparative study among research scholars pursuing Ph.D. from public and private universities. As, this study is only restricted to two Telugu states (i.e. Telangana & A.P.) the results of the study cannot be generalized to all over India. So, this can also be considered as a possibility for extending the present research to national level.

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An Empirical Study on Community Awareness of CSR Practices with Special Reference to SCCL

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Abstract

In today's upgrading world, Corporate Social Responsibility (CSR) is a developing phase where academicians, practitioners, and entrepreneurs are showing interest in both theory level and practice level. In the present scenario, the Indian Corporate Giants are voluntarily contributing their efforts in terms of service towards the society and the well-being of public. Now-a-days most of the large Indian companies are getting engaged in CSR activities in order to enhance their corporate image or to stand in a competitive environment. The present research aimed to highlight the community awareness of the CSR practices employed by the singareni collieries company limited (SCCL). As the SCCL operates its all activities from the central head quarters located in Bhadradi Kothagudem District in Telangana State, the research work has been undertaken among the individuals living in the rural and urban areas. The main objective of this study is to find out the degree of public awareness on CSR activities implementing by SCCL Mines in order to provide a quality life and its role in development of society. The SCCL Mines has been conducting several social responsibility activities like "social awareness programmes, health camps, and societal development programmes etc." The target respondents (people living rural and urban areas of Bhadradi Kothagudem city only) are selected for the study through field survey technique using a questionnaire. The findings of the study reveals that most of the people residing in the urban areas are well aware of the CSR concept and the practices implementing by the SCCL and also it was highlighted that the SCCL company has to still create some awareness programmes for the people from rural areas and make them to utilize the services providing by the SCCL as well.

Keywords: CSR, CSR activities, Community Awareness, SCCL Mines.

I. Introduction

Common perception of an organization is towards development of their economy and growth where, the modern escalations are directly correlated with the effective utilization of natural resources. But, "the concern for over-exploitation of natural resources is continuously increasing and arising conflict over economy and ecology because of the imbalance between the development and the social

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and environmental sustainability (Pawan Kumar Singh & Arvind Kumar Mishra, 2016). To balance the development and the social and environmental sustainability the term corporate social responsibility has been coined and implementing by many public and private sector organizations (both manufacturing and service sector) to show their concern towards societal responsibility as they are also a part of the society. The term Corporate Social Responsibility (CSR) includes environmental, social, and human rights-based impacts and initiatives of companies (Ward & Fox 2002).

While there may be no single universally accepted definition of CSR, each definition that currently exists underpins the impact that businesses have on society at large and the societal expectations of them. Although the roots of CSR lie in philanthropic activities (such as donations, charity, relief work, etc.) of corporations, globally, the concept of CSR has evolved and now encompasses all related concepts such as triple bottom line, corporate citizenship, philanthropy, strategic philanthropy, shared value, corporate sustainability and business responsibility. The **EC(European Commission)** defines CSR as "the responsibility of enterprises for their impacts on society". To completely meet their social responsibility, enterprises "should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders" The **WBCSD** defines CSR as "the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large." According to the **UNIDO**, "Corporate social responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives (Triple-Bottom-Line Approach), while at the same time addressing the expectations of shareholders and stakeholders. In this sense it is important to draw a distinction between CSR, which can be a strategic business management concept, and charity, sponsorships or philanthropy.

1. 1. CSR in India

CSR in India has traditionally been seen as a philanthropic activity. And in keeping with the Indian tradition, it was an activity that was performed but not deliberated. As a result, there is limited documentation on specific activities related to this concept. However, what was clearly evident that much of this had a national character encapsulated within it, whether it was endowing institutions to actively participating in India's freedom movement, and embedded in the idea of trusteeship. As some observers have pointed out, the practice of CSR in India still remains within the philanthropic space, but has moved from institutional building (educational, research and cultural) to community development through various projects. Also, with global influences and with communities becoming more active and demanding, there appears to be a discernible trend, that while CSR remains largely restricted to community development, it is getting more strategic in nature (that is, getting linked with business) than philanthropic, and a large number of companies are reporting the activities they are undertaking in this space in their official websites, annual reports, sustainability reports and even publishing CSR

reports. The Companies Act, 2013 has introduced the idea of CSR to the forefront and through its disclose-or-explain mandate, is promoting greater transparency and disclosure. Schedule VII of the Act, which lists out the CSR activities, suggests communities to be the focal point. On the other hand, by discussing a company's relationship to its stakeholders and integrating CSR into its core operations, the draft rules suggest that CSR needs to go beyond communities and beyond the concept of philanthropy. It will be interesting to observe the ways in which this will translate into action at the ground level, and how the understanding of CSR is set to undergo a change.

According to Dr. Gujjala Srinivas Reddy (2016), "CSR in India has traditionally been seen as a philanthropic activity. But, CSR activities by the companies have been made mandatory through the introduction of amendments in Companies Act, 2013. As per the Gazette notification of Ministry of Corporate Affairs, published on 27th February, 2014, every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee consisting of three or more directors, out of which at least one director shall be an independent director. Under sub-section (3) of section 134, the company shall disclose the composition of the Corporate Social Responsibility Committee and the committee shall formulate and recommend Corporate Social Responsibility Policy to the board which shall indicate the activities to be undertaken by the Company as specified in Schedule VII and recommend the amount of expenditure to be incurred on the activities and monitor the CSR policy of the company from time to time. As per the clause 135 of Companies Act, provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for CSR activities. Further, if the company fails to spend much amount, the Board shall, in its report made under clause(o) of sub-section (3) of section 134, need to specify the reasons for not spending the amount. Every company including its holding or subsidiary, and a foreign company defined under clause (42) of section 2, having its branch office or project office in India which fulfills the criteria specified in sub-section (1) of section 135 of Companies Act, 2013 shall come under the purview of CSR initiatives and need to specify disclosure of CSR activities in its official website. The Act encourages companies to spend at least 2% of their average net profit in the previous three years on CSR activities. The ministry's draft rules, that have been put up for public comment, define net profit as the profit before tax as per the books of accounts, excluding profits arising from branches outside India."

1.2. CSR in Singareni Collieries Company Limited:

The main areas of CSR in SCCL are:

- I. Community Development:** This program consists of two major events named "SHAPE" and Medical/Health initiatives.
- a. SHAPE (Surrounding Habitat Assistance Program):** A flagship programme called 'SHAPE' was started in the year 2003-04 for taking up development works in coal belt areas. Habitats

which are less than 8.00 kms from townships or 10.00 kms from mine entries and having SCCL workmen at 25% of total population or 200 nos. whichever less are considered. For this, funds are sourced from 5% average profits earned by the Company in preceding 3 years within the provision of Sec.293 (i) (e) of The Companies Act, 1956. Under this programme, Drinking water supply, education facilities and infrastructure development in the surrounding habitats of SCCL are taken-up.

- b. Medical & Health Initiatives:** 2746 Mega/Mobile Medical Camps were conducted and medicines supplied free of cost. 230551 villagers of surrounding areas of collieries got benefited. Super specialty medical care was also extended to 54 villagers who have undergone open Heart Surgeries, double valve replacements etc. 2000 Cataract cases were operated with the help of SCCL. As recommended by World Health Organisation, 12 X 12 programme was launched by Singareni with aim to achieve 12% of Hb to children of 12 years age. Under this programme, parents, teachers and children are educated about the impact of malnutrition and Iron tablets are distributed on every Monday which is observed as iron day. Considerable improvement is observed in Hb% levels. This is first programme of its kind conducted in the state of A.P. Already 16786 children of Govt. & Company schools are covered under this programme. Introduced 'SPANDANA' mobile hospital services especially for the benefit of Tiryani Mandal, Adilabad dist. The service is assisted by male and female doctors with technical and nursing staff & it covers 2 to 3 villages/hamlets every day.

II. Empowering People

- a. Self Employment Training Programmes Through "SingareniSevaSamithi" (SSS):** 11597 persons including 1485 Project Affected Persons were trained in different vocational/self employment courses out of which 5169 secured employment/earning and 1411 have established their units. About 300 persons are sanctioned loans with 35% (Rural)- 25% subsidy under PMEGP (Prime Minister's Employment Generation programme). 84 PAPs were trained on Volvo vehicles at Bangalore. All secured employment. Giving training to Project Affected People and their children and local children to enable them to compete in police/Para-military recruitment. 1103 candidates selected in Police/Army recruitment, out of 13370 candidates trained. Organized a major Army Recruitment Rally in Kothagudem from 02-01-2012 to 07-01-2012. 20,312 candidates participated and 2693 were selected in the run.
- b. Educare Initiatives:** Singareni educational society is managing one Degree and one Jr.College for women, one Polytechnic college, and 10 schools in coal belt areas. Further Singareni is managing one Nursing School. SCCL is extending infrastructural and financial support to JNTU, Hyderabad for establishing an Engineering College in six branches including MINING near Manthani, Karimnagar Dist from the academic year 2010-11 by contributing an amount of Rs. 20.00 Crores in a phased manner. Five (5) percent of supernumerary seats will be provided in

each discipline to the children of SCCL. 50% seats in SCCL polytechnic college are reserved for other than Singarenians. About 60% of children of Local People/PAP have been admitted in Singareni Educational Schools. 372 merit students (children of SCCL employees) were sanctioned Scholarships for pursuing Engg./Medicine courses. 50% fee reimbursement to the students (children of SCCL employees) who scored 500 and more in SSC and taken admission in Corporate Colleges to pursue Intermediate course. Scholarships to the children of paps who passed SSC with 500 or more marks and pursuing intermediate course.

III. Environmental Management

SCCL is the first Coal Company to introduce environment as a subject in academic curriculum in Company Schools in 2003. The company is having a full-fledged environment department for preparation of EIA/EMP for new/expansion of coal mining projects, Environment Impact Assessment (EIA) studies, implementation of Environmental Safeguards and other Environmental Initiatives. SCCL has launched a number of 'eco-friendly' practices to mitigate damage to environment and improve the quality of life. A number of key initiatives taken up by SCCL for environment protection in the recent years include setting up of Automatic Dust Suppression arrangements, Sewage Treatment Plants, Effluent Treatment Plants, Bio-engineering structures on Over Burden Dumps, Clonal Plantations, Medicinal Plantations and development of Parks & Gardens. SCCL has engaged WWF in environment measures & in School education.

II. Review of Literature

Abigail McWilliams and Donald Siegel in their research paper "Corporate Social Responsibility: A Theory of the Firm Perspective", (2014) has addressed the issue that precisely how much should a firm spent on CSR? In this case they addressed this issue using a supply and demand theory of the firm framework and found that there is a level of CSR investment that maximizes profit, while also satisfying stakeholder demand for CSR. They said that this level of investment can be determined using only Cost-Benefit analysis. According to their argument, in equilibrium there should be no relationship. CSR attributes are like any other attributes a firm offers. Finally they predicted that there is a neutral relationship between CSR activity and Firm Financial Performance. *According to the Companies Act 2013*, it has introduced several provisions which would change the way Indian corporate do business and one such provision is spending on Corporate Social Responsibility (CSR) activities. CSR, which has largely been Voluntary contribution, by corporate has now been included in law. Basis, the CSR provisions as laid down under the 2013 act, and the draft CSR rules made available for public comments, in this bulletin we bring out the key provisions, analysis and challenges relating to the compliance of these provisions for companies to consider. A study conducted by *Vikas Choudary & Suman Tandon, in their article "Corporate Social Responsibilities of Public Sector Banks in India", (2013)* revealed that the banks recognized their responsibility towards society development and contributing their efforts in the areas of employment generation, education, healthcare,

women welfare, farmer training, and empowering women. These authors suggested that banks should disclose the amount spent on these CSR activities in their annual reports so that it will be able to know by an individual that how far banks are involving in developing the society through CSR activities.

B. Uma Rani and M. Sarala by their research paper named *"A Study on Corporate Social Responsibility in Singareni Collieries Company Limited"* (2013) explored that Singareni Collieries Company Limited (SCCL), involved in high level to develop the employees and society through its CSR activities. SCCL is implementing its CSR activities through some well designed programs like SSS (SingareniSewaSamithi), SHAPE (Surrounding Habitat Assistance Program) for laying roads, constructing bridges, providing central lightening. They also revealed that SCCL is conducting some mega medical camps to help poor people. **Anupam Sharma & Ravi Kiran** in their review of previous studies on *"Corporate Social Responsibility: Driving Forces and Challenges"*, (2013) revealed that in their research conveys the changing developments of CSR practices with the help of CSR literature from 1975 to 2011. In this study the authors discusses that there should be an increasing changes and developments in the CSR practices according to the needs of the economy adopting and implementing by organizations. Their study exhibits both implicit and explicit CSR factors should be considered for a holistic approach in the combination of four of Caroll's responsibilities including education, health and environment will help in formulation and implementation of social responsibility practices. **Markus Kitzmueller & Jay Shimshack** in their study of *"Economic Perspectives on Corporate Social Responsibility"*, (2012) provides a coherent framework for the economic analysis of CSR. It also states that several explanations for the emergence of CSR are underdeveloped in the literature. Regarding theory, marketing and advertising studies highlight the possibility that CSR influences preference formation, while economists have traditionally assumed that exogenously formed preferences influence CSR. This Empirical evidence supports relationships between private and public politics and CSR provision. **Muhammad Mohtsham Saeed and Faria Arshad** in their study *"Corporate Social Responsibility as a source of Competitive Advantage: The Mediating Role of Social Capital and Reputational Capital"* (2012) has opined that Management Researchers and Practioners are increasingly concerned with strategic role of intangible resources for increasing organizational performance. The major goal of this study is develop a model for the creation of intangible strategic resources for an organization through inclusion of social responsibility activities in the organization's business strategy, thereby increasing the firm's profitability and competitiveness.

P.Swapna in her research article *"Social Responsibility towards Labour Welfare in Singareni Collieries Company Limited"* (2011) has opined that the concept of social responsibility has been equated with economic welfare. It is also revealed that operationally, labour welfare can be achieved through social responsibility which is very closely linked to the social welfare. In this study, in the twentieth century the organizations and the human society should consider the welfare of entire human society which includes each and every individual person. **RichaGautam and Anju Singh** in their study *"Corporate Social Responsibility Practices in India: A Study of Top 500 Companies"*, (2010)

has opined that the corporate companies or organizations should consider some limitations to extend their CSR activities in less privileged states rather than in resource rich states. Organizations should encourage and motivate their employees to participate in their CSR practices through proper recognition and incentives. They also stated that there is also a need for public-private partnership among organizations/corporate sectors with well-defined controls and process for best use of CSR practices and its resources for a quality societal change.

2.1. Research Gap

In the study of various previous research papers published in national and international journals, and various research works (theses) conducted under this study; it was observed that most of the studies are concentrated on the CSR practices and its impact on the companies, economy etc but very limited studies are conducted to explore the opinions of people living in the society who are benefitted with the CSR practices either directly or indirectly. And also, it was found that no previous studies from the collected literature has pointed out the people's perception and their awareness about CSR and its activities implementing by the local organizations for better society. So, the present research is taken up with respect to public awareness about CSR in the Singareni Coal Belt Areas. In this research, the findings of the study will explore the differences in the perceptions of people residing in the rural and urban areas towards the uses and benefits of the CSR activities implementing by SCCL.

III. Objectives of the Study

In the presence of vast research study on the CSR practices and performance of Singareni Collieries Company Limited on the society, it is expected to give the public awareness and their opinions about CSR implementation by SCCL. This research tries to evaluate the CSR awareness of the community on SCCL CSR activities. The objectives of this study are:

1. To know whether people in the society, both rural and urban areas are aware of the concept of CSR and the CSR activities implemented by the Singareni Collieries Company Limited.
2. To analyze the responses of peoples' awareness on CSR and programmes undertaken by Singareni Collieries Company Limited to develop the society with respect to the respondents' geographical location.

IV. Research Methodology

IV.1. Area of Study

This research has been conducted in the areas, where Singareni Collieries Company Limited has been established and expanded in Bhadrakoti Kothagudem District, Telangana State. The Singareni Collieries Company is the famous and oldest company well established with a Corporate Office in Kothagudem, Bhadrakoti Kothagudem District. In this study the sample has been taken from the individuals from rural and urban areas located in and around Kothagudem, Yellandu, Manuguru, Sathupalli. In this

study the data has been collected towards the respondents' opinion regarding CSR activities conducting by Singareni Collieries Company Limited.

IV.2. Sample Size

The sample size for this study is 360 which comprise two equal parts of respondents from both rural and urban locations of selected mining areas (Kothagudem, Yellandu, Manuguru, Sathupalli).

IV.3. Methods of Data Collection

Primary Data: The primary data has been collected using well structured Questionnaires. In this study the questionnaire has been framed into two parts i.e., part-I consists of three point rating scale and part-II consists of five point rating scale.

Secondary Data: The secondary data has been collected from various numbers of journals on CSR, books, websites etc.

IV.4. Statistical Tools

As the collected data from the respondents are classified into two different samples 'rural' and 'urban' (of equal size ($n_1=n_2=165$)), the ANOVA-One Way Classification has been applied to test the differences among the respondents from both rural and urban areas and also the differences within the rural and urban area people.

IV.5. Hypotheses

Null Hypothesis (H_0): There is no significant difference between the opinions of respondents' from rural and urban areas regarding implementation of CSR practices by SCCL.

Alternative Hypothesis (H_1): There is a significant difference between the opinions of respondents' from rural and urban areas regarding implementation of CSR practices by SCCL.

V. Data Analysis and Interpretation

The collected data has been classified and tabulated as per the questionnaire. The following are the tables showing the both calculated and critical values of Chi-Square test which is applied on the primary data.

Table - 1: Chi-square Analysis For Goodness Of Fit

Part-I				
Questions	Chi-Square Calculated Value	df.	CHI-Square Table Value	Ho accepted/ rejected
1. Awareness on CSR	37.52	2	5.991	REJECT Ho
2. Empowering people	47.12	2	5.991	REJECT Ho
3. Satisfaction regards CSR activities	27.44	2	5.991	REJECT Ho
4. Awareness on ancillary units	12.08	2	5.991	REJECT Ho
5. SCCL concern about affected people	2.96	2	5.991	ACCEPT Ho
6. Implementation of CSR practices	32.24	2	5.991	REJECT Ho
7. Awareness on "shape" by SCCL	12.56	2	5.991	REJECT Ho
8. Medical facilities	28.88	2	5.991	REJECT Ho
9. Infrastructural development	5.84	2	5.991	ACCEPT Ho
10. Welfare measures for society	37.52	2	5.991	REJECT Ho
11. Awareness on "HELPING HAND" by SCCL	3.44	2	5.991	ACCEPT Ho
12. treatment for public in SCCL hospitals	24.08	2	5.991	REJECT Ho

Source: Questionnaire

Interpretation: In the part - I, among 12 variables, only in 3 variables null hypothesis (H₀) has been accepted since the calculated values are less than the critical values and the alternative hypothesis has been rejected. Hence, we can say that there is no significant difference between the opinions of respondents regarding CSR activities in SCCL Mines. From the remaining 9 variables, it is clear that the null hypotheses are rejected since the calculated Chi-square values are greater than the critical values of chi-square test. Hence, we can confirm that there is a significant difference among the opinions of respondents' from rural and urban areas towards implementation of CSR practices by SCCL.

Table - 2: Chi-square Analysis For Goodness Of Fit

PART-II				
Questions	Chi-Square Calculate D Value	d.f.	CHI-Square Table Value	Ho accepted/ rejected
1. Facilities Providing to society by SCCL	88.4	4	9.488	REJECT Ho
2. CSR Activities in gardening & plantation	42.8	4	9.488	REJECT Ho
3. Medical camps in Villages by SCCL	46.8	4	9.488	REJECT Ho
4. Research & Development programs by SCCL	29.6	4	9.488	REJECT Ho
5. SCCL Manpower to participate in CSR	40.4	4	9.488	REJECT Ho
6. Helping affected people of Natural Calamities	40.4	4	9.488	REJECT Ho
7. SCCL supports & develop peoples' occupation	41.2	4	9.488	REJECT Ho
8. SCCL always support society by its CSR Team	23.2	4	9.488	REJECT Ho
9. SCCL Employee Participation in CSR Activities	22	4	9.488	REJECT Ho
10. SCCL plays its role in societal improvement	36	4	9.488	REJECT Ho

Source: Questionnaire

Interpretation: In the part - II, among all the 10 variables it is clear that the null hypotheses are rejected since the calculated Chi-square values are greater than the critical values of chi-square test. Hence, we can confirm that there is a significant difference among the opinions of respondents' from rural and urban areas towards implementation of CSR practices by SCCL.

VI. Scope for further research

In this research, the entire study has been conducted to know whether the people in the society are having awareness on Corporate Social Responsibility activities and its practices performed by Singareni Collieries Company Limited in its coal belt areas in order to develop the society along with its development. But, there is a chance for an expansion of this research i.e.

1. The future study can be on the concept of how these people in the society are utilizing the facilities provided by SCCL and how they are developing themselves with the help of the CSR services ladder provided by the Singareni.
2. Also the study can be extended on how the public are coordinating along with SCCL in community development, environment management, and some other developmental programs conducting by SCCL.

VII. Conclusion

The present study is relating to the CSR activities conducted by SCCL Mines in its coal belt areas of BhadradiKothagudem District, and awareness of the people in the society both from rural and urban areas. It was found that the respondent's awareness levels and knowledge on CSR are different. From the entire study it was observed that the perceptions of the respondents' from rural and urban

areas differ significantly because, the people from urban background are more aware about SCCL's CSR activities as the head quarters of SCCL is located in Kothagudem town. But, the people from rural areas are having less awareness about the CSR programs organized by SCCL with various reasons out of which illiteracy may be one of the major reasons. Though rural people are more benefitted with the CSR services provided by SCCL, still most of them do not know about the history and evolution of CSR activities in SCCL. That is why; the perceptions and opinions of rural and urban people vary from location to location. Some of the respondents' responded positively that they knew the CSR practices implemented by SCCL for building better society where as some of them responded negatively as they are lacking knowledge of CSR and CSR activities performed by SCCL. From society point of view, It can be suggested that each and every individual (both from rural and urban areas) to gain some knowledge on the importance of CSR on the society development and the CSR activities undertaken by SCCL, because the company is working for the societal development and the company needs the cooperation of these individuals in society for living a quality life and for better future. From SCCL point of view, it can be suggested that the company and its CSR team has to create public/societal awareness by conducting CSR awareness programs. These programmes will definitely educate society for better understanding of CSR programmes of SCCL like what is CSR? What are the uses of CSR practices for a society etc? This will definitely helps society and make people in the society to participate with equal shares for development of the society and in upliftment of underprivileged people in the society.

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Measuring Effectiveness of Distribution Channel Practices among Merchants: An Empirical Study on Logistics Companies in Chennai City

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Abstract

The Indian logistics industry is defined by its ability to function as an integral service to the customers in helping them ameliorate their overhead costs in the logistics sector in India. The logistics market in India comprises shipping, port-services, warehousing, rail, road and air freight, express cargo and other value-added services. The logistics sector in India supports various components of the manufacturing industry in India. Over 50% of the logistical requirements are outsourced by the top logistics companies in India. Transport is a crucial component of the Indian logistics industry, being about half the size of the Indian logistics industry market size, followed by warehousing and storage, comprising another 25-30% of the total market. The rest of the Indian logistics industry market size constitutes value-added and freight forwarding services. Road transportation with over 50% market share dominates the logistics industry in India, succeeded by the railway's sector at over 30%, water transport at 7%, and air shipment at 1%. The industry has moved from being just a service provider to provider of end-to-end supply chain solutions to their customers. A distribution channel is the path by which all goods and services must travel to arrive at the intended consumer. It is also used to describe the pathway that payments make from the end consumer to the original vendor. Distribution channels can be short or long, and depend on the amount of intermediaries required to deliver a product or service. The objective of research paper is to study the performance of the channel of marketing and to measure the effectiveness of distribution channel practices among merchants by the logistics services providers in Chennai city.

Keywords: Delivery time, Distribution pattern, Documentation process, Credit period, communication and information.

Introduction

The logistics industry is one of the key sectors of the Indian economy that has seen immense growth in the last couple of years. Infrastructure spending has been given a major push and the

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logistics industry in India, as per the ICRA report, is expected to grow at the rate of 9-10% per annum. The recent index published by the World Bank Logistics Performance Index (LPI) saw India's position rise from the 54th position in 2014 to the 35th position in 2016. The Indian logistics industry which provides employment to more than 22 million people has grown at a compound annual growth rate (CAGR) of 7.8 per cent during the last five years. With the implementation of GST, the Indian logistics market is expected to reach about USD 215 billion in 2020, growing at a CAGR of 10.5 per cent. Improving the logistics sector has huge implication on exports and it is estimated that a 10 per cent decrease in indirect logistics cost can increase 5-8 per cent of exports. Indian market for warehouse automation is projected to grow 10-12% to \$3.49 billion by 2020. A new logistics division has been created in the Department of Commerce to coordinate integrated development of the industry, identification of gaps, and introduction of technology based interventions. It is clear that the Indian logistics sector faces challenges and there is a lot to act upon. Use of innovative models, new technological systems, international best practices, research and adequate implementation approach can all help to improve the sector, which in turn can stimulate growth and employment in the country. The objective of the researcher paper was to find out the effective role of distribution management influencing the marketer in a channel decisions to ensure the channel members and informing the consumers in making the product to reach from producer to the consumer

Literature of Review

Domschke and Schield (2014) who also had researched on Channels of distribution had mentioned in their research findings that: "Distribution is a system which consists of all activities related to the physical movement and the transfer of the ownership of economic goods between producer and customer. It also consists of a coordinated movement or transfer of manufactured goods according to their volume, time and space, so that the various time lines related to logistics are met (order fulfillment) and an estimated requirement can be effectively addressed and satisfied".

Chintagunta and Jain (2015) developed a dynamic model for determining equilibrium marketing investment levels for channel members and a framework for understanding the effects of channel dynamics on difference in profits resulting from coordinated marketing interventions. They have concluded that when the manufacturer and channel member followed a coordinated strategy, it resulted in enhanced marketing effort levels by channel members resulting in higher total channel profits and that there is greater need for such coordinated strategy when discounts, rates, carryover effects of marketing efforts and goodwill interactions between manufacturers and channel partners are high.

Gary L. Frazier (2016) had covered various aspects related to channels of distribution in various papers had in the year 1999 published a paper titled "Organizing and Managing Channels of Distribution" where in he touched up the man management part of the channels of distribution. He also touched up on various aspects like, use of internet in channels of distribution, how various jobs can be split between the various channel and distribution partners, Various aspects of push and pull strategies that can be used in sales and distribution.

M.Sreenivas and T. Srinivas (2017) had worked on Effectiveness of Distribution Network through various factors influencing supply chain efficiency and effectiveness had concluded that since most of these influencers are governed by the seller, It has been suggested that they identifying them as it would help sellers to improve their. They also added that there were several steps that one could take to ensure that these vital parameters to distribution network planning are followed.

Need for the Study

The distribution management is of major decision for the marketer because it involves channel members and consumers in making the product to reach from producer to the consumer. Designing the channel style, channel intermediaries, channel members role and functions helps the marketer to focus on the product/services movement to the consumers through the channel intermediaries. Most of the companies' performance and profitability is decided by the distribution and channel decisions. This study makes known the reasons for conflicts among the channel members in five industries like consumer electronics, health care product, life saving drugs, general health, paints and chemicals in Chennai city and provides models for designing the partnership marketing to the channel profile is known. The reasons for the channel members difference of opinion and their expectations further helps in implementing the significant practices of partnership marketing in different industries. This will be definitely helpful to the channel members to know their problems involved in the channel members and to evolve the partnership strategies to make them becoming the good channel partners through effective logistics services.

Statement of the Problem

The channels of distribution have been an area where there has been some research that has been happening, though many empirical studies have given. There is still a lack of agreement about the magnitude of the impact of service quality and its consequences. Also, the findings have same been disputed by other researches over a period of time. Hence, it became imperative to develop a model which can bridge the gaps of the existing models. There were various questions that needed to be answered to ensure the success; some of them are given below:

- What are the various parameters related to the performance of the channel of marketing and distribution?
- What is the relationship between various distribution parameters?
- What are the various aspects that need to be kept in mind to ensure that distribution is seem less and economical?

Objective of the Study

- To understand Merchants overall satisfaction regarding Distribution network of Logistics Service providers in Chennai city.

- To ascertain the Merchants opinion on the various attributes of Logistics Service providers.
- To identify the factors that influences the Merchants opinion for placing an order with Logistics Service providers.
- To study about the type of Merchants placing an order frequently with Logistics Service providers in Chennai city.
- To examine the various value added services such as packaging and transportation carried out by Logistics Service providers.

Scope of the Study

The scope of this study is to ascertain the Merchants attitude towards the distribution channel of logistics service providers in Chennai city and various methods to increase the sales volume of the concern. The methods include regular information to the dealer creating a brand position in the market and taking measures to make the brand remain in its position. One of the important aspects of this study is also to increase the market segment for the product. This study will formulate the channel designer in designing the channel style, channel intermediaries, channel members role and functions helps the marketer to focus on the product/services movement to the consumers through the channel Intermediaries.

Research Methodology

Research Design

The present research design is descriptive and diagnostic in nature as it describes what is happening, why it happening and possible solution is for it via understanding and analyzing Merchants towards various aspects of distribution channel practices in Logistics services.

Sampling Design

Population

The study of various characteristics relating to items /individual belong to a particular group is called as population. The population of the study consists of the different merchants using distribution channel of logistics companies in Chennai city. The sample size of the actual study consisted of 126 Merchants using distribution channel services of logistics companies

Sampling Technique

The sampling technique used was non-probability sampling method is adopted in this study. It refers to the technique where the probability of each cases being selected from the total population is known. The sampling technique used was judgement sampling where sample units are selected from special group of the Merchants using distribution channel services in chennai city.

Data Collection Method

The present study has employed both the primary and secondary data. Data was collected only through primary source. Primary data was collected through questionnaires. For this purpose support from logistics companies were received.. To analyze the trends of distribution channel services, secondary data has been collected from the websites, journal and reports.

Data Analysis

Reliability Test

Case Processing Summary			
		N	%
Cases	Valid	15	100.0
	Excluded ^a	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.804	39

Inference

The Cronbach's alpha coefficient for 39 items is 0.804 suggesting that the items have high level of internal consistency.

CHI Square Test

Null hypothesis (H₀): There is no association between the rating of overall distribution channel system of logistics companies and size of the merchants.

Alternate hypothesis (H₁): There is association between the rating of overall distribution channel system of logistics companies and size of the merchants.

Size of the Merchant * Rate Overall Distribution Channel Cross Tabulation

		Count			Total
		Rate Overall Distribution Channel			
		Good	Average	Poor	
Size of the Merchant	Small scale	0	25	0	25
	Medium scale	25	26	0	51
	Large scale	25	0	25	50
Total		50	51	25	126

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	93.894 ^a	4	.000
Likelihood Ratio	125.555	4	.000
Linear-by-Linear Association	.627	1	.428
N of Valid Cases	126		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.96.

Inference: The Pearson chi square significant value is 0.00 which is lesser than 0.05. Hence Reject Null hypothesis. Therefore there is association between the rating of overall distribution channel system of logistics companies and size of the merchants.

Friedman Test

Null hypothesis (H_0): There is no significant difference between mean ranks towards the factors of ordering the distribution channel services from logistics companies.

Alternate hypothesis (H_1): There is significant difference between mean ranks towards the factors of ordering the distribution channel services from logistics companies.

Ranks

	Mean Rank
Price	4.11
Quality	3.79
Attributes	3.71
Discounts	3.02
Packaging	3.39
Business Ethics	2.99

Test Statistics ^a	
N	126
Chi-Square	43.438
df	5
Asymp. Sig.	.000

a. Friedman Test

Inference: It reveals that since p value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is significant difference between mean ranks towards the factors of ordering the distribution channel services from logistics companies.

Kruskal-Wallis Test

Null hypothesis (H₀): There is no significant difference between precautionary measures taken for delivering products by the Logistics companies and type of Merchant.

Alternate hypothesis (H₁): There is significant difference between precautionary measures taken for delivering products by the Logistics companies and type of Merchant.

Ranks

Ranks			
	Size of the Merchant	N	Mean Rank
Precautionary Measures For Delivering Products	Small scale	25	89.00
	Medium scale	51	38.50
	Large scale	50	76.25
	Total	126	

Test Statistics^{a,b}

Test Statistics ^{a,b}	
	Precautionary Measures For Delivering Products
Chi-Square	55.151
df	2
Asymp. Sig.	.000

- a. Kruskal Wallis Test
- b. Grouping Variable: Size of the Dealer

Inference: Since $p\text{-value} = 0.000 \leq 0.05 = \alpha$, we reject the null hypothesis. At the $\alpha = 0.05$ level of significance, there exists enough evidence to conclude that there is significant difference between precautionary measures taken for delivering products by the Logistics companies and type of Merchant.

Findings

- The Cronbach's alpha coefficient for 39 Items is 0.804 suggesting that the Items have high level of internal consistency.
- Using chi square Analysis it is found that the Pearson chi square significant value is 0.000 which is less than 0.05. Hence Reject Null hypothesis. Therefore there is association between the rating of overall distribution channel system of logistics companies and size of the merchants.
- From Friedman Test It reveals that since p value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is significant difference between mean ranks towards the factors of ordering the distribution channel services from logistics companies.

- From Kruskal Waalis Test it is found that $p\text{-value} = 0.000 \leq 0.05 = \alpha$, we reject the null hypothesis. At the $\alpha = 0.05$ level of significance, there exists enough evidence to conclude that there is significant difference between precautionary measures taken for delivering products by the Logistics companies and type of Merchant.

Suggestions

On the basis of the findings of the Study the researcher proposes following suggestions To the Logistics service providers

- It is suggested that the Logistics companies should implement telematics represents an enormous opportunity for OEMs to maintain their relationship with a dealer beyond the initial steel sale and throughout the entire ownership experience, providing many chances to reinforce brand loyalty.
- It is suggested that the managers should ensure that the important subjects like channel margins, timely claim settlement, credit being offered by the Logistics companies to the dealer, material at outlets etc be closely monitored by themselves as they are key parameters which help in ensuring that the dealers are satisfied.
- It is suggested that the Logistics companies should manage multiple channels of communication. Capture Dealer interaction that may occur via face to face contact, internet portal and E-mail.
- It is suggested that the Logistics companies should have better logistics facility for making reach the product at retailer's door at a right time.

Conclusion

Best management of distribution channels is one of factors providing the success of products sold by the company in the market. Also a company should not forget about the appropriate upgrading of a product over time to meet the expectations of customers and to be desired by them. Also noteworthy and not to be underestimated is an offered potential by the growth of networks and electronic commerce. It seems that the electronic channel of distribution will be soon one of the most popular forms of distribution channel in logistics companies, because it reduces expenses associated with the costs of distribution and sales, and if you look from the client perspective it shortens the time of a purchase of a specific product. Electronic distribution channels also provide the company with a high level of computerization in the field of development, which is nowadays of great importance for the position and credibility in the market. While the Logistics market certainly offers a big attraction to marketers, it would be naïve to think that any company can enter the market without facing any problems and walk away with a sizable share. Distribution is the most important variable in the marketing plans of most consumer goods manufacturers, because managing such a massive sales and distribution network is in itself a huge task. Now a day it is not easy to sustain in the market only with the brand name, because customers expects more benefits for which they pay. Hence the merchant should adopt electronic distribution services rendered by logistics companies in Chennai city.

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Whether Change in Government in India has Any Role in the Co-integration of Developed Economies and Indian Stock Market?

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India has been growing at more than 7% almost every year. The size of an investment in stock market has become larger after the economic reforms in 1991. At the same time, India is vulnerable to the shock created by major incidents happened outside the country. So it become inevitable to study the impact of major incidents happened around the world. At the same time leaders of the country take serious action to ensure those major incidents do not create big impact on the stock market and its performance by maintaining that stock market get the same return and it operates within the same volatility. This paper tries to explore whether any impact is there on the Cointegration of developed economies and Indian stock market whenever Government changes.

India has been ruled by 4 strong Prime ministers after the economic reforms in 1991 - 1992. They are Shri P V Narashimha rao (Between 1991-1996), Shri Atal Bihari Vajpayee (Between 1998-2004), Dr Manmohan Singh (Between 2004-2009, 2009-2014), Shri Narendra Modi (Between 2014 to till date).

Three five year terms were belonging to Congress party and two terms were belonging to BJP. The period of Shri PV Narashimha Rao is called as Era of Economic Reforms, The period of Shri Atal Bihari Vajpayee is called as era of Infrastructure, The period of Shri Dr Manmohan Singh is called as Era of Education, and The Periodof Shri Narendra Modi is called as Era of Development. The period under study between 1991 and 2018 can be divided into 5 terms on the basis of Prime ministerial terms elected.

Table 1: Terms taken for study

Term	Period	Prime Minister
I	1991-1996	Shri PV Narashimha Rao
II	1998-2004	Shri Atal Bihari Vajpayee
III	2004-2009	Dr Manmohan Singh
IV	2009-2014	Dr Manmohan Singh
V	2014-2018	Shri Narendra Modi

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This paper is an attempt to study where there is any change in the degree of co integration among the developed economies and Indian Stock Market if the government changes. So we name the governments as Term I which denotes the government that ruled India between June 1991 and May 1996, Term II which denotes the government that ruled India between March 1998 and April 2004, Term III which denotes the government that ruled India between May 2004 and April 2009, Term IV which denotes the government that ruled India between May 2009 and April 2014 and Term V which denotes the government that ruled India between May 2014 and till date i.e. up to May 2018. We will make a serious attempt to find out whether the Indian stock market is affected aggressively by the developed economies taken for study during various governments which were ruling our country after economic reforms happened in 1991-1992.

Assessing volatility of asset returns is an important prelude toward the proper evaluation of regulatory policy changes aiming at restricting (or enhancing) international capital flows. Volatility considerations also assume significance for determining the cost of capital and for implementing international diversification and hedging strategies [Bekaert and Harvey (1997)].

This article has been divided into five sections. Section I explains the descriptive statistics of each data series of stock market of developed economy and Indian Stock market. They demonstrate the mean and median of monthly returns of all stock market indices taken for study. It also shows the risk parameter of all indices and Skewness and Kurtosis of all indices. Section II which shows the Correlation and Covariance Analysis between Indian stock market and stock market of each developed economy undertaken for study. It verifies whether there is any change in the coefficient of correlation between stock market of each developed economy taken for study and Indian Stock market. Covariance is a statistical measure of how two assets move in relation to each other. A positive covariance indicates that two assets move in tandem. Section III exhibits the results of unit root test. It examines whether any stationarity exists in the data series of stock market of each developed economy. The Augmented Dickey Fuller Test (ADF) is unit root test for stationarity. Unit roots can cause unpredictable results in time series analysis. Unit root tests need to be conducted for each data series. The index data of all stock markets taken for study viz US, UK, Germany, Japan and India need to be tested for stationarity. Section IV shows the results of Cointegration Test. Cointegration Test can be used to test whether the stock markets of developed economies and Indian stock market are co integrated. If they are co integrated, there will be less chance for arbitrage and therefore it will not be possible to make abnormal profit in the long run. Johansen Juselius Test is used to check existence of long run relationship between the stock markets under study. Section V lists the results of Test for Causality. It checks whether the movement of data series of any index cause the movement of data series of other indices. Section VI exhibits Test for volatility. It measures stock return volatility using GARCH process. All these sections will clearly explain the results of various tests under various governments as listed in Table I. It will also analyze the changes happened in the parameters under various governments.

Section I Descriptive Statistics

This is describing the basic characteristics of the data series of all five selected indices. All indices show a positive mean monthly return except Nikkei 225 that shows negative mean monthly return. Surprisingly all four indices viz., Sensex, GSPC, Dax, Cac 40 have same median return. Sensex has the highest monthly return during the last three decades. Remaining all four indices have almost the same maximum monthly return.

Table 2: Descriptive statistics of all five selected indices

Descriptive Statistics	Sensex	GSPC	DAX	CAC 40	Nikkei225
Mean	0.010	0.006	0.006	0.004	-0.005
Median	0.010	0.010	0.011	0.010	0.003
Maximum	0.534	0.106	0.194	0.126	0.149
Minimum	-0.252	-0.185	-	-0.192	-0.272
Standard Deviation	0.081	0.041	0.059	0.052	0.058
Skewness	0.760	-0.826	-	-0.482	-0.531
Kurtosis	8.811	5.032	5.984	3.472	3.980

Section II Relationship between the indices

The following are the relationship among the indices. Correlation analysis is the statistical tool we can use to describe the degree to which one variable is likely related to another. Correlation can also be used by itself to measure the degree of association between two variables. Covariance is a measure of the joint probability of two random variables. Covariance is a measure of how much two random variables vary together. It is similar to variance, but where variance tells you how a single variable varies, covariance tells you how two variables vary together. Covariance indicates the directional relationship of the returns of the selected indices.

Table 3: correlation for the whole period taken for study

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	0.00	0.07	0.03	0.08
GSPC	0.00	1	0.11	0.74	0.07
DAX	0.07	0.11	1	0.09	0.48
CAC 40	0.04	0.74	0.09	1	0.13
Nikkei 225	0.08	0.07	0.48	0.13	1

Though all indices are positively correlated and only Indices GSPC and CAC 40 are most perfectly positively correlated. Correlation between Sensex and GSPC is zero. So there is no correlation between these two indices. It means movement of Sensex and GSPC are random and movement of GSPC does not affect movement of Sensex at all.

Term wise Correlation Results

Term I Period under study is between Jun 1, 1991 and May 31, 1996

Table 4: correlation for Term I

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	-0.10	0.14	0.09	0.16
GSPC	-0.10	1	-0.09	0.36	-0.08
DAX	0.14	-0.09	1	0.03	0.12
CAC 40	0.09	0.36	0.03	1	0.07
Nikkei 225	0.16	-0.08	0.12	0.07	1

Term II Period under study is between March 1, 1998 and April 30, 2004

Table 5: correlation for Term II

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	-0.07	0.22	-0.02	0.20
GSPC	-0.07	1	0.09	0.78	0.13
DAX	0.22	0.09	1	0.07	0.44
CAC 40	-0.02	0.78	0.07	1	0.22
Nikkei 225	0.20	0.13	0.44	0.13	1

Term III Period under study is between May 1, 2004 and April 30, 2009

Table 6: Correlation for Term III

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	0.00	-0.08	-0.00	-0.00
GSPC	0.00	1	-0.03	0.82	-0.01
DAX	-0.08	-0.03	1	0.08	0.55
CAC 40	-0.00	0.82	0.08	1	0.11
Nikkei 225	-0.00	-0.01	0.55	0.11	1

Term IV Period under study is between May 1, 2009 and April 30, 2014

Table 7: Correlation for Term IV

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	0.21	0.01	0.19	0.00
GSPC	0.21	1	0.35	0.89	0.26
DAX	0.01	0.35	1	0.30	0.82
CAC 40	0.19	0.89	0.30	1	0.25
Nikkei 225	0.00	0.26	0.82	0.25	1

Term V Period under study is between May 1, 2014 and June 30, 2018

Table 8: Correlation for Term V

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	1	0.08	-0.13	-0.07	-0.13
GSPC	0.08	1	0.10	0.55	0.15
DAX	-0.13	0.10	1	0.04	0.75
CAC 40	-0.07	0.55	0.04	1	0.15
Nikkei 225	-0.13	0.15	0.75	0.15	1

Above tables illustrate the correlations among India, US, Germany, France and Japan stock markets. It clearly shows that there is no correlation between India and US, Germany, France and Japan Markets during all five terms taken for study irrespective of the Government ruling India. It is interesting to note that France and US stock markets have perfect positive correlation ship during all five terms of study. Except Term I, Germany and Japan markets have perfect positive correlation.

Covariance

Table 9: Covariance among all five selected indices during the whole period

	Sensex	GSPC	Dax	CAC 40	Nikkei225
Sensex	0.0060	0.0001	0.0003	0.0001	0.0003
GSPC	0.0001	0.0016	0.0002	0.0017	0.0002
DAX	0.0003	0.0002	0.0035	0.0003	0.0017
CAC 40	0.0001	0.0016	0.0003	0.0027	0.0004
Nikkei 225	0.0004	0.0002	0.0017	0.0004	0.0034

Section III. Test for Stationarity

To test whether Time Series indices have Unit roots, a most popular test among researchers is Augmented Dickey Fuller Test. Let X_t be a time series. The ADF Test finds the following equation

$$\Delta X_t = \alpha + \beta t + (\rho - 1) X_{t-1} + \sum \varphi_i \Delta X_{t-i} + \varepsilon_t$$
 and testing whether $\rho = 1$. In this equation $\Delta = 1 - L$

(where L is a lag operator); t is a trend; and ε_t is a white noise term. Phillips and Perron (1988) tests were also conducted, which allow for more general error terms (heteroskedastic and auto correlated errors).

The Augmented Dickey Fuller Test (ADF) is unit root test for stationarity. Unit roots can cause unpredictable results in time series analysis. Null Hypothesis for ADF Test is Unit root exists in the Time series taken for study. Alternative hypothesis for ADF Test is Unit root does not exist in the Time series taken for study. Philips Perron Test is also a widely used test to find the existence of Unit root in Time Series.

Table 10 : Test of stationarity - unit root test of all Indices -Augmented Dickey Fueller test results

	ADF Test value (Variable in Levels)	ADF Test value (variable in first differences)	PP Test value (Variable in levels)	PP Test value (Variable in first differences)
Sensex	-16.48**	-15.23**	-16.49**	-108.39**
GSPC	-17.33**	-11.64**	-17.43**	-82.48**
DAX	-17.13**	-11.83**	-17.14**	-122.40**
CAC 40	-16.95**	-12.13**	-16.96**	-118.60**
Nikkei225	16.66**	-15.30**	-16.71**	-80.09**

An ** indicates rejection of null hypothesis of non-stationarity at 1 percent level of significance.

The results clearly indicate null hypothesis of existence of non stationarity can be rejected for all stock indices expressed in levels itself. And also, null hypothesis of existence of non stationarity can be rejected if the indices data are converted into first differences. Therefore we may conclude that all five stock indices are integrated of order zero.

Section IV. Test for Cointegration

For testing cointegration, testing the existence of Unit root is the first step. We have already tested all the five indices for existence of Unit root. Both ADF test and PP Test confirm the absence of Unit root in all the five indices data series. Unit root test suggest that they are all differenced at zero.

So now Cointegration test can be applied to check whether all these stock markets are co integrated or not. For testing cointegration, Johansen and Juselius cointegration test is used. If test confirms that these markets are cointegrated, there will be less chance for arbitrage.

Table 11: The Johansen Juselius co-integration test results

(Co-integrating vector: IN, US,GE,FR,JA)

Period under study are between Jan 1, 1991 and May 31, 2018

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	323.3331	69.8189	114.6885	33.8768
At most 1	208.6446	47.8561	62.7541	27.5843
At most 2	145.8905	29.7970	59.1087	21.1316
At most 3	86.7818	15.4947	45.9970	14.2646
At most 4	40.7848	3.8414	40.7848	3.8414

An * indicate rejection of null hypothesis of no co-integration at the 95% level of significance.

From the table, JJ Test results it can be inferred that there is a cointegrating relationship between India and other four selected markets viz.,US, Germany, France and Japan. This inference is supported by both the trace and the maximal Eigen value statistics of JJ approach. Both of these statistics are more than enough to reject the null hypothesis of no cointegration ($r=0$) among India, US, Germany, France and Japan stock markets at 95 percent level of confidence.

Term IPeriod under study are between Jun 1, 1991 and May 31, 1996

Table 12: The Johansen Juselius co-integration test results for Term I

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	195.7100	69.8189	70.5736	33.8768
At most 1	125.1364	47.8561	56.4702	27.5843
At most 2	68.6662	29.7970	30.0094	21.1316
At most 3	38.6568	15.4947	22.2145	14.2646
At most 4	16.4423	3.8414	16.4423	3.8414

Term IIPeriod under study are between March 1, 1998 and April 30, 2004

Table 13: The Johansen Juselius co-integration test results for Term II

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	139.8429	69.8189	44.6394	33.8768
At most 1	95.2034	47.8561	37.9203	27.5843
At most 2	57.2831	29.7970	25.1683	21.1316
At most 3	32.1148	15.4947	19.9801	14.2646
At most 4	12.1346	3.8414	12.1346	3.8414

Term IIIPeriod under study are between May 1, 2004 and April 30, 2009

Table 14: The Johansen Juselius co-integration test results for Term III

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	143.1295	69.8189	49.6237	33.8768
At most 1	93.5057	47.8561	38.7713	27.5843
At most 2	54.7343	29.7970	27.0901	21.1316
At most 3	27.6442	15.4947	21.0154	14.2646
At most 4	6.6287	3.8414	6.6287	3.8414

Term IV Period under study are between May 1, 2009 and April 30, 2014

Table 15: The Johansen Juselius co-integration test results for Term IV

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	196.1690	69.8189	72.4023	33.8768
At most 1	123.7667	47.8561	52.4738	27.5843
At most 2	71.2928	29.7970	33.9821	21.1316
At most 3	37.3107	15.4947	21.0623	14.2646
At most 4	16.2483	3.8414	16.2483	3.8414

Term V Period under study are between May 1, 2014 and June 30, 2018

Table 16: The Johansen Juselius co-integration test results for Term V

Hypothesized no of CEs	The Trace value		The Maximal Eigen value	
	Test Statistics	CV (95%)	Test Statistics	C.V.(95%)
None *	142.3823	69.8189	50.6691	33.8768
At most 1	91.7131	47.8561	31.0724	27.5843
At most 2	60.6407	29.7970	26.9758	21.1316
At most 3	33.6648	15.4947	21.0247	14.2646
At most 4	12.6401	3.8414	12.6401	3.8414

From the above analysis term wise, Trace value and Maximal Eigen value indicate that Null hypothesis "No cointegration among India, US, Germany, France and Japan" is rejected. The above tabulated results of Johansen Juselius cointegration test - term wise clearly indicate that There is cointegration among India, US, Germany, France and Japan Stock markets irrespective of the ruling government and irrespective of the ruling Government's policies.

Conclusion

This paper tries to examine whether change in government in India do play any role in the cointegration of stock market. Correlation results show that there is no correlation among the five indices taken for the study. This is also true if you find correlation for the five terms taken for study. But Johansen Juselius cointegration test results demonstrate that there is cointegration among the five markets taken for study. This is also true during all the five terms taken for study. So change in Government in India does not play any role in the cointegration among markets in India, US, Germany, France and Japan. In other words, change in Government in India does not affect the cointegration among markets in India, US, Germany, France and Japan.

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Factors influencing the selection of Distribution Channels in Vegetable Supply Chain- An Analytical Study of Farmers in Telangana State

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Abstract

The purpose of this paper is to understand the criteria used by farmers for selecting the distribution channel for their vegetable. This was part of a study to find the efficiency of different channels for vegetable supply chain and relevant questionnaire was designed to understand farmer's preference and reason behind that. The data was collected based on questionnaire from 410 farmers who are using different channels. The data analysis is based on the sample data for four districts of Telangana and three selected vegetables which are assumed to be representative of the overall sample frame. It was observed that the farmers are having specific channel preferences and criteria for channel selection that often varies from channel to channel. The reasons for different channel selection was identified for each channel and highlighted the most important reasons identified by the farmers through detail interview.

Keywords: Distribution Channel, Vegetables, Selection Criteria

Introduction

The vegetable supply chain is part of Agri-fresh produce (sometimes referred as Perishable food supply chain) differs from regular supply chain in many ways. India is the second largest producer of vegetables in the world. But, the heterogeneous product supply base and presence of multiple non-value-added intermediaries within the supply chain make the vegetable supply chain less competitive. Also, it was observed that there are limited research studies which have focused on challenges and issues of vegetable supply chain.

Following are some of the channels for supply chain network of vegetables.

Channel 1:



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This is one of the common channel where farmers are carrying their vegetable in a local market with semi-permanent structure and sell directly to the end consumers generally in less quantity. Farmers get immediate cash on hand and use it for their immediate livelihood needs. End consumers buy the vegetables to get fresh vegetable at a reasonable price

Channel 2:



This channel is used by the farmers for bulk quantities and purchased by the wholesaler through a spot bidding process. The commission agents play a significant role to drive the bidding process and arrange for buyers. In turn, they collect commission against the sale. There is an organized market committee who manages the operation of the market and they also maintains the information of vegetable arrival and pricing on a daily basis.

Channel 3:



This channel is operational in combined Andhra Pradesh from 1990 with the idea of creating an organized market where farmers can sell directly to end consumers without any middleman.

Channel 4:



This channel is primarily governed by the super market chains to collect best quality vegetables from the farmers directly. Sometimes, they create contract with the farmers to buy different vegetables without any firm commitment and they also work closely with the farmers on quality.

There can be other variants of supply chain network which are not considered in this study.

It is, therefore, important to conduct a study to understand the farmer's position to select the right supply chain suitable to their situation.

2. Literature review

More than 200 peer reviewed papers related to vegetable supply chain were reviewed from international journals and few relevant articles related to this specific topic are discussed below.

Lusineet al (2007) in the article "Performance measurement in agri-food supply chains: a case study" tried to provide a framework for performance measurement system (PMS) of agri-food supply chain using Supply chain operation Reference (SCOR) model by Supply chain council. This study tried to analysis the decision making approach of supply chain design.

Sachan et al (2005) in their article "Developing Indian grain supply chain cost model" presented the Total Supply Chain Cost (TSCC) with three types of model namely co-operative model, contract farming and a collaborative supply chain model. The model was reviewed with optimistic, pessimistic and most likely scenario.

Sagheer et al (2009) in the article "Developing a conceptual framework for assessing competitiveness of India'sagri-food chain" tried to provide a landscape of different types of supply chain and possibilities of linking the small producers of the agri-food with the alternate global market and also tried to build a conceptual framework how to build the Indian agri-food competitive in international market.

Sudhakar (2010) in his research having title "Measuring the performance of Agri-supply chain: A study of traditional fresh produce distribution system in Andhra Pradesh" has done a comprehensive study of performance measure on selected vegetable and fruits. The study also discussed the different channels used for vegetable supply chain in details.

Thakar et al (2012) tried to understand the post harvest losses of few common vegetables from farming to different stages of supply chain by analyzing the reasons.

3. Objective

The objective of the current study is to focus on the different supply chain channels available for vegetables described above and analyze the factors influencing the criteria for farmers to decide the preference for a particular channel. This will in turn help in addressing the issues of the farmers for the specific channels and create viable options for alternate market.

4. Hypothesis for the study

The hypothesis tested for the current study is the following:

Null Hypothesis 1 (H01): There is no significant difference on importance of different channel selection criteria for different channels.

Null Hypothesis 2 (H02): There is no relationship between channel selection and education level.

Null Hypothesis 3 (H03): There is no relationship between channel selection and income level of the farmers.

5. Research Design

The various research design components are discussed below.

Sample selection:

The Telangana state was used for the scope of this study. Five years (2012-2016) production data of major crops of the state was collected from Telangana Horticulture department. Accordingly, top three commonly used vegetables (Tomato, Brinjal, Lady's finger) were selected for study.

Once the vegetables were selected, a multistage area sampling method was used, and each district is considered as a sub-area. The top 5 districts for each selected vegetable are shown below in table 1. The districts which are in the top list of at least 2 vegetables are collected as colored below:

Table 1: Top districts on the basis of top 3 vegetable production

Tomato	Lady's Finger	Brinjal
Medak	Warangal	Mahabubnagar
Adilabad	Medak	Ranga Reddy
Mahabubnagar	Ranga Reddy	Medak
Ranga Reddy	Khamamm	Khamamm
Warangal	Nalgonda	Nizamabad

(Source: Compiled based on Telangana Horticulture Department January'2017)

The further analysis was conducted to select the Mandal and random sampling was done from farmers from those Mandals.

The district wise distribution of sample for different channels is shown below in table 2.

Table 2: District wise summary of data for different channels

District/ Channel ->	1	2	3	4	Grand Total
Mahabubnagar	30	28	51		109
Medak	26	33	11	33	103
Rangareddy	25	25	27	23	100
Warangal	24	49	25		98
Grand Total	105	135	114	56	410

Questionnaire design:

Looking at the different reasons based on the literature reviews and subsequent discussion with agricultural specialist a questionnaire was designed to capture the responses from the sample. This is part of the bigger questionnaire to understand the supply chain efficiency of different channel. The relevant portion of the questionnaire is produced below in table 3:

Table 3: Questionnaire to understand the importance of different factors
Please rate the importance of the reasons for each channel selection (5- Very Important, 4- Important, 3-Moderately important, 2-Slightly important, 1- Not important)

Channel	Local market	Wholesale market	Rythu Bazaar	Super Market	Others (Please specify_____)
Price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distance from market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Payment promptness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credit taken from channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others (Please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Data Analysis

The Chi-square analysis was conducted between channels and criteria with the null Hypothesis 01 as mentioned in section 4 and the results are shown in Table 4 below.

Table 4: Importance attached to different criteria for different channel selection

Reason	Importance	Count	Channel				Total	
			1	2	3	4		
Better Price	Moderately important	Count	10	128	1	0	139	
		Expected Count	35.6	45.8	38.6	19.0	139.0	
	Important	Count	27	4	21	3	55	
		Expected Count	14.1	18.1	15.3	7.5	55.0	
	Very Important	Count	68	3	92	53	216	
		Expected Count	55.3	71.1	60.1	29.5	216.0	
Less transportation cost	Slightly Important	Count	0	0	103	56	159	
		Expected Count	40.7	52.4	44.2	21.7	159.0	
	Moderately important	Count	9	102	11	0	122	
		Expected Count	31.2	40.2	33.9	16.7	122.0	
	Important	Count	84	33	0	0	117	
		Expected Count	30.0	38.5	32.5	16.0	117.0	
	Very Important	Count	12	0	0	0	12	
		Expected Count	3.1	4.0	3.3	1.6	12.0	
	Less distance from market	Moderately important	Count	21	28	11	0	60
			Expected Count	15.4	19.8	16.7	8.2	60.0
		Important	Count	79	107	103	28	317
			Expected Count	81.2	104.4	88.1	43.3	317.0
Very Important		Count	5	0	0	28	33	
		Expected Count	8.5	10.9	9.2	4.5	33.0	
Prompt payment	Moderately important	Count	0	0	0	8	8	
		Expected Count	2.0	2.6	2.2	1.1	8.0	
	Important	Count	0	0	0	48	48	
		Expected Count	12.3	15.8	13.3	6.6	48.0	
	Very Important	Count	105	135	114	0	354	
		Expected Count	90.7	116.6	98.4	48.4	354.0	
Credit taken from market	Not Important	Count	105	18	114	56	293	
		Expected Count	75.0	96.5	81.5	40.0	293.0	
	Slightly Important	Count	0	1	0	0	1	
		Expected Count	.3	.3	.3	.1	1.0	
	Moderately important	Count	0	95	0	0	95	
		Expected Count	24.3	31.3	26.4	13.0	95.0	
	Important	Count	0	21	0	0	21	
		Expected Count	5.4	6.9	5.8	2.9	21.0	
	Less time spent in the market	Not Important	Count	105	1	114	0	220
			Expected Count	56.3	72.4	61.2	30.0	220.0
Moderately important		Count	0	45	0	16	61	
		Expected Count	15.6	20.1	17.0	8.3	61.0	
Important		Count	0	89	0	40	129	
		Expected Count	33.0	42.5	35.9	17.6	129.0	
			Important for the channel					

Note: p-value as per Chi-square analysis is 0.0001

The Table 4 above is showing the importance attached to the different criteria for channels with their actual and expected count for cross-tab chi-square test. The important criteria are highlighted in green for each channel

Based on the above data from Table 4 and low Chi-square value the null hypothesis H01 is rejected and it was observed that criteria of channel selection are different for different channels.

Demographic analysis was conducted to test the null hypothesis H02 as mentioned in section 3 to check the relationship between channel selection and education level and the results are shown below in Table 5.

Table 5: Education level and Channel selection cross tabulation

			Channel				Total
			1	2	3	4	
Education Level	Below School	Count	55	50	71	16	192
		Expected Count	50.3	62.2	54.3	25.2	192
	School Level	Count	47	76	39	35	197
		Expected Count	51.7	63.8	55.7	25.8	197
Total	Count		102	126	110	51	389
	Expected Count		102	126	110	51	389

Note: p-value as per Chi-square analysis is 0.018

Based on the above data from Table 5 with low p-value the null hypothesis H02 is rejected and observed that the channel selection and education level have significant relation.

The null hypothesis H03 from section 4 was tested to find out the relationship between income level and channel selection and the test results are summarized in Table 6.

Table 6: Income level and Channel selection cross tabulation

			Channel				Total
			1	2	3	4	
Income Level	<2.5L	Count	67	63	70	23	223
		Expected Count	58.6	72.6	63.1	28.7	223
		Standardized Residual	1.1	-1.1	0.9	-1.1	
	<5L	Count	37	66	42	28	173
		Expected Count	45.4	56.4	48.9	22.3	173
		Standardized Residual	-1.3	1.3	-1	1.2	

Note: p-value as per Chi-square analysis is 0.018

Based on the above data from Table 6 with low p-value the null hypothesis H03 is rejected and the channel selection is observed to be associated with income level.

7. Findings

The above table 4 shows clearly that importance attached for different criteria is different for different channel selection as described below:

- **For Channel 1** - Prompt payment, better price and less transportation cost is important
- **For Channel 2** - Less wait time in the market, credit taken from the market and prompt payment are important criteria
- **For Channel 3** - Prompt payment, better price and less distance from the market is important
- **For Channel 4** - Better price, less wait time in the market and less distance from market is important

The demographic analysis through Chi-square as shown in Table 5 has shown that the farmers with at least school level education only will prefer channel 2 and channel 4. The channel 2 and 4 will need some official transaction to be handled in the market place like suitable agreement for online transaction, communications to understand the demand from super markets. The farmers with less education level try not to venture with this complication and prefers channel 1 and 3.

It is observed from table 6 above that the farmers with a total yearly revenue more than 2.5 lakhs tends to select channel 2 and 4. These two channels will be viable only with a bare minimum quantity to be brought in to the market. So, low income farmers with small quantity of produce will prefer local market (channel 1) or Rythu Bazaar (channel 3).

8. Conclusion

The study was to systematically understand the criteria for channel selection based on farmer's input through a questionnaire. The demographic analysis of channel orientation of farmers based on education level can further help in building horticulture mission to improve the market understanding and education level for the farmers to provide them opportunity to explore alternate markets. The channel selection preference for low income group can be considered as an indicator for developing the necessary support system for marginal farmers. This will help in understanding the advantages and disadvantages of different channels and further study can be conducted in improving the channel condition to make it efficient for farmers in future.

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Impact of Select Behavioural Factors Influence on the Investment Decision Making

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Abstract

The equity investors' behavioural factors are playing the vital role in the capital markets. The present study has been emphasized on the select behavioural factors impact on the investors' decision making. The study has considered the primary data from the investors of the equity markets. The bivariate correlation has been applied and the result observed that the achievement motivation factor is having the stronger relation with the investment decision making. The structure equation model has been applied and the result states that the self-efficacy is having the higher influence on the investment decision making. The study is useful to the equity investors, academicians and other capital market stake holders.

Keywords: behavioural factors, Achievement Motivation, Decision making, Investors, Locus of control and Self-efficacy.

Introduction

Rational thinking may lead to irrational decisions in misunderstood context. This may cause the investors to emphasize to discount the information; leads to base of the strong attachment for the idea or inability to take the opportunity. Analysis of investor's behaviour has been done over the past thirty years. But there is a need to know the impact of the behaviour of the investors along the economical factors and behavioural factors which lead to decision making. This is because the investment decision making process will depend on many external economic factors along with the individual factors. The investors behaviour is also playing the vital role in the decision making process. The present study has considered the three factors which are part of the decision making process. The Self efficacy, Achievement motivation and Locus of control impact on the investors' decision making been studied.

Review of Literature

Jhansi Rani Boda and Sunitha. G (2018) emphasized on the investors perception and their reaction impact on the decision making process. The study result stated that individual investor perspective financial behaviour is based on historical data. (Bakar. S - ?2016) disclosed that the psychology of the investor in investment decision making focused on the rationality by examining the emotional and psychological factors, which effects the investments. MirkoBabanic (2018) examined the

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psychology factors, the behavioural economics and behavioural finance. The study observed that the generally used common decision making in relation to the capital structure. The study has considered the net operating income method. Inderjit Kaur, K. P. Kaushik, (2016), did a study which focused on the psychological factors in the terms of financial leverage and capital structure, the found that the psychological aspects in the process of financial decision making of investors and managers are influencing the structure of capital decision making. Raja Rehan (2017), examines the impact of behavioural biases (i.e. cognitive and emotional biases) on investor decisions. The findings imply that behavioural factors have a profound effect on investor decisions as argued by behavioural finance theorists Abdul Samad (2017) who studied the psychological factors of risk reduction and risk aversion strategies in the investment decision making process. The examined the effects of investors' knowledge on the investment decision with information search. The study found that the investors who are having the more experience are able to take the efficient decision. Tarak Nath Sahu (2015) found the significant effect of Awareness and Perceived Risk Attitude on Investment Behaviour of individual investors of Stock Market. Mark K.Y (2017), financial service provider is able to predict the investment behaviour/preference of its customers and formulate marketing and strategic decisions.

Objectives of the Study

1. To study the relationship of select behavioural factors with the investors decision making.
2. To study the impact of select behavioural factors on the investors decision making.

Hypotheses of the Study

H0: There is no relationship of select behavioural factors with the investors' decision making.

H0: There is no impact of select behavioural factors with the investors' decision making.

The Sample Size: The sample data consists of 172 respondents from equity investors. The questionnaire has been framed keeping view of 2 objectives mainly to know the select behavioural factors impact on investors decision making. The simple random methodology has been applied to collect the data.

The Tool for Data Collection: The data is collected through structured questionnaires. It is so designed to collect all required information from investors of mutual funds. Based on their knowledge, information source and investment decision factors, these factors are related to the investors behavioural factors.

Tools of Data Analysis: The data and information collected has been classified, tabulated and processed and its findings presented in a systematic manner. Statistical tools as bi-variate correlation and structure equation model have been considered.

Tabulation of Data Analysis

1. To study the relationship of select behavioural factors on the investors' decision making.

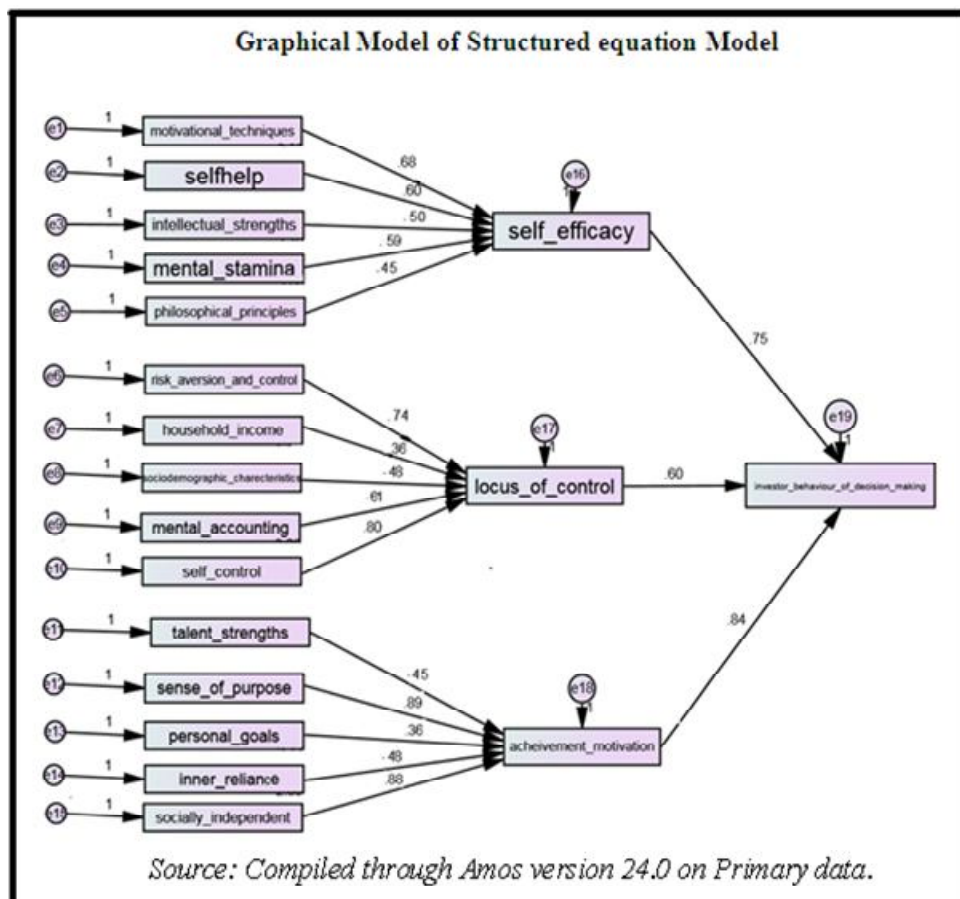
Table - 1 of Select behavioural Factors Relation with Investment Decision Making

Independent Variable		Dependent Variable	Correlation	Sig.
Self-efficacy	<--	Investment Decision making	0.471	0.022
Locus of Control	<--	Investment Decision making	0.598	0.005
Achievement Motivation	<--	Investment Decision making	0.624	0.003

Source: Compiled through SPSS version 22.0 on Primary data.

The table depicts the bi-variate correlation of select behavioral factors with the investors investment decision making. The achievement motivation (0.624) relationship with the investment decision making is strongly correlated. The Self-efficacy (0.471) and Locus of control (0.598) are moderately correlated with the investment decision making.

2. To study the impact of select behavioural factors on the investors' decision making.



Structure Equation Model which is model in this study was based on impact of investors' behavior on Investment Decision Making. First the model was specified and reliability test was applied on sample data that comprised of all observed variables in the model. In this model testing procedure was to determine the goodness of model. Such structure of the hypothesized model was imposed on the sample data to test how well the observed data fits this restricted structure.

Note: There are two basic requirements for the identification of any kind of Structural Equation Model: (1) there must be at least as many observations as free model parameters ($df \geq 0$), and (2) every unobserved (latent) variable must be assigned a scale (metric).

Computation of Degree of Freedom

The proposed model in this study is an Over-identified model with positive degrees of freedom as shown in table drawn from the AMOS output. In this model there are 209 distinct sample moments from which we have to compute the estimates of the default model, and 56 distinct parameters to be estimated, leaving 153 degrees of freedom, which is positive (greater than zero). Hence the model is an Over-identified one.

Table - 2 of Degrees of freedom

Number of distinct sample moments:	209
Number of distinct parameters to be estimated:	56
Degrees of freedom (209 - 56):	153

Source: Compiled through AMOS version 24 on Primary data.

Model Evaluation Criteria: Goodness of FIT

In the below table NPAR stand for Number of Parameters, and CMIN is the Chi-square minimum discrepancy represents the discrepancy between the unrestricted sample covariance matrix S and the restricted covariance matrix. DF stands for degrees of freedom and P represented as Probability value.

Table - 3 of Goodness of Fit

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	56	140.099	153	.765	.916
Saturated model	209	.000	0		
Independence model	38	154.113	171	.818	.901

Source: Compiled through AMOS version 24 on Primary data.

The above table depicts goodness of fit. In this model the value of chi square (140.099) is observed to be smaller as compared to the value of the independence model (154.113) and P-value i.e., Probability value of the model seems to be significant at 5% level (< 0.05). Hence the table concluded

that model is fit. The various common model-fit measures used to assess the model's overall goodness of fit as explained below.

Table - 4 of Fit Statistics of the Measurement Model

Fit statistic	Recommended	Obtained
Chi-square		140.099
Df		153
Chi-square significance	$p \leq 0.05$	0.000
GFI	<0.90	0.821
AGFI	>0.90	0.936
NFI	>0.90	0.924
RFI	>0.90	0.935
CFI	>0.90	0.984
TLI	>0.90	0.936
RMSEA	<0.05	0.000

Source: Compiled through AMOS version 24 on Primary data.

The above Fitness model table depicts that Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI) are obtained respectively which is above recommended value i.e., 0.90 which signifies the model is at acceptable level. Similarly, Normed Fit indexes (NFI), Relative Fit Index (RFI) are above the recommended value as 0.924 and 935 respectively which indicates that model is strong fit. Whereas, Comparative Fit Index (CFI), Tucker Lewis Index (TLI) are observed to be below recommended value with their respective values as. Further, Root mean square Residual (RMSEA) seems to be less than the 0.05 ($0.000 < 0.05$). Hence the model shows an overall model is strongly acceptable and concluded that model is fit for SEM (Structure Equation model).

Table - 5 of Latent variables Impact on Self-Efficacy

			Estimate	S.E.	C.R.	P	Significant/Non-significant
Self-efficacy	<--	motivational techniques	0.681	0.482	1.412863	***	Significant
Self-efficacy	<--	self-help	0.598	0.385	1.553247	***	Significant
Self-efficacy	<--	intellectual strengths	0.502	0.383	1.310705	***	Significant
Self-efficacy	<--	mental stamina	0.593	0.384	1.544271	0.029	Significant
Self-efficacy	<--	philosophical principles	0.449	0.287	1.56446	0.012	Significant

Source: Compiled through AMOS version 24 on Primary data.

From above table it is depicts that each and every independent variable is significantly connected to self-efficacy. Result indicates that p-value for all the variable seems to be significant at 5% level. Among all variable, "Motivational Techniques" is having high influence on self-efficacy of investor's behavior with its regression value as 0. 681, followed by the variable "Self-Help" (0.598) .While "Mental Stamina", "Intellectual Strengths" is influence with their respective regression weight as 0.593 and 0.502. "Philosophical Principles" (0.449) is having low influence on investors behavior in decision making.

Table - 6 of Latent variables Impact on Locus of Control

			Estimate	S.E.	C.R.	P	Significant/Non-significant
Locus of control	<--	Risk aversion and control	0.739	0.391	1.890026	0.033	Significant
Locus of control	<--	Household income	0.361	0.094	3.840426	0.038	Significant
Locus of control	<--	Sociodemographic characteristics	0.482	0.189	2.550265	***	Significant
Locus of control	<--	Mental accounting	0.608	0.391	1.554987	***	Significant
Locus of control	<--	Self-control	0.806	0.592	1.361486	***	Significant

Source: Compiled through AMOS version 24 on Primary data.

From above table it represents that each and every independent variable is significantly connected to Locus of Control. Result indicates that p-value for all the variable seems to be significant at 5% level. Among all variable, "Self-Control" is having high influence on Locus of Control of investor's with its regression value as 0. 806, followed by the variable "Risk Aversion and Control" (0.739).While "Mental Accounting" and "SociodemographicCharacteristics" are influence with their respective regression coefficient value as 0.608 and 0.482, whereas, Household Income seems to be having low influence on investors behavior in decision making.

Table - 7 of Latent variables Impact on Achievement Motivation

			Estimate	S.E.	C.R.	P	Significant/Non-significant
Achievement motivation	<--	Talent strengths	0.451	0.193	2.336788	0.013	Significant
Achievement motivation	<--	Sense of purpose	0.892	0.692	1.289017	***	Significant
Achievement motivation	<--	Personal goals	0.363	0.089	4.078652	0.024	Significant
Achievement motivation	<--	Inner reliance	0.475	0.189	2.513228	0.019	Significant
Achievement motivation	<--	Socially independent	0.876	0.695	1.260432	***	Significant

Source: Compiled through AMOS version 24 on Primary data.

From above table it is depicted that each and every independent variable is significantly connected to Achievement Motivation. Result indicates that p-value for all the variable seems to be significant at 5% level. Among all variable, "Sense of Purpose" is having high influence on achievement motivation of investor's behavior with its regression value as 0.892, followed by the variable "Socially Independent" and "Inner Reliant" are influenced on Investors' Behaviour with their regression coefficient value as 0.876 & 0.475. "Talent Strengths" is influence with 0.451 coefficient value. The lowest influence is shown by the variable "Personal Goals" (0.363) on Investors behaviour on investment decision making.

Table - 8 of Impact of Selected Behavioural Factors on Decision Making

			Estimate	S.E.	C.R.	P	Significant/Non-significant
Investor behavior of decision making	<--	Achievement motivation	0.751	0.489	1.535787	0.021	Significant
Investor behavior of decision making	<--	Locus of control	0.603	0.494	1.220648	0.022	Significant
Investor behavior of decision making	<--	Self-efficacy	0.849	0.698	1.216332	***	Significant

Source: Compiled through AMOS version 24 on Primary data.

The above table it is depicted that each and every independent variable is significantly connected to Investor's Behavior of Decision Making. Result indicates that p-value for three Antecedent components are seems to be significant at 5% level. Among the Antecedent components "Self-efficacy" showing high influence on Investor's Behavior, with its regression value as 0.849, followed by the Antecedent component "Achievement Motivation" and "Locus of Control" which are influencing investors' behavior. Hence, it is concluded that all three antecedent component having strong influence on investors behavior for decision making.

Findings of the Study

The following are the findings were derived based on the data analysis with the statistical tools.

1. The study found with the help of bi-variate correlation that the Achievement Motivation (0.624) is having the strong correlation with the Investors investment decision making.
2. It has been observed that the self-efficacy (0.471) and Locus of control (0.598) are having the moderately correlated with the investment decision making.
3. The study observed with the structure equation model that the Self-efficacy (0.849) is having the highest impact on the equity investors' investment decision making compared to other selected behavioural factors.
4. It has been observed that the Locus of control (0.603) and Achievement Motivation (0.751) are also having the stronger influence on investor investment decision

Conclusion of the Study

The present study concludes the titled "Impact of select behavioural factors Impact on the Investors Investment Decision Making" has been done on the primary data. The equity investors investor's decision making will be influenced by the various factors but investors behavioural factors also will have the role in influencing. The study observed with the bivariate correlation that the achievement motivation is having the stronger correlation with the investors' investment decision making. The impact has been studied with the SEM and the result indicated that the Self-efficacy influence is having the higher impact on the investors' investment decision making. Hence, there is scope to do research in this area by considering the other perceptual and attitude parameters impact on the equity and debt market investors' investment decision making.

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