

IITM Journal of Business Studies(JBS)

“A UGC CARE Approved Journal”

Annual Journal of Institute of Innovation in Technology & Management

Contents

1. A Cross Sectional Study On Perception Towards Wellness Practice Among The Employees At Private Hospital
2. A Study Of Grievance Handling And Its Impact On Consumer Perception: The Case Of Uber & Ola
3. A Study Of Popular E-Commerce Platforms And Demographics Profiling Of Online Consumers In India
4. A Study Of Workplace Deviances With Respect To Age And Gender
5. A Study On Factors Affecting Purchase Pattern Of Green Products
6. A Study On The Operations Of Women Self Help Groups And Framing Of Marketing And Positioning Strategies For Their Ethnic Products & Services - With Special Reference To Sivasagar District, Assam
7. A Study On Youth's Preference For Khadi Apparels - The Signature And Sustainable Fabric Of India
8. An Analysis Of Factors Related To Consumer Active Participation, Brand Engagement And Community Trust In Online Food Community Platforms
9. An Analysis Of Growth And Association Between Labour Productivity And Wages In The Indian Leather Industry
10. An Empirical Investigation Of The Relationship Between Retail Store Attributes And Customer Satisfaction
11. An Interaction Analysis and Assessment Of Risk Perception, Equity Investment And Financial Information Awareness
12. Attributes Of Organizational Creative Climate: A Perceptual Assessment Of Individuals
13. Company Boards And Their Impact On Corporate Governance: Empirical Evidence From India & Singapore
14. Employee Satisfaction with Social Security Provisions (Gratuity, Pf, And Pension): An Empirical Study In The Selected Organizations
15. Impact Of Marketing, Socio-Economic And Cultural Variables On Consumer Choice Of Health Insurance
16. Influence Of Brand Loyalty And Brand Equity Through Social Media Marketing On Buying Intention Towards Electronic Home Appliances
17. Influence Of Cognitive Biases On Consumer Buying Behaviour
18. Investigating The Effect Of Economic Determinants On Stock Market Returns: An Introspection
19. Item Analysis Of An General Management Awareness/Learning Assessment Test In Business School For Its Difficulty Index, Discrimination Index, And Distractor Analysis
20. Linkage Between Euro Futures And Spot Market: Empirical Evidence From India
21. Mediating Role Of Social Isolation In The Relationship Of Personality Traits And Burnout
22. Modelling The Factors Affecting Financial Literacy Of Women Towards Digital payments Using Ism And Micmac Approach
23. New Dimensions Of Consumer Welfare Legislations In India Vis A Vis Consumer Education: An Analytical Study
24. Optimum Allocation Of Fund According To Risk Propensity Of The Investors: A Study Based On Nifty Data
25. Perceived Organizational Support, Psychological Empowerment, And Job Performance: Mediating Role Of Organizational Justice
26. Predictive Power Of Parameters Influencing Borrowing By MSMEs
27. Psychological Capital And Optimism As A Predictor Of Workplace Happiness In Service-Based Industry In India
28. The Influence Of User-Generated Content On Purchase Intention Of Travel Products
29. Case Study: A Case Study Of Quick-O-Book- An Online Appointment Booking System For Patients In North-East India
30. Book Review: Why She Must Lead

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The Institute of Innovation In Technology and Management brings out “IITM Journal of Business Studies (JBS) an internationally indexed annual journal of business management”. All the academic fraternity are requested to submit research papers; book reviews, summarized, completed or ongoing empirical work, theoretical inquiries, review papers, case studies and shorter research notes.

All submitted work must be original and not have been published elsewhere. Abstracts of about 250 words are required for all submitted papers. The full papers should not be less than 3000 words.

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CONTENTS

1. A Cross Sectional Study On Perception Towards Wellness Practice Among The Employees At Private Hospital 3-19
2. A Study Of Grievance Handling And Its Impact On Consumer Perception: The Case Of Uber & Ola 20-37
3. A Study Of Popular E-Commerce Platforms And Demographics Profiling Of Online Consumers In India 38-50
4. A Study Of Workplace Deviances With Respect To Age And Gender 51-56
5. A Study On Factors Affecting Purchase Pattern Of Green Products 57-68
6. A Study On The Operations Of Women Self Help Groups And Framing Of Marketing And Positioning Strategies For Their Ethnic Products & Services - With Special Reference To Sivasagar District, Assam 69-84
7. A Study On Youth's Preference For Khadi Apparels - The Signature And Sustainable Fabric Of India 85-96
8. An Analysis Of Factors Related To Consumer Active Participation, Brand Engagement And Community Trust In Online Food Community Platforms 97-109
9. An Analysis Of Growth And Association Between Labour Productivity And Wages In The Indian Leather Industry 110-125
10. An Empirical Investigation Of The Relationship Between Retail Store Attributes And Customer Satisfaction 126-144
11. An Interaction Analysis and Assessment Of Risk Perception, Equity Investment And Financial Information Awareness 145-161
12. Attributes Of Organizational Creative Climate: A Perceptual Assessment Of Individuals 162-172
13. Company Boards And Their Impact On Corporate Governance: Empirical Evidence From India & Singapore 173-191

14. Employee Satisfaction with Social Security Provisions (Gratuity, Pf, And Pension): An Empirical Study In The Selected Organizations 192-200
15. Impact Of Marketing, Socio-Economic And Cultural Variables On Consumer Choice Of Health Insurance 201-209
16. Influence Of Brand Loyalty And Brand Equity Through Social Media Marketing On Buying Intention Towards Electronic Home Appliances 210-225
17. Influence Of Cognitive Biases On Consumer Buying Behaviour 226-241
18. Investigating The Effect Of Economic Determinants On Stock Market Returns: An Introspection 242-252
19. Item Analysis Of An General Management Awareness/Learning Assessment Test In Business School For Its Difficulty Index, Discrimination Index, And Distractor Analysis 253-265
20. Linkage Between Euro Futures And Spot Market: Empirical Evidence From India 266-277
21. Mediating Role Of Social Isolation In The Relationship Of Personality Traits And Burnout 278-289
22. Modelling The Factors Affecting Financial Literacy Of Women Towards Digital payments Using Ism And Micmac Approach 290-305
23. New Dimensions Of Consumer Welfare Legislations In India Vis A Vis Consumer Education: An Analytical Study 306-316
24. Optimum Allocation Of Fund According To Risk Propensity Of The Investors: A Study Based On Nifty Data 317-331
25. Perceived Organizational Support, Psychological Empowerment, And Job Performance: Mediating Role Of Organizational Justice 332-346
26. Predictive Power Of Parameters Influencing Borrowing By MSMEs 347-361
27. Psychological Capital And Optimism As A Predictor Of Workplace Happiness In Service-Based Industry In India 362-372
28. The Influence Of User-Generated Content On Purchase Intention Of Travel Products 373-390
29. Case Study:
A Case Study Of Quick-O-Book- An Online Appointment Booking System For Patients In North-East India 391-405
30. Book Review: Why She Must Lead 406-408

A CROSS SECTIONAL STUDY ON PERCEPTION TOWARDS WELLNESS PRACTICE AMONG THE EMPLOYEES AT PRIVATE HOSPITAL

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ABSTRACT

Workplace wellness practices focus on lowering employee risk by providing ongoing health promotion and sickness management because they allow for frequent contact with employees through regulated environmental and communication systems, workplaces are perfect for health behaviour change. Here the researchers tried to understand the employee's perception towards wellness practice, check the employees' interest in different wellness practice and recommended to implement employee wellness measures in the company. A substantial amount of material was obtained and then combined and concentrated in an ethical manner in order to partially satisfy the requirements for the academic research project. This project was conducted in order to meet a component of those specifications. Apart from the guide and his student, researchers provided significant contributions to this study work, which served to make it more realistic.

Keywords: *Perception, Wellness, Screening Test, Gender and Experience*

INTRODUCTION

A Workplace Wellness programme is a company-sponsored health initiative that aims to promote and protect employees' health. It has been proven that incorporating stress-reduction measures into workplace programmes is useful. Workplace wellness programmes can assist businesses in reducing health-care costs and rates. Many diseases such as diabetes heavy fatness and many others are huge concern for the corporate world because of the high costs, poor job performance, and other possible problems associated with obesity. Workplace wellness centres have been demonstrated to aid employees in losing weight, improving their health, and reducing stress. Employee morale and sick leave are also improved by these programmes, which lower healthcare expenses. Despite receiving extensive

health education, healthcare workers rarely follow through on their own advice. Hospital workers are sicker and spend more on healthcare than the general population. Companies frequently sponsor these programmes in the hopes of saving money by boosting employee health, morale, and productivity, but the data is mixed. Allowing employees to exercise on their own time, providing on-site cooking and dining facilities, providing healthy food options in vending machines, organising “walk and chat” groups, and providing financial and other incentives for participation are all non-controversial. Architectural and interior design principles that encourage physical activity, as well as single health promotion treatments, are among the most recent breakthroughs in workplace wellness.

OBJECTIVES OF THE STUDY

- To study the employee’s perception towards wellness practice.
- To check the employees’ interest in different wellness practice.
- To suggest suitable recommendation to implement employee wellness measures in the company.

LITERATURE REVIEW

An interdependent study was used to assess the impact of a workplace wellness program in Saudi Arabia. A pre-post longitudinal wellness program was carried out to assess physical activity, diet, job satisfaction and stress. The results demonstrate that employees’ physical health improved, with an increase in daily water and fruit consumption, a decrease in weekly soft

drink consumption, and a decrease in sick days during the last three months. They conclude that generally, wellness measurements improved, having a significant impact on employees’ physical functioning and eating habits. Another study looked at nurses’ physical and emotional health, as well as their attitudes toward wellness support. Over half of the 1790 US nurses had poor physical and emotional health. In the environment, half of the nurses have made medical errors in the last five years. Nurses in poor health were more likely than healthy nurses to make medical errors, ranging from 26% to 71%. There was also a correlation between occupational wellbeing and better health. They concluded that to increase treatment quality and avoid costly medical errors, practitioners must be encouraged to focus on wellness. The workplace wellness prevention policies, practices, programs, and supports in US hospitals were described in this study. From November 2016 to September 2017, they studied self-reported hospitals participating in Workplace Health in America (WHA). The survey included 388 hospitals chosen at random. X2 and descriptive statistics were employed to analyze the data. They discovered that 82% of hospitals offer wellness programs, 62% offer nutrition programs, 74% offer physical activity programs, and 40% prohibit smoking. Only 47% had lactation help and 25% had a healthy sleep schedule. They observed that most hospitals have wellness programs that focus on diet, physical activity, and tobacco management, but few support healthy sleep or lactation. Researchers have developed and tested an online learning tool for healthcare personnel, educators, and students in the United Kingdom. Learn about

six important aspects of workplace wellness using this online platform. The pre-post online learning tool questionnaire was completed by 188 participants. Results reveal that user knowledge increased from pre-intervention to post-intervention based on the findings. Participant feedback following the usability test indicated that they found the product to be useful and enjoyable. Healthcare professionals, educators, and pre-registered healthcare students found online learning acceptable. In the future, further online packages may be produced for other important health parameters. The inquiry took place at a prestigious Boston academic medical centre. Immersion crystallization was used to examine the results. The average age of the participants was 41, with 89 percent of female employees and 54 percent of white employees. According to the findings, 21% of employees have previously participated in wellness activities and 87% desired financial incentives. Employees wanted answers to substantial time and space constraints, often poisonous interpersonal relationships, and poor communication, all of which are workplace challenges that aren't usually addressed by health efforts. Research was conducted to assess barriers to employee involvement in wellness programs. Each lesson had a 5-question quiz at the end. Employee wellness programs have been found to assist in raising employee understanding of nutrition and health issues. Insufficient incentives, unsuitable locations, and time constraints may hinder future workplace wellness involvement. The goal of this research was to see how clinic characteristics affected stress symptoms, compassion for patients, sleep, and work or personal relationships. Most

participants said they felt more relaxed, less anxious, had more energy, and were in less pain after the first session. 92 percent of respondents said that they would recommend it to their co-workers. The most frequently modified health habits were diet and nutrition, stress reduction, and weight loss. This study discovered that a hospital-based wellness clinic was beneficial in reducing workplace stress and increasing mood and sleep, based on complementary and alternative medicine concepts and practices. The long-term effects of the University of Rochester Employee Wellness Program on CVD risk were investigated. Between January 2013 and December 2017, they studied nearly 16,000 participants. The impact of engagement on lowering CVD risk was calculated using logistic regression. The patients' health improved statistically. Almost half of individuals saw a 10-year reduction in cardiovascular disease risk. A third of participants improved one risk category. Participation in a condition management program boosted improvement chances by 36%. They concluded that healthy lifestyle changes over time can improve long-term health and minimise the risk of cardiovascular disease. A nurse's health-promoting behaviours were studied. They also show their participation in wellness programs and the relationship between health and lifestyle. It looked at 127 nurses' demographics and self-reported employee wellness program usage. The HPLP-II survey measures nurses' healthy lifestyle choices. SPSS 20.0 is used to analyse nurse demographics and HPLP-II scores. Nurses over 40 used hospital wellness programs more. In both the total and two subscale HPLP-II scores, there were statistically significant age

differences. Firms should help senior nurses maintain healthy lifestyles, personal well-being, and strong social relationships. The RE-AIM Framework was used to assess the intervention's reach, effectiveness, adoption, implementation, and maintenance. They conducted a randomised control trial on weight gain prevention at the hospital. They found no change in BMI while preventing weight gain in the one who used more intervention components and materials. 37.2% of participants were unaware that EWP services were not free. An investigation was conducted into employee awareness, attitudes, and use of EWP. It also advises the company on its EWP and focuses on non-use reasons. They studied workplace obesity and low-wage workers' participation in employer-sponsored wellness programs. They conducted an informant interview with two partners, a health care employer and a retail union. The primary themes related to healthy diets, exercise, and workplace variables affecting health were transcribed and grouped. Participatory or integrated health and safety strategies improve eating and physical activity habits by modifying the physical and social work environment. But more research is needed to discover which tactics best suit low-wage workers. They determined that non-standard obesity therapies can be used in the workplace. To find out what helped and hindered nursing assistants' participation in a worksite health promotion program focusing on physical activity and diet to reduce cardiovascular disease risk. Three focus groups with 12 (67%) program participants were held. Four themes emerged: motivation to join in a worksite health promotion program, facilitators of involvement, impediments to participation,

and future program ideas. This data will be used to create future programmes. Research conducted a study to determine how much outdoor, indoor, and indirect nature interaction hospital staff receives in a workweek. A Nature environment questionnaire was distributed among the fourth-floor postsurgical staff. This questionnaire measures the quantity and types of natural interaction that employees have during the work week. The findings suggest that the fourth-floor post surgical floor employees had a limited ability to relieve stress through natural contact exposures, which may have had an influence on their job stress perceptions, stress-related behaviours, and health consequences. They conclude that employees' exposure to natural encounters is limited. A coordinated effort to provide more outdoor, indoor, and indirect nature contact exposures for personnel in healthcare facilities may be beneficial. The goal of this study was to compare changes in primary care physicians' burnout before and after a workload intervention in primary care clinics. Four clinics were chosen for the intervention. The results show a significant impact, with a 0.61 unit increase in workload and a 6.989 unit decrease in emotional tiredness ($p = 0.039$). Its effectiveness may be attributed to participants' self-selection of these interventions as well as people's difficulty leaving occupations without management consent. Aside from outcomes, management must assess the workplace's impact on physicians. This study indicated that improving socio-psychological health and coping skills is crucial to retaining cancer nurses. Exercising and personal experience are data sources. Oncology nurses benefit from programs that develop coping skills expansion to reduce

stress, build supportive workplace connections, and lessen work-related loss, grief, and fatigue. The growing recognition of oncology nursing's stressful character has led to initiatives that describe the psychological well being of oncology nurses. To reduce stress and burnout, oncology nurse leaders should investigate and develop programs to improve staff coping skills and mutual support. This study employed a remote occupational health clinic to train nurses in stress management. A total of 500 HCWs were contacted via hospital channels. To avoid costly medical blunders, they employed PDSA. The project team enlisted help. During the intervention, PSS-achievers (N = 213) were hired. The SDM nurse practitioner (N = 33) advised them of stress-reduction exercises and invited them to participate. Approximately half of the workers who were assessed for stress completed the appointment. 75% indicated they would use personalized stress management. Stress was reduced by 25% to 72%. Project strengths included PSS screening, SDM chances, and stress management activities. Healthcare employees' obesity prevention programs at work were well researched. The following criteria were used to select the article for systematic review: (a) workplace treatments, (b) health-care staff-targeted treatments, and (3) participant-reported weight-related outcomes. No studies on weight loss the bulk (75%) of the 51 research reviews focused on food and exercise behaviors. The intervention worked for most people. Overall, trained professionals used moderate-to-high intensity behavioral techniques to enhance weight-related outcomes. Environmental changes change habits. Self-direction benefits motivated

employees. Workers should be treated in new ways, and their progress should be monitored. Employers' opinions on health and good behaviour will be assessed to help stakeholders build a workplace wellness program at a Catholic hospital. Their way The Stages of Change were used to assess the readiness of hospital workers. These included important WW incentives, employment pressures, and spirituality/religious significance in health (N=705). This census poll demonstrated a willingness to exercise, lose weight, and manage stress. Spiritual or religious people were more likely to engage in healthy habits. Employees could benefit from WW incentives that encourage activity, weight loss, and stress management. Various health programs were applied for 9 weeks during lunchtime. Demographic and mental health data were obtained before and after the program. Companionship satisfaction, exhaustion, and secondary traumatic stress were all assessed using the ProQOL-5. On average, participants (N = 42) wanted to stay in their existing jobs for a year longer than post-program participants (N = 15), but pre-program participants said they had no plans to leave or apply for new jobs. Attendees said they planned to seek or retire from inside or outside jobs. The therapy reduced burnout and secondary traumatic stress. So the intervention could be responsible for changes in participants' assessments.

HYPOTHESES

H01: There is no significant difference between variables and gender

H02: There is no significant difference between variables and experience

RESEARCH METHODOLOGY

Methods of data Collection: Through structured questionnaires

Sampling: The population of the study shall be the nursing staff of the selected Hospital.

Following formula was applied to find out sample size.

Sample size = $N / \sqrt{1 + Ne^2}$. Population Size, $N=150$. Margin of error = $e = 0.05$ at 95% confidence level, Total Population (N) is 110 staff of selected private hospital.

Appropriate tools for data analysis:

The Microsoft Excel tool use to analyses the complex task that summarizes the data with a preview of pivot tablets that help in filtering the data as per person requirement.

Data was analyzed by using the Mann Whitney and Kruskal-Wallis Test

The statistical test was performed at the significance level of 0.05(5%).

ANALYSIS

Descriptive Statistics:

Frequency of Gender: 65 (40.9%) female participants and 45 (40.9%) males.

There were a maximum number of participants (54) in the age group of 25 to 35 years, and a minimum of 12 participants (12) were in the above age group. There were 18 participants under the age of 25, and 26 between the ages of 35 and 45. Participants were divided into three departments, with 30 (27.3%) coming from the Administration department. 65 (59.1%) participants are from nursing and 15 (13.6%) participants are from pharmacy.

Consent of the importance of health: All 110 (100%) participants admitted that health is important.

Consent on following routine exercise: 62 (56.4%) participants followed routine exercise, whereas 48 (43.6%) participants didn't.

Preference of food from home or canteen/outside: 86 (78.2%) participants prefer home food, whereas 24 (21.8%) participants eat canteen/outside food.

Preference of eating junk food or healthy food: 78 (70.9%) participants said they eat healthy food, whereas 32 (29.1%) participants said they eat junk food.

Quality of Food offered in the Canteen: 85 (77.3%) participants prefer the quality of food offered in the canteen, whereas 25 (22.7%) participants said they do not like it.

Healthy food that the hospital provides in the office cafeteria: 8 (7.3%) participants said very healthy food, 89 (80.9%) participants said healthy food, 4 (3.6%) participants said not healthy enough food, and 9 (8.2%) participants said terrible food provided by the hospital in the office cafeteria.

Medical ailment occurrences: 16 (14.5%) participants said they have any medical ailments, whereas 94 (85.5%) participants said no.

Insured by medical insurance plan: 66 (60%) participants said yes, whereas 44 (40%) participants said no.

Time spent on a computer or phone at work each day: 33 (30%) participants said they expose for a very long time, 45 (40.9%) said they expose for a long time, 16 (14.5%) said they expose moderately, 13 (11.8%) said they expose for a short time, and 3 (2.7%) said they expose for a very short time.

Any experience with eyesight problems: 61 (55.5%) participants experienced any eyesight problems because of the screen time, whereas 49 (44.5%) participants did not.

Occurrences of pain in the neck, upper back, lower back, or elbows while working: 60 (54.5%) participants experienced neck, upper back, lower back, or elbow pain while working, whereas 50 (45.5%) participants did not experience it.

Good furniture to maintain good posture while working: 101 (91.8%) participants said yes, they have to maintain good posture on chairs, tables, and furniture while working, whereas 9 (8.2%) participants said no.

Stressed at Work: 54 (49.1%) participants said yes, they were stressed at work, whereas 56 (50.9%) participants said no.

17 (15.5%) participants said they were sleep deprived due to work pressure, while 93 (84.5%) said they were not.

41 (37.3%) participants said they had experienced physical distress, while 69 (62.7%) said they had not.

41 (37.3%) participants said they follow any routines to relieve stress, while 69 (62.7%) said no.

Participation in wellness programme if offered at work: 102 (92.7%) participants said yes,

they would like to participate in a wellness programme if offered at work, whereas 8 (7.3%) participants said no.

47 (42.7%) participants said they would like to learn more about health and lifestyle information, while 63 (57.3%) said no.

44 (40%) participants said yes, they would like to attend phone counseling, whereas 66 (60%) participants said no.

Joining for Health Screenings (i.e., Blood Pressure): 47 (42.7%) participants said yes, they would like to join health screenings, whereas 63 (57.3%) participants said no.

Attendance at Physicians: 66 (60.0%) participants said yes, they like to see doctors, while 44 (40.0%) said no, they do not like to see doctors.

20 (18.2%) participants said wellness activity lasted for 30 minutes, 33 (30%) participants said wellness activity lasted for 45 minutes, 38 (34.5%) participants said wellness activity lasted for 60 minutes, and 15 (13.6%) participants said wellness activity lasted for 90 minutes.

Table 1: Rating of interest in each wellness topic by using the scale below.

	Not Interested	Less Interested	Moderately Interested	Interested	Very Interested	Total
Allergies	24 (1.8%)	16(14.5%)	25(22.7%)	16(14.5%)	29(26.4%)	110(100.0%)
Asthma	44(40.0%)	17(15.5%)	8(7.3%)	23(20.9%)	18(16.4%)	110(100.0%)
Back Injury	16(14.5%)	0.00	36(32.7%)	11(10.0%)	47(42.7%)	110(100.0%)
Prevention	11(10.0%)	13(11.8%)	13(11.8%)	45(40.9%)	28(25.5%)	110(100.0%)
Cholesterol	20(18.2%)	8(7.3%)	20(18.2%)	24(21.8%)	38(34.5%)	110(100.0%)
Management	3(2.7%)	10(9.1%)	11(10.0%)	45(40.9%)	41(37.3%)	110(100.0%)
Diabetes	16(14.5%)	4(3.6%)	21(19.1%)	25(22.7%)	44(40.0%)	110(100.0%)
Emotional Health	16(14.5%)	4(3.6%)	20(18.2%)	20(18.2%)	50(45.5%)	110(100.0%)

Healthy Cooking	20(18.2%)	8(7.3%)	5(4.5%)	24(21.8%)	53(48.2%)	110(100.0%)
Men's Health	29(26.4%)	4(3.6%)	12(10.9%)	4(3.6%)	61(55.5%)	110(100.0%)
Nutrition	8(7.3%)	4(3.6%)	4(3.6%)	8(7.3%)	86(78.2%)	110(100.0%)
Parenting	24(21.8%)	12(10.9%)	12(10.9%)	5(4.5%)	57(51.8%)	110(100.0%)
Physical Activity	12(10.9%)	0.00	4(3.6%)	9(8.2%)	85(77.3%)	110(100.0%)
Skin Cancer	32(29.1%)	21(19.1%)	4(3.6%)	16(14.5%)	37(33.6%)	110(100.0%)
Smoking Cessation	56(50.9%)	8(7.3%)	16(14.5%)	9(8.2%)	21(19.1%)	110(100.0%)
Stress Management	16(14.5%)	4(3.6%)	16(36.4%)	40(36.4%)	34(30.9%)	110(100.0%)
Walking Program	12(10.9%)	4(3.6%)	12(10.9%)	28(25.5%)	54(49.1%)	110(100.0%)
Weight Management	4(3.6%)	8(7.3%)	20(18.2%)	12(10.9%)	66(60.0%)	110(100.0%)
Women's Health	12(10.0%)	4(3.6%)	17(15.5%)	20(18.2%)	57(51.8%)	110(100.0%)
Work/Life Balance	12(10.9%)	0.00	12(10.9%)	8(7.3%)	78(70.9%)	110(100.0%)
Other:	20(18.2%)	19(17.3%)	21(19.1%)	16(14.5%)	34(30.9%)	110(100.0%)

It can show the participants' interest in each wellness. 29 (26.4%) individuals are highly interested in allergies, while 16 (14.5%) are not. 44 (40.0%) people are uninterested in asthma, whereas 8 (7.3%) are quite interested. 47 (42.7%) individuals are highly interested in back injury, while 0.00% are not. 45 (40.9%) people are interested in prevention, while 11 (10.0%) are not. 38 (34.5%) people are highly interested in cholesterol, while 8 (7.3%) are not. 45 (40.9%) people are interested in management, while 3 (2.7%) are not. 44 (40.0%) individuals are highly interested in Diabetes, whereas 4 (3.6%) are not. 50 (45.5%) people are extremely interested in emotional health, while 4 (3.6%) are not. 53 (48.2%) individuals are highly interested in healthy cooking, while 5 (4.5%) are moderately interested. Men's Health is very important to 61 (55%) of participants, whereas it is less important to 4 (3.6%). 86 (78.2%) people are highly interested in nutrition, whereas 4 (3.6%) are less and somewhat interested. 57 (51.8%) people are highly interested in parenting, whereas 5 (4.5%) are less and somewhat interested. 85 (77.3%) people are highly interested in physical activity while 0.00% are not. 37 (33.6%) individuals are highly interested in skin cancer, while 4 (3.6%) are moderately interested. 56 (50.9%) will not be interested in quitting smoking whereas 8 (7.3%) will be. 40 (36.4%) people are interested in stress management, whereas 4 (3.6%) are not. 54 (49.1%) individuals are highly interested in the Walking Program, whereas 4 (3.6%) are not. 66 (60.0%) individuals are highly interested in weight management whereas 4 (3.6%) are not. 57 (51.8%) people are very interested in women's health, whereas 4 (3.6%) are not. Work/Life Balance is very important to 78 (70.9%) people, while it is not important to 0.00%. 34 (30.9%) individuals are highly interested in Other, while 16 (14.5%) are interested in Other.

Table 2: Table below is indicating the participation of workers in screening test(s), if offered at their worksite.

	Participate	Not Participate	Total
Blood Pressure	70(6.36%)	40(36.4%)	110(100.0%)
Flu Shot	54(49.1%)	56(50.9%)	110(100.0%)
Body Fat	67(60.9%)	43(39.1%)	110(100.0%)
Cholesterol	82(74.5%)	28(25.5%)	110(100.0%)
Seated Massage	42(38.2%)	68(61.8%)	110(100.0%)
Hearing	65(59.1%)	45(40.9%)	110(100.0%)
Glucose	77(70%)	33(30. %)	110(100.0%)
Bone Density	62(56.4%)	48(43.6%)	110(100.0%)
Vision	90(81.8%)	20(18.2%)	110(100.0%)
Skin Analyzer	58(52.7%)	52(47.3%)	110(100.0%)
None	16(14.5%)	94(85.5%)	110(100.0%)

In the above graph and table, we can see the participants interest in Screening test, Participants would like to participate as follows: for Blood Pressure - 70 (6.36%), Flu Shot -54 (49.1%), Body Fat - 67 (60.9%) , Cholesterol - 82 (74.5%), Seated Massage - 42 (38.2%), Hearing - 65 (59.1%), Glucose - 77 (70%), Bone Density - 62 (56.4%), Vision- 90 (81.8%), Skin Analyzer - 58 (52.7%) and 16 (14.5%) will participate for none. Participants would not like to participate as follows: Blood Pressure - 40 (36.4%), Flu Shot -56 (50.9%), Body Fat - 43 (39.1%), Cholesterol - 28 (25.5%) 68 Seated Massage - (61.8%), Hearing - 45 (40.9%), Glucose - 33 (30%), Bone Density - 48 (43.6%), Vision - 20 (18.2%), Skin Analyzer - 52 (47.3%) and 94 (85.5%) will not participate for None.

Table 3: H01: There is no significant difference between variables and Gender.

Mann-Whitney Test Ranks				
	Gender	N	Mean Rank	Sig (2-tailed)
Allergies	Male	45	55.42	.983
	Female	65	55.55	
	Total	110		
Asthma	Male	45	55.33	.962
	Female	65	55.62	
	Total	110		

Back Injury	Male	45	54.12	.688
	Female	65	56.45	
	Total	110		
Cholesterol Main.	Male	45	58.12	.458
	Female	65	53.68	
	Total	110		
Diabetes	Male	45	53.23	.517
	Female	65	57.07	
	Total	110		
Emotional Health	Male	45	59.01	.309
	Female	65	53.07	
	Total	110		
Healthy Cooking	Male	45	55.73	.945
	Female	65	55.34	
	Total	110		
Men Health	Male	45	60.33	.142
	Female	65	52.15	
	Total	110		
Nutrition	Male	45	56.68	.655
	Female	65	54.68	
	Total	110		
Parenting	Male	45	54.90	.859
	Female	65	55.92	
	Total	110		
Physical Health	Male	45	58.07	.338
	Female	65	53.72	
	Total	110		
Skin Cancer	Male	45	54.33	.740
	Female	65	56.31	
	Total	110		
Smoking Cessation	Male	45	55.76	.940
	Female	65	55.32	
	Total	110		

Stress Management	Male	45	55.59	.980
	Female	65	55.44	
	Total	110		
Walking	Male	45	57.06	.647
	Female	65	54.42	
	Total	110		
Weight Management	Male	45	53.92	.624
	Female	65	56.59	
	Total	110		
Women's Health	Male	45	51.13	.195
	Female	65	58.52	
	Total	110		
Work/life Balance	Male	45	54.08	.627
	Female	65	56.48	
	Total	110		
Others	Male	45	52.20	.354
	Female	65	57.78	
	Total	110		

From the above table, it can be observed that out of 22 different variables for the interest level of employees in wellness practice, all variables have a p value > 0.05. That's why there is no significant difference between 22 variables and gender.

Table 4: H02: There is no significant difference between variables and experience.

Kruskal-Wallis Test			
Ranks			
	Age	N	Sig (2-tailed)
Allergies	Less than 25 years	18	.401
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	

Asthma	Less than 25 years	18	.576
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Back Injury	Less than 25 years	18	.402
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Cholesterol Main.	Less than 25 years	18	.817
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Diabetics	Less than 25 years	18	.677
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Emotional Health	Less than 25 years	18	.097
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Healthy Cooking	Less than 25 years	18	.089
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	

Men's Health	Less than 25 years	18	.496
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Nutrition	Less than 25 years	18	.176
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Parenting	Less than 25 years	18	.060
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Physical Health	Less than 25 years	18	.672
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Skin Cancer	Less than 25 years	18	.316
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Smoking Cessation	Less than 25 years	18	.581
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	

Stress Management	Less than 25 years	18	.553
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Walking	Less than 25 years	18	.516
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Weight Management	Less than 25 years	18	.460
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Women's Health	Less than 25 years	18	.645
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Work/life Balance	Less than 25 years	18	.386
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	
Others	Less than 25 years	18	.850
	25 to 35 years	54	
	35 to 45 years	26	
	45 and above	12	
	Total	110	

The above table depicts the interest in terms of age numbers. For example, there is a high interest in allergy topics among those aged 25 to 35, while those aged 45 and above have a lower interest. Similarly, participants aged 25 to 35 years have a keen interest in the asthma topic. Simultaneously, participants aged 25 to 35 years have found a higher interest in all wellness topics including back injury, cholesterol, diabetes, emotional health, healthy cooking, men's health, nutrition, parenting, physical health, skin cancer, skin cessation, stress management, walking, weight management, women's health, work/life balance, and others, whilst it is lowest among those aged 45 and above. It can also be observed that out of 22 different variables for the interest level of employees in wellness practice, it was found that all variables' p values were more than 0.05. That's why there is no significant difference between the 22 variables and experience.

FINDINGS

The majority of participants prefer home cuisine because they like to eat healthy food and believe that junk food is unhealthy, but they also believe that the food served in the hospital cafeteria is acceptable. Participants reported they have problems with their necks and upper backs at work. They also stated that they are not under any work pressure or experiencing any bodily discomfort (i.e., headaches, blood pressure, etc.). If offered at work, they would take part in a wellness programme. Participants stated they get hold of health and lifestyle information through one-on-one counselling, phone counselling, health screenings, health fairs, on-site workshops, and other sources when asked where they got it.

In addition, the mean rank of diseases among males and females was calculated. In terms of allergies, ladies (55.55) have a higher average than males (55.42). Asthma is more severe in women than in men (55.33). Similarly, females have a higher average in back injuries, diabetes, parenting, skin cancer, weight management, women's health, work-life balance, and other areas than males. This suggests that ladies are more interested in such wellness issues than guys. Men, on the other hand, are concerned

about cholesterol control, emotional well-being, healthy cooking, men's health, nutrition, physical well-being, smoking cessation, stress management, and walking. When looking at the p-values of all wellness topics, all of them are significant because they are all greater than 0.05, which is not significant at a 5% level. As a result, it may be inferred that neither males nor females are interested in such issues.

Interest varies by age group; for example, people aged 25 to 35 have a high level of interest in allergy themes, but those aged 45 and over have a lower level of interest. Participants aged 25 to 35 years old, on the other hand, are very interested in the topic of asthma. Those aged 25 to 35 years have a higher interest in all wellness topics, including back injury, cholesterol management, diabetes, emotional health, healthy cooking, men's health, nutrition, parenting, physical health, skin cancer, skin cessation, stress management, walking, weight management, women's health, work/life balance, and others, while those aged 45 and up have the lowest interest. If you look at the p-values for all wellness themes, you'll notice that they're all more than 0.05, which isn't significant at a 5% level. As a result, it may be determined that

such issues do not pique the interest of people of various ages.

CONCLUSIONS AND SUGGESTIONS

The results of the survey clearly show that employees understand the significance of engaging in various forms of well-being maintenance in order to maintain good health. Hospital workers have no interest in participating in the different health and wellness initiatives. Although they may be interested if the institution has a well-structured policy in place. According to the findings, there are no differences in employee perceptions based on

gender or age. Employees are interested in the hospital's wellness initiatives and may use them if they are introduced in the hospital. Employees are more likely to participate in such wellness programmes when they can easily access them within the company. In order to preserve patient safety, healthcare organisations should create a work environment that promotes employee well-being while also reducing burnout among their employees.

For staff welfare and patient safety, more research and trials of interventions at all levels of the organisation, with workers, and with patients are required in order to establish the most effective solution for each situation.

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A STUDY OF GRIEVANCE HANDLING AND ITS IMPACT ON CONSUMER PERCEPTION: THE CASE OF UBER & OLA

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ABSTRACT

The goal of any service provider is to satisfy the customer expectations in order to create a brand loyalty. However, no service provider can escape from the service errors as humans are involved in service delivery. Since the production and consumption of services usually occurs concurrently, the quality of a service is dependent upon the deliverability of the service provider and the recipient's utility. Thus, in order to overcome the limitation of inevitable errors, service providers must be concerned with service recovery. As attracting new customers is costly as compared to retaining existing customers, it becomes another important reason for service providers to must try hard for efficient service recovery. This empirical investigation is designed to test effective recovery processes for service failures in e-hailing by studying the relationship between compensation, apology, and response time on perceived justice, service recovery satisfaction, and repurchase intention of the customer. Our sample consist 160 students from University of Delhi, India, who are active e-hailing service users. The findings indicate that all three

e-hailing service recovery attributes appear to be key in creating satisfied customers based on their effects on perceived justice.

INTRODUCTION

The cab industry in India is completely transformed by connecting the smartphone apps with internet users in the past few years. We don't even remember the last time when we called up local cab agency, do you? If we go back to the evolution of cab service providers, Meru cabs were launched in India in 2006, primarily used for airport commutations. It is famous for providing quality services, AC, and well-organized rides (Meru, 2021). There are various other cab agencies in the e-hailing segment like EasyCabs and Mega Cabs, but Meru is undeniably the most sought after cab despite its relatively higher pricing (Nextbigwhat, 2016). However, despite growing preferences for Meru and other cabs agencies, there are many other commuters who are looking for an economical alternatives to travel to airports, offices and other purposes.

Taxiforsure started as an online portal in 2011 for easy online booking of cabs which was

architect upon multiple cab agencies. This was considered as a very smart move by Taxiforsure as customers no longer need to contact multiple agencies and instead can book the cab using just a mobile phone with internet. But Ola, which started operation in 2010, and initiated a different model by associating directly with cab drivers, resulting in elimination of cab agencies. This model reduced the ride rates significantly. This was the main reason that customers started preferring Ola cabs over other cabs in India (Nextbigwhat (2016)).

During 2013, when Ola started flourishing in the India markets, global taxi market leader Uber entered, which light up the competition to another level (Bhattacharya, 2019). However, the growth rate of Uber was slow in the initial years as it was operating in app-only model and provided credit card as the only payment option.

Due to cheap ride prices and high incentives to drivers, Ola was able to increase its customer base exponentially. Soon Taxiforsure started revising their strategies in line with Ola by eliminating the cab agencies and provided various promotional offers. Uber also in its attempt to understand Indian markets introduced other payment options like paytm, debit card, and cash (Nextbigwhat, 2016).

Various mergers and acquisitions happened in this sector like Ola acquired TaxiForSure in 2014, Mahindra & Mahindra acquired Meru in 2021, etc., which fueled up the growth of this sector and still remained competitive as it was before (Meru, 2001; Nextbigwhat, 2016).

If we look at the statistics of market share of this industry, as per ResearchAndMarkets.com report (2019), 2019, Uber's market share in

India has reached to 21% and Ola cab's around 72.5%. Other players like Meru, Mega Cabs and Carzonrent together held 6.5% of the total market. This was the main reason that we have chosen Ola and Uber as our case studies as they are undoubtedly the leading companies in this segment in India.

Amidst their chase for offering discounts and other promotions to attract new customers, many instances of wrongdoing of drivers (like rash driving, drunk driving, sexual harassment, etc.), cancellation of bookings without valid reasons and taking long routes are reported in India. Cab drivers are running to complete their incentivized targets and cab aggregators are busy in increasing their market shares Nextbigwhat (2016). Tax and Brown (1998) recommended firms shift their paradigm from pursuing "offensive strategies" (seeking new customer) to "defensive strategies" (keeping and satisfying current customers). Thus, service providers like Ola and Uber should incorporate service recovery as part of their operations strategy, as it provides a second chance to amend failures and retain customers.

OBJECTIVE

The purpose of this study is to understand the importance of grievance handling mechanism and its impact on consumer's perception. Uber and Ola, e-hailing companies which connects drivers and riders for commuting within city or sometime out station as well, are considered for this study. As the dealing of this business involves lots of human interaction and directly serving the customers, a grievance handling mechanism is important to satisfy the unhappy customers.

The object of this study is to find out below relationships for taxi aggregators like Ola and Uber

1. How grievance handling techniques (compensation, respond speed and apology) impact on customer's perceived justice in e-hailing
2. How perceived justice constructs and their interaction impact customer's satisfaction
3. How perceived justice constructs and their interaction influence customers for repurchase

LITERATURE REVIEW

E - Services

E-services are not the same as traditional face-to-face services, most noticeably in the absence of any requirement of physical facility. The concept of e-service is translated many ways in the academic literature and popular press. Traditionally, e-commerce was mainly linked with "communicating the brand and or enabling sales transactions" (De Ruyter et al., 2001).

De Ruyter et al. (2001) provide a comprehensive conceptualization of e-services as "E-service is an interactive, content-centred and Internet-based customer service, driven by the customer and integrated with related organizational customer support processes and technologies with the goal of strengthening the customer-service provider relationship". There is dearth of service research literature in context of e-service. To date, more researchers have acknowledged e-service and more research has incorporated eservices, but it is still relatively scarce as compared to research in manufacturing. Service recovery incorporates all the required

actions taken by a service provider during service failures and the process the firm uses to rectify the failure (Kelley and Davis, 1994).

Studies have shown that dissatisfaction with a particular service does not necessarily follow a service failure. Customers are more often restored to a more satisfied state if the recovery process is done immediately. The recovery process could be in the form of an apology to the customer or providing compensation commensurate to their difficulties. Conversely, Kelley and Davies (1994) suggested that the lack of response from organizations after a failure is a significant cause of dissatisfaction to customers. Therefore, e-service providers must make an effort to re-establish a customer's state of well-being following a failure.

Online service quality and customer satisfaction

Many studies on service quality have been expanded to the e-commerce environment (Santos, 2003). The quality of e-service is measured by the consumers' overall judgment of the excellence and quality of e-service offerings in the virtual marketplace (Santos, 2003). Firms could have potentially valuable service offerings, but quality issues such as incomplete transactions, lack of response from service providers, and late delivery of products could threaten the e-service business. A stream of research has found evidence of inadequate service quality being delivered over the Internet.

A link between service quality and improved customer loyalty and retention is evident in e-services. Past research on eservice quality focused on consumer and Web site interaction. However, studies suggest that consumers are interested in the way the services are delivered

as well as the end result of the service. Holloway and Beatty's (2003) research supports this notion and suggests that delivery is the most frequently stated problem. Consumers are interested in the whole process from searching for the products, delivery of the products, and service recovery processes if anything goes wrong. Understanding factors that could contribute to service delivery failures is important to both traditional and online retailers.

Service Failure

The key outcome of the marketing process and the goal of the market economy is customer satisfaction. All service providers strive to perform services without error in order to achieve customer satisfaction. However, Boshoff (1997) suggests that mistakes are an unavoidable feature in service industry due to the intangible nature of services. Since customers are present during traditional service delivery, failures are practically inevitable and service recovery attempts are important to prevent harmful outcomes caused by these mistakes.

In the relationship between service providers and customers, service failure and recovery encounters act as "moments of truth" in maintaining or terminating the relationship. In the restaurant, hotel, and airline industries, over 23 percent of satisfactory encounters are the results of the service recovery attempts (Bitner et al. 1990). Customer reformulate their re-patronage intentions after a service recovery. Therefore, if service providers incorporate a successful service recovery, it can transform customers' dissatisfaction into satisfaction.

Service Recovery and Justice Theory

There are numerous studies which have established the relationship between service recovery and justice theory (Tax et al., 1998; Lind and Taylor, 1988; Goodwin and Ross, 1992). Justice theory has its roots in social psychology, and provides a foundation of how customers' perceive service failures and its recovery process. In this section, the impact of service recovery on procedural, distributive, and interactional justice is considered. In a service recovery setting, procedural justice incorporates the perceived fairness of the policies and actions which the service provides use while rectifying the error (Tax et al., 1998). Distributive justice is related with the perceived fairness of the solution offered by the service provider. Interactional justice is the manner in which complaints are treated, information is exchanged, and outcomes are communicated while going through the recovery process (Maxham & Netmeyer, 2002b). It takes into account interpersonal fairness. Bitner et al. (1990) suggested that how front-line employees or employees that are involved in the recovery process respond to customers will result in the service encounter being remembered as satisfactory or dissatisfactory. How customers' feel they are treated influences their perception of interactional justice. Customers are more emotionally attached to the service providers if they respond and exhibit concern after a service failure.

Service Recovery Satisfaction

Satisfaction is related to fulfilled expectations. If all requirements are met, the outcome will be a satisfied customer. Oliver (1977) suggested, "Satisfaction is the consumer's fulfilment response". Thus, fulfilment of

customers' expectations should be proportional to satisfaction. One of the main aims of service recovery is to transform a customer's emotional response from being dissatisfied with a particular service to a more acceptable condition. Service recovery is an organization's response to poor quality service (Gronroos, 1988). The definition is enhanced by Johnston (1995) who states that it is important for any service organization to take any corrective action post service failure to reduce the damage in the relationship and to make a dissatisfied customer to a satisfied one.

A study by Michel (2002) indicated that service recovery efforts that go beyond customer expectations could improve customer satisfaction with the company. Their study provides support for the example given in Hart et al. (1999) who showed how the manager in Club Med Cancun implemented their service recovery strategy and overcame customers' remorse and dissatisfaction from flight delays.

Past researchers have maintained support for the link between satisfaction and service quality. Parasuraman, Zeithaml, and Berry (1988) suggested that "incidents of satisfaction over time result in perceptions of service quality". Thus, satisfaction has been hypothesized as an antecedent to service quality. However, more researchers have found quality as an antecedent to customer satisfaction.

According to Boshoff (2012), the outcomes of service recovery are improved customer satisfaction. If a customer perceives good service quality, then this should lead to repeat purchases and customer loyalty that would eventually impact the firm's bottom line. So, it is important to understand and identify attributes that could influence this factor. A review of the

literature found that many studies examined the relationship between service recovery/failure and satisfaction (Johnston, 1995). However, researchers are in agreement that customer satisfaction can be achieved through the recovery of a service failure. The procedures to reach the outcome and the interactions during the recovery process contribute to customer satisfaction (Goodwin & Ross, 1990).

Repurchase Intention

Repurchase intention is the customer's perception of the likelihood that they will return and purchase the service or not. If a customer is unhappy or if there is a defect in the service transaction, a customer might not want to repeat the experience. Repurchase intention is associated with satisfaction. In a recovery effort, the change in repurchase intention is a more tangible result than the level of customer satisfaction. Customer dissatisfaction as a variable affects repurchase intention (Fang et al., 2011). However, if customer dissatisfaction is resolved by the e-service provider, customers are found to be 8% more loyal than those having no grievance with the e-service provider.

Conceptual Framework and Hypotheses

The model for this study is based on theory developed by Chihyung Ok in 2004. We have replicated the study to test the same hypothesis in the e-hailing sector in India. In the model, the focal point is on how respondents perceived the service recovery process after facing a failure. The interaction effects between the service recovery process attributes and the failure context are considered, and their impact on perceived justice is tested. This investigation looks at the relationship between the e-service recovery

process and its effect on customers' perceptions of service failure. The theoretical model is presented in Figure 1 (adapted from Chihyung Ok in 2004).

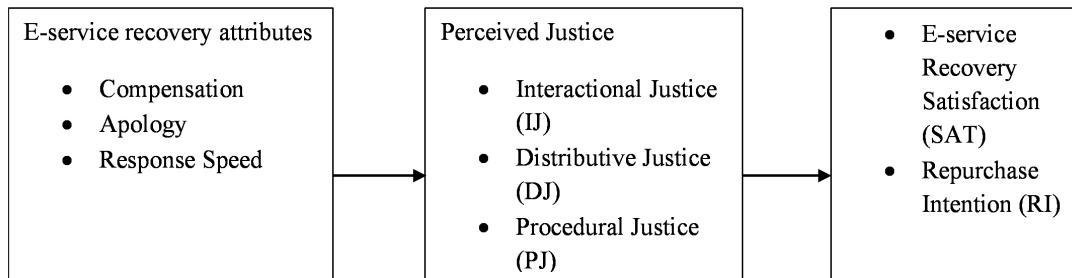


Figure 1: Conceptual Model

The following are proposed hypotheses on the effects of compensation on perceived justice constructs:

H1: There will be significant relationship between compensation and perceived justice in an e-hailing service environment

H1a: There will be significant relationship between compensation and perceived interactional justice in an e-hailing service environment

H1b: There will be significant relationship between compensation and perceived distributive justice in an e-hailing service environment

H1c: There will be significant relationship between compensation and perceived procedural justice in an e-hailing service environment

H2: There will be significant relationship between response speed and perceived justice in an e-hailing service environment

H2a: There will be significant relationship between response speed and perceived interactional justice in an e-hailing service environment

H2b: There will be significant relationship between response speed and perceived distributive justice in an e-hailing service environment

H2c: There will be significant relationship between response speed and perceived procedural justice in an e-hailing service environment

H3: Interaction of response speed and compensation will have significant relationship with perceived justice in an e-hailing service environment

H4: There will be significant relationship between apology and perceived justice in an e-hailing service environment

H4a: There will be significant relationship between apology and perceived interactional justice in an e-hailing service environment

H4b: There will be significant relationship between apology and perceived distributive justice in an e-hailing service environment

H4c: There will be significant relationship between apology and perceived procedural justice in an e-hailing service environment

H5: Interaction of apology and compensation will have significant relationship with perceived justice in an e-hailing service environment

H6: There will be significant relationship between perceived justice and e-hailing service recovery satisfaction

H7: There will be significant relationship between perceived justice and repurchase intention

RESEARCH METHODOLOGY

This study adopted a 2 x 2 x 2 factorial between subject's experimental design (Ok, Chiyung, 2004), to examine the effects of manipulating the independent service recovery variables on respondents' perceived justice, satisfaction, and repurchase intention in an e-hailing service setting. The factors of response speed (immediate versus delayed), apology (automated versus personal call), and compensation (no compensation versus 40% refund) are between-subjects factors. Scenarios are used to administer the manipulated effects of the service recovery variables. It allows the researcher to focus only on the effect of the variable that is most important in a particular study. At the same time, scenarios reduce the possibility of memory biases (Smith et al., 1999).

The design has eight scenarios, each with a combination of service recovery attributes (Fig. 2).



Figure 2: Proposed Manipulations for Independent Variables

The first manipulated factor is whether a customer receives an immediate or delayed recovery response after an e-hailing service failure. Receiving a service recovery response within 24 hours represented an immediate response, and responses occurring five days after a complaint is lodged depicted a delayed response. Within 24 hours are viewed as an immediate response as it is consistent with current practice. Five days is consistent with a delayed response. Manipulation checks confirm that 24 hours versus five days appropriately depict the immediate versus delayed factor levels.

In the current literature apology is often manipulated as an apology is offered or no apology offered (Smith et al., 1999). In e-hailing service studies, apology is usually offered via e-mail. For this study, the two levels of apology are 1) apology offered via e-mail, or 2) a personal telephone call. A personal telephone call is an appropriate representation of a personal apology in an e-hailing service environment because a face-to-face interaction is usually not possible. Manipulations checks confirm that apology offered via e-mail versus a personal telephone call appropriately depict the automated versus personal factor levels.

In practice, compensation for e-hailing service failure is usually given in the form of different levels of monetary refunds or discounts for future purchases. For example, Smith et al. (1999) used different levels of discounts as compensation. Offering different levels of compensation allow a variation of responses from the respondents. In this study, I use two levels of compensation: 1) no compensation, and 2) a 40% refund.

RESPONDENTS

Sample consists of the individuals having experience with e-hailing services. Random sampling is done mostly from Delhi University students, India as college students are generally active Internet users and e-hailing service users.

SAMPLE SIZE

For MANOVA, a minimum of 20 observations per cell is recommended (Hair et al., 1998). Following Hair et al, the suggested sample size is above 160 (20 x 8 groups). Our sample is exact 160 participants.

INSTRUMENTS

For interactional justice, we adapted four items out of the 10 items scale from the instrument of Collier and Bienstock, (2006) (reliability coefficient of 0.929), with a slight replacement in the wording e-retailer with e-hailing service provider.

For procedural and distributive justice, we adapted the instrument by Maxham & Netemeyer (2002) (reliability coefficients of .91 and .90, respectively). The authors based their study on two traditional settings where they look at the impact of perceived justice on the consumer's satisfaction and repurchase intent following a service failure.

For service recovery satisfaction, we adapted the instrument from Bakar (2017) (reliability coefficient of .93). This scale is used to measure the level of customer satisfaction after experiencing e-service failure.

Repurchase intention is measured using an adapted scale from Maxham (1999). This study

is conducted in a traditional setting looking at perceived justice on consumer complaint behaviour, with a reliability coefficient of .93.

All the instruments used in this study are adapted to fit the e-hailing service environments and all the statements are measured on a seven point Likert-scale ranging from “Strongly Disagree” (1) to “Strongly Agree” (7).

DATA ANALYSES

SPSS version 19.0 is used for analysing the data. Reliability analysis are performed to confirm the dimensionality, validity, and reliability of the instrument. This is followed by MANOVA and

multiple regressions to test the aforementioned hypotheses. For hypothesis testing, multivariate analysis of variance (MANOVA) is used. The relationship between perceived justice and e-recovery satisfaction is examined using multiple regressions.

RESEARCH FINDINGS

Demographics of Respondents

The sample consist adequate representation of female and male respondents (41% and 59% respectively) (Table 1). In terms of age, 90.6% respondents are within the ages of 20 and 39. All the respondents belonged to Metro cities.

Table 1: Demographics of Respondents.

Demographics		Number	Percentage
Gender	Male	94	58.8%
	Female	66	41.3%
Age (Yrs)	<20	12	7.5%
	20-29	136	85.0%
	30-39	9	5.6%
	40-49	3	1.9%
	>50	0	0.0%
City	Metro	159	99.4%
	Non-Metro	1	0.6%

Table 2 shows that 23.8% of the samples use e-hailing service daily basis and 50.6% use e-hailing service several times per week. 43% respondents agree that they faced e-hailing service problem and 34% strongly agreed for the same. Hence, the respondents' experiences with e-hailing service and its failure and it is concluded that the respondents could provide good data for this study.

Table 2: Internet Activity of Respondents.

Activity		Number	Percentage
Frequency of e-ride in Ola/Uber/Meru etc	Daily	38	23.8%
	Several times per week	81	50.6%
	Several times per month	13	8.1%
	Less often than monthly	28	17.5%
Faced problem while taking e-ride	Strongly disagree	2	1.3%
	Disagree	29	18.1%
	Neutral	5	3.1%
	Agree	69	43.1%
	Strongly agree	55	34.4%

Normality Test

Normality test is conducted using skewness and kurtosis statistics from SPSS. All variables had values in the range of -.339 to .150 for skewness and -1.410 and -.912 for kurtosis (refer table 3). Normality assumption is not violated as the normal acceptable range of kurtosis and skewness by Leech, Barrett, and Morgan (2014) and Hair et al. (2010) are satisfied.

Table 3: Skewness and Kurtosis.

Statistics

		IJ	DJ	PJ	SAT	RI
N	Valid	160	160	160	160	160
	Missing	0	0	0	0	0
Skewness		-.339	-.065	.150	-.232	-.216
Std. Error of kewness		.193	.192	.193	.192	.192
Kurtosis		-1.025	-1.410	-1.270	-.920	-.912
Std. Error of Kurtosis		.382	.382	.382	.382	.381

HYPOTHESIS TESTING

This study adopted a 2 x 2 x 2 full factorial between-subjects multivariate analysis of variance (MANOVA). The effect of no compensation vs. Rs 150 compensation, email apology vs. personal apology, and 1 day response speed vs. 5 day response speed are investigated. The dependent variables

are three types of perceived justice constructs - interactional, distributive, and procedural justice. In addition, regression is used to predict the relationship between the perceived justice variables and e-hailing service recovery satisfaction. Although repurchase intention was initially considered as one of the dependent variables in the MANOVA model, it was dropped due to very high correlation ($R=0.876$, Table 4) between satisfaction and repurchase intention. Severely high correlation indicates the variables are measuring the same thing. E-hailing service recovery satisfaction was deemed more germane to the study and retained. Table 5 provides the descriptive statistics.

Table 4: Intercorrelations, Mean and Standard Deviation for Dependent Variables.

Variable	IJ	DJ	PJ	SAT	RI	M	SD
Interactional Justice	1	0.815	0.735	0.871	0.871	4.43	1.48
Distributive Justice		1	0.564	0.866	0.864	3.91	1.60
Procedural Justice			1	0.703	0.628	3.97	1.66
Satisfaction				1	0.876	3.91	1.29
Repurchase Intention				1	3.83	1.31	

IJ = Interactional Justice, DJ = Distributive Justice, PJ = Procedural Justice
 RI = Repurchase Intention, M = Mean, SD = Standard Deviation

Table 5: Means and Standard Deviations for Interactional Justice (IJ), Distributive Justice (DJ), Procedural Justice (PJ), satisfaction (SAT), and Repurchase Intention (RI) as a Function Attributes of Service Recovery.

COMP	APO	IJ		DJ		SAT		RI				
		M	SD	M	SD	M	SD	M	SD			
Comp	Email		5.96	0.38	5.89	0.41			5.26	0.39	4.63	0.48
			5.15	0.67	4.70	0.71			4.44	0.53	4.71	0.33
	PC		6.11	0.37	5.62	0.61			5.60	0.48	5.74	0.33
			4.62	0.52	4.97	0.53			4.34	0.38	4.43	0.44
No Comp	Email		3.24	0.62	2.46	0.61			3.10	0.65	2.77	0.33
			2.04	0.59	1.75	0.40			2.08	0.67	1.78	0.49
	PC		5.57	0.54	3.67	0.72			4.26	0.49	4.12	0.43
			3.13	0.46	2.30	0.36			2.40	0.28	2.57	0.51

HYPOTHESIS TESTING - MANOVA

All main effects and interactions of the combinations are tested for significance (refer Table 6). The results indicate that consumers perceived interactional justice, distributive justice, and procedural justice levels are significantly different for each factor level of attributes of service recovery (compensation, response speed, and apology). All independent variables showed significant effects at $p < .005$, implying that all of the service recovery process attributes had a significant impact.

As hypothesized, compensation had a significant main effects on consumers' distributive justice, procedural justice, interactional justice, $p < .001$. These results show that compensation improved the customer's perceived justice level in the service recovery process. Hence, H1, H1a, H1b, H1c are supported.

The main effect of response speed had a statistically significant main effects on consumers' distributive justice, procedural justice, interactional justice, $p < .001$. This indicates that a faster response speed will improve the customer's perceived justice. Therefore, response speed is a key driver in a service recovery route. This result supports H2, H2a, H2b and H2c.

Similarly, the main effect of apology is also statistically significant with $p < .005$. These results indicate that a more personal form of apology in the service recovery process increases the perceived justice of consumers. Therefore, H4, H4a, H4b, H4c are supported.

Table 6: Multivariate Effects of Service Recovery Attributes on Perceived Justice.

Effect	Pillai's Trace	F	df	Error df	P	η^2
COMP	0.905	477.7	3	150	0.000***	0.905
APO	0.398	33.0	3	150	0.000***	0.398
RS	0.901	452.7	3	150	0.000***	0.901
COMP X APO	0.508	51.6	3	150	0.000***	0.508
COMP X RS	0.179	10.9	3	150	0.000***	0.179

Significant at *** $p < .001$

The follow-up ANOVAs (see Table 7) indicate that the effects of compensation, response speed and apology are statistically significant for all perceived justice constructs. Hence, service recovery attributes can be utilized to positively affect respondents' perceptions of equity and e-hailing service recovery satisfaction when failure occurs.

The interaction effect for compensation and response speed is statistically significant with $p < .001$. The follow-up ANOVA analysis (refer to Table 4.7) indicates that the interaction effect of compensation and response speed is not significant for distributive justice at $p < .10$. This effect could indicate that the positive impact of a response speed as part of a service recovery process

could be exacerbated when accompanied by monetary compensation. Therefore, H3 is supported. The interaction effect for compensation and apology is statistically significant with $p < .001$. Hence, H5 is supported.

In summary, H1, H2, H3, H4, and H5 are supported based on MANOVA results.

Table 7: Univariate Effects of Service recovery process attributes on Perceived Justice.

Source	Dependent Variable	Df	F	P	η^2
COMP	IJ	1	548.6	0.000***	0.783
	DJ	1	974.6	0.000***	0.865
	PJ	1	191.4	0.000***	0.557
APO	IJ	1	82.0	0.000***	0.351
	DJ	1	24.8	0.000***	0.140
	PJ	1	10.4	0.002**	0.064
RS	IJ	1	313.3	0.000***	0.673
	DJ	1	122.4	0.000***	0.446
	PJ	1	1235.8	0.000***	0.890
COMP X APO	IJ	1	127.9	0.000***	0.457
	DJ	1	24.9	0.000***	0.141
	PJ	1	42.9	0.000***	0.220
COMP x RS	IJ	1	16.1	0.000***	0.096
	DJ	1	0.5	0.491	0.003
	PJ	1	8.5	0.004**	0.053
APO X RS	IJ	1	33.2	0.000***	0.179
	DJ	1	0.1	0.738	0.001
	PJ	1	12.3	0.001**	0.075
COMP X APO X RS	IJ	1	2.8	0.096†	0.018
	DJ	1	11.6	0.001**	0.071
	PJ	1	5.6	0.019*	0.036
Error	IJ	152			
	DJ	152			
	PJ	152			

Significant at *** $p < .001$, ** $p < .01$, * $p < .05$, † marginally significant at $p < .10$

HYPOTHESIS TESTING – MULTIPLE REGRESSION

Multiple regressions are used to determine the relationship between the perceived justice constructs and the dependent variable in e-hailing services satisfaction. In order to determine whether the independent variables are multicollinear, Tolerance and Variance Inflation Factors (VIF) are checked. VIF is considered the most reliable approach to examine multicollinearity. Based on the summary of tolerances and VIF values presented in Table 8, there is no multicollinearity issue, between the perceived justice variables, as the VIF values are less than 5.0 (Hair et al., 2010).

Table 8: VIF value of multiple regressions.

Excluded Variables^a

					Collinearity Statistics			
Model	Beta In	T	Sig.	Partial Correlation		Tolerance	VIF	Minimum Tolerance
1.	DJ	.465b	8.198	.000	.547	.336	2.976	.336
	PJ	.136b	2.388	.018	.187	.459	2.178	.459
2.	PJ	.173c	3.690	.000	.283	.455	2.195	.225

a. Dependent Variable: SAT

b. Predictors in the Model: (Constant), IJ

c. Predictors in the Model: (Constant), IJ, DJ

Table 9: Coefficients of multiple regressions.

	Unstandardized B	Coefficients std error	Standardized coefficient beta
IJ	0.306	0.058	0.350
DJ	0.392	0.044	0.483
PJ	0.135	0.037	0.173

Table 10: R value of multiple regressions.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1.	.871a	.758	.756	.63895	
2.	.911b	.830	.828	.53638	
3.	.919c	.844	.841	.51605	1.951

- a. Predictors: (Constant), IJ
- b. Predictors: (Constant), IJ, DJ
- c. Predictors: (Constant), IJ, DJ, PJ
- d. Dependent Variable: SAT

Adjusted R square value (Table 10) is 0.841 which shows there is very high level of correlation between the perceived justice constructs and the dependent variable e-hailing services satisfaction. 84.1% of the variance in e-hailing service satisfaction can be explained by predictors - interactional justice, distributive justice and procedural justice. The coefficients of interactional justice, distributive justice, and procedural justice are shown on table 4.9. And we already found out that there is high correlation between e-hailing service recovery satisfaction and repurchase intension. Hence, H6 and H7 are supported.

CONCLUSION

This study investigated how certain e-hailing service recovery attributes impacted perceived justice and how perceived justice can be used to predict customer satisfaction with a service recovery. These relationships have been examined in traditional services, but not in e-hailing services. Despite their similarities, there are a few significant differences. E-hailing service consumers appear to be influenced more by compensation and response speed than apology type when compared to consumers on traditional services. For policy makers, in e-hailing service organization, it is essential to have an effective recovery process. The results of this study shed light on the importance of certain service recovery attributes on creating customer satisfaction through perceived justice. The findings indicate that compensation has the largest impact on distributive justice, apology has the largest influence on interactional justice, and response speed has the largest effect on procedural justice. So all three e-hailing service recovery attributes appear to be key in creating satisfied customers based on their effects on perceived justice.

DISCUSSION

The intention of this study is to contribute to the stream of research in e-hailing services in context of justice theory. Ola and Uber, the major players in the market, are specifically chosen to identify and test effective recovery processes for failures in depth. It is utmost important for any service provider to ensure the satisfaction of customers, as it can be a catalyst for continuous patronage to their services (Ranaweera and Prabhu, 2003). It is not possible for the e-hailing service providers to be completely error-free as humans are prone to errors (Boshoff, 1997). Although there may be no human interaction in e-services, errors can still occur; for example, navigation can cause customer dissatisfaction, congestions on road or website/app errors can cause transactions to fail (Agarwal et. al, 2021). Service providers address such issues to deliver quality e-service and customer satisfaction and when failures occur, a good service recovery system helps create customer satisfaction and perhaps, loyalty (Boshoff, 2012 and Ok, Chihyung, 2004). There is dearth of literature in understanding customers' perceptions of quality

and customer satisfaction, and the associated recovery attributes in context of e-hailing services.

The results indicate that consumer's levels of perceived justice are significantly different for each level of compensation, apology and response speed. Without compensation, distributive justice is substantially lower while when monetary compensation is provided, distributive justice exceeds procedural justice and the gap between interactional justice is small. In addition, the level of interactional justice exceeds procedural justice, and widens when compensation is given. Interactional justice indicates that it is the most sensitive to the apology type. Furthermore, the gap between procedural justice and distributive justice decreases more with a personal apology. When a response speed is slow, interactional and distributive justice has similar levels, with procedural justice much lower, while response speed is high, procedural and interactional justice are similar, with distributive justice much lower. This implies that procedural justice is the most sensitive to the length of the response time taken to fix service recovery failure.

The interaction effect for compensation and response speed is statistically significant (with $p < .001$) with perceived justice in an e-hailing service environment. However, their interaction effect is not significant for distributive justice. This effect could indicate that the positive impact of a response speed as part of a service recovery process could be exacerbated when accompanied by monetary compensation. Also, the interaction effect for compensation and apology is statistically significant (with $p < .001$) with perceived justice in an e-hailing service environment.

This study provides empirical support regarding the impact of recovery attributes on perceived justice in e-hailing service environments. E-hailing service is revolutionizing business and provides an increasingly rich area for conducting research in service operations. E-service providers must make an effort to re-establish a customer's state of well-being following a failure. This study developed a new variable for e-hailing service recovery satisfaction and also contributed to the research on perceived justice and how it predicts e-hailing service recovery satisfaction.

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A STUDY OF POPULAR E-COMMERCE PLATFORMS AND DEMOGRAPHICS PROFILING OF ONLINE CONSUMERS IN INDIA

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ABSTRACT

Past decade has seen a surge in shopping via online mode by Indian consumers. This is accompanied by a multifold increase in e-commerce platforms that are catering to the diverse needs of these customers. Yet some e-commerce platforms remains more popular in the market and others fade out fast. This study is an attempt to investigate the popular e-commerce platforms among Indians in categories namely, food, shopping, entertainment and transport (cab service). Further, the study also explores the influence of demographic variables (gender & age) on the online shopping behavior of Indian consumers. Online survey-based questionnaire was used to collect data from the respondents. Data analysis and hypotheses testing was performed using Chi-square test. Analysis revealed that age differences were important factor influencing the online shopping behavior of consumers in India in comparison to gender differences. The findings of the current study will help e-commerce platforms in strategizing themselves to lure the untapped age groups in India as more and more

consumers are becoming comfortable with surfing, ordering and purchasing via the digital mode.

Keywords: *E-commerce platforms, Online shopping behavior, demographics, Indian consumers.*

INTRODUCTION

Businesses are today faced with highly dynamic environment that necessitates them to be adaptive, agile & resilient. The digital revolution is one such facet that has invaded each & every part of our life and to some extent every individual. This invasion that was gradual over years changed its trajectory and became fast paced with the onset of pandemic. Consumers today are embracing digital technologies as a way to ease their everyday life be it searching information, commuting, shopping, cooking, travelling, entertainment, and the list is endless. This has provided immense opportunity to the digitally innovative companies to serve these customers in the unique way. The physical and the digital world to serve the consumers are slowly coming at cross roads where it is predicted that digital world will phenomenally

over power the physical brick & mortar stores specifically in tier I & II cities with the influx of digital infrastructure led by ever surging demand for smartphones, move towards 5G network, Digital India, E-commerce Ecosystem projects of the government. Pandemic was the final stroke the enabled consumer adaptation to digital technologies even faster (Livemint, Sept. 2021; Economic Times, Mar 2021; IMAI & KANTAR Report 2021).

E-COMMERCE PLATFORMS & ONLINE CONSUMERS IN INDIA

The digital revolution in India is marked by the combination of affordable broadband network with affordable smartphones which has been a strong driving force for the India's e-commerce successful growth story. Added to this are the events like demonetization and current pandemic that necessitated consumers for a digital switch over against the traditional mode of buying and payments. Onset of pandemic marked a slowdown across all sectors of the economy. However, e-commerce businesses not only sailed through the turbulent times but even became a major game-changer in the market in year 2020-2021 with an unparalleled sales growth in segments such as online grocery, e-pharmacy, e-cabs, e-food delivery, online education, e-services, and the list is ever increasing. Internet penetration in India has increased overtime from mere 4% in 2007 to 45% in 2021 with 747.41 million users which is further expected to increase to 900 million users by 2025. The Government of India's Digital India Campaign is a major thrust for the widespread proliferation of e-commerce in India aiming at trillion-dollar online economy

with online shoppers expected to reach 220 million by 2025. Millennials (those between 25-35 years of age) are the most active users of e-commerce platforms, yet the trend is slowly picking up among higher age groups as well. Online deliveries are today reaching almost 20,000 pin codes (out of existing total 1,00,000 pin codes) in the country comprising of metro cities & smart cities. Reaching remote location will further provide a great boost to this sector. Availability of internet content in local language is another reason for more shoppers to join this online bandwagon (IMAI & KANTAR Report, 2021).

LITERATURE REVIEW

Over the past years, extensive research has been conducted in the areas of online shopping, digital consumers, e-commerce, digital marketing. Some studies analysed the demographic characteristics of the consumers while other studies measured other dimensions of digital adaptation among consumers, viz, ease, price, security, etc. The former characteristics viz. the demographics of the consumers in terms of age, gender, education level & income level have been commonly employed in the marketing research for the purpose of market segmentation as well as to provide an insight into the changes in the consumers' behavior (Bhat and Darzi, 2019; Bigne' et al., 2005; Lynch and Beck, 2001) in a particular country and their importance will remain undisputable in the context of technological behavior in future as well (Hou and Kevin, 2021; Lissitsa and Kol, 2016; Venkatesh and Morris, 2000).

Research by Alreck and Settle, 2002; Brown et al., 2003; Donthu and Gracia, 1999; Li and

Zang, 2002; Rodgers and Harris, 2003, Slyke et al., 2002 concluded that males are more into online purchase and digital spending than females. This is because women were found to be more skeptical of e-business. Younger consumers were found to be more at ease with online shopping in comparison to older generation (Bhat and Darzi, 2019; Bellman et al, 1999; Donthu and Garcia, 1999; Lissitsa and Kol, 2016). Yet some studies also concluded that there was no such difference between age groups (Bhatnagar and Ghose, 2004). Similar mixed results have been observed with respect to the influence of variable education level on online shopping (Bellman et al., 1999; Bhat and Darzi, 2019; Donthu and Garcia, 1999; Li and Zang, 2002).

OBJECTIVES OF THE STUDY

The above review of literature highlights the influence of demographic variables on online shopping among consumers. Accordingly, the objective of the present study is:

1. To identify the popular online shopping apps / websites among Indian consumers.
2. To study the effect of demographic factors on online shopping behavior of Indian consumers.

HYPOTHESES OF THE STUDY

The proposed hypotheses investigated in the present study are:

- H1:** Gender-wise Indian consumers differ in their exposure to online platforms for shopping needs.
- H2:** Gender-wise Indian consumers differ with respect to time since they started using online platforms.

H3: Gender-wise Indian consumers differ in their frequency of the usage of online platforms in the past one year.

H4: Gender-wise Indian consumers differ in their usage of digital payment platforms in last 1-2 years.

H5: Age-wise Indian consumers differ in their exposure to online platforms for shopping needs.

H6: Age-wise Indian consumers differ with respect to time since they started using online platforms.

H7: Age-wise Indian consumers differ in their frequency of the usage of online platforms in the past one year.

H8: Age-wise Indian consumers differ in their usage of digital payment platforms in last 1-2 years.

RESEARCH METHODOLOGY

Research Design

Consumer survey was conducted using non-probability convenience sampling method by emailing the questionnaire link to the respondents. While selecting these respondents it was ensured that this study has adequate representation of both males and female. Besides, snowball sampling technique was applied by requesting these respondents to further share the link of the survey in their contacts.

Research Instrument

A structured, undisguised questionnaire was designed divided into two parts. Part-A contained information related to the demographic details of the respondents and Part-B contained information related to their usage of online platforms for shopping and payment.

Research Techniques

The collected data was analysed using SPSS software. The statistical tools applied included descriptive statistics, scatter plots, chi-square test of significance.

RESPONDENT PROFILE

The survey questionnaire was electronically mailed to 700 respondents. Of these 647 valid responses were received. This study is therefore,

based on these 647 valid responses only. As far as the demographic profile of the respondents is concerned, it is observed that the study is based on fairly equal representations of females and males which is 48.8% and 51.2% respectively. Age-wise, the data gives more representation of young people (57.2% respondents were 30 years or below), yet mature and old generation has also been adequately represented (42.8% respondents were 31 years and above).

Table 1: Respondent Profile.

DEMOGRAPHIC VARIABLES	COMPONENTS	FREQUENCY*	PERCENTAGE
GENDER	FEMALE	316	48.8 %
	MALE	331	51.2 %
AGE	20 years or below	288	44.5 %
	21-30 years	82	12.7 %
	31-40 years	32	4.9 %
	41-50 years	175	27.0 %
	51 years & above	70	10.9 %
LEVEL OF EDUCATION	Schooling only	163	25.2 %
	Graduate	287	44.4 %
	Post-graduate	131	20.2 %
	Professional	66	10.2 %
OCCUPATION	Student	325	50.2 %
	Professional	48	7.4 %
	Business	74	11.4 %
	Employed	110	17.0 %
	Housemaker	81	12.5 %
	Retired	9	1.4 %

FAMILY INCOME LEVEL (monthly)	<₹20,000 p.m.	44	6.8 %
	₹20,000-40,000 p.m.	135	20.9 %
	₹40,001-80,000 p.m.	226	34.9 %
	>₹80,000 p.m.	242	37.4 %

*N=647

Majority of respondents were graduates (44.4%) followed by school pass-outs (25.2%), postgraduates (20.2%) and professional (10.2%). Corresponding to this 50.2% of the respondents were students while remaining 49.8% of respondents were either professionals or employed or in business or housemakers or retired. Monthly family income of respondents varied, with 37.4% belonging to high income category, 34.9% in high middle income, 20.9% in low middle income and 6.8% in low-income category. The following section gives the results of the data analysis for the proposed hypotheses as well as insight into widely popular e-commerce platforms among Indian consumers.

RESULTS AND ANALYSIS

Scatter Plot Results

The result of the scatter plot (refer Figure 1) for the most preferred online food delivery app revealed that Zomato and Swiggy are the most popular online food delivery apps. This can be attributed to the variety of cuisines offered by app providers together with the deep discounts offered by them. Dominos and Pizza Hut are, yet other popular apps patronized by the consumers, especially the younger ones. Since they offer only continental cuisine, they are targeting limited consumer base in India. Food Panda, Uber Eats (it has closed now) and some other apps serving in local areas were also revealed in the survey, but they were having limited market share as seen in the scatter plot. The word cloud shows dominance of Zomato, Swiggy, Dominos, Pizzza Hut and others in decreasing order of preference.

The result of the scatter plot (refer Figure 2) for the most preferred online shopping apps revealed that Amazon, Flipkart, Myntra, Ajoio being the most popular online shopping apps. This can be attributed to the variety of products (across gender and age) being offered by app providers together with the deep discounts and on sales promotions by them. Nykaa happens to be yet another popular app patronized by the women consumers. But it is... catering to a segment of Indian consumers. Tata Cliq, Meesho, Urbanic, H&M, Lakshita, and some other online shopping apps were also revealed in the survey, but they were having limited market share as seen in the scatter plot. The word cloud shows dominance of Amazon, Flipkart, Myntra, Ajoio and others in decreasing order of preference.



Figure 1: Popular Online Food Delivery Apps among Indians



Figure 2: Popular Online Shopping Apps among Indians

The result of the scatter plot (refer Figure 3) for the most preferred online cab booking services revealed the preference for Uber, Ola, Meru, Mega, Rapido in the decreasing order of preference. The dominance of Uber and Ola over others in the word count is due to their wide reach, discounts and loyalty programs for their customers.

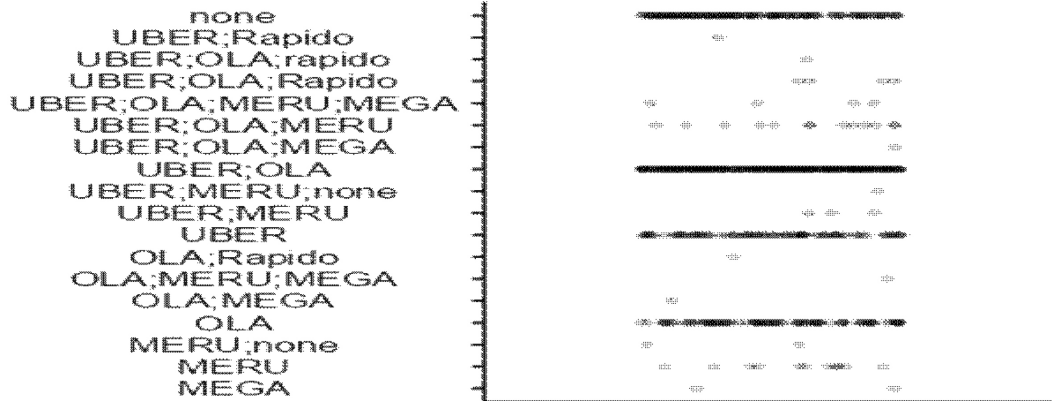


Figure 3: Popular Online Cab Service Apps among Indians

The result of the scatter plot (Figure 4) for the most preferred digital entertainment platforms revealed that Netflix, Amazon Prime, Disney HotStar, Sony Liv are the most watched digital entertainment platforms. This can be attributed to their offerings that include variety of series, movies, documentaries to suit the need of different members of the family that to at low subscriptions. Voot, Hungama, Zee5, Discovery are some other watched digital entertainment platforms, but they had limited market share as can be seen in the scatter plot. The word cloud shows dominance of Netflix, Amazon Prime, Disney HotStar and Sony Liv in decreasing order of preference.



Figure 4: Popular Online Entertainment Apps among Indians'

The demographic variables viz., gender and age were tested on four parameters each using chi square goodness of fit. The results of the chi square goodness of fit test are presented in Table 2 and 3.

GENDER-WISE DIFFERENCES

Table 2 presents the test results of gender-wise difference on online shopping behavior between males and female consumers in India. Results reveal that significant differences were observed between male and female online shopping behavior in terms of usage of digital payment platforms in last 1-2 years (H4). With respect to other three variables observed and measured in the study viz., exposure to online platform for the shopping needs (H1), time since started using the online platform (H2), frequency of the usage of online platforms in the past one year (H3), no significant differences were observed in the online shopping behavior of males and females. Therefore, proposed hypotheses H4 is accepted while H1, H2, and H3 are rejected with respect to gender-wise differences in online shopping behavior of Indian consumers.

Table 2: Chi-square results for hypotheses testing of relationship between gender and online shopping behavior of Indian consumers.

HYPOTHESIS	VARIABLES	MALE	FEMALE	TOTAL	χ^2	df	p
H1: Males & females differ in exposure to online platform for the shopping needs.	Yes	305	299	604	1	1.60	.206
	No	26	17	43			
	Total	331	316	647			
H2: Males & females differ with respect to time since they started using the online platform.	never used	23	16	39	5.64	3	.130
	since last 1-2 years only	132	154	286			
	since last 5 years	154	125	279			
	since last 10 years	22	21	43			
	TOTAL	331	316	647			
H3: Males & females differ in their frequency of the usage of online platforms in the past one year.	never (not tried online platform in past 1 year)	14	14	28	1.85	5	.869
	rarely only (once in 6 months)	26	25	51			
	sometimes only (once in 4-5 months)	43	50	93			
	occasionally (once in 2-3 months)	87	86	173			
	frequently (every month)	138	124	262			
	very frequently (every week)	23	17	40			
	Total	331	316	647			

H4: Males & females differ in their usage of digital payment platforms in last 1-2 years.	never (not tried online platform in past 1 year)	12	20	32	27.9	5	<.001*
	rarely only (once in 6 months)	14	21	35			
	sometimes only (once in 4-5 months)	16	26	42			
	occasionally (once in 2-3 months)	41	57	98			
	frequently (every month)	82	96	178			
	very frequently (weekly)	166	96	262			
	Total	331	316	647			

*p is significant at 0.05 level

Table 3: Chi-square results for hypotheses testing of relationship between age and online shopping behavior of Indian consumers.

HYPOTHESIS	VARIABLES	AGE					Total	x ²	df	p
		20yrs or less	21-30 yrs	31-40 yrs	41-50 yrs	51 yrs or more				
H5: Age-wise Indian consumers differ in their exposure to online platforms for shopping needs.	No	9	2	0	17	15	43	37.7	4	<.001*
	Yes	279	80	32	158	55	604			
	Total	288	82	32	175	70	647			
H6: Age-wise Indian consumers differ with respect to time since they started using online platforms	never used	12	2	0	12	13	39	60.6	12	<.001*
	<i>since last 1-2 years</i>	135	24	12	84	31	286			
	since last 5 years	131	40	16	68	24	279			
	since last 10 years	10	16	4	11	2	43			
	Total	288	82	32	175	70	647			

H7: Age-wise Indian consumers differ in their frequency of the usage of online platforms in the past one year	never (not tried online platform in past 1 year)	3	0	0	13	12	28	72.3	20	<.001*
	rarely only (once in 6 months)	25	4	0	14	8	51			
	sometimes only (once in 4-5 months)	43	8	2	30	10	93			
	occasionally (once in 2-3 months)	73	18	11	52	19	173			
	frequently (every month)	125	41	17	59	20	262			
	very frequently (every week)	19	11	2	7	1	40			
	Total	288	82	32	175	70	647			
H8: Age-wise Indian consumers differ in their usage of digital payment platforms in last 1-2 years	never (not tried online platform in past 1 year)	9	1	0	11	11	32	59.9	20	<.001*
	rarely only (once in 6 months)	15	3	0	12	5	35			
	sometimes only (once in 4-5 months)	14	5	0	14	9	42			
	occasionally (once in 2-3 months)	41	6	6	33	12	98			
	frequently (every month)	74	22	13	51	18	178			
	very frequently (weekly)	135	45	13	54	15	262			
	Total	288	82	32	175	70	647			

*p is significant at 0.05 level

AGE-WISE DIFFERENCES

Table 3 presents the Chi-square test results of age-wise difference in online shopping behavior between young (upto 30 years), adult (31-50 years) and old (51 years and above) consumers in India. Results reveal that significant differences were observed in online shopping behavior between consumers belonging to different age groups. This holds true for all the observed variables viz., exposure to online platform for the shopping needs (H1), time since started using the online platform (H2), frequency of the usage of online platforms in the past one year (H3) and usage of digital payment platforms in last 1-2 years (H4). Therefore, proposed hypotheses H1, H2, H3 and H4 are accepted with respect to age-wise differences in online shopping behavior of Indian consumers.

DISCUSSION AND CONCLUSION

The study is based on a large consumer survey giving adequate representation to males and females as well as young, adult and old consumers in India. Therefore, the results of the study try to give a real glimpse of the online shopping preference (digital platforms) and behavior of Indian consumers. The study reveals that e-commerce platforms are gaining popularity and acceptability in India. This is similar to the results of the earlier studies in other countries (Rohm and Swaminathan, 2004; Hou and Kevin, 2021; Mckinney, 2004) Some of the popular ecommerce platforms according to the present study are: online food ordering- Zomato, Swiggy, Dominos, Pizza Hut; online shopping- Amazon, Flipkart, Myntra, Nykaa; digital entertainment- Amazon Prime, Netflix, Disney HotStar, Sony Liv; online cab booking- Uber, Ola, Meru, Mega, Rapido. The study also concluded that males and females exhibit similar behavior towards online shopping in India though age-wise young Indians are more receptive to digitalization and new trends as compared to old consumers. Such mixed behavior were also revealed in earlier studies as well (Lissitsa and Kol, 2016; Bhat and Darzi 2019; Pank and Jun, 2003; Mahmood et al., 2004). This also highlights the immense opportunity that exist in the e-commerce sector whether in terms of consumers or in terms of unexplored segments for marketers to target in the future.

IMPLICATIONS AND LIMITATIONS OF THE STUDY

The survey of the Indian consumers highlights growing preference for e-commerce platforms

for meeting day-to-day needs from food ordering, shopping, cab services to digital payments. The online trend is here to stay for a long time given the boost to Digital India Campaign, move to 5G network, ever increasing demand for smart phones, continuous efforts to digitally connect the rural areas. Paytm and other digital wallets became a hit after demonetization. Similarly online meeting and educational platforms got a tremendous boost since the onset of pandemic. These are path breaking lessons for the new age marketers. This study is a step in that direction to provide an insight to the Indian marketers to further leverage this trend by diving deep into the online sector to digitally transform the untouched areas. Though the study is based on a large consumer survey yet there is scope for future studies in this area to cover more dimensions of online shopping such as investigating the motivation (Rohm and Swaminathan, 2004), orientation (Lynch and Beck, 2001), behavior and satisfaction (Tran and Quang, 2019) towards online shopping by Indian consumers. Future studies can also investigate the role of gender, age and income as moderators (Herna`ndez et al., 2011) to online shopping behavior in Indian context. A cross-cultural study (Lissitsa and Kol, 2016; Mahmood et al., 2004) of Indian consumers online shopping behavior vis-à-vis other countries can provide a broader perspective to the global companies in their marketing strategy. Such future research areas will add more insights about the consumer purchase behavior and decision in the digital scenario.

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A STUDY OF WORK PLACE DEVIANCES WITH RESPECT TO AGE AND GENDER

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ABSTRACT

Workplace deviances have always been critical issues in organization among researchers and managers. The occurrence of deviant behavior involves deception, employees thievery (stealing & shoplifting), squashing, unexcused absences, taking long breaks, rude violent behavior, and sexual abuses at the workplace accounts a big task for organizations. The impact of these behaviors is enormous on organization and individual & such behavior incur massive economic loss. To make organization productive & effective, we need to work hard to get over with this problem and bring harmony among them and in the organization. Keeping in mind the present study aims to study workplace deviant behavior in private sector among the working professionals. A sample of 60 working professional were taken from private sector undertaking and tested on the two aspects of workplace deviances ie., interpersonal deviances and organizational deviances. The aim of this paper is to study the impact of age and gender on workplace deviances. The age & gender has shown significant relation with interpersonal deviances than organizational deviances.

Keywords: *Workplace deviances, organizational deviances, Interpersonal deviances, age and gender.*

INTRODUCTION

Today, workplace deviant behavior is one of the major concern for the organization and also a focal area of further study and attention (Bennett & Robinson, 2003). Research support several studies of the past that the negative workplace behavior do not impact financial concerns only but social and psychological impacts are more on the organization productivity (Hollinger & Clark, 1982; Hollinger & Clark, 1983; Murphy, 1993). This includes deliberate malicious attempt to harm organization by causing problems at the workplace. Deviant behavior are of two types, interpersonal deviances, which involves spreading rumors, gossiping, yelling at someone, aggressive behavior, lying, bullying, blaming others for their own mistake, abusive supervisors, substance use at workplace .Organizational deviances such as reporting late ,lying about hours worked ,theft of organizational property, sabotage etc. It has been found that between 33 to 75 percent employees have found indulging in offenses like stealing, embezzlement, damage, and disruption (Harper, 1990). The less frequent aggressive behaviours were lying (DePaulo & DePaulo, 1989), spreading rumors (Skarlicki & Folger, 1997; Fox & Spector, 1999), with holding effort (Kidwell and Bennett, 1993) and absenteeism

(Johns, 1997). These behaviors disrupt workplace norms and ethics and therefore labeled antisocial behavior (Robinson and Bennett, 1995). These immoral deviant behavior are predominating and impacting organization culture and productivity.

GAP

Numerous past research have examined deviant behavior with many reasons leads to become deviant (Bennett and Robinson ,2003) other studied correlates of personality with environment (Farhadi et al.,2012). To date, very little empirical researches have been conducted which is directly focused on deviant behavior .The concept of deviant behavior usually misinterpreted and often ignore to study employee behavior (Vardi & Wiener,1996). Very less study conducted on the demographic variables i.e., age gender, marital status income etc. Therefore, keeping in mind the need of the research, an attempt has been made to understand the impact of demographic variables such as gender and age on workplace deviances. The findings will help organizations to understand the different categories & age group people are engaged in deviant behavior. This will also justify the need of the research.

METHOD

In the current study a random sample of 110 respondent from the private sector undertaking were initially taken from Delhi & NCR region. A pool of mass email generated, where out of 110 only 60 people responded back. The study was conducted by sending out a mass e-mail to the above sample. A 19 item questionnaire

developed by Robinson and Bennett is used in the present study, which comprise 7 item on interpersonal deviances & 12 items on organizational deviances. The respondents were instructed to mark their responses on a 7-point likert scale in the questionnaire. The internal reliability of this scale is found to be .81& .78 respectively. A personal interview taken from the entire respondent as they were reluctant to give genuine response for the one-to-one analysis. The results were analyzed through SPSS.

HYPOTHESIS

- There are no differences between males and females with respect to their work place deviances.
- No difference between males & Females regarding organizational deviances
- No differences between males & females regarding interpersonal deviances
- Age do not have significant differences on workplace deviances(organizational and Interpersonal)

PROCEDURE

A 19 item questionnaire was sent through e-mail to 60 participants, but only 58 participants responded back. The concept & purpose of this study was communicated to all the participants earlier and questionnaire circulated to them only on agreement to participate in the study and assured them to keep their identity unknown to their organizations. The data was treated in SPSS. This study enabled the researchers to examine the potential influence of gender & age on the deviant behavior of the participant.

RESULT AND DATA INTERPRETATION

Table 1

Gender	Number	Mean	Std. deviation	Std.Error Mean	t-value	Remark
Work Place Deviances						
Male	28	35.46	8.505	-3.636	1.498	P> .05
Female	30	39.10	9.813	2.428		

An independent sample t-Test was conducted to examine age & gender differences on workplace deviances. From the data, it shows that male (M=35.46,SD 8.505,N=28) and female (F=39.10,SD 9.813,N=30) do not have much differences with respect to work place deviances. It is evident from the table 1.1, the t-value is -1.498, which is not significant at 0.05 and at 0.001 level with Degrees of freedom 56. It reflects that mean value of work place deviances of males and females did not differ significantly. In this context the null hypothesis “there is no significant difference in the mean score of work place deviances of male and female employees” is not rejected.

Table 2

Gender	Number	Mean	Std. deviation	Std.Error Mean	t-value	Remark
Organizational Deviances						
Male	28	22.71	5.855			
Female	30	22.80	6.810	-.086	.958	P>.05

From table 2, For the second hypothesis, we find Male having (M=22.71,SD= 5.855) & female having (M=22.80,SD=6.810) from table 1.2, do not have much difference with respect to organisational deviances. The t value is .958 at 56 Df is not significant at 0.05 and 0.01. The mean scores of organizational deviances of males and female did not differ significantly, therefore the null hypothesis “there is no significant difference in the mean scores of Organizational deviances of male and female teachers” is accepted.

Table 3

Gender	Number	Mean	Std. deviation	Std.Error Mean	t-value	Remark
Interpersonal Deviances						
Male	28	12.75	5.407	-4.217	-2.696	P<.05
Female	30	16.97	5.404			

Regarding third hypothesis, from table 3, we observed that Males ($M=12.75$, $SD=5.407$ & Females $M=16.97$ & $SD=5.404$) having significant differences in their scores, The t test calculated -2.969 at 56 df higher at 0.05 and .01 level, the mean scores of males and females on interpersonal deviances are significantly different ,therefore we reject null hypothesis of “there is no significant difference in the mean score of interpersonal deviances of males and females teachers” and accept alternative hypothesis of, there is significant difference in the mean scores of interpersonal deviances of males and females.

Table 4

Work place Deviances	Age	No.	Mean	Std. deviation	Std.Error Mean	t-value	Remark
Org deviances	(Age-1) 35-45	37	22.78	6.721	.557	.320	$P>.05$
	(Age-2) 46-51	21	22.23	5.992	.320	$P>.05$	
Interpersonal Deviances	Age-1	37	16.22	5.945	3.807		
	Age-2	21	12.41	4.797		2.691	$P<.05$

The fourth hypothesis is Age do not have significant difference on organizational and Interpersonal deviances. From table 4,we observe that employees who are between 35-45 years of Age ,denoted by Age 1, have mean 22.78 & $SD= 6.721$, whereas people between 46-51 ,who are denoted by Age 2, having mean=22.23 & $SD=5.992$ do not significantly different on the organizational deviance, the t value is .320, which is not significant at .05 & .001 level at 56 df .The null hypothesis is accepted here which says that “ there is no difference between the organizational deviances scores of Age -1 and Age-2 employees.

But when we compare the interpersonal deviance scores of Age-1 and Age-2 employees .The mean score for Age-1 is 16.22 & SD is 5.945, whereas the mean scores for Age-2 is 12.41 & $SD = 4.797$. There is a significant differences between the two groups .The t value calculated is 2.691, which is much significant at .05 and .001 level at 56 Df .The difference of mean is 3.807. We observe that these two age groups stand different on interpersonal workplace deviances. Thus we reject null hypotheses, which says that there is no difference between the means of two groups on interpersonal deviances and accept alternative hypothesis that the Age -1 & Age -2 are different in their mean scores on interpersonal workplace deviances.

DISCUSSION

Workplace deviant behavior has been a critical issue for any organizational success. Organizations experienced heavy losses in terms of financial, productivity and adverse impact on human efficiency. It has gained popularity in recent times and wide scope of further research (Bennett and Robinson, 2003).

In this present study, we have attempted to examine the impact of Workplace deviance on gender and age. There are two type of deviances; constructive and destructive. Under destructive deviances there are further two types- interpersonal and organizational deviances. In the present study, significant difference found between interpersonal deviances and organizational deviances. An interpersonal deviance did show significant difference at workplace with respect to gender & age. Male and female significantly differ in their interpersonal deviances. Age is also contributing in interpersonal deviances. The common interpersonal deviances includes making funny comments on coworkers, derogatory remarks rude behaviors', minor mistakes becomes a major issues on job, defying supervisors' instruction (under political deviances). Under personal aggression (cussing at coworkers, degrading & bullying subordinates, sexual harassment, saying inappropriate things and hitting them). Interpersonal deviances may be treated less important unless until it is reported. It's treated by employees as part and parcel of the organization's day to day affair. It is considered unhealthy because many times it becomes a cause and costs to employees for quitting their jobs. Early identification needs

to notice and take remedial measure to control. Employees often get favor doing so in spreading false rumors about others to gain attention, promotion and coming in close contact with their superiors'. Supervisors who favors one over the others for undue things prompt deserving candidate to commit deviant act. Thereby the moral and productivity of the other employees automatically gets down. The manager and HR practioners must be aware of these impacts on organizational culture and climate and take stern steps to control such unhealthy behavior in organization for further growth and prospect.

On the other hand we did not find any significant difference of gender and age on organizational deviances. This can be interpreted that male and female employees were same in organizational deviances. Productive deviances (leaving early and taking long breaks) as well as Property deviances (stealing company's property, lying about hours worked and damaging equipment) were prevalent among male and female and different age group employees.

CONCLUSION

Workplace deviant behavior is a phenomenal with each and every organizations. WPD has significant direct economic consequences on the organization's productivity. Researchers in past have used different terms to describe workplace deviances as less productive and non-effective workplace behaviors, which has a direct relationship to harm organization brand and its members output. Therefore, managers and researchers should take a serious note to ruminate the effect of deviant behavior in organizations work life.

The conclusion of this study is that gender and age did not show significant impact on organizational work place deviances, whereas significant results obtained in interpersonal deviances. There were mixed results obtained by the earlier researchers. (Farhadi et al., 2012) This finding will further help organizations to consider

WPD as a serious issue and prepare in advance in order to have better understanding and timely relevant solutions of deviant behaviors. It will further help them to frame and formulate policy for any such misconduct for future. The upcoming research prospect in this area is also very wide and immense scope for further research.

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A STUDY ON FACTORS RESTRICTING PURCHASE OF GREEN PRODUCTS

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ABSTRACT

In spite of consumers' awareness and consciousness regarding environmental issues, there is a lack of purchase of green products by consumers. They are showing concern for environment; but they are not purchasing green products. There are various factors which negatively affect the purchase of green products by consumers. So this study was conducted with an objective to explore the factors restricting rural consumers to buy green FMCG products. For this purpose data were collected from 200 respondents. By applying factor analysis; ten factors were explored regarding restricting the rural consumers to buy green FMCG products. These factors include Lack of knowledge and promotion; Uncaring Behaviour; Inefficacy of green products; Negative attitude and speciousness regarding advertisements claims; Negligence towards green products; Ambiguity in claims and cost factor; lack of promotional incentives and quality; Self-inefficacy and lack of belief; Ineffective labeling and Complex exercise.

Keywords: *green products, environmental issues, FMCG products, Inefficacy of green products and speciousness regarding advertisements claims*

INTRODUCTION

Environmental deterioration has made it essential for everyone to adopt green products. Producing and selling green products has emerged as a great opportunity for the marketers which help them in gaining competitive advantage and consumer trust. Consumers all over the world are also getting aware regarding hazardous impact of non-green products on the environment and their health. Government is also supporting the initiatives of businesses regarding environmental protection. This overall support has led to an increasing scope of green products.

Consumers are getting more educated and conscious regarding environmental issues. They are getting aware regarding the effect of their consumption on the environment. According to a study conducted by GreenPrint on U.S. residents in 2021, 77% respondents were found to be concerned regarding the impact of their consumption on the environment while 78% respondents were found having an intention regarding purchase of green products.

Coronavirus pandemic has also made the consumers more aware regarding the hazardous impact of non-green products on their health and environment.

Consumers' awareness regarding environmental issues and their intention regarding purchase of green products has made the companies to consider the green aspect in their activities. Government is also supporting and compelling the companies to adopt green practices and produce green products. That is why companies all over the world are trying to produce green products and adopt green practices. Although consumers are getting conscious regarding environmental issues and the benefits of green products still many consumers are not ready to change their consumption habits. They are not ready to purchase green products. There are various reasons for non-purchase of green products such as higher prices, lack of trust and lack of availability etc. So this study is an attempt to explore such factors which negatively affect the purchase of green products by consumers.

LITERATURE REVIEW

Junior et al. (2019) analyzed the effect of greenwashing and attitude and belief on the consumption of green/eco-friendly products. For this purpose data were collected from 880 respondents. By applying SEM (structural equation modeling) it was found that greenwashing was significantly and positively related with confusion regarding green consumption and perceived risk while significantly and negatively related with satisfaction and loyalty and perceived benefits regarding consumption of eco-friendly products. However greenwashing was not found positively related with controlled behaviour and subjective and control forces regarding consumption of eco-friendly products. Attitude

and belief was found significantly and positively related with perceived benefits, subjective and control forces, satisfaction and loyalty and controlled behaviour regarding consumption of eco-friendly products while it was found significantly and negatively related with confusion regarding green consumption and perceived risk.

Megavannan et al. (2019) analyzed the effect of problems faced while buying green products and environmental consciousness on the decision regarding purchase of green products. For this purpose data were collected from 135 respondents. By applying regression analysis it was found that environmental consciousness and problems namely lack of belief, poor and confusing labeling, lack of awareness and poor quality were having significant influence on the decision regarding purchase of green products.

Kautish and Sharma (2018) examined the relationship among instrumental values, terminal values, consciousness towards environment and behavioural intentions regarding green products. For this purpose data were collected from 396 respondents. By applying SEM (structural equation modeling) it was found that both instrumental values and terminal values were having significant and positive influence on both consciousness towards environment and behavioural intentions regarding green products. It was also found that the influence of instrumental values on consciousness towards environment and behavioural intentions regarding green products was greater than the influence of terminal values. Consciousness towards environment was also found to be positively related with behavioural intentions regarding

green products and was also mediating the relationship of both instrumental values and terminal values with the behavioural intentions regarding green products.

Nguyen et al. (2017) pointed out various barriers regarding green purchase behavior of consumers and also suggested various strategies to cope up with these barriers. This study found that higher price for green products, lack of credibility and lack of information regarding green products were the main barriers in green purchase behavior of consumers. This study found that in order to cope up with these barriers reduction in price by improving the production efficiency, making the green products widely available, proper labeling and providing proper communication were required.

Barbarossa and Pastore (2015) highlighted the barriers restraining consumers from buying eco-friendly goods. By interviewing 51 consumers who were environmentally conscious, it was found that higher price, lack of availability and lack of proper in-store and mass media communication were the main problems restraining consumers from buying eco-friendly goods. It was also found that lack of proper in-store and mass media communication helps in making negative perception of consumers regarding eco-friendly products. They consider eco-friendly products as highly expensive and a time wasting activity. Apart from this absence of proper in-store and mass media communication also contribute in making consumers unaware regarding positive effect of green products on environment. This makes consumers unwilling to pay a relative higher price for purchasing green products.

Johnstone and Tan (2015) explored the reasons for non-adoption of green products

by consumers who were environmentally conscious. Data were collected from 51 respondents. This study found that the reasons such as lower income level, higher price of green products, limited time were the reasons for non-adoption of green products by consumers. It was also found that consumers did not believe green products. They found labeling on green product confusing. They were also having lack of knowledge regarding environment which prevent them from buying green products. It was also found that consumers did not see any negative effect of their consumption on environment. They were having lack of willpower for changing their consumption from non-green to green products. Consumers were also found having strong attachment with some brands which prevents them from changing their brand and buying green products.

Chen and Chang (2013) analyzed the effect of greenwash (i.e. misleading consumers regarding environmental friendly practices of companies or regarding environmental benefits provided by any service or product) on the trust regarding green products. This study also analyzed the mediating role of consumers' confusion regarding green products and perceived risk regarding green products. For this purpose data were collected from 252 respondents. By applying SEM (structural equation modeling) it was found that greenwash, perceived risk regarding green products and consumers' confusion regarding green products were negatively related with the trust regarding green products. It was also found that greenwash was positively related with both perceived risk regarding green products and consumers' confusion regarding green products which

implies that both perceived risk regarding green products and consumers' confusion regarding green products were mediating the negative relationship of greenwash with the trust regarding green products. So this study suggested that greenwash, consumers' confusion and perceived risk regarding green products should be reduced by companies for enhancing the trust of consumers in green products.

Carrete et al. (2012) found the barriers regarding eco-friendly behavior of consumers. These barriers include lack of trust, confusion, a tradition of spending less and saving more, lack of environmental consciousness and deep rooted habits. This study also suggested that for overcoming these barriers decreased uncertainty and risk, increased personal benefits by decreasing the cost and changing consumers' cultural values are required.

FACTORS RESTRICTING RURAL CONSUMERS TO BUY GREEN FMCG PRODUCTS

For exploring the factors restricting rural consumers to buy green FMCG products factor analysis was applied.

Table 1: KMO, Bartlett's Test and Total Variance Explained.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.739
Bartlett's Test of Sphericity (Sig)	.000
Total Variance Explained	66.97

Table 1 presets the value of KMO (Kaiser-Meyer-Olkin), Bartlett's Test of Sphericity and the total variance explained. The table shows that the value of KMO is .739 which is considered satisfactory for applying the factor analysis. The value of Bartlett's Test of Sphericity is .000 which indicated that all the statements regarding factors restricting rural consumers to buy green FMCG products are significantly correlated. Apart from these two measures, the value of total variance explained was also found to be satisfactory (i.e. 66.97) for applying the factor analysis. So factor analysis was applied for exploring the factors restricting rural consumers to buy green FMCG products.

OBJECTIVES OF THE STUDY

The main objective of this study was to explore the factors restricting rural consumers to buy green FMCG products

RESEARCH METHODOLOGY

For achieving the objectives of the study mainly primary data have been used. However for reviewing the literature secondary data was also used in this study. Primary data was collected by distributing the hard copies of structured questionnaires. This questionnaire was having 34 statements regarding the factors restricting rural consumers to buy green FMCG products. The study was conducted on rural consumers of Haryana. Data were collected from 200 rural consumers of Bhiwani and Jind districts. Factor analysis was used for analyzing the data.

Although 34 statements were taken regarding factors restricting rural consumers to buy green FMCG products; but only 27 statements could be included in the final factors. Because for including any statement in factor, extraction value should be greater than .5; but extraction value for two statements namely availability of so many products claiming that they are environmentally safe, creates confusion regarding choosing the best green product and i think efforts by a single person are useless for protection of environment was found to be below 0.5.

While 4 statements have no factor loading to be included in a particular factor. These statements are It is ridiculous to buy any new product when you are already using a product and are satisfied with your product; Green FMCG products are more costly than non-green FMCG products; I don't believe that green FMCG products are of better quality than non-green FMCG products and I am not able to buy green FMCG products because of lack of availability of these products. So these statements have not been included in any factor. So final factors are made by taking into consideration only 27 statements.

Table 2: List of factors restricting rural consumers to buy green FMCG products.

Sr. No.	Factor and Statements	Factor loading
Lack of knowledge and promotion		
1.	There is a lack of promotional efforts regarding green FMCG products by its manufacturers.	.735
2.	I have lack of knowledge and awareness regarding green FMCG products.	.709
3.	I believe that the companies always exaggerate green features of their products.	.699
Uncaring Behaviour		
1.	We are having so many natural resources that, we need not to be worried about their usage.	.735
2.	I never consider the effect of my purchase and consumption on the environment.	.729
3.	It is not necessary to save the resources for the coming generations.	.648
4.	There is no adverse effect of environmental pollution on my health.	.645
Inefficacy of green products		
1.	Paying higher price for purchase of green FMCG products is not reasonable.	.750
2.	The use of green FMCG products does not fulfill my expectations.	.699
3.	I don't believe that use of green FMCG products will provide more benefits than the use of non-green FMCG products.	.532

Negative attitude and speciousness regarding advertisements claims		
1.	I think problem of environmental pollution has been exaggerated	.712
2.	I think a large portion of our society has not adopted green products.	.600
3.	There is no need to be concerned towards environment, as these are only hypes that are created by NGO's and media.	.597
4.	I have a doubt regarding environmental claims made in advertising about the products.	.543
Negligence towards green products		
1.	I don't care whether I have bought a product having ISO certification or not.	.733
2.	I think that purchase of green FMCG products will not provide value of my money.	.523
Ambiguity in claims and cost factor		
1.	Claims made by companies regarding green products are always confusing.	.847
2.	Value of money is not provided when green FMCG products are purchased.	.512
lack of promotional incentives and quality		
1.	There is lack of discount and sales promotion incentives on the purchase of green FMCG products.	.776
2.	The price of green FMCG product does not insure its quality.	.614
self-inefficacy and lack of belief		
1.	I can't afford to pay higher prices for the purchase of green FMCG products.	.637
2.	I don't think environmental pollution is the only problem; our nation is dealing with.	.507
3.	I think that green products are green only in advertising and labeling.	.506
Ineffective labeling		
1.	It is very complicated to read and understand the information provided on the labels of green products.	.773
2.	Information provided on labels of green FMCG products is not adequate.	.626
Complex exercise		
1.	It takes extra time to purchase green FMCG products.	.807
2.	I usually buy the product having lowest price regardless of the fact that it may be harmful for my health and environment.	.507

Table 2 presents list of factors restricting rural consumers to buy green FMCG products. This table presents name of 10 factors extracted by applying factor analysis, statements included in each of these factors and factor loading of each statement.

10 FACTORS EXTRACTED BY APPLYING FACTOR ANALYSIS ARE:

- Lack of knowledge and promotion
- Uncaring Behaviour
- Inefficacy of green products
- Negative attitude and speciousness regarding advertisements claims
- Negligence towards green products
- Ambiguity in claims and cost factor
- lack of promotional incentives and quality
- Self-inefficacy and lack of belief
- Ineffective labeling
- Complex exercise

Factor 1-Lack of knowledge and promotion

First factor includes the statements mainly related with lack of knowledge and lack of promotional efforts regarding green products, so this factor is given the name of 'Lack of knowledge and promotion'. This factor includes 3 statements namely there is a lack of promotional efforts regarding green FMCG products by its manufacturers, I have lack of knowledge and awareness regarding green FMCG products and I believe that the companies always exaggerate green features of their products. All of these statements have a factor loading greater than .50 indicating the importance of each statement.

Factor 2- Uncaring Behaviour

Second factor includes the statements mainly related with uncaring behaviour of consumers, so this factor is given the name of 'Uncaring Behaviour'. This factor includes 4 statements namely we are having so many natural resources that, we need not to be worried about their usage; I never consider the effect of my purchase and consumption on the environment; It is not necessary to save the resources for the coming

generations and There is no adverse effect of environmental pollution on my health. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

Factor 3-Inefficacy of green products

Third factor includes the statements mainly related with Inefficacy of green products, so this factor is given the name of 'Inefficacy of green products'. This factor includes 3 statements namely paying higher price for purchase of green FMCG products is not reasonable, the use of green FMCG products does not fulfill my expectations and I don't believe that use of green FMCG products will provide more benefits than the use of non-green FMCG products. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

Factor 4- Negative attitude and speciousness regarding advertisements claims

Fourth factor includes the statements mainly related with Negative attitude of consumers and speciousness of consumers regarding advertisements claims, so this factor is given the name of 'Negative attitude and speciousness regarding advertisements claims'. This factor includes 4 statements namely I think problem of environmental pollution has been exaggerated, I think a large portion of our society has not adopted green products, There is no need to be concerned towards environment, as these are only hypes that are created by NGO's and media and I have a doubt regarding environmental claims made in advertising about the products. All of these statements have a factor loading greater than .50 indicating the importance of each statement.

Factor 5-Negligence towards green products

Fifth factor includes the statements mainly related with negligence of consumers regarding green products, so this factor is given the name of 'Negligence towards green products'. This factor includes 2 statements namely I don't care whether I have bought a product having ISO certification or not and I think that purchase of green FMCG products will not provide value of my money. All of these statements have a factor loading greater than .50 indicating the importance of each statement.

Factor 6-Ambiguity in claims and cost factor

Sixth factor includes the statements mainly related with ambiguous claims made by companies and costly exercise of buying green products, so this factor is given the name of 'Ambiguity in claims and cost factor'. This factor includes 2 statements namely Claims made by companies regarding green products are always confusing and Value of money is not provided when green FMCG products are purchased. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

Factor 7-lack of promotional incentives and quality

Seventh factor includes the statements mainly related with lack of promotion incentives and lack of quality of green products, so this factor is given the name of 'lack of promotional incentives and quality'. This factor includes 2 statements namely there is lack of discount and sales promotion incentives on the purchase of green FMCG products and the price of green FMCG product does not insure its quality. Factor loading for all of these statements is

greater than .50 which indicates the importance of each statement in the factor.

Factor 8-Self-inefficacy and lack of belief

Eighth factor includes the statements mainly related with Self-inefficacy regarding buying green FMCG products and lack of belief, so this factor is given the name of 'Self-inefficacy and lack of belief'. This factor includes 3 statements namely I can't afford to pay higher prices for the purchase of green FMCG products, I don't think environmental pollution is the only problem; our nation is dealing with and I think that green products are green only in advertising and labeling. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

Factor 9-Ineffective labeling

Ninth factor includes the statements mainly related with ineffectiveness of labeling, so this factor is given the name of 'Ineffective labeling'. This factor includes 2 statements namely It is very complicated to read and understand the information provided on the labels of green products and Information provided on labels of green FMCG products is not adequate. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

Factor 10-Complex exercise

Tenth factor includes the statements mainly related with complexity of buying green FMCG products, so this factor is given the name of 'Complex exercise'. This factor includes 2 statements namely it takes extra time to purchase green FMCG products and I usually buy the product having lowest price regardless of the fact that it may be harmful for my health and

environment. Factor loading for all of these statements is greater than .50 which indicates the importance of each statement in the factor.

FINDINGS

By applying factor analysis; ten factors were explored regarding restricting the rural consumers to buy green FMCG products. These factors include Lack of knowledge and promotion; Uncaring Behaviour; Inefficacy of green products; Negative attitude and speciousness regarding advertisements claims; Negligence towards green products; Ambiguity in claims and cost factor; lack of promotional incentives and quality; Self-inefficacy and lack of belief; Ineffective labeling and Complex exercise.

CONCLUSION AND DISCUSSION

The scope of green marketing is increasing continuously. More and more consumers are getting aware and conscious regarding environment (Sondhi, 2014). But still there are various factors which are restricting the growth of green products. These products negatively affect the consumers to buy green products (Nguyen et al., 2017 and Barbarossa and Pastore, 2015). So this study explores various factors which restrict rural consumers from buying green FMCG products. 10 factors namely Lack of knowledge and promotion; Uncaring Behaviour; Inefficacy of green products; Negative attitude and speciousness regarding advertisements claims; Negligence towards green products; Ambiguity in claims and cost factor; lack of promotional incentives and quality; Self-inefficacy and lack of belief; Ineffective labeling and Complex exercise were explored in this study

which restrict the rural consumers from buying green FMCG products. The finding of this study is in consistence with the previous studies.

Factors extracted regarding restricting rural consumers from buying green FMCG products namely Negligence towards green products; Ambiguity in claims and cost factor; Ineffective labeling and Complex exercise are in consistence with the previous studies (Johnstone and Tan, 2015). The finding regarding the extraction of factors namely Uncaring Behaviour; Self-inefficacy and lack of belief is also in consistence with the findings of prior studies (Carrete et al., 2012). Factor extracted namely Negative attitude and speciousness regarding advertisements claims also corroborate previous study (Chen and Chang, 2013). The extraction of factors namely Lack of knowledge and promotion; Inefficacy of green products and lack of promotional incentives and quality also corroborate previous studies (Ogiemwonyi et al., 2019 and Megavannan et al., 2019).

Marketers should consider these factors while promoting these products in rural markets. They should also make efforts for removing these hurdles. They should provide products at lower cost make efforts for increasing awareness and knowledge among rural consumers and should promote their products effectively etc. Consumers should also try to adopt more favorable attitude for adopting green products.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The present study explores the factors restricting the purchase of green products for rural consumers only. Factors restricting the purchase of green products for urban consumers are not studied.

This study considers only green FMCG products; other type of products and green services are outside the scope of this study.

In future, another study to overcome these can be carried out. A study for factors restricting the

purchase of green products for urban consumers can be conducted. A study by considering green services or other types of products can also be conducted in future.

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ANNEXURE

List of Statements regarding factors restricting rural consumers to buy green FMCG products

Sr. No.	Statements
1.	It is very complicated to read and understand the information provided on the labels of green products.
2.	Information provided on labels of green FMCG products is not adequate.
3.	I have lack of knowledge and awareness regarding green FMCG products.
4.	I think that green products are green only in advertising and labeling.
5.	I believe that the companies always exaggerate green features of their products.
6.	I have a doubt regarding environmental claims made in advertising about the products.
7.	The use of green FMCG products does not fulfill my expectations.
8.	I think that purchase of green FMCG products will not provide value of my money.

9.	I don't believe that use of green FMCG products will provide more benefits than the use of non-green FMCG products.
10.	I think a large portion of our society has not adopted green products.
11.	Availability of so many products claiming that they are environmentally safe, creates confusion regarding choosing the best green product.
12.	There is no need to be concerned towards environment, as these are only hypes that are created by NGO's and media.
13.	Claims made by companies regarding green products are always confusing.
14.	There is a lack of promotional efforts regarding green FMCG products by its manufacturers.
15.	I don't believe that green FMCG products are of better quality than non-green FMCG products.
16.	I am not able to buy green FMCG products because of lack of availability of these products.
17.	Green FMCG products are more costly than non-green FMCG products.
18.	Paying higher price for purchase of green FMCG products is not reasonable.
19.	There is lack of discount and sales promotion incentives on the purchase of green FMCG products.
20.	The price of green FMCG product does not insure its quality.
21.	Value of money is not provided when green FMCG products are purchased.
22.	It is ridiculous to buy any new product when you are already using a product and are satisfied with your product.
23.	I think problem of environmental pollution has been exaggerated
24.	I think efforts by a single person are useless for protection of environment.
25.	I don't think environmental pollution is the only problem; our nation is dealing with.
26.	We are having so many natural resources that, we need not to be worried about their usage.
27.	It is not necessary to save the resources for the coming generations.
28.	There is no adverse effect of environmental pollution on my health.
29.	I never consider the effect of my purchase and consumption on the environment.
30.	I don't care whether I have bought a product having ISO certification or not.
31.	I usually buy the product having lowest price regardless of the fact that it may be harmful for my health and environment.
32.	It takes extra time to purchase green FMCG products.
33.	I can't afford to pay higher prices for the purchase of green FMCG products.
34.	A lesser variety is available of green FMCG products.

A STUDY ON THE OPERATIONS OF WOMEN SELF HELP GROUPS AND FRAMING OF MARKETING AND POSITIONING STRATEGIES FOR THEIR ETHNIC PRODUCTS & SERVICES - WITH SPECIAL REFERENCE TO SIVASAGAR DISTRICT, ASSAM

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ABSTRACT

Women Self Help Groups are impending in a big way where the spirit of their entrepreneurial capabilities can be transparently witnessed. This research attempted to lay down certain management expertise to the pool of occupations by the women self help groups by creating a space of opportunities to them so that there is a steady growth in the economy. Based on the concept of bi-directional study and purposive sampling design; fifty (50) Women SHGs engaged in preparation of ethnic food items and ten (10) organizations has been considered by the researcher. The study area has been confined to the Sivasagar District of Assam. The study emphasized on the nature of the SHGs operations and highlighted the characteristics of the ethnic food items that can be incorporated in a ready to eat ethnic lunch basket. Competitiveness of the ethnic food items of the SHGs in the competitive market has also been put forward by the researcher through an effective cost feasibility analysis. Suitable

marketing, positioning & branding strategies of the ethnic food items and the selection of an effective distribution channel for the SHGs has also been proposed by the researcher. From the study, it was inferred that the women members of the SHGs can enter into the competitive market with a boom and with effective promotional & positioning strategies, the ethnic food items of Assam do possess the capacity of giving stiff competition to the commercial food items and can create a niche in the market and thus, can also attain a national presence.

INTRODUCTION

An approach intended towards the economic development of a nation gets a positive vibe with the participation of the significant division of workforce, i.e., the women populace. The entrepreneurial spirit and its initiatives as laid by the women population act as a pointer towards the development of any nation. Thus, framing of entrepreneurial policies for the women by the concerned Government becomes

an essence for the societal growth. “The long-term objectives of development programmes for women should be to raise their economic and social status in order to bring them into the mainstream of national life and development. For this, due recognition must be accorded to the role and contribution of women in the various social, economic, political, and cultural fields.” Women Self Help Groups are thus coming in a big way where the spirit of their entrepreneurial capabilities can be transparently witnessed. In the words of Nimisha, M. & Arumugam, D. (2019), “SHGs have proven to be a great platform to exhibit their passion and enthusiasm to start their business ventures rather than seeking employment opportunities”. Previous literatures as put down by Vijaya, G. & Masthani, S. (2014), Suthamathi, D. (2018) and Das, S., Mitra, A. & Ali, H. (2015), studied Self Help Group as an instrument for the growth & expansion of women entrepreneurship.

“Self Help Groups (SHG) are village based initiatives, where members regularly save up in order to start lending once the group collected enough money. Often from a homogenous economic and social background, they have the common goal to pool their resources in order to fund common or individual projects, ensuring financial stability and repayment”.

The fundamental objective of self help group is to provide financial assistance to its members. The notion of any SHG is to provide financial security and accredit to its members by encouraging entrepreneurial spirit, providing trainings, conducting meetings and providing mutual help among the members of the group. These groups along with the support from various government and non government

entities, gets involved in numerous socio-economic activities and enterprises and puts effort to effectively manage their operational activities and sustenance in the society. Sharma, K. C. (2001), highlighted the exclusive role of SHG, i.e., women empowerment and has put forward the significant changes in the living standard of SHG members, in terms of increase in income levels, assets, savings, borrowing capacity and income generating activities.

With the mentioned impression under consideration, formation and functioning of various SHGs in North eastern part of India is also apparent. “The total number of SHGs in Assam was 292071 as on 31-03-2015” . These SHGs strengthen the source of revenue of low income holders, empowering their social status and livelihood. Sen, M. (2000), emphasized on Self-help groups and micro finance as an alternative to socio-economic option for the poorer section. A very strong instrument for economic development; the SHGs creates financial habits and unleash entrepreneurial ability. This sector is mostly dominated by women and many financial and Govt. organizations take up plans and initiative to empower them in the best possible way.

ORIGIN OF THE RESEARCH PROBLEM

In Assam, the women members from the SHGs are occupied with various activities like; preparation of ethnic food items, designing of ethnic handloom products, designing of handicrafts, dairy farming, etc. These groups get micro credit and other financial assistance from organizations like National Bank for Agriculture and Rural Development

(NABARD) and related financial institutions for earning a livelihood by putting their ideas, experience and labour, for producing a finished saleable product in order to lead a better economic status in the society. In addition, government is regularly working on schemes related to women accredit, which is a process that evolves from one's within. In the words of Konwar, M. (2015), "The term empowerment is consisting of power within, power to, power with and power over. Power within indicates to articulate one's self and aspirations. Power to refers to develop one's own skills and ability to make success their self and aspirations. Power with which refers to people's coherent collective aspirations to unify them and to connect with other persons or organisations. Power over indicates gaining capability to make changes and capacity over resources. Thus in feminist discourse empowerment is to be traced through the terms power over, power to, power with and power within." Thus, it is noticeable that the spirit of empowerment is in the air; but when it comes to reality, the women members of SHGs faces difficulties in establishing an eminent business in the market. Even though these women members of SHGs produce a saleable product, they don't get the desired market and thus they are deprived of their deserved financial benefit. They fall short off in establishing the competitiveness of their product in the market, highlighting the product characteristics, framing effective marketing strategies, positioning & branding their product in the right targeted market within the right time frame, product packaging, pricing strategies and selecting an effective distribution channel.

INTERDISCIPLINARY RELEVANCE

The word 'interdisciplinary' signifies, unifying two or more disciplines in order to provide a collective solution to the problem under study. Through this research, the researcher attempted to unify two disciplines, i.e., economics and management, and provide a collective solution on social well being and accredit the rural women involved in various natures of self help groups. If the women population, specifically rural, is being empowered, the standard of living of the society is likely to show an optimistic rise, which in turn is expected to reflect in the entire economy. It is because, like the rural male population, the women mass also holds the capability to demonstrate their skills, earn a living, and hold a respectable position in the society. After all in the modern times, male and female population is treated equally by the society and it's expected that the female populace possess equal skills, knowledge, zeal and aspirations to counter the male population. The only thing that is deficient and is creating a hindrance to these female masses is the lack of; proper training, proper management and proper exposure to the competitive market. Thus, this research attempted to lay down certain management expertise to the pool of occupations by the women self help groups and creating a space for opportunities to them so that the economy gets uplifted on a gradual basis.

SIGNIFICANCE OF THE STUDY

In line to the previous literatures, this research attempted to provide the women members of SHGs in establishing their product competitiveness, characteristics, right marketing

strategies while positioning their product, packaging and pricing, so that they get their desired benefit and recognition in the cutthroat market and attain an acceptable position in the national as well as international level.

OBJECTIVE OF THE STUDY

1. To emphasize on the nature of the SHGs operations and to highlight the characteristics of the ethnic food items that can be incorporated in a ready to eat ethnic lunch basket.
2. To identify competitiveness of the ethnic food items of the SHGs in the competitive market.
3. To design effective marketing, positioning & branding strategies of the ethnic food items of the SHGs and in selecting an effective distribution channel.

RESEARCH QUESTIONS

1. What are the essential packaging requirements and features for ethnic food items in the market?
2. What are the indicators for accrediting the women SHGs?

RESEARCH METHODOLOGY

Research Design & Sampling plan

For the study; among the nine (9) Development Blocks of Sivasagar district, Assam, Gaurisagar block has been selected through purposive/judgemental sampling. Purposive/Judgemental sampling has been selected because only women dominated SHGs were considered by the researcher. It has been observed that in Gaurisagar block of Sivasagar district, Assam, a total of 161 no.s of SHGs are functional. These SHGs are involved in various activities like; preparation of ethnic food items, designing

of ethnic handloom products, designing of handicrafts, farming, etc. For the study, the SHGs who are involved in preparation of ready to eat ethnic food items have been purposefully considered.

The researcher opted for a bi-directional study, where on one hand the SHGs were considered and on the other hand the organizations/institutions/firms who may be the prospective consumers were taken as the second set of respondents. A sample size of fifty (50) SHGs has been considered as the first set of respondents and the sample size for the second set of respondents, i.e., the organizations/institutions/firms, was ten (10) in numbers, with a minimum of twenty (20) employees. The selection of the second set of respondents were based on a judgement that only those organizations were selected who would likely be interested with the catering/lunch service comprising of ready to eat ethnic products prepared by the women members of the SHGs of Gaurisagar block of Sivasagar district, Assam.

The researcher conducted a feasibility study on the competitiveness and the demand of the ready to eat ethnic food items in Sivasagar district, Assam and the significance of packaging and visibility in the market, from the consumers' lens. Through the bi-directional study, the researcher tried to bridge the gap between demand and supply of ethnic food items in the market.

Sivasagar district, Assam has been considered because as per the researcher's venturing into the topic, studies (specifically bi-directional studies) relating to SHG, their operations, marketing & positioning of ethnic food items, is very limited till date.

The researcher conducted interview sessions with the Jeevika Sakhi under whose umbrella; the SHGs operate and also with the members of the SHGs, in order to identify the operational duties, rules and ideas as implemented and executed by them for their smooth functioning. Later, interview sessions were also conducted with the selected organizations in order to identify their need towards type of items, quantity, variety, etc. in the lunch platter either as per their regular order or on special occasions. For both the set of respondents, two different schedules has been designed and put forward for primary data collection. The time period of the study was from January 2020 to October 2021.

The schedule for the first set of respondents i.e. SHGs covered aspects like; period of their existence, details on their existing bank/ financial loan if any, preparation of ethnic food items and its variety that they are equipped with, existing channels of distribution, exposure to participate in local displays/ exhibitions, their existing market, attributes of each item (existing/proposed) from the lunch basket, their learning behavior, quantity and ability of production per day, time for preparation per day, adherence to hygiene/ taste & health benefits in preparing the ethnic items, cost feasibility, willingness to accept experimentation for product improvements and acceptance of innovation in the entire process. Additionally, the cost feasibility aspect was inclusive of costs like; procurement of raw materials, processing & preparation, labour, marketing, packaging and any other related costs. Through the interview sessions and the schedule, the researcher attempted to identify

their strengths, zeal towards their work, challenges and risks associated with their work and the capability to accept change and adapt in the competitive market.

An another schedule/proforma has been designed for the second set of respondents, i.e. the organizations, firms, etc. whose employees were interested with the catering/lunch service comprising of ready to eat ethnic food items prepared by the women members of the SHGs.

The responses collected through the scheduled interview sessions from the second set of respondents acted as a linkage in order to identify the demand for ethnic food in terms of; type, quality, variety, taste, authenticity, price, packaging, timing, etc. The study was qualitative in nature and thus descriptive interpretations have been put forward.

Thus, a feasibility study on the competitiveness and the demand of the ready to eat ethnic food items in Sivasagar district was covered through the current study and the significance of packaging and visibility of the indigenous products in the market, from the consumers' lens were highlighted. And through the bi-directional study, the researcher aimed to bridge the gap between demand and supply of ethnic food items in the market.

FINDINGS, INTERPRETATIONS & OBSERVATIONS

Nature of the SHGs operations and the characteristics of the ethnic food items that can be incorporated in a ready to eat ethnic lunch basket:

From the study, it has been observed that the SHGs were operational in preparation of ethnic food items within an overall time frame of eight (8) years. The women members of the SHGs mentioned that they have inherited the concept of ethnicity right from their birth and were very particular in maintaining its heritage in the best possible way. They were taught to cook right from their childhood by the senior members of the family and these cooking skills turned out to be hobby at times for them. Therefore, they were equipped with the skills needed for preparation of the ethnic items, in particular, and made

themselves prepared to turn their hobbies into income generating source, once they joined their respective SHGs.

The ethnic food of Assam comprises of a wide variety of vegetarian and non-vegetarian items and the women members of these SHGs were well equipped in preparation of the same as they either witnessed or involved themselves in cooking these items on a daily basis in their homes right from their childhood. The assortment of ethnic items, in which these SHGs were equipped in preparing a ready to eat lunch basket has been outlined as follows:

Exhibit 1: List of ethnic items to be included in a ready to eat lunch basket.

Sl. No.	Ethnic Assamese Names of Main Course items	Main Ingredient & its nature	Supplementary Ingredient (inclusive of salt)
1.	Boiled/Steamed Rice	Joha Rice (aromatic)/ Chokuwa Rice(semi waxy)/ Red Bao Roce (deep & floating)	
2.	Bamboo Cooked Rice	Bora Rice (Sticky or waxy)	Bamboo Tubes
3.	Plain Masoor Dali	Pink Lentils	Oil & Spices like turmeric
4.	Mati Mahor Dali	Split Black Gram/Urad Dal	Oil & Spices like turmeric
5.	Vegetable Boil	Seasonal Vegetables	Ethnic spices/Fiddlehead ferns/cherry tomatoes
6.	Mix vegetable with Aaroi Saul pitha guri	Seasonal Vegetables/ Sun dried rice powder	Ethnic spices
7.	Pork with Bamboo shoot	Pork/Bamboo Shoot	Oil & Spices like garlic, ginger, turmeric/ onions/tomatoes
8.	Pork with Lai xaak	Pork/ Mustard green(a green leafy vegetable)	Oil & Spices like garlic, ginger, turmeric, onions
9.	Smoked pork	Pork	Ethnic spices
10.	Fish with Paleng xaak	Local Fish/Spinach	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
11.	Fish with Horiyoh xaak	Local Fish/Mustard Plant	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato

12.	Fish with Ou tenga	Local Fish/ Elephant apple	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
13.	Fish with Kosu	Local Fish/Taro or colacasia	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
14.	Chicken with Koldil	Chicken/Banana Flower	Oil & Spices like garlic, ginger, turmeric/onions
15.	Chicken with Kosu	Chicken/Taro or colacasia	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
16.	Chicken Curry	Chicken/Potato	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
17.	Duck with Kumura	Duck/Ash gourd	Oil & Spices like garlic, ginger, turmeric/onions/cherry tomato
18.	Kosu guti pitika	Mashed root colacasia	Chillies
19.	Dry Fish pitika with khar	Mashed dry fish/Khar (an alkaline extract from the ashes of burned dried bana peels)	Ethnic spices/Chillies
20.	Kharoli	Fermented mashed mustard	Ethnic spices/Chillies
21.	Paani tenga	Fermented mustard chutney	Ethnic spices/Chillies

Source: Self generated from primary data collection from the SHGs

Above is the list of various ethnic vegetarian and non-vegetarian main course items of Assam which can be launched as a ready to eat lunch platter in the competitive market and from the above list; selective items can be included as per the customers' order & preferences in the lunch basket and it may change from person to person. With a selective and customized order, the pricing strategy of the lunch platter will definitely get affected and the same has been outlined in the cost feasibility analysis in the second objective of the study.

The qualitative responses from the women SHGs apparently pointed out that the demand for ethnic main course food items are occasional or seasonal in nature. During peak festive seasons, cultural forums, literature fests, etc.; the demand for these items can be witnessed in a wider form, than in normal days. Whenever the demand arises in these occasions, the SHGs prepare themselves to meet the demand, but only with some specific and handful channels of distribution. Thus it can be interpreted that,

the supply chain or the channels of distribution for these ethnic items are very limited, resulting in restricted availability in the commercial market. At times, the SHGs get opportunity to display the food items in some local displays/exhibitions and these points of sales assist them as a source of their minimal incomes. Additionally as a new challenge, the current pandemic scenario is acting as an upcoming barrier in their incomes as local displays/exhibitions can hardly be witnessed due to the

restrictions as laid by the Govt. from time to time.

The zeal to learn and the positive attitude to achieve something have been the main motivators of the women members of the selected SHGs. Even though these women were from the rural background, the researcher found it interesting to highlight that the mind set of these women populace has been very forward oriented. The immediate family members of these women are sufficiently encouraging and supportive towards their work which added more enthusiasm among them to work collaboratively and with cooperative effort.

The Women SHGs of the study area optimistically showed willingness to accept experimentation for product improvements and acceptance of innovation in the entire process. They were particular in detailing out their overall production for a day and it turned out to be around sixty (60) lunch plates on an average by an SHG comprising of at least a minimum of three (3) active women members. Adherence to hygiene/ taste & health benefits in preparing the ethnic items has been a very crucial issue among the SHGs and they clearly mentioned their extra effort to adhere the same. While preparation of the food items; their kitchen were cleaned on a daily basis, the utensils were washed, hair fully tied, hands fully sanitized and the attitude was such that they were preparing the food for their own consumption. These people are simple in nature, and therefore they entirely dedicate themselves in giving a final output, without the understanding of the complexities of the outer world. These members mentioned

that, at times, they have even served food to the customers with kahor bason (bell metal utensils such as dishes/plates/bowls, etc.) from their own homes, which is actually a heritage/tradition of Assam. In Assam, serving food in Bell metal utensils can be termed as a culture, tradition and heritage to show respect to the person whom the food is being served. Even if the bell metal utensils can be reused after proper washing, but from the commercial point of view; serving food in bell metal utensils is an expensive affair as these utensils comes under high pricing segment in the market. Therefore, it can be clearly interpreted that the women members of the SHGs put their heart and soul in their work but, they are way behind commercialization of their products.

Finally it can be inferred that, if these women members of the SHGs are being properly guided, they can enter into the competitive market with a boom and through this study the researcher attempted to assist the SHGs in promoting the ethnic food items of Assam and in opening the gateway for the Assamese ethnic items to the national market.

Competitiveness of the ethnic food items of the SHGs in the competitive market

In the course of the study and while collecting the primary data, the researcher witnessed the limited exposure of the ethnic food items in the competitive market. In spite of giving the cost and expenditure details in preparing a ready to eat lunch basket, the women members of the SHGs aspired a cost feasibility analysis from the researcher which they presumed to act as a guiding map for them to launch their product in the competitive market. Therefore, the researcher has primarily collected the cost

details in procuring the raw materials from the real market and has put forward a cost feasibility analysis in order to identify the competitiveness of the ethnic food items of the SHGs in the competitive market.

With the mentioned intention, the cost feasibility analysis has been undertaken covering various aspects of costs like; procurement of raw materials, processing & preparation, labour, marketing, packaging and any other related costs. The detailed cost feasibility analysis has been undertaken under the following heads:

1. Cost of procurement of raw materials from the Local market
2. Processing & preparation cost per day for preparation of sixty (60) lunch baskets/plates
3. Labor cost
4. Packaging cost
5. Miscellaneous expenses per day for preparation of sixty (60) lunch baskets/plates

Therefore, the total cost per lunch basket/plate for an SHG will be an accumulation of all the five (5) types of cost as mentioned above.

Exhibit 2: Cost of procuring raw materials for ready to eat ethnic lunch baskets/plates from Sivasagar market.

Sl. No.	Name of the raw product	Cost of the raw product in the local market (inclusive of all the vegetarian and non-vegetarian items) (in Rs)	Cost of the raw product in the local market (Only Veg) (in Rs)	Cost of the raw product in the local market with Pork (Non-Veg) (in Rs)	Cost of the raw product in the local market with Local Fish (Non-Veg) (in Rs)	Cost of the raw product in the local market with Chicken (Non-Veg) (in Rs)	Cost of the raw product in the local market with Duck (Non-Veg) (in Rs)
1.	Rice	40 per kg	40 per kg	40 per kg	40 per kg	40 per kg	40 per kg
2.	Dal	35 per 250 gm	35 per 250 gm	35 per 250 gm	35 per 250 gm	35 per 250 gm	35 per 250 gm
3.	Mix vegetables with green leafy vegetables	150 per 750 gm	150 per 750 gm	150 per 750 gm	150 per 750 gm	150 per 750 gm	150 per 750 gm
4.	Salad	180 per 750 gm	180 per 750 gm	180 per 750 gm	180 per 750 gm	180 per 750 gm	180 per 750 gm
5.	Chutney	50 per 100 gm	50 per 100 gm	50 per 100 gm	50 per 100 gm	50 per 100 gm	50 per 100 gm
6.	Mustard Oil	240 per ltr	240 per ltr	240 per ltr	240 per ltr	240 per ltr	240 per ltr
7.	Bamboo Shoot	50 per 250 gm	50 per 250 gm	50 per 250 gm	50 per 250 gm	50 per 250 gm	50 per 250 gm
8.	Pork	350 per kg	N/A	350 per kg	N/A	N/A	N/A

9.	Local Fish	400 per kg		N/A	400 per kg		
10.	Chicken	180 per 750 gm			N/A	180 per 750 gm	
11.	Duck	650 per kg				N/A	650 per kg
	Total procurement of raw material cost for serving Twelve (12) ready to eat ethnic lunch baskets/ plates	2325	745	1095	1145	925	1395
	Total procurement of raw material cost for serving One (1) ready to eat ethnic lunch baskets/ plates						
	-----(I)	194 (rounded)	62 (rounded)	91 (rounded)	95 (rounded)	77 (rounded)	116 (rounded)

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price of the products may vary from time to time

The above exhibit depicts the average cost of procurement of raw materials from the local market and the selected quantity for each item will be sufficient enough for preparation of twelve (12) lunch baskets for the customers.

From the above exhibit, it can be interpreted that the SHGs total cost for serving twelve (12) vegetarian lunch baskets will be Rs. 745/- and likewise, the cost per serving comes out to be Rs. 62/- in case of vegetarian meal. In case of non-vegetarian lunch basket, as per the preference of the customers, either pork can be added or fish or chicken or duck, keeping all the veggies intact with the lunch basket. With the inclusion of each non-vegetarian item, there is a change in the total cost. If pork is added, the cost per serving has been identified as Rs. 91/-. Likewise, if local fish is added, the cost will be Rs. 95/- and with the addition of chicken, the cost per serving will be Rs. 77 and duck being the most expensive in the market, with the addition of the same, the cost for the SHGs per lunch plate will be Rs. 116/-.

Exhibit 3: Processing & preparation cost per day for preparation of sixty (60) lunch baskets/ plates.

Type of Cost	Average Cost (in Rs) for preparation of sixty (60) lunch baskets/plates per day by 3 active members	Cost (in Rs) for preparation of twelve (12) lunch baskets/plates	Cost (in Rs) for preparation of one (1) lunch basket/plate
Processing & preparation cost per day (cost inclusive of cylinder/line gas/contingency)	200	40 (rounded)	3 (rounded) ---- (II)

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price of the products may vary from time to time

Exhibit 4: Labor cost per day.

Type of Cost	Average Cost (in Rs) for preparation of total sixty (60) lunch baskets/plates per day by 3 active members (@ Rs. 400 for 3 active women members)	Cost (in Rs) for preparation of one (1) lunch basket/plate
Labor cost per day	1200	20-----(III)

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price of labor may vary from time to time

Exhibit 5: Packaging Cost for preparation of one (1) lunch basket/plate.

Type os Cost	Cost (in Rs) per piece
Packaging Cost for Plastic Disposable Thali 2mm with 5 compartments	6----- (IV)

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price of the products may vary from time to time

Exhibit 6: Miscellaneous expenses.

Type of Cost	Average Cost (in Rs) for preparation of sixty (60) lunch baskets/plates per day	Cost (in Rs) for preparation of twelve (12) lunch baskets/plates	Cost (in Rs) for preparation of one (1) lunch baskets/plate
Miscellaneous expenses per day (cost inclusive of logistics/ transportation, etc.)	200	40 (rounded)	3 (rounded)----- (V)

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price of the products may vary from time to time

From the above exhibits, the total cost in preparation of one (1) ready to eat lunch basket/plate can be determined and likewise, the monthly profit of an SHG through the selling of ready to eat lunch basket/plate can be determined which has been highlighted below:

Exhibit 7: Overall Cost and Profit Margin of an SHG through the selling of ready to eat lunch basket/plate in the commercial market.

Type of Costs	Amount (in Rs)				
	Vegetarian Basket	Non-Vegetarian Basket			
		Pork	Fish	Chicken	Duck
Procurement of raw material cost for serving One (1) ready to eat ethnic lunch baskets/ plates---- (I)	62	91	95	77	116
Processing & preparation cost of one (1) lunch basket/plate---- (II)	3	3	3	3	3
Labor cost for preparation of one (1) lunch basket/plate---- (III)	20	20	20	20	20
Packaging cost for preparation of one (1) lunch basket/plate----- (IV)	6	6	6	6	6
Miscellaneous expenses for preparation of one (1) lunch baskets/plate---- (V)	3	3	3	3	3
SHGs Total Cost in preparation for one (1) ready to eat lunch basket/plate ---- (I + II + III + IV + V) = A	94	123	127	109	148
SHGs tentative Selling price for one (1) ready to eat lunch basket/plate ----- B	110	140	145	125	170
SHGs Profit for one (1) ready to eat lunch basket/plate ---- (B - A) = C	16	17	18	16	22
SHGs Daily Profit for sixty (60) ready to eat lunch basket/plate ---- C * 60 plates = D	960	1020	1080	960	1320
SHGs Monthly Profit for sixty (60) ready to eat lunch basket/plate per day---- D * 30 days = E	28,800	30,600	32400	28800	39600

Source: Self generated through primary data collection from the local market during the year 2020 till 2021. However, the market price/profit ` may vary from time to time

From the above exhibit, it can be clearly interpreted that, the total cost for the SHGs in the preparation of one (1) ready to eat vegetarian lunch basket/plate is Rs. 94/- and in case of non-vegetarian meal, it ranges from Rs. 109/- to Rs 148/- depending on the type of the meat or fish. The researcher has suggested an average selling price of Rs. 110 /- for vegetarian meal and Rs 125/- to 170/- per plate for non-vegetarian meal after keeping the rates of vegetarian and non-vegetarian meals from local restaurants/fast foods/food joints, etc. from the study area. With the advised selling price, it can be

observed that the SHGs can earn a profit margin of Rs. 16/- to Rs. 22/- per plate depending on the preference of the customers. If the monthly profit is being calculated, it is crystal clear that the profit margin that the SHGs will earn is on a positive side and the earning per member of an SHG, comprising of three (3) active members will be a handsome amount, i.e. each member shall earn a monthly income ranging from Rs. 9600/- to Rs. 13,200/-.

Therefore from the cost feasibility analysis, it can be inferred that the ethnic food items of the SHGs are very competitive in the market and these food items can also give a cut-throat competition to the other branded or commercial food items from the local restaurants/fast foods/food joints, etc. of the study area. If the SHGs get a proper and definite direction in commercializing their ethnic items, they can also earn good revenues from their efforts and investments. On a final note, it can be deduced that along with competitiveness; commercialization of a product also poses an equal importance. Thus, the researcher attempted to design effective marketing, positioning & branding strategies of the ethnic food items in order to popularize these ethnic products in the market and it has been detailed in the third objective of the study.

Designing effective marketing, positioning & branding strategies of the ethnic food items of the SHGs and in selecting an effective distribution channel:

In order to design effective marketing, positioning & branding strategies of the ethnic food items of the SHGs and in selecting an effective distribution channel; the researcher has interviewed the employees of few organizations,

firms, etc. who were likely interested with the catering/lunch service comprising of ready to eat ethnic food items. These organizations or the firms included for the study were; Office of Deputy Registrar of Cooperative Societies, District Information Centre, Office of the Deputy Commissioner, Private & PSU Banks, Financial Institutions and few Private firms.

In order to generate demand for ethnic food in the study area, the researcher has collected responses from the employees of these organizations covering aspects such as; type, quality, variety, taste, authenticity, price, packaging and timing. From the qualitative responses, it was apparent that there exists demand, for ethnic cuisines among the customers of the study area. The respondents showed interest towards the wide assortment of items in the ready to eat lunch baskets and they were inclined towards the unique and authentic taste of Assamese cuisine. The respondents mentioned that they usually compromise on the quality and taste of the food, when it is ordered from a local restaurant or a food joint. As these restaurants are too commercial with ample walk-in orders or office/home delivery orders, they compromise on the quality as they are focused on getting more and more orders and thus delivering them in no time. When taste is considered, the respondents clearly mentioned that they experience similar taste every time they order from these restaurants. However, the respondents were satisfied with the hygienic and safe packaging of the food items, whenever they order it from the restaurants.

The respondents mentioned that the concept of consuming ethnic food items in a ready to eat lunch basket is quite a new and appealing

concept and they opted for catering services from these SHGs at times as an alternative to the commercial lunch items available in the market. They also showed interest in ordering the lunch baskets from the SHGs on certain occasions like; meetings, trainings, workshops, etc. as organized by their respective organizations from time to time. However, they were very particular about the packaging, timing and price of the ethnic items by the SHGs. As the lunch baskets were meant for consumption, the respondents wanted a clean & safe packaging, preferably disposable packaging due to the pandemic scenario. Every organization had a specific timing for lunch, due to which delivering the lunch baskets on time were an additional need for these prospective customers. And lastly, they expected a competitive pricing for the lunch baskets compared to the platters ordered from the restaurants or food joints.

It has been apparent that demand from ethnic food items existed among this set of customers and selection of this channel of distribution for their lunch baskets will definitely prove to be an effective decision by the SHGs.

In line to the responses from the second set of respondents, the researcher has put forward certain marketing, positioning & branding strategies of the ethnic food items of the SHGs which may bridge the gap between the demand and supply of ethnic food items in the commercial market of the study area.

In this internet era where everyone possesses a Smartphone and a net connectivity, the women members of the SHG can opt for promoting their ready to eat lunch baskets in the online platform with almost negligible financial investment. They can take the pictures of the

lunch baskets or come up with live videos in the social networking platform like; Facebook and attract the viewers' attention and tempt them for purchasing these food items. For using online platform, they can even name their product which may be used as their brand name in the future, when they start getting orders in acceptable numbers. In addition to online marketing, a mobile van or a point of sale in a centre place of the market will also give the ethnic products of SHGs; Visibility in the eyes of the customers. The women members of the SHGs should keep them well informed about any upcoming trainings, workshops, displays, exhibitions, etc., so that they don't miss out any chance for promoting the authentic and ethnic cuisine of Assam in the commercial platform.

ADDRESSING THE RESEARCH QUESTIONS

From the study, it is clear that packaging of a consumable product does have an impact in the final purchasing decision of a customer, especially when the product is ordered either for home/office delivery. The essential packaging requirements and features for ethnic food items can be outlined as; spill proof, fully covered, hygienic, easy to handle and convenient for carrying. The SHGs should therefore, focus on their packaging and should opt for Plastic Disposable Thali with size of 2mm and at least a minimum of 5 compartments where the items such as; rice, dal, one mix veg, one non-veg item and chutney/salad can fit into. The compartments of the Thali should be such that it fills the hunger of the customers' as it would be for lunch. This Plastic Disposable Thali's can be procured from the wholesaler of the study area

or from online mode, i.e. indiamart.com, where normally such products are sold at a wholesale rate. The packaging should be within the price of Rs. 6/- per plate, as the mentioned price has been put forward by the researcher after a compatible cost feasibility analysis.

Additionally, financial organizations like NABARD, Apex Bank, Bandhan Bank, etc. provides enough scope to the SHGs and similar organizations to boost their business. Thus with the financial assistance from these institutions, the SHGs can work for better positioning of their products and create a niche in the commercial market.

The study clearly signifies that the indicators for accrediting the women SHGs will be the quality of the ethnic food, taste, feasible price per plate (vegetarian/non-vegetarian), variety of items, delivery on time, the limit of customization & inclusion of innovation as per the need of the customers and finally, the teamwork of the women members of SHGs.

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CONCLUSION

This research signified the potentiality of the ethnic food items of Assam in the competitive market as compared to the already existing commercial establishments in the study area. Ethnic food and its significance stand strong in the cutthroat competition. When it comes to preparation and delivery of ethnic products, SHGs do continuously carry the legacy of Assamese culture; it also poses a promising and prospective future in the said field. The women members of the SHGs inspire the society to work with fervor, adapt to changes, enter the commercial market with dedication; keeping the ethnicity, culture, customs & traditions intact and safe in their promising hands. The operations of the women members through the SHGs are perfect paradigm of teamwork, leadership, motivation and aspirations to dream big and to work on bringing those dreams, into reality.

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A STUDY ON YOUTH'S PREFERENCE FOR KHADI APPARELS - THE SIGNATURE AND SUSTAINABLE FABRIC OF INDIA

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ABSTRACT

Khadi- the original fabric of India is alternatively termed as “Khaddar”, a hand-spun and hand woven material, greatly helps to sustain the rural economy by providing employment to rural artisans and women. People who wear Khadi are self-motivated and bore a positive attitude to buy the fabric as indicated through the application of Theory of Planned Behaviour in the study. The contribution of Designers is immense to attract potential buyers for wearing Khadi. Despite being the culture and heritage, Khadi is not worn by the masses. Therefore in this paper an attempt has been made to find out the reasons for the non-acceptance of Khadi and promote it as a fashion fabric through the survey. Young Celebrity endorsement, Online Sales, promoting exports, Production research for quality improvement and round-the-year discount seasons have been suggested to make Khadi a long-lived sustainable fabric.

Keywords: *Apparels, Consumer Behaviour, Khadi, Theory of Planned Behaviour, Sustainable.*

INTRODUCTION

A hand spun Indian heritage fabric Khadi is an integral part of apparel segment, which was robbed off by the Britishers. The revival genesis of Khadi in historic India was credited in the name of The Father of the Nation-Mahatma Gandhi who proposed- Swadeshi Movement (synonymous to Khadi). Khadi was used as a weapon to promote Indian merchandise while boycotting British merchandise in the market (Blackwell., 2011) to make India independent. The transformational fabric (Khadi Book, 2018) Khadi was looked at as an icon of self-sufficiency, sustainability and employment. Even today, in Pure Gandhian Institutes (such as Vidyapith) Khadi has been treated as uniform (Gujarat Vidyapith, n.d.). According to The Khadi and Village Industries Commission (KVIC), the share of Khadi fabric in the total textile mill production has doubled from 4.23% to 8.49% in 2018-19, which is phenomenal in itself (Mistry, 2020) and it is owed to Prime Minister Narendra Modi, who gave a clarion call to adopt Khadi (The Economic Times, 2019). As per the data of 2018-19 the mill fabric production is 2,012

million square meters versus 170.80 million square meters of Khadi fabric production (The Economic Times, 2019), indicating that still Khadi is not worn by many people.

LITERATURE REVIEW AND RESEARCH GAP

Khadi, the word is derived from the Hindi word 'Khad' or 'Pit' (Gupta, Rastogi, & Mathur, 2018). In pre-independence era, Khadi's popularity was restricted in Bangladesh and Pakistan only (Pal, 2017; Ramagundam, 2008). Khadi promoted rural industrialization, self-employment, self-sufficiency, sustainability and tool to boycott foreign goods. Khadi is viewed as a transformational fabric (The Economic Times, 2019; Khadi Book, 2018) a favoured fabric due to its features such as similar to cotton material or supple like its silk, eco-friendliness, adaptable to easily print and embroidery work (Khadi and Crafts, 2009; Rai, 2016; Vivek, 2016; Gupta, 2016), cool fabric in summer and hot in winter (Ambre and Lad, 2017; Rana, 2018; and Choudhury and Ramachandran, 2004), bucolic and zero contraption appearance (Bajpai and Gahlot, Khadi, 2011; Fibre2Fashion, n.d ; Mishra, 2014) and it is skin-friendly due to its breathing behaviour (Chatterjee, Das, Kavita, and Nayak, 2011; Goel and Jain, 2015).

As a move to promote Khadi, India now celebrates Khadi Day on September 19th (Sinha, 2018). The most sensitive segment to the apparel industry is youth. The definition of youth from the economic perspective consists of individuals in the age group of 18-24 years (United Nations), 18-35 years (UNESCO,

2017), 15-29 years (National youth Policy, 2014). The Fashion industry extends the age-limit of youth from as high as more than 15 years (Rocha, Hammond, and Hawkins., 2005) and as high as 25-45 years (Kaur & Singh, 2007). Operationally, researchers have defined "Youth is a person falling in the age group of 18-45 years who make a purchase decision to buy clothes which fits the body size and pays due consideration to style while buying the apparel for themselves and at times for family members and friends".

The factors influencing the buying behaviour of individuals could be easily captured through the renowned Theory of Planned Behaviour (TPB) which was proposed by Azen (1991). The gist of the TPB is that social choices are the aftereffect of a contemplated procedure where the person is favourable in Attitudes (AT), Subjective Norms (SN) and Perceived Behaviour Control (PBC), it leads to the underlying foundations of purchase intention (willingness to buy), which ultimately promotes the buying behaviour (willingness to purchase) (Smith, et al., 2007).

Available study contextually describes the genesis, advantages and disadvantages of Khadi. The empirical study to identify reasons supporting wearing of Khadi, cited in the literature were conducted in Delhi, Jaipur, Coimbatore, Mumbai and Bangalore. The studies based on TPB were also conducted for various products or services of different region. None of the empirical studies which exhaustively explained the reasons for people wearing Khadi and reasons for people not wearing Khadi were studied in Gujarat. Present study attempts to address this gap.

RESEARCH OBJECTIVES

- To appreciate the role of Khadi from a freedom fabric to fashion fabric.
- To empirically test the reasons and modus operandi for the purchase of Khadi apparel.

- To identify the influence of attitude, subjective norms and perceived behavioural control on purchase intention of Khadi apparel.
- To empirically explore the reasons for consumers not buying Khadi apparel.

RESEARCH METHODOLOGY

Table 1: Research Methodology.

Parameters	Section-I	Section-II
Research Design	Descriptive, Single Cross Sectional	
Sampling Method	Non Probability Convenience	
Sampling Unit	Khadi India Outlets	Shopping Malls
Sampling Element	Individual	
Research Approach	Survey	
Sample Size Determination	$n = Z^2 * p * q / e^2$, i.e. $(1.96)^2 * (0.5) (0.5) / (0.06)^2$	
Sample Size	250	300
Sampling Duration	August-September, 2020	September-October, 2020
Sampling Area	Ahmedabad	Ahmedabad, Gandhinagar, Surendranagar, Vadodara
Data Collection	Primary	
Tools for Data Collection	Self-Administered Questionnaire	
Contact Method	Personal Visit	
Sources of Secondary Data Collection	Internet, Website, Books etc	
Data Management	Microsoft Excel, SPSS-20 and Smart PLS Programming	Microsoft Excel, SPSS-20
Data Analysis	Frequency Table and Tabulation	
Descriptive Analysis	Mean(X), Median (M), Mode (Z), Standard Deviation (SD),	X, M, Z, SD, Minimum (Mini.), Maximum (Maxi.), Range (R) and Rank Analysis
Inferential Statistics	Confirmatory Factor Analysis (CFA)	N.A

(Source: Author's Own Compilation)

DATA ANALYSIS AND FINDINGS

Section-I: For Khadi Wearers.

Table 2: Demographic Analysis

Variables	Observed Statistics
Location	Ahmedabad (100%)
Gender	Male (52%), Female (48%)
Age (in Years)	18-25 (1%), 25-35 (33%), 35-45 (20%) and 45 and Above (46%)
Educational Qualification	Less than Graduate (26%), Graduate (46%) and Post Graduate (28%)
Occupation and Sector	Service (Public Sector) (47%), Business/Profession (15%), Social Activist (13%), Home maker (9%), Retired (15%) and Students (1%)

(Source: SPSS Output)

HYPOTHESIS TESTING

Attitude construct was measured using the bio-polar 7-point rating scale. The subjective norms perceived behavioural control and purchase intentions were measured on the 7-point likert scale of Extremely Strongly Disagree (1) to Extremely Strongly Agree (7). The results of researchers in studying the buying behaviour of customers towards green products explained that if the attitude, subjective norms and perceived behavioural control towards the product are positive then it supports purchase intention (Arora and Kishor, 2019; Zheng and Chi, 2014; Shukla, 2019; Kalafatis, Pollard, East, and Tsogas, 1999). Based on this the following hypothesis can be framed. H01: Attitude towards buying Khadi Products has a positive effect on Youth's Purchase Intention. H02: Subjective Norms towards buying Khadi Products has a positive effect on Youth's Purchase Intention. H03: Perceived Behavioural Control towards buying Khadi Products has a positive effect on Youth's Purchase Intention.

Data analysis was conducted by checking the internal consistency reliability of the scale with the help of Cronbach Alpha (Internal Reliability), through the Smart PLS Software. The alpha value for Attitude (0.84), Subjective Norms (0.73), Perceived Behavioral Control (0.86) and Purchase Intentions (0.71), met the standard value greater than 0.6 (Ferketich, 1990). The details of AVE, CR are displayed in Table 3.

Table 3: Observed Statistics.

Latent Constructs	Variables	Number of Items		
Attitude (AT)			0.55	0.88
Un-Educated---Scholarly	0.75	AT1		
Dull---Hipster	0.79	AT2		
Messy---Crisp	0.80	AT3		
Uncomfortable---Comfortable	0.77	AT4		
Harsh---Smooth	0.60	AT5		
Rural-Urban	0.74	AT6		
Subjective Norms (SN)				
My family thinks that I should often buy Khadi apparel for wearing.	0.55	SN1	0.52	0.81
My Friends thinks that I should often buy Khadi apparel for wearing.	0.89	SN2		
My Club-Mates (Reference Groups) thinks that I should often buy Khadi Apparels for wearing.	0.62	SN3		
My Colleagues thinks that I should often buy Khadi Apparels and Wear.	0.79	SN4		
Perceived Behaviour Control (PBC)				
I am confident that wearing apparel made out of Khadi fabric would suit my personality.	0.71	PBC1	0.53	0.89
I am confident that, I can buy and wear apparel made out of Khadi Fabric.	0.72	PBC2		
I am confident that wearing apparel made out of Khadi fabric would suit my skin and feel comfortable.	0.76	PBC3		
I am confident that Khadi provides a variety of unique style choices and promotes its unique fashionable element.	0.72	PBC4		
I am confident that Khadi provides a variety of choices in fabric and designs.	0.74	PBC5		
I do not face high barriers in purchasing Khadi Apparel.	0.72	PBC6		
If I wished, I can easily buy Khadi Apparel.	0.73	PBC7		
Purchase Intentions (PI)				
I will try to purchase at least one garment made out of Khadi in the near future.		PI1	0.63	0.84
I Plan to purchase Khadi apparel in the near future.		PI2		
If I see Khadi apparel while shopping, I intend to purchase or consider purchasing it.		PI3		

(Source: Smart PLS Output)

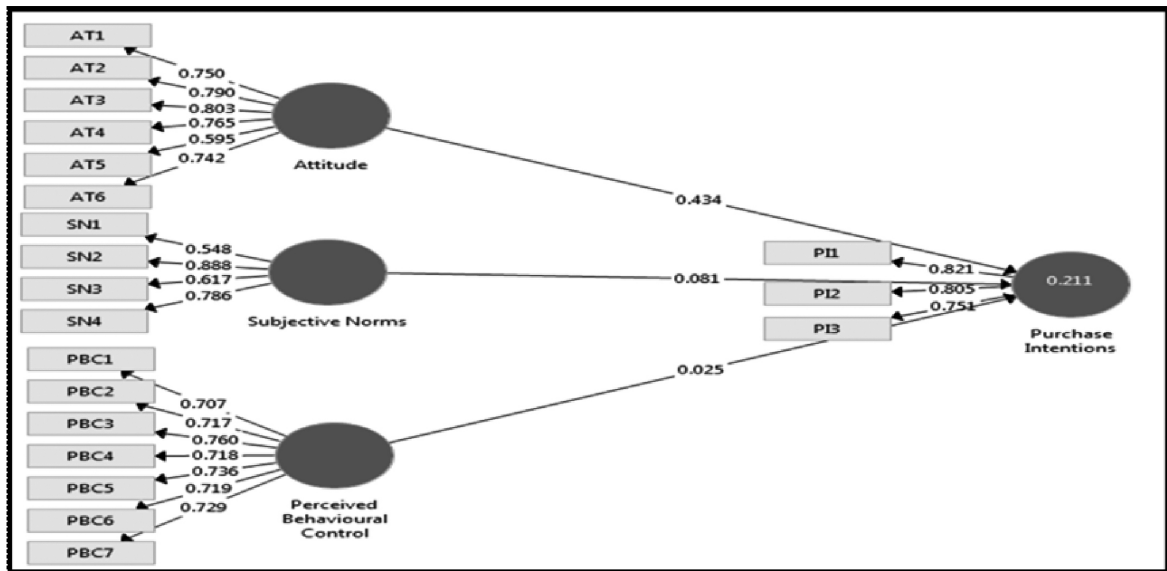
For almost all the items, the factor loadings were greater than 0.60 and denoted a strong correlation of these items with the variables of TPB (Rummel, 1970). The Composite Reliability (CR) was greater than 0.6, indicating a very good internal consistency among the items of the variables (Bacon and Sauer, 1995). The value of AVE should be 0.50 or higher indicating good reliability of the model (Fornell and Larcker, 1981).

Table 4: Discriminant Validity.

Particulars	AT	SN	PBC	PI
AT	0.74			
SN	0.08	0.72		
PBC	0.73	0.06	0.73	
PI	0.45	0.08	0.35	0.79

(Source: Smart PLS Output)

Discriminant Validity of the measurement model was tested to ensure that the selection of items measured a particular construct and not the other construct (Hamid et al, 2017). It was noted that the cut-off value for all the four constructs were greater than 0.70 (Becker, Klein and Wetzels, 2012).



(Source: Smart PLS Output)

The factor loadings of AT towards PI were 0.43, SN 0.08 and PBC 0.025. The model explained that 21% of the dependent variable is explained by the independent variable. The SRMR value was 0.06 which is less than 0.08 (Hair, Hult, Ringle and Sarstedt, 2017).

The overall findings demonstrated that ATT was stronger than SN, which was stronger than PBC, although all the three variables of TPB were statistically significant. The final result, i.e.; the PI was described at R square as 0.211, showing a positive PI highlighted from all the three variables. From figure-1, it can be concluded that consumers who have the necessary purchase intentions pursuant to the TPB were likely to engage in the purchase behaviour.

SECTION II: FOR KHADI NON-WEARERS

Table 5: Demographic Analysis.

Location	Ahmedabad (25%), Gandhinagar (25%), Vadodara (25%) and Surendranagar (25%)
Gender	Male-48% and Female-52%
Age (in Years)	18-25 (27%), 25-35 (27%), 35-45 (23%) and 45 and above (23%)
Educational Qualification	Less than Graduate (22%), Graduate (52%) and Post Graduate (26%)
Occupation	Service (36%), Business (48%), Home-makers (13%) and Students (3%)
Total Family Income (in Rs.)	More than Rs.50,000 (100%)

(Source: SPSS Output)

SHOPPING FREQUENCY, TIME OF PURCHASE AND SPENDING ON APPARELS

Respondents made the purchases once in 2-3 months (75%), Half Yearly (19%) and once in a month (6%). It was known that respondents wished to update their wardrobe based on latest fashion once every two three months. Respondents made the purchases during the end of the season discounts (29%), festive time (26%), on special occasions (23%), and whenever required (22%). Respondents believed that they might take advantage of reduced prices during the end of season discounts. The approximate amount spent per annum on apparels were less than Rs.10,000 (3%);

Rs.10,000-15,000 (77%); Rs.15,000-20,000 (7%) and Rs.20,000-25,000 (13%). They were spending the money either in ready to wear or ready to stitch type of apparel.

PURCHASE ATTRIBUTES AND MODE OF PURCHASE

On a seven point Likert scale from (7-Extremely important to 1-Not at all important). The respondents preferred Comfort (X= 6.03, SD=0.74), Style (X=5.52, SD=0.67), Price (X=5.78, SD=0.84), Trend (X=5.33, SD=0.60), Brand (X=5.74, SD=0.68), Fit (X=5.74, SD=0.67), Quality (X=5.87, SD=0.71), Colour Combination (X=5.51, SD=0.67), Celebrity Endorsement (X=5.38, SD=0.55) and Print

Design ($X=5.45$, $SD=0.67$). The mean ratings greater than 5 and SD less than 1, respectively highlighted importance and uniformity in the responses. The fashion-conscious non-Khadi wearers valued brand name and felt connected with celebrity endorsement when they purchased the apparel (Ambre and Lad, 2017). The respondents preferred Cotton, Silk, Denim, Lycra, Wool, Polyester, Synthetic, Rayon, Linen and Other Fabrics. Cotton was the most favoured fabric, as it was skin and weather friendly and comfortable wear (Sewing & Craft Alliance, 2008).

All (100%) respondents preferred both the offline and online mode of shopping.. Preference for offline mode of shopping was Branded Stores (30%), Local Retail Stores (29%), Wholesale Stores (29%) and Factory Outlets (12%). Indian consumers prefer to touch, see, feel and at times try the product before buying, which is possible only in offline stores (Sharma, 2017). Respondents preferred to buy the private labels provided it

was of good quality (Daengrasmisopon, 2004). They preferred to buy on Amazon, Flipkart, Snapdeal, eBay, Myntra, Jabong etc.

SOCIAL, CLOSE-NET AND SOCIAL MEDIA INFLUENCERS ON BUYING DECISION

Respondents admitted that their purchase decision was influenced by Family and Friends (24%), Internet (23%), Advertisements (17%), Past Experiences (22%) and store agents (14%). Close-net influencers were Spouse (87%) and friends (13%). Face book (19%), Instagram (19%), Whatsapp (19%), Online Stories (19%), Snap Chat (19%) and Fashion Blogs (5%) also influenced the purchase decision of respondents. The customer conducts research on trendy clothes and then wishes to buy the product (Roesler, 2015). The reviews and ratings assist in research and comments from family, friends and spouses transform the willingness into actual purchase of attire (Fernandes and Panda, 2018).

REASONS FOR NON-PURCHASE OF KHADI

None of the respondents had bought any Khadi apparel in last one year. The reasons for not wearing Khadi were explored, which are described in Table 6.

Table 6: Reasons for Non-Purchase of Khadi.

Reasons	X	SD	Reasons	X	SD
Problem in Fabric			Non-Appealing Feature		
Poor Quality	5.52	0.62	Not Branded	5.55	0.61
Shrinkage	5.60	0.67	Not Fashionable	5.45	0.99
Colour Fading	5.32	0.53	Unpleasant Wear	5.56	0.62
Harsh Material	5.71	0.64	Rural Look	5.36	0.54
Poor Fitting	5.63	0.75	No Celebrity Endorsement	5.52	0.56

Availability Problem			Cost Issues		
Limited Variety	5.97	0.55	High Price	5.56	0.76
No Designer Khadi	5.97	0.70	Dry Cleaning	5.63	0.71
No Online Sales	5.55	0.50	Ironing Cost	5.88	0.71
Only Exclusive Outlets	5.65	0.66			

(Source: SPSS Output)

Respondents do not prefer Khadi due to problems in fabric, non-appealing features, availability problems and cost issues. The majority of the respondents uniformly agree with the reasons for not wearing Khadi.

BENEFITS OF KHADI

The versatile and flexible Khadi fabric has one of the properties of keeping the wearer warm in winter and cool in summer. On washing, it is more improved; the more you wash it, the better is the look. Khadi doesn't effortlessly wear out with a timeframe of realistic usability (Fibre2fashion, 2006). Khadi promotes tiny businesses in rural areas and provides self-employment to people (PTI, 2020).

Table 7: Benefits of Khadi

Khadi Wearing	Percentage	Production and Sales	Percentage
Skin Friendly	17%	Employment Generation	19%
Comfortable	8%	Poverty Alleviation	15%
Versatile	6%	Rural Industrialization	7%
Good Quality	4%	Increases Production	13%
Value for Money	2%	Women Empowerment	23%
National Significance	25%	Promoting Local Based Production	23%
Swadeshi	25%	---	---
Increases Productivity	13%	---	---

(Source: SPSS Output)

Changes Expected in the Khadi Apparels, Future Purchase and Mode of Purchase
 Respondents expected Khadi in Designer Apparels (14%); More Varieties (14%); Lower price (14%); Sound Promotion (12%); Online Availability (11%); Web Marketing (14%); Availability in other stores (11%) and Celebrity Endorsement (9%). 70% showed their interest to purchase Khadi apparel in future. Respondents assigned first rank to online and second rank to offline stores for purchasing Khadi.

CONCLUSION AND SUGGESTIONS

The research was conducted to study the preference of Youth for the Khadi Apparels. The Khadi wearers who wear it by choice were surveyed using the model of TPB. Results indicated that each of the three antecedents of the TPB was statistically significant for the intention to purchase Khadi apparel. However, Attitude was found to be stronger than perceived behavioural control and subjective norms. They expected the fabric to be available easily at different stores other than Khadi Bhandhars with a good range of variety including designer Khadi apparel. The Khadi Non-Wearers do not wear the fabric mainly due to unawareness and the high cost involved in its purchase. The machine-made cloth was cheaper in comparison to Khadi was the main reason for not wearing it. Besides this, other reasons like its harsh touch, rural look, shrinkage on wash, lack of brand ambassadors were the reasons for disliking the fabric. If such

flaws were improved, the non-wearers may be converted into the Khadi wearers.

MANAGERIAL IMPLICATIONS

KVIC may increase the range of varieties in khadi, improve on fittings, endorse it as a branded product, should make it readily available other than Khadi Bhandhar (Khadi India Stores), and may try to make it a fashionable product. Khadi apparel may be sold online by KVIC through different platforms for its easy accessibility. A designated website must be created for the sale of Khadi apparel, which may showcase the latest designs, colours and prices for ready to wear and ready to stitch clothes. The practice of discounts should be worked for the whole year rather than exclusively in the month of October. Khadi should also be promoted by young Celebrities to appeal to the Youth. Proper Research and Development of the fabric are needed for the removal of complaints inherent to the fabric.

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AN ANALYSIS OF FACTORS RELATED TO CONSUMER ACTIVE PARTICIPATION, BRAND ENGAGEMENT AND COMMUNITY TRUST IN ONLINE FOOD COMMUNITY PLATFORMS

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ABSTRACT

Purpose – With the growing importance of consumer interaction on web and social media platforms, consumer engagement has been extensively examined for various brands but not for online food community platforms. To mitigate this gap in the literature, the current study is undertaken to identify the factors that impact the customer engagement model for an online food community platform. The study also discusses the drivers of the customer engagement model and its outcomes for an online food community platform. To investigate how well these online food communities, engage with customers, the study examines the constructs i.e. community active participation, brand engagement and community trust.

Design/methodology/approach – A questionnaire-based survey is conducted with the online food community members to gather data. Exploratory factor analysis followed by confirmatory factor analysis has been applied to analyse the data.

Findings – The study identifies the role and significance of encouraging active participation in engaging customers in an online food community context. Further, it also recognizes

community trust to be a key factor in consumer brand engagement.

Research limitations/implications – The study presents understanding to the marketers in terms of managing customer engagement with their online food communities.

Originality/value – There are numerous views among researchers regarding the customer engagement. Only limited studies have focussed on this construct in the perspective of markets in developing economies. No previous study is done on studying customer engagement in an online food community platform. Thus, the study attempts to close this gap.

Keywords: *Social networks, online food community platforms, consumer behaviour internet, active participation, brand engagement and community trust*

INTRODUCTION

With the advent and quick proliferation of the Internet across the world, customer engagement over the Internet for promoting the brands has become of the most important marketing tactics these days. With consumers becoming more active over the Internet and interacting

more with each other, brands have become more conscious and alert about consumers engagement online on the usage of social media platforms by them.

The term brand engagement was first noticed in the literature in 2006 and, since then, research in this field has grown with every passing day. In such a kind of two-way interactive surrounding, consumers are not only engaging themselves in brand related communication but also creating unique content related to brand (Hollebeek and Macky, 2019). In this ever changing competitive business scenario, efforts placed by a consumer in engaging with the brand indicates the connection and efforts consumers (Hollebeek et al,2019) are ready to lay in the brand of their interest (Islam et al,2017), and is of immense importance (Wirtz et al,2013). It has been seen from past research that engaged customers have led to increase in sales, organisation performance and positive feedback (Bijmolt et al., 2010), thus proving its importance. With the rapid increase in the number of Internet facilities and social media users, and interactivity is an important part of customer relationship management and digital marketing environment, the combination of the two types represents a potential field for research to develop experimental design. This is also stated in the literature (Habibi et al, 2014)regarding the growing importance of achieving greater customer engagement (Schultz and Peltier, 2013)through social media channels (Hollebeek et al, 2014).As per social media marketing report by Ernst and Young , India (economic times 2016) states that 72 percent marketers believed that prime reason of their presence on social media is customer engagement. This emphasizes further

the importance that customer engagement comprises of for a topic of research. With the advent of Internet 2.0, customers have become more active (from passive), and not only go for information search but also involve themselves actively in exchanging their views and feedback on social media platforms, studying consumer engagement is of paramount importance.

LITERATURE REVIEW

Brand Engagement

As stated by Google in 2014, in this current era consumers have shifted from passive participation in brands to active participation and becoming a co party in creation of brand content and consumption of valuable offerings. The Major business giants like Facebook, Amazon, Google have taken note of this shift and are giving prime emphasis on keeping more focus on engagement efforts. The major reason cited behind this importance to engagement is that more engaged customers tend to purchase more and advocate more about brand.

So question arises what exactly engagement mean? There is no specific agreeableness on the meaning of engagement in context to business but it has been defined as: “a set of consumer mental, emotional and physical experience that will have a positive impact on a brand. It includes all steps that companies take to reach out to consumers and establish relationship with them Thompson(2014), Google (2014). CBE, the concept of brand customer engagement has been focused and focused in the study marketing literature since 2005 (Brodie et al., 2011; Islam and Rahman, 2016)

Since this study is focussed on virtual brand community so here term consumer becomes

more relevant as compared to customers as consumers are not getting anything paid for being engaged (Hollebeek et al., 2014). Brand engagement origination roots can be traced from Vivek et al. (2012) where consumer engagement is referred as a way to build relationship with customers, and broadly reflect consumers' Brodie et al. (2011) experience from different brands Islam et al (2019). In spite of all the doubts regarding concept of engagement but still its two-way interactivity is proven in many previous researches (Hollebeek et al., 2019, Groeger et al., 2016; Hollebeek, 2013) in his paper define CBE as a customer's will to invest their time and efforts in brand interactions (Hollebeek et al., 2014, Algesheimer et al., 2005). In current situation of increasing spread of online environment, consumers do not only get brand-related content, but also indulge in a great manner in creating it themselves (e.g. via user-generated content), hence showcasing the two way interactivity in CBE (Hollebeek and Chen, 2014). (Mollen and Wilson, 2010) the maximum number of present studies about concept of engagement view it as a multi-dimensional concept which can be categorize under intellectual or cognitive, emotional aspects (Brodie et al., 2011).

Based on the literature discussed above, we can define CBE as the mood of consumers related to their psychological thinking, which is reflected in their commitment, awareness, gratitude and relationship with brands (Paruthi and Kaur, 2017, p. 133). This CBE concept fits well into the context of the brand's virtual community, which considers consumer exchange, participation and brand connectivity

(De Valck et al., 2009; Baldus et al., 2015). Given the time consumers spend in online communities, it is necessary to understand the fundamental forces that characterize their participation in these communities (Islam and Rahman, 2017; Baldus et al., 2015).

Active participation

When we talk about online brand communities there can be two type of members active members and passive members (Tonteri et al. 2011, Kang et al. 2014). Passive users or members benefit from being stupid viewers in the community without much participation, while active users are the one's who are content creator in spreader of news and information in communities. This research gives importance to active members in the brand community and hence known as "active participation". Active participation takes place when members provide their constant evaluations and opinions to the community, leading to a closer relationship between them (Henning-Thurau et al., 2004).

As per the current study and on basis of past studies it becomes important to consider active participation as a key factor for sustaining in this online platform. So, when to do online community related research taking active participation in account is very important as it has important role in outcome in form of engagement.

Community Trust

For any relationship building exercise trust is central and important construct (Hess and Story, 2005). Trust can be judged by a person's belief in reliability, honesty, and security (Chaudhury and Holbrook, 2001, p. 82). Recently, Kim and Peterson, (2017) the study of trust in the management of network relationships has

become increasingly important (Chahal and Rani, 2017, Ridings et al., 2002). In this context, it was suggested that while most empirical research on trust examines this structure, social media leads to trust in social media and communication and thus requires special research Cheng et al. (2017). So, in this study we try to fill this gap by examining the relationship of community trust with engagement and active participation. We will study community trust both as antecedent and consequence of community engagement.

Research Methodology, Analysis and Findings

For this study, the scales for constructs have been taken from the previous studies and are modified to suit the present context on online food community platform. The questionnaire comprised of three sections pertaining to active participation, consumer engagement and consumer trust. Cognitive, affective, and

behavioural three dimensions explained the construct of engagement.

To measure customer engagement and its three dimensions i.e. cognitive, affective, and behavioural, different established scales from the literature were considered. A scale comprising of seven items (adapted from Cheung, et al. 2011 and Hollebeek et al. 2014) was used to measure the dimension namely affective. A five-point scale was adjusted by Cheung et al in terms of behavior, (2011) Holbeck, Glen & Brody (2014). Six component scales have been adapted for the cognitive plane by Cheung et al. (2011): The community trust scale consists of six elements: Casalo et al. (2011) & Horppu et al. (2008): A four-point scale was adapted to measure active participation by Casalo et al. (2011): The constructs and their measurement instruments considered for this study have been adapted from their respective original studies and are as depicted in table 1.

Table 1: Construct Items.

Construct	Item
Active Participation (Casola et al., 2011)	AP1: I participate actively in food community page
	AP2: I contribute messages, responses and other information to the food community page
	AP3: I provide useful information to other members of the food community
	AP4: I post messages and responses in the community with excitement and on a regular basis
Consumer Brand Engagement (Cheung, et al., 2011; Hollenbeek et al., 2014) Affective	ABE1: I am enthusiastic about this food community page
	ABE2: This food community page inspires me
	ABE3: This food community page seems meaningful to me
	ABE4: Visiting food community page fills me with excitement
	ABE5: I am interested in this food community page
	ABE6: My mind is focussed when visiting this food community page
	ABE7: I am proud to be a member of this food community page

Behavioral (Cheung, et al., 2011)	BBE1: I become very active while visiting this food community page
	BBE2: I feel mentally connected with this food community page
	BBE3: I put lot of efforts while browsing this food community page
	BBE4: I try hard to perform well on this food community page
	BBE5: this food community page holds special place in my heart wa compared to other pages
Cognitive (Cheung, et al., 2011)	CBE1: Time flies when I am visiting this food community page
	CBE2: I get completely involved while reading information and posts on the food community page
	CBE3: I give my full attention to food community pages
	CBE4: I am completely involved in food community pages
	CBE5: My mind is focussed while surfing this food community page
	CBE6: I pay full attention to this food community page
Community Trust (Casola et al., 2011; Horppu et al., 2008)	CT1: I think that the information offered in food community page is sincere and honest
	CT2: The food community page does not provide any misleading information
	CT3: I Consider tips and suggestions for food in this site is designed for mutual benefit.
	CT4: I do not think that the community food site will intentionally place advertisements or endorse anything that would harm me or other users
	CT5: I think I trust other contributions from others members on the food community page
	CT6: In general, most of the food community members do not make false Statements

Data for the study was collected from actual members of food community group on Facebook or Instagram in India. Prior to actual collection of data, the questionnaire was pilot tested for 150 respondents and after receiving satisfactory results the questionnaire was distributed further. The questionnaire was also tested for its reliability and validity. Of 500 distributed questionnaires, 198 filled and complete questionnaires were received. This represents the response rate of 39.6 percent. The data collected from the questionnaire-based survey was analyzed using Statistical Package for Social Sciences SPSS v.21. AMOS v.21. Methods used for analysis consists of descriptive data analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability analysis. Within CFA, goodness-of-fit, convergent validity, discriminant validity and composite reliability were also conducted.

To identify the factors, multivariate data analysis is performed in two steps. The first step consists of extracting the factor structure of the research framework. To do this, principal component analysis (PCA) was performed to reduce the larger set of variables to a categorized and more manageable set of scales. Before performing EFA, another important parameter is Kaiser-Meyer-

Olkin (KMO) Test that is a measure of how well the data is suited for factor analysis. The test is run to measure the sampling adequacy for each variable in the model along with the complete model. The high value (close to 1) of KMO test indicates that a factor analysis may be useful with the data. The result of Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.866 indicating that the sampling was adequate. Another test which is Bartlett's Test of Sphericity is also used to assess the equality of variance in different samples. Small values (less than 0.05) of the significance level specify that a factor analysis may be useful with the data. The result of Bartlett's Test of Sphericity was 0.00. The table 2 below represents the results of KMO and Bartlett's Test.

Table 2: Results of KMO and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.866
Bartlett's Test of Sphericity	Approx. Chi-Square	1909.624
	df	231
	Sig.	.000

Post KMO and Bartlett's Test principal component analysis (PCA) was performed on the items with varimax rotation and five factors were extracted. These five factors are labelled based on items included in each of them. The total variance explained for this is 51.67%. The table 3 below represent the results of principal component analysis (PCA) on the items. This stage also consisted of finding out internal consistency and reliability among the items of each construct by performing Cronbach's alpha. To check the reliability of the items, Cronbach alpha was performed. The result of the Cronbach alpha for these items was identified and it came out to be 0.918 suggesting satisfactory level of construct reliability.

Table 3: Results of Principal Component Analysis (PCA).

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1.	7.560	34.366	34.366	7.088	32.219	32.219	5.996
2.	1.934	8.790	43.156	1.425	6.479	38.699	4.218
3.	1.828	8.308	51.464	1.243	5.650	44.349	3.870

4.	1.341	6.094	57.558	.976	4.437	48.786	5.018
5.	1.118	5.084	62.641	.633	2.879	51.665	3.348
6.	.869	3.951	66.593				
7.	.779	3.543	70.136				
8.	.705	3.206	73.341				
9.	.675	3.069	76.410				
10.	.642	2.920	79.330				
11.	.578	2.626	81.956				
12.	.557	2.532	84.488				
13.	.474	2.157	86.644				
14.	.447	2.033	88.677				
15.	.433	1.969	90.646				
16.	.405	1.840	92.486				
17.	.372	1.691	94.178				
18.	.357	1.624	95.802				
19.	.276	1.254	97.056				
20.	.233	1.059	98.115				
21.	.220	.999	99.115				
22.	.195	.885	100.000				

The factor loading received ranged from 0.609 to 0.895 barring few factors which were rejected because of less factor loading i.e. below 0.5. The loadings indicated high correlations between the items and the corresponding. The factors were named as affective brand engagement, behavioral brand engagement, cognitive brand engagement, consumer trust and active participation.

For the construct active participation, all the four items remained intact with high factor loadings. For the construct consumer trust, variable CT4 was dropped due to its less factor loading. For the construct consumer engagement, BBE3 got eliminated (under behavioural construct) whereas for the construct affective brand engagement, all the seven variables remained intact and relevant for study. For the construct cognitive brand engagement, four variables got eliminated i.e. CBE1, CBE4, CBE5, CBE6. The table 4 below represent the results of factor loadings.

Table 4: Results of Factor Loadings of Items.

Pattern Matrix ^a					
	Factor				
	1	2	3	4	5
AP1		.695			
AP2		.654			
AP3		.720			
AP4		.787			
CT1			.691		
CT2			.763		
CT5			.618		
CT6			.698		
CT3			.538		
BBE4				.609	
BBE5				.680	
BBE1				.715	
BBE2				.895	
ABE1	.623				
ABE2	.615				
ABE3	.716				
ABE4	.814				
ABE5	.834				
ABE6	.685				
ABE7	.688				
CBE2					.613
CBE3					.711
Extraction Method: Maximum Likelihood.					
Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Post this Cronbach alpha was performed for each of the five factors to check their reliability. For all these five factors Cronbach alpha ranged between 0.700 to 0.883 suggesting satisfactory level of construct reliability.

To achieve the objectives and to confirm the psychometric properties of the scale used, the results of exploratory factor analysis were tested using measurement model. On this measurement model, a CFA was performed to understand the strength of each variable in explaining its respective construct. Accordingly, CFA of measurement model is applied using AMOS 21. After identifying the constructs and their respective explaining variables, a measurement model was developed as shown in figure 1.

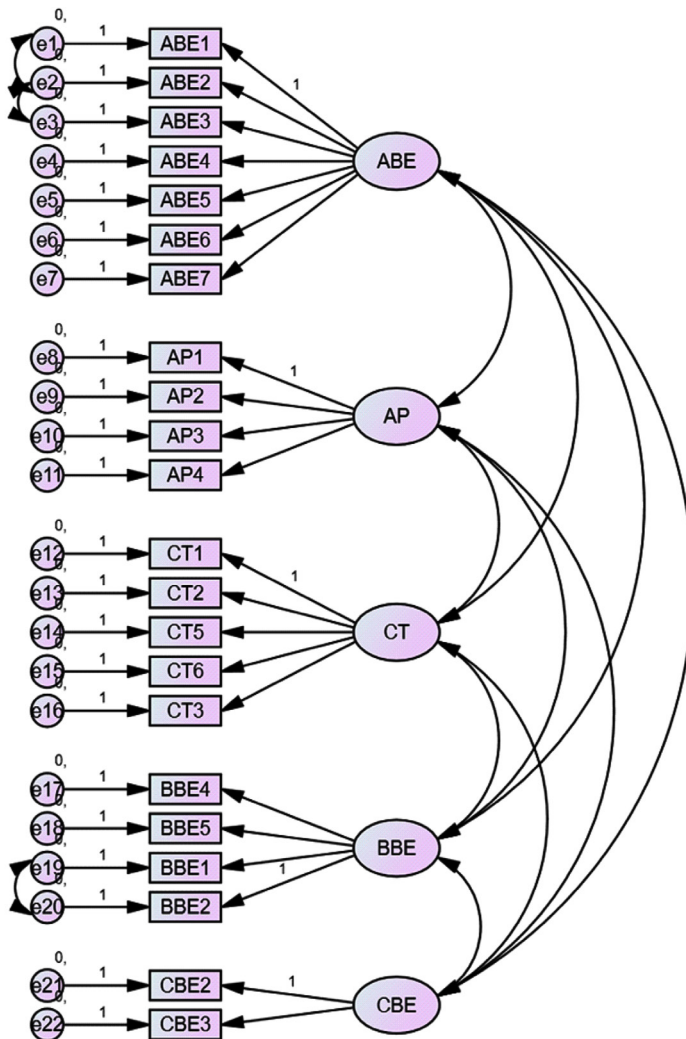


Figure 1: Measurement Model

After performing CFA, variables that strongly define the construct are retained whereas the variables that weakly defines the constructs are dropped. The CFA results demonstrated good reliability as the factor loading scores are within acceptable range.

Table 5: Factors and Factor Loading.

Factors	Factor Loads	
Factor 1: Affective brand engagement (ABE)	ABE1	0.675
	ABE2	0.671
	ABE3	0.719
	ABE4	0.777
	ABE5	0.805
	ABE6	0.764
	ABE7	0.795
Factor 2: Behavioral brand engagement (BBE)	BBE1	0.822
	BBE2	0.784
	BBE4	0.674
	BBE5	0.744
Factor 3: Cognitive brand engagement (CBE)	CBE1	0.699
	CBE2	0.770
Factor 4: Consumer trust (CT)	CT1	0.526
	CT2	0.870
	CT3	0.709
	CT5	0.610
	CT6	0.772
Factor 5: Active participation (AP)	AP1	0.723
	AP2	0.723
	AP3	0.677
	AP4	0.754

The measurement model indicates the relation between latent (unobserved) and indicator (observed) variables. This measurement model also represents confirmatory factor analysis (CFA). As discussed,

brand management has five dimensions and each and each dimension is measured by various items. As stated in the table 6, following results related to CFA are obtained at high statistical significance ($p < .01$). The results of the CFA obtained are obtained (CMIN/DF = 1.619); (CFI= 0.934); (RMSEA= 0.059); (IFI= 0.935). These model fit indices results recommend satisfactory overall model fit (Hair et al., 2006). The result of the model fit indices also confirms the external validity of the propose structure of the constructs.

Table 6: Model Fit Indices for Measurement Model.

Measure	Threshold	Model Statistics
CMIN	-	317.250
Df	-	196
CMIN/DF	≤ 3.000	1.619
IFI	≥ 0.900	0.935
CFI	≥ 0.900	0.934
TLI	≥ 0.900	0.922
RMSEA	≤ 0.080	0.059
SRMR	≤ 0.100	0.0585

The AVE values for all the constructs that are studied are tested and the found to be greater than the minimum recommended value of 0.40. Further the square root of AVE for each of the construct considered in the measurement model, as reported in the diagonal of the correlation of constructs matrix is larger than the corresponding off-diagonal correlations of the construct to their latent variables. These two measures of the model confirmed convergent and discriminant validity of the questionnaire.

Table 7: Convergent and Discriminant Validity of the Measurement Model.

	CR	AVE	CBE	ABE	AP	CT	BBE
CBE	0.701	0.541	0.735				
ABE	0.897	0.556	0.476	0.745			
AP	0.811	0.518	0.349	0.450	0.720		
CT	0.830	0.501	0.081	0.145	0.130	0.708	
BBE	0.843	0.575	0.629	0.668	0.568	0.200	0.758

CONCLUSION

The study discussed the online food community level factors for which CFA is used to test the measures of construct to check their consistency with the understanding of the constructs pertaining to these online food community platforms. The model fit measurements indicate that the data fit the measurement model. This hypothesized model is based on literature study. The study offers understanding towards inducing customer participation in an online food community platform. The findings of this

study have many implications to understand consumers' behaviour towards online food community platforms. The study demonstrated how consumer engagement is also possible on online platforms where no buying and selling takes place only people with similar interest comes together and share their experiences. Study proved that consumer participation has impact on consumer engagement and consumer engagement also have an impact in building consumer trust. Further studies can be undertaken to identify similar factors pertaining to different industries.

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AN ANALYSIS OF GROWTH AND ASSOCIATION BETWEEN LABOUR PRODUCTIVITY AND WAGES IN THE INDIAN LEATHER INDUSTRY

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ABSTRACT

The leather industry is one of India's oldest industrial industries and plays a significant role in the Indian economy. It employs over 2.5 million people in the country and generates roughly \$ 5 million in annual revenue. Because of its abundant raw materials, India is one of the best places in the world to invest in the leather business. Therefore, it is essential to follow the development of India's leather industry. This article is It was the first attempt to analyze the growth and composition of the workforce in the Indian leather industry using the annual compound interest growth rate. Second, clarify the relationship between the growth of the Indian leather industry and employment, wages and net value added (NVA). Finally, we used regression analysis to analyze the impact of labor productivity on wage setting. The individual NIC codes (151 and 152) were chosen to draw inferences between these 2 codes to give an overview of the leather industry.

Keywords: *Key Words: Leather, Labour Productivity, Employment Growth, Regression, Wage*

INTRODUCTION

One of the most commonly traded commodities on the planet is leather. Demand for leather is being driven up by the fashion business, notably footwear, as well as the furniture and interior design industries, as well as the vehicle industry (Leather Industry and Exports, 2018). "The Leather Industry occupies an important position in the Indian economy as well; it is one of the country's oldest manufacturing businesses, employing over 2.5 million people and generating an annual turnover of approximately USD 5,000,000." Because it has an abundance of raw materials in the form of a large population of cattle, India is one of the greatest places in the world to invest in the leather business. India has 21% of the world's cow and buffalo population, as well as 11% of the world's goat and sheep population." (2019, Team) The industry has enormous potential for job creation, growth, and exports. Exports of leather and leather products have recently accelerated. India's leather exports are rapidly increasing. This is mostly due to the importance of the leather industry's planned development and optimum utilisation of available raw materials. (group).

India's leather sector benefits from a trained workforce, cutting-edge technology, greater industry compliance with international environmental norms, and industry assistance. The leather industry employs about 55% of the labor force (under 35 years old), and the quality of labor productivity in the industry has been observed to be low (KL Krishna, 2018). The industry employs a significant number of female workers, accounting for about 30% of the total workforce. Female workers in the leather industry come from poor and marginalized communities and are part of a secret production that exploits their vulnerabilities "(Parakni, who defends workers' rights and corporate responsibilities). On the other hand, improving productivity of is widely understood as a means of raising the standard of living. Being productive means that you can increase the number of goods and services that are produced and consumed without the need for more work. In theory, increasing labor productivity benefits from companies hiring more workers as long as there is a market to increase productivity. All else being equal, this increase in labor demand tends to boost wages. If labor demand does not increase due to market declines or technological advances, productivity gains will come to consumers in the form of low prices or to the owners of businesses in the form of high profits. Most reports of income in the mainstream press specifically refer to wages. However, wages are only part of labor income and focusing solely on wages can be misleading. Compensation (wage and salary, employer contributions to insurance and pensions, profit sharing and unemployment allowance) is a broader measure

of labor income. In the long run, wages and salaries are declining in total compensation, Brian W. Kaschel said. (Cashhell, 2004)

LITERATURE REVIEW

Jesim Pais (2006) did a study on When wages are used as a proxy for work quality, a growing business with high growth in output, exports, and employment does not always reflect enhanced job quality, according to primary data collected from two rounds of sample surveys in the leather accessories manufacturing in Dharavi, Mumbai. However, this study does not consider labour productivity as a primary factor of wage rate in the leather sector, and the wage analysis is limited to Mumbai rather than India as a whole. (2006) (Jesim).

Nisa Syeedun (2007) has conducted 'A Study of Export Potential of Indian Leather Industry and Strategies for Growth' to examine and assess the current export trend of Indian leather under numerous headings and industries; nevertheless, this study does not go into detail about wage rate determination methodologies.

In their article 'A study of export potential of leather and leather products from India to the United Kingdom and the United States of America,' Agrawal Kalpana and Gokhar'u Abhishek (2014) emphasise the primary export destinations of Indian leather and leather products. The study's findings revealed that Leather & Leather Products has a significant growth potential in the coming years, which will undoubtedly increase. Looking at world trade and domestic demand, India's leather industry has the potential to grow exponentially in the coming years. The limitation of the study was that statistical data was collected for only

5 years. H. From 200809 to 201213. This may not generalize the results.

“A Study on the Environmental Compliance of the Indian Leather Industry and the Extensive Impact on Leather Exports” (Roy, 2012) showed the widespread impact of environmental regulations on the export sector of the Indian leather industry. Within the limits of the available data, environmental statistics found that there was a positive correlation between environmental quality and leather exports, and the Indian leather industry made the Porter hypothesis rather than the pollution haven hypothesis. I have proved that I support it.

In their work ‘A Study on Financial Analysis of Indian Leather Exports,’ B Saranya and V. Kavitha (2016) attempted to understand the relevance of the leather business in international commerce as well as the export performance of the leather industry in India. They use statistical approaches such as Growth Percentage Analysis, Trend Analysis, and Compound Annual Growth Rate to examine the leather industry’s export performance from 2010 to 2015 and to forecast future growth in India. Economic fundamentals are vital in accelerating exports, according to the levels of study. And numerous concepts for importing leather manufacturers and exporting leather to many nations via various leather products were developed. (2016, B. Saranya)

Sahdev Supriya and Singh Tilottama (2017) conclude from a case study that the Indian leather industry is focused on exporting leather products manufactured in 2016 and 2017. increase. Various countries were also investigated. In addition, they also considered future aspects, analyzed challenges and made recommendations to the leather industry. They

basically surveyed all markets for Indian exports of leather goods. (Supriya Lamba Sahdev, 2017

Dr. Goel Shilpa (2014) surveyed the Indian leather industry with a particular focus on the export outlook for leather products. She aims to maximize the raw materials available to maximize the profits from exports, especially the Indian leather industry is attracting worldwide attention for its unique performance on the international stage. He said that more and more emphasis is being placed on planned development. Exports have shown remarkable growth in recent years. (Goel, 2014)

Damodaran Sumangala and Mansingh Pallavi (2008), in the working paper “Leather Industry in India”, outlines India’s leather and leather goods industry in different segments of the industry, different production centers and sectors. The main purpose of this study is to understand India’s leather industry and its impact as part of the global production chain, and the Indian government’s liberalization policy and the third major countries, Chennai, Agra and Warangal. Impact on the selected labor market. Then they goes on to give an insight into the structure of the industry, the production process, the government policy and the export policy of the Indian leather industry. The purpose of this study is to have a better understanding of the viewpoints of workers in India’s leather sector. It explains how India’s labour market has been affected by government policies of liberalisation and increasing integration with the global economy.

Mr. Kumar Ashish, Mr. Mazumdar Rahul and Ms. Jahanwi (2015) is their working paper ‘Indian Leather Industry: perspective and strategies’ discussed about the whole leather

market of India ranging from the global scenario of international trade and the raw materials (raw hides and skins) availability in the whole world to the export imports of India in this industry. The paper even discusses the major markets for Indian leather goods. According to a paper quote, “The Indian leather industry has undergone a dramatic transformation from the exporters of pure raw materials in the early 1960s and 1970s to the exporters of today’s value-added finished leather products. The Indian leather industry has established itself as an important industry in both the international and domestic markets. The leather industry is a labor-intensive sector that employs approximately 2.5 million people.” (Mr. Ashish Kumar, 2015)

Different authors have done different studies on different aspects of the leather industry and its potential, exports, employment and more. Although some studies were also included in this paper, it was noted that most of the literature reviews could not examine the impact of labor productivity on wage setting in the context of the Indian leather industry. This is because most leather and leather products, ie leather, luggage, handbags, saddles and harness tanning and finishing, fur dressing and dyeing, shoe manufacturing are covered by NIC 3 digits, ie NIC 151 and NIC 152 categories. The paper will focus. Only with these two NIC codes.

NATURE AND DATA COLLECTION

Data from the leather industry 3-Digit NIC 2008 will be used for analysis that is part of the code classification. Code151: Leather tanning and finishing. Manufacture of baggage, handbags,

harnesses and tableware. Fur and Code 152 Dressing and Dyeing: Manufacture of shoes from 201011 to 201516.

Combined annual growth is taken into account to determine wage and employment growth for Code 151 and Code 152. The CPI of industrial workers has inflated wages and NVA.

RESEARCH METHODOLOGY:

Inter-correlation matrix is used. The relationship between employment, real earnings, man-days worked, and real NVA is shown using Pearson’s correlation coefficient.

REGRESSION

Labor productivity determines the growth of the industry. The following regression equation is used to determine the impact and ratio of labor productivity.

$$\text{LnX1} = \alpha + \beta \cdot \text{LnX2} + \epsilon$$

Where,

LnX1 = Log in the Wage rate of Leather employee;

LnX2 = Log in Labour productivity of the leather employee

α = Intercept

β = Regression coefficient

ϵ = Error term includes all the other factor which impacting wage rate

OBJECTIVES OF THE STUDY

This study will be conducted for the following specific purposes:

Objective 1: To investigate the growth and composition of the Indian leather industry’s

labour force, as well as the combined annual employment growth rate and wage share of the leather industry's NIC3 number code. H. 151 and 152

Objective 2: The purpose of this study is to determine the impact of labour productivity on pay rate determination in the Indian leather sector.

Objective 3: Identify the correlation between real wage growth, working days per worker, real NVA, and total employment in the leather industry.

RESULTS AND DISCUSSION

Objective 1: To study the growth and composition of the workforce in the Indian leather industry and determine the combined annual growth rate of employment and the wage share of the NIC3 number code in the leather industry. H. 151 and 152

Table 1 shows the characteristics of Code 151, that is, the composition of the labor force employed in the leather industry from 2010-11 to 2015-16. The tendency of individuals employed in this industry is the change in corporate law (2013). Regarding the number of men and women employed, the number of men and women directly employed in the industry also surged in 2015-16 compared to 201011, but the number of women was found to be increasing at a much faster pace. rice field. The annual growth rate (percentage) of employed workers is also showing a volatile trend, but the combined annual employment growth rate increased by 0.066% from 2010-11 to 2015-16.

Table 2 shows the composition of employees in the leather industry from 2010-11 to 2015-

16 with characteristic 152. Worker trends in the leather industry are constantly changing. The number of men and women employed directly in the industry in 201-516 also increased sharply compared to 2010-11, but the number of women increased by much faster than men. This can be seen from the total annual growth rate of 0.05% compared to 0.006. man's%. This shows that the number of people working in the leather industry, Code 152, has increased significantly.

Wages and salaries for the three-digit NIC code 151 in Table 3 of the leather industry from 2010-11 to 2015-16. Employee total wages and salaries, including employer contributions, are on the rise. It can be seen that the average wage increase rate is 0.185%. And with a 3-digit NIC code 152. It is increasing at a compound annual growth rate of 0.184%. From the above, it can be seen that the annual compound interest growth rate of wages in both categories is higher than the annual compound interest growth rate of employment in both categories, and purchasing power is increasing. It was also observed that female employment rates were higher than males in both categories, but female wages were lower than males in both categories.

Objective 2: Know the impact of labor productivity on wage determination in the Indian leather industry. It also identifies the correlation between real wage growth, working days per employee, real NVA, and total employment in the leather industry.

To fulfil Objective 2 following hypothesis were Taken into Consideration:

HYPOTHESIS:

The Hypothesis set out in accordance with the aforementioned aims is as follows:

H01: In the tanning and dressing of leather, the manufacture of luggage, purses, saddlery, dressing, and dyeing of fur, labour productivity has a significant impact on wage rate setting.

H02: In the footwear industry, labour productivity has a significant impact on wage rate setting.

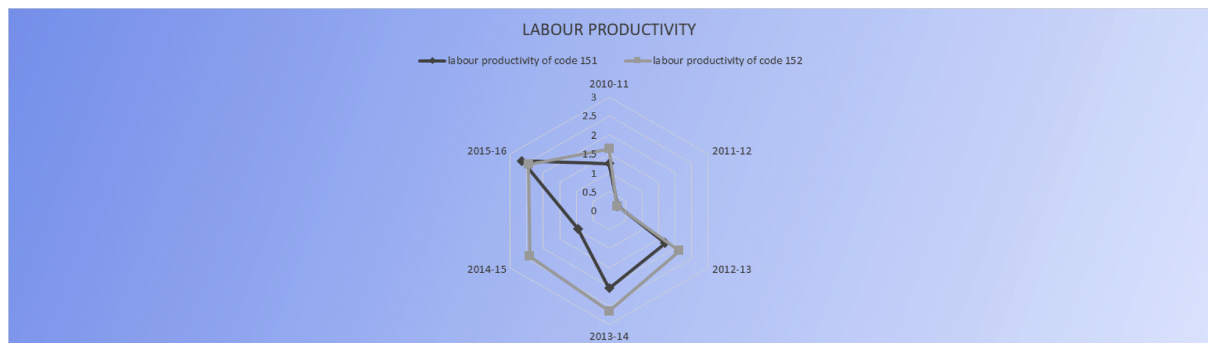
H03: In the leather industry, there is a strong link between the growth of real salaries, man-days worked per employee, real NVA, and total employment.

To get a clear picture of the growth of workers employed in the industry, how the wage rate trends for the three-digit codes 151 and 152 from 2010-11 to 2015-16 increased and decreased over time. It is very important to find out. (As shown in the appendix).

Wage rates are an important component of economics, as average worker wages are an important factor in both microeconomics and

macroeconomics. Wage rates have been on an upward trend from 2012 to 2012-13, reaching a maximum of 1.726716 at code 151 (shown in Table 5) and at code 152 (shown in Table 6) in 2015. The wage rate is 1.7239, which is almost the same.

The labor productivity of those employed by the three-digit NIC151 shown in Tables 7 and 8 indicates the labor productivity of those employed by the three-digit NIC152. Manufacture of baggage, handbags, harnesses and tableware. Fur dressing and dyeing declined from 201011 to 2011-12, then fluctuated considerably, but eventually peaked in 2015-16, reaching 2.64. The productivity of people engaged in shoe manufacturing dropped from 2010-11 to 2011-12, which is very stable compared to 3Digit NIC 151 and finally reached 2.4416 in 2015.



Impact of Labour Productivity on Wage Rate in India

The growth of the industry is determined by labour productivity. The goal of this study is to determine the magnitude of worker productivity's impact on wage rate determination in the Indian leather sector. The impact and ratio of labour productivity are calculated using the regression equation below.

$$\text{LnX1} = \alpha + \beta \cdot \text{LnX2} + \epsilon$$

Where,

$\ln X_1$ = Wage rate of Leather employee;

$\ln X_2$ = Labour productivity of a leather employee

α = Intercept

β = Regression coefficient

ϵ = Error term includes all the other factor which impacting wage rate

Table 1: This table shows Simple Linear Regression between Labour Productivity and Wage Rate in India.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	R square
X NIC 151	0.131	0.110	1.190	0.299	-0.175	0.43	-0.175	0.439	0.261
X NIC 152	0.133	0.107	1.24	0.281	-0.164	0.43	-0.164	0.431	0.278

Source: calculated by the researcher

The empirical results in Table 1 show that the impact of labor productivity on wage rate determination is significant for both the leather industry categories NIC code 151 (leather spinning, weaving, finishing) and NIC code 152 (leather shoe manufacturing). It shows that it is not important to sex. 5 percent level. Therefore, the null hypothesis is rejected. In the former branch (Code 151), 26.16% of the wage rate determination is explained by labor productivity, and the coefficient (X NIC 151) shows that a 1% change in labor productivity increases the wage rate by 13%. increase.

On the other hand, the latter branch (code 152) accounts for 27.8% of labor productivity. Therefore, the higher the labor productivity of an industry, the lower the wages of that industry, and the coefficient (X NIC 152) indicates that a 1% change in labor productivity will change the wage rate by 13%. Real wages continued to fluctuate from 201011 to 201314, after which they rose to 201516, as shown in Table 9 of the Appendix of the 3-digit Code 151. Man-hour growth per employee has shown a stable trend except in 201213 and 201415. These years have shown negative growth. NVA is increasing except for 2013-14 and 2014-2015.

Leather tanning and dressing, luggage, handbags, saddle and harness manufacturing, fur dressing and dyeing employment growth shows an inconsistent trend. The growth of the Indian leather industry in the shoe manufacturing industry in Table 10 from 2010-2011 to 2015-2016 is that real wages continue to fluctuate up and down from 201011 to 201314 and then continue to increase, reaching 51932.54 to 201516. Is clearly shown. Growth in working days per employee has shown a stable trend except in 201213 and 201415. This year showed negative growth. NVA is increasing except for 2013-14 and 2014-2015. Employment growth in the shoe manufacturing industry is showing a volatile trend.

Real Wages, Man-Days Employment per Employee, Real NVA, and Employment in India's Leather Manufacturing Inter-correlation Matrix

The inter-correlation matrix is used to determine the relationship between real pay growth, man-days-worked-per-employee growth, real NVA growth, and total employment growth in the leather industry (in both categories, i.e., Code-151 and Code-152).

H0: $p = 0$, that is, the correlation coefficient of the population is zero (null hypothesis)

H1: $p \neq 0$ (alternate hypothesis)

Table 2: Inter-correlation Matrix of Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, and harness; dressing and dyeing of fur in India NIC-152

	Real WAGE	Real MAN DAY PER EMPLOYEE	Real NVA	EMPLOYMENT GROWTH
REAL WAGE	1			
MANDAYA PER EMPLOYEE	0.610817939	1		
Real NVA	-0.37713918	-0.544693249	1	
Real Employment	0.6789179	0.912052666	-0.52034	1

Source: Calculated by the researchers

Empirical Result of Table 2 (Code-151) indicates that Real wage has a positive and significant correlation with real Man days and real employment growth and real Man days employed are positively highly correlated with employment growth in NIC 151.

Table 3: Inter-correlation Matrix of Manufacture of footwear in India NIC-152

	Real WAGE	REAL MAN DAYS PER EMPLOYEE	Real NVA	Real Employment
Real WAGE	1			
Real Man days Per Employee	0.76570409	1		
Real NVA	-0.65683128	-0.932245116	1	
Employment Growth	0.922935704	0.466259874	-0.3387292	1

Source: Calculated by the researchers

Empirical Result of Table 3 (Code-152) indicates that the real wage rate has a positive correlation with man-days per employee and employment growth and real Man days are also positively correlated with

employment growth. For that null hypothesis accepted and for others, it is rejected.

CONCLUSION ABOUT STATED OBJECTIVE

Objective 1

India's leather industry is one of the largest employment sectors. The number of workers (both manual and non-workers) increased during this period, but the number of female workers is still very small compared to male workers, and there is still a large disparity in the Indian leather industry. It shows that it exists, but at the same time suggests that the industry has tremendous growth potential. Code 151 has an average annual employment growth rate of 0.066 and Code 152 has an average annual employment growth rate of 0.047, suggesting the employment growth rate of workers employed in leather tanning and finishing. Manufacture of baggage, handbags, harnesses and tableware. The fur dressing and dyeing was the same as the shoe making. On the other hand, the combined annual growth rates of wages for Code 151 and Code 152 were 0.185 and 0.184, respectively. Combined annual wage growth is higher than employment, and real wage growth for workers indicates an increase in the overall purchasing power of workers in the leather industry.

Objective 2

In all categories, labour productivity was determined to be an unimportant effect in determining wages. It suggests that as labour productivity rises, wage rates for leather workers do not rise as quickly. As a result, it may be deduced that the wage rate is influenced by a variety of external factors in the economy, and

that there is no link between output per worker and earnings per worker.

The leather industry is separated into two areas or components: tanning and dressing of leather; manufacturing of luggage, handbags, saddlery, and harness; and dressing and dyeing of fur. The second sector or component is footwear manufacturing. It can be seen from the study that wage rate and productivity are unrelated in both components, thus both provide an equal opportunity for framing and implementing policies to maximise production potential. The regulations appear to have improved things because there has been significant growth, but the government still needs to take action and implement policies to minimise gender disparity and ensure that people are paid according to their ability and production.

Finally, the aforementioned paper indicated that in the leather business, real pay has a positive and substantial relationship with real man-days and real employment growth, and real Man days employed are favourably significantly connected with employment growth (for both categories). It shows that as the actual wage rate rises, employment in the leather industry rises as well.

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APPENDIX

Table 1: Composition of Employees Engaged in Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, and harness; dressing and dyeing of fur.

Code	Characteristic	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	The compound annual growth rate
	A. Number of Person Engaged	90587	103712	91406	104532	97766	124752	0.066
151	1. Workers	74766	87214	76439	88941	80595	103872	
151	1.1 Directly Employed	56174	57265	52759	58776	57400	77532	
151	Men	43771	43083	40227	44711	42411	50349	
151	Women	12403	14182	12532	14065	14989	27183	
151	1.2 Employed through Contractors	18592	29950	23680	30164	23195	26339	
151	2. Employees other than Workers	15310	15872	14321	14983	16539	20218	
151	2.1 Supervisory and Managerial	7138	6823	5707	5991	7253	9493	
151	2.2 Other Employees	8172	9049	8614	8992	9286	10725	
151	3. Unpaid Family Members/ Proprietors	510	626	645	608	633	661	
151	Annual Growth Rate (percentage)		14.49	-11.87	14.36	-6.47	27.60	

Source: India stat 2010-11 to 2015-16: Calculated by Researcher

Table 2: Composition of Employees Engaged in Manufacturing of footwear.

Code	Characteristic	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	The compound annual growth rate
	Number of Person Engaged	202070	201099	193987	207062	229376	255015	0.047

152	1. Workers	176658	174150	167803	177213	197982	220340	
152	1.1 Directly Employed	155005	153086	143477	150845	162658	183766	
152	Men	94848	92794	86292	91437	88073	98870	
152	Women	60157	60292	57185	59408	74585	84896	
152	1.2 Employed through Contractors	21653	21064	24326	26367	35323	36574	
152	2. Employees other than Workers	24982	26659	25806	29318	30724	34177	
152	2.1 Supervisory and Managerial	11794	11751	11832	12759	14396	15448	
152	2.2 Other Employees	13188	14908	13974	16559	16328	18729	
152	3. Unpaid Family Members/ Proprietors	431	290	378	531	670	498	
152	Annual Growth Rate (percentage)		-0.48	-3.54	6.74	10.78	11.18	

Table 3: Composition of wages and salaries of people engaged in Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, and harness; dressing and dyeing of fur.

Characteristic		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Compound annual growth rate of wages
	Wages and salaries including employer's contribution	91767	110822	110241	139505	157179	215063	0.185703
151	1. Wages and Salary Including Bonus	80527	174150	167803	177213	197982	220340	

151	1.1 Wages and Salary		75086	143477	150845	162658	183766	
151	1.1.1 Workers	47606	61954	86292	91437	88073	98870	
151	1.1.2 Supervisory and Managerial	19676	60292	57185	59408	74585	84896	
151	1.1.3 Other Employees	7804	21064	24326	26367	35323	36574	
151	1.2 Bonus to all Staff	5440	26659	25806	29318	30724	34177	
151	2. Employers' Contribution	11240	11751	11832	12759	14396	15448	
	Annual growth rate of wages (percentage)		20.76	13974	16559	16328	18729	

Source: India stat 2010-11 to 2015-16, Compound annual growth rate is Calculated by Researcher.

Table 4: Composition of wages and salaries of people engaged in Manufacturing of footwear.

CODE		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Compound annual growth rate of wages
152	Wages and salaries including employer's contribution	188614	217887	233415	306612	352113	440338	0.185703
152	1. Wages and Salary Including Bonus	165099	180291	167803	177213	197982	220340	
152	1.1 Wages and Salary		75086	143477	150845	162658	183766	
152	1.1.1 Workers	118962	193504	255425	91437	88073	98870	
152	1.1.2 Supervisory and Managerial	31920	41562	44851	67634	72598	94227	
152	1.1.3 Other Employee	15896	19767	24326	26367	35323	36574	
152	1.2 Bonus to all Staff	5440	26659	25806	29318	30724	34177	

152	2. Employers' Contribution	11240	11751	11832	12759	14396	15448	
	The annual growth rate of wages (percentage)		15.52	13974	16559	16328	18729	

Source: India stat 2010-11 to 2015-16, Compound annual growth rate is Calculated by Researcher

Table 5: Calculation of wage rate of people engaged in Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur.

CODE	Categories	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
151	Wages and salaries including employers contribution	91767	110822	110241	139505	157179	215063
151	Number of People Engaged	90587	103712	91406	104532	97766	124752
151	WAGE RATE	1.0130	1.0685	1.2060	1.3345	1.6077	1.7239

Source: Estimated by Researcher

Table 6: calculation of wage rate in Manufacturing of Footwear

	Categories	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
151	Wages and salaries including employer's contribution	188614	217887	233415	306612	352113	440338
151	Number of Person Engaged	202070	201099	193987	207062	229376	255015
151	WAGE RATE	0.9334	1.0834	1.2032	1.4807	1.5350	1.7267

Source: Estimated by Researcher

Table 7: labour productivity of people engaged in tanning and dressing of leather; manufacture of luggage, handbags, saddlery, and harness; dressing and dyeing of fur.

Code		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
151	Net value-added	129407	217887	233415	306612	352113	440338
151	Number of people engaged	90587	26447	193987	207062	229376	255015
151	Labour productivity	1.247753394	0.255004	1.7044395	2.0454789	0.9510259	2.6430198

Source: calculated by a researcher

Table 8:labour productivity of people engaged in the manufacturing of footwear.

Code		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
151	Net value-added	330279	217887	233415	306612	352113	440338
151	Number of people engaged	202070	26447	193987	207062	229376	255015
151	Labour productivity	1.6344	0.2490	2.1205	2.6558	2.4132	2.4436

Source: calculated by a researcher

Table 9: the relation between employments, man-days employed, wages and net value added (NVA) Code 151.

Year	2011-11	2011-12	2012-13	2013-14	2014-15	2015-16
Real NVA		-0.77711	5.54019	0.552121	-0.55077	2.703459
Employment growth		0.146	-0.126	0.153	-0.068	0.107
Man days per employee		0.0018	-0.0099	0.0101	-0.0040	0.0020
Real Wage		0.107	-0.104	0.118	0.905	0.310
Man days per employee	298.4	298.96	296	299	297.8	298.4
Real Wage	15987.2	17703.1	15862	17749	19357	25361.2

Total Employed	27123587	31109712	27172406	31349535	29211766	37348752
Real NVA	74279618	16555822	108278220	168060948	75498136	279604256

Source: calculated by Researcher

Table 10: Relation between employments, man-days employed, wages and net value added (NVA) Code 152.

Year	2011-11	2011-12	2012-13	2013-14	2014-15	2015-16
Mandays per employee		0.001764	-0.00645	0.006689	-0.00601	0.007387
Employment		-0.00304	-0.0403	0.073482	0.100731	0.119967
Real Wage		0.059241	-0.03509	0.161501	0.111632	0.197605
Real NVA		-0.83461	11.30759	0.120089	9.409663	-0.88255
Mandays per employee	300.41	300.94	299	301	299.19	301.4
Real Wage	32859.58	34806.23	33585	39009	43363.66	51932.54
Total Employed	60906070	60721099	58273987	62556062	68857376	77118015
Real NVA	189580146	31354462	385897980	432240264	4499475292	528443072

Source: calculated by Researcher

AN EMPIRICAL INVESTIGATION OF THE RELATIONSHIP BETWEEN RETAIL STORE ATTRIBUTES AND CUSTOMER SATISFACTION

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ABSTRACT

It is the goal of this study to examine the relationship between consumer satisfaction and various retail business attributes. As everyone knows that Indian retail industries are flourishing and Organised retail is chipping away at brick-and-mortar businesses' market share. According to the findings of previous research, the scale used to assess customer satisfaction includes store atmosphere, shopping convenience, operational competence, service quality, product selection, pricing policy, and services given after the sale. Using a sample of 274 Big Bazaar consumers in West Bengal, India, we tested the suggested model using Smart PLS. According to this study, customers' satisfaction in the retail business is influenced by a variety of shop factors. Store attributes were shown to be the most significant antecedent of customer satisfaction. By analysing the dimensions of perceived customer satisfaction, this research adds to the understanding of the concepts of customer satisfaction. In this study, further research should be done to analyse

consumer satisfaction in a variety of retail sectors. A comparison of this idea with other retail categories will be possible. Furthermore, Interrelationship between customer satisfaction components in the retail business must also be studied in details.

According to this study, retail managers and executives should aim to influence the atmosphere of their shops as well as the ease of shopping as well as the service quality, product selection, pricing strategy, and after-sale services.

Keywords: *Retail Store attributes, Service Quality, Store atmospherics, Customer Satisfaction.*

INTRODUCTION

The Indian retail market is in a state of boom (IBEF, Indian Retail Industry Analysis, 2021). After Independence, per capita income was very low. Indian customers depended on Mom & Pop stores for their everyday needs (Reuters, 2021). In the 1980s, metropolitan single-chain retail outlets like Gwalior Suiting, Bombay Dyeing, Titan, etc. opened. Multi-brand retail emerged

after the 1990s. Urbanization, demographic shifts, rising per capita income, changing lifestyles, and media proliferation have made retail one among the world's most valuable marketplaces. (Teli, 2014). Liberalization in FDI has boosted multinational companies to target the Indian retail market (Kannaiah & Vinayagamoorthy, 2016). On the other hand, huge investment in the initial stages leads to failure in reaching the breakeven point, and few of them achieve success so far.

Nowadays, several retail stores focus on customer satisfaction to overcome the competition (Betancourt et al., 2007; Saeidi et al., 2015)). A number of studies have shown a correlation between shop characteristics and consumer satisfaction. (e.g., Wu, 2013; Kim et al., 2015). It is important for retailers to understand (1) the aspects that separate them from their competition; (2) how their consumers perceive those features; and (3) the link between perceived store qualities and customer satisfaction (Martinez-Ruiz et al., 2010).

Several variables that distinguish retailers from their competitors have been discovered in the marketing literature. This study attempts to rank those attributes as per their contribution to customer satisfaction. Only a small number of studies have been done in this area, and the vast majority of those studies have focused on the link between perceived shop features and customer happiness (Szymanski and Henard, 2001). Referring to several attributes identified by different researchers, the present work aims to identify a few essential attributes and their impact on customer satisfaction. After doing an intensive literature survey, a modified set

of store attributes has been identified for this research, which is expected to influence overall customer satisfaction. This paper attempts to provide answers to the following questions: 1) what are the dimensions that effect customer satisfaction in a store? and secondly 2) Which of the chosen dimensions has the greatest impact on customer satisfaction?

After a review of the literature on consumer satisfaction and retail shop attributes, we proceeded to discuss our findings. Second, the writers evaluated the suggested hypothesis research approach and analysed the findings. Finally, we summarised the findings of the research, including the study's limitations and management implications.

LITERATURE REVIEW

Customer satisfaction

Nowadays, customer satisfaction is one of the most crucial criteria for a company's long-term viability. The corporation must concentrate on both present and future demand and profit in order to remain competitive in the market for the long term (Xiao et al., 2010). A person's enjoyment or unhappiness with the perceived performance (or result) of a product in compared to their expectations is referred to as customer satisfaction (Oliver, 1980). Customer happiness is linked to a company's success, because happy consumers stay loyal to the company and enhance profits via word-of-mouth and repeat purchases (Zairi, 2000). Customer satisfaction is a psychological trait shown by a customer after consuming a service or product that results in positive experiences (Pleshko and Heiens, 1996). Knowledge of satisfied customers helps gain and maintain competitive advantage and

long-term relationships (Kumar and Reinartz, 2006). Satisfied customers are more likely to buy from the company again and to stay loyal to it, as well (Carter, 2010). Retailers have to provide service as per the customer expectation to satisfy customers for reselling and cross-selling (Jeevananda, 2011). Customer satisfaction is one the most critical business asset which an organization has to manage very cautiously to retain and increase it (Alam and Rana, 2013). Retailers believe that a retailer's performance is determined by the level of client satisfaction (Gomez et al., 2004). Customer satisfaction may assist in gaining a better understanding of purchasing behaviour (Seiders et al., 2005). As a result, several researchers have turned their attention to customer satisfaction research. The fierce level of competition is forcing merchants to prioritise customer satisfaction in order to maintain a long-term connection.

RETAIL STORES ATTRIBUTES

Store atmospherics

Based on previous literature (Mohan, 2013; Erdil 2015; Kumar et al., 2017), several retail shop's features have been found to be utilised by merchants to distinguish themselves from their competition. These shop's features positively impact the degree of customer satisfaction, store choice, and purchase intentions (Popkowski, 2001). Several elements have been identified by Manrai & Manrai (2007) as having an influence on the level of customer satisfaction. These are the range of services, product price, store image, product quality, and personal skills of the employee. Customers are most likely to be pleased with

a store's convenience, atmosphere, product variety, price, and promotions, as well as its customer service and invoicing procedures (Mohan, 2013). Store atmospherics have significant influences on consumer's shopping behavior. Spence et al. (2014) pointed out that various audiovisual atmospherics affect customers' perceptions and their behavior. Grewal & Baker (1994) found that the atmosphere and design of retail stores had a substantial impact on customers' perceptions of retail image and price tolerance. Good store atmospherics create more pleasant retail environments for customers, thus energizing them to stay for an extended period, spend more, and frequently return (Brand, 1963). Based on these researches, it was hypothesised that shop atmospherics positively impacts Big Bazaar's total customer satisfaction.

H1: Store Atmospherics has positively impacted Big Bazaar's total customer satisfaction.

Shopping convenience

Shopping convenience consists of all those elements that reduce the amount of time and helps prospective customers to reach a specific shopping mall easily (Ingene, 1984). Convenient to visit due to location has been validated as a significant retail store attribute, and it encourages customers to come back (Bearden, 1977; Frasquet et al., 2001). In addition, it has been shown that shopping ease has a direct influence on consumer loyalty and satisfaction (Hsu et al., 2010). Based on customer opinion, this component also minimises time and effort (Berry et al., 2002). Convenience is a key factor in bringing individuals to a retail mall (Teller

and Elms, 2010). Based on these researches, it was hypothesised that shopping convenience positively affects overall customer satisfaction concerning Big Bazaar.

H2: Convenience in shopping has a significantly positive impact on perceived customer satisfaction.

Operational Competence

Operational competence is defined as the ability to do a certain job quickly and efficiently; it is the competent use of knowledge and procedure to complete a task successfully (Butler, 1978). Operational competence consists of several items like waiting time in queue, availability of the products, timely delivery, etc. which affect the decision-making process and satisfaction level of customers (Davis-Sramek et al., 2008). According to Smaros et al. (2000), merchants must transition from simple trade to providing easy services to their clients in order to maintain a competitive edge. McDonald (1991) identified that speed in the checkout counters significantly impacts different age groups and one of the essential store attributes for influencing customer satisfaction. The majority of clients believe that wasting their time while waiting in que (Mittal, 2016; Weiss and Tucker, 2018) and a long period of waiting leads to becoming less satisfied customers (Lee and Lambert, 2005; Xie and Or, 2017). Operational elements can play an essential role in differentiating a seemingly similar product (Davis-Sramek et al., 2008). On the basis of these research, it was hypothesised that operational competence had a favourable impact on perceived customer satisfaction with Big Bazaar.

H3: Operational competence has a favourable impact on perceived customer satisfaction with Big Bazaar

Service Quality

In this age of competition, employee service quality is now considered an essential retail store attributes, and the long-run success of any service provider is closely linked with high-quality customer services that govern customer satisfaction (Lymperopoulos, 2006; Hussain et al., 2015). Employee quality performance can minimize customer absenteeism and enhance customer satisfaction which boosts the employee's morale and helps them to work better (Zehir et al., 2012). The most demanding service element that may assure customer satisfaction and assist differentiate from competitors is service quality (Carter et al., 2013). Based on the research, it is found that service quality attributes elicit customer satisfaction and dissatisfaction, respectively (Chiguvi, 2016). Service quality attributes that boost satisfaction also help line up a company's resources to capitulate a high return on investment (Kristianto et al., 2012). On the basis of the above theoretical arguments and empirical data, it was hypothesised that service quality has a positive effect on perceived customer satisfaction with Big Bazaar.

H4: Service Quality has a positive effect on perceived customer satisfaction with Big Bazaar.

Product assortment

The selection of products in accordance with client expectations is one of the key duties of retailers (Levy and Weitz, 2008). Additionally, it is a critical component of the marketing mix, since it contributes to customer acquisition and

retention (Libai, 2020). customer satisfaction of retail stores is primarily induced by product availability and product assortment (Sharif, 2012). Assembling an appropriate variety and product mix has always been a difficult task for merchants, since consumers differ in emotional, functional, and behavioural aspects (Terblanche, 2018). Several empirical types of research proved that a well-chosen product range contributes to a positive return on investment (Pan and Zinkhan, 2006; Chan et al., 2017). Apart from customer acquisition and retention, product assortments can impact customers' choices by shaping customer preferences (Whitley, 2018). On the basis of the above theoretical arguments and empirical data, the hypothesis was proposed that product assortment has a significantly positive influence on Big Bazaar's perceived customer satisfaction.

H5: Product assortment has a significantly positive influence on Big Bazaar's perceived customer satisfaction.

Pricing Policies

Pricing policies of a retail store can also influence customers because the price of a product can attract or alienate them (Grewal et al., 1998). Price determines the quality of a product (Lewis and Shoemaker, 1997), and customers perceive high quality if the product's price is high and vis-a-vis (Conway and Saad, 2006). Grocery-shopping decisions of a customer are also depending on the price of the product in that grocery (Hortman et al., 1990). Shoppers choose between various retail models depending on the price strategies of the various retail establishments (Carpenter and Moore, 2006). The store's value is heavily influenced by its price (Sirohi et al., 1998). Pricing may influence a

retailer's profitability, brand image, and customer loyalty by persuading customers to buy from them (Grewal et al., 2011). Group with a low income in comparison to the high-income group, customers are more worried with the price of a product while purchasing consumer durable goods (Gonzalez-Benito et al., 2010). On the basis of the above theoretical arguments and empirical data, the hypothesis was proposed that pricing policies have a significantly positive influence on Big Bazaar's perceived customer satisfaction.

H6: Pricing policies have a significantly positive influence on Big Bazaar's perceived customer satisfaction.

After Sales Service:

Customer service activities that an organization provides after the delivery of a product or service are known as after-sales services. (Murali et al., 2016; Chiguvi, 2020). Along with all of the other characteristics of a retail store, after-sales service is an undeniable predictor of client retention and satisfaction (Kurata and Nam, 2010). Products and services that include post-purchase support are not only required by law, but also help businesses stand out from their competition (Li et al., 2014). Many manufacturing organization perceive that After-sales service is a crucial activity that can help boost total profits through customer satisfaction and loyalty (Ahn and Sohn, 2009). On the basis of the above theoretical arguments and empirical data, the hypothesis was proposed that has a significantly positive influence on Big Bazaar's perceived customer satisfaction.

H7: After-sales service has a significantly positive influence on Big Bazaar's perceived customer satisfaction.

CONCEPTUAL MODEL

The focus of this study is on different dimensions of retail stores and their effects on customer satisfaction. Based on the various literatures accessed, a conceptual model is created.

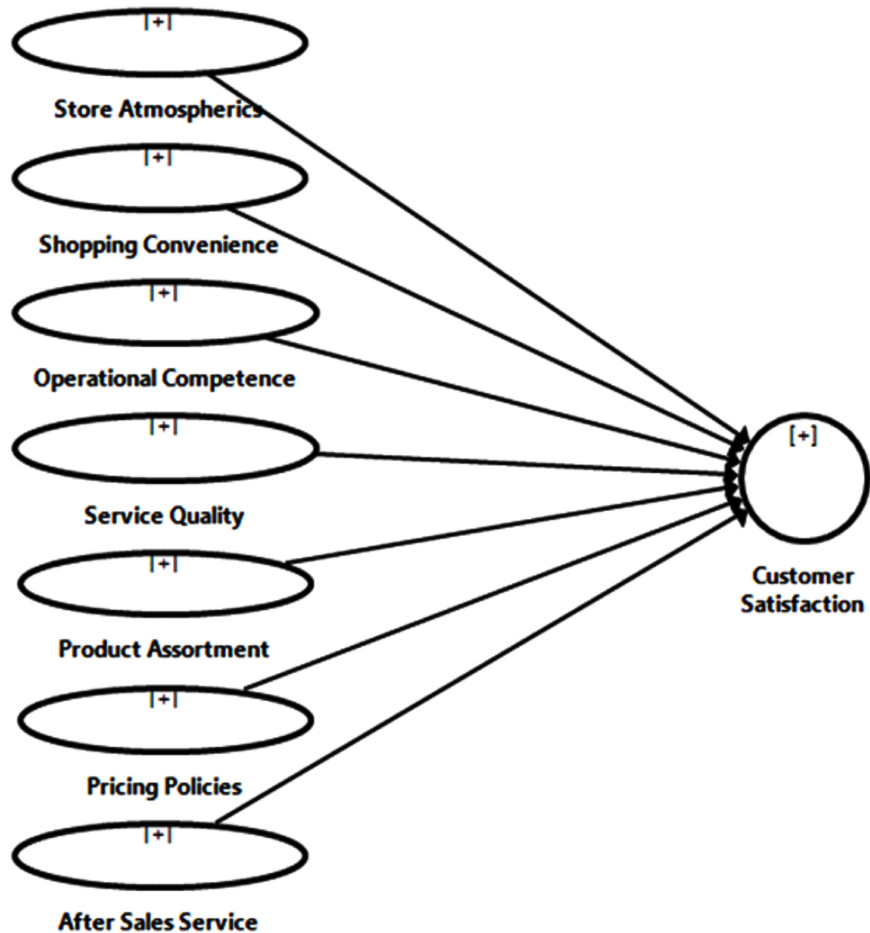


Figure 1: Conceptual Model

RESEARCH METHODOLOGY

This study was carried out in the cities of Burdwan, Durgapur, and Asansol. In addition, owing to pandemic circumstances and the government's shutdown, information from respondents was acquired through an internet questionnaire. The online survey was conducted through convenient sampling method to obtain data through a questionnaire. The questionnaire was adapted from Manrai & Manrai (2007) and Mohan (2013). A customised version of Khan et al. (2016) was used

to gauge customer satisfaction. All items were graded on a 5-point scale ranging from 1 to 5, with 1 indicating strongly disagree or is not true and 5 representing strongly agree or is extremely true.

SAMPLES AND PROCEDURE

G*Power software (3.1.9.7 version) was used to calculate the study’s sample size (Faul et al., 2007; 2009). The research needed a sample size of 218 participants to achieve a power of 0.95, however it was completed with a sample size of 274. Estimates of minimum sample sizes are shown in Figure 2.

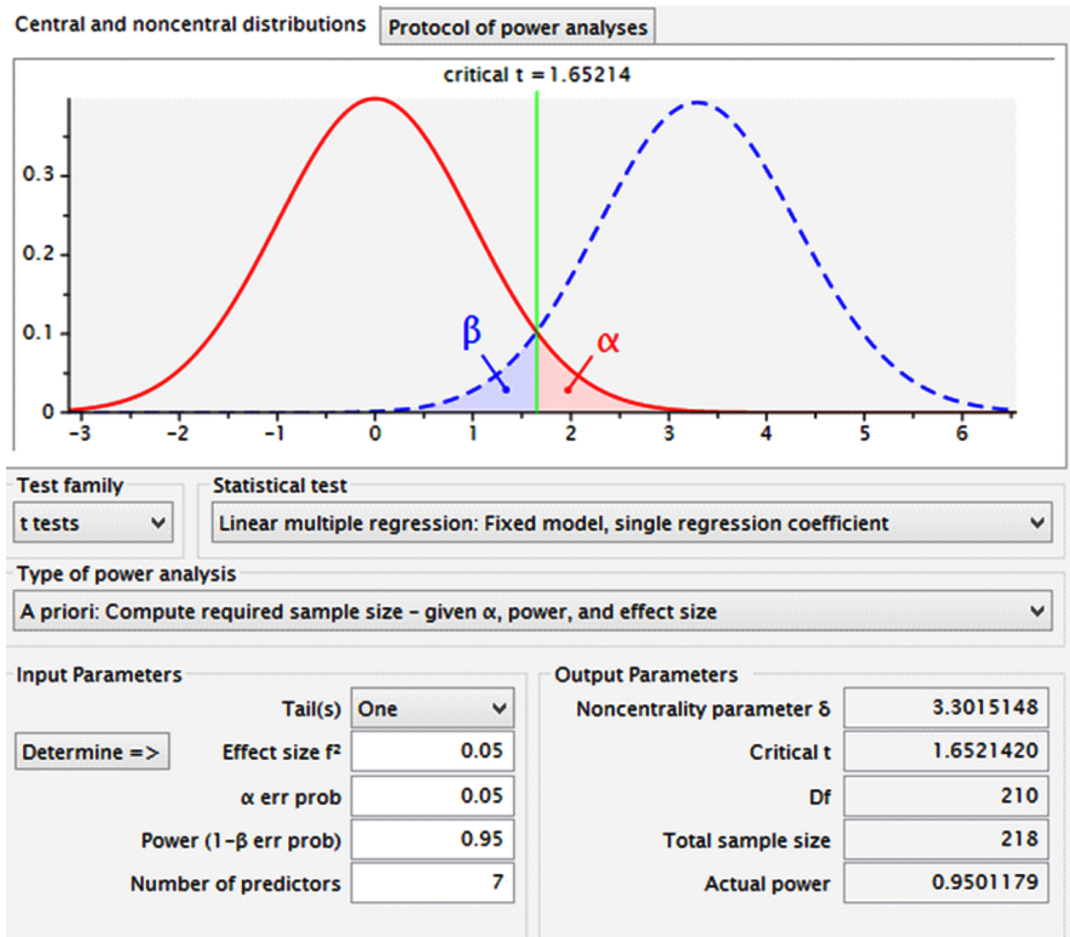


Figure 2: G*Power Survey (Faul et al. 2007; 2009).

Source: Authors' Calculations

The sample data demographic compositions are as follows:

Table 1: Sample demographic profile.

Demographic Characteristics	Categories	Respondents (In Numbers)
Age Groups	15+years to 30 years	113
	30+ years to 45 years	83
	45+ years and above	78
	Total	274
Education	10th standard	46
	Graduate	164
	Postgraduate	64
	Total	274
Income groups	Up to 25 thousand	96
	25 thousand + to 50 thousand	91
	Above 50 thousand	87
	Total	274

Data was obtained through an online questionnaire from these groups on their perceptions of service quality and overall customer satisfaction.

STATISTICAL TOOLS USED FOR ANALYSES

The Partial Least Square Structural Equational Modeling, the feature of SmartPLS Software 3.3.4 version was used to compute the entire correct data of 274 respondents' feedback obtained from the survey for 27 questions.

ASSESSMENT OF CONCEPTUAL MODEL

The research assessed internal model reliability and validity. This was done using Dijkstra and Henseler's RhoA and Composite Reliability (CR). All dimensions' RhoA (Except customer satisfaction) and CR exceed 0.70. (Ali et al., 2018; Hair et al., 2014; 2017; 2020). The customer satisfaction construct's Dijkstra and Henseler's rhoA was less than 0.70, while the composite reliability was much over 0.70 to demonstrate the constructs' reliability (Hair et al., 2019). All the reflective construct of the model's has above 0.50 threshold value for convergent validity (Fornell and Larcker, 1981; Hair et al., 2014; 2019). Table 2 shows the results of internal reliability and convergent validity tests.

Table 2: Quality Criterion for reflective model assessments.

Construct	Items	Type	Loading/Weights	rhoA	CR	AVE
Store Atmospherics	StoreAtmos1	Reflective	0.887	0.844	0.869	0.626
	StoreAtmos2		0.737			
	StoreAtmos3		0.769			
	StoreAtmos4		0.763			
Shopping Convenience	ShopConv1	Reflective	0.93	0.85	0.905	0.761
	ShopConv2		0.844			
	ShopConv3		0.839			
Operational Competence	OperComp1	Reflective	0.898	0.823	0.873	0.634
	OperComp2		0.79			
	OperComp3		0.747			
	OperComp4		0.739			
Service Quality	ServQult1	Reflective	0.883	0.745	0.832	0.624
	ServQult2		0.751			
	ServQult4		0.727			
Product Assortment	ProdAssort1	Reflective	0.848	0.774	0.868	0.687
	ProdAssort2		0.817			
	ProdAssort3		0.82			
Pricing Policies	PricePol1	Reflective	0.747	0.747	0.861	0.675
	PricePol2		0.868			
	PricePol3		0.845			
After Sales Service	AftSalesServ1	Reflective	0.86	0.725	0.818	0.602
	AftSalesServ2		0.731			
	AftSalesServ3		0.729			
Customer Satisfaction	CustSatisf1	Reflective	0.778	0.654	0.81	0.587
	CustSatisf2		0.818			
	CustSatisf3		0.697			

Source: Authors' Calculations

Fornell and Larcker's Criterion (1981) was used to examine the discriminant validity of the data, which claimed that the under root of AVE recovered from each construct on the diagonal was

larger than the inter-item correlation values. Each construct was distinct from all others in Table 3, suggesting that this research may be used to conduct the final analysis.

Table 3: Discriminant Validity test.

Constructs	After Sales Service	Customer Satisfaction	Product Assortment	Operational Competence	Pricing and Policies	Service Quality	Shopping Convenience	Store Atmospherics
After Sales Service	0.776							
Customer Satisfaction	0.149	0.766						
Product Assortment	0.068	0.645	0.829					
Operational Competence	-0.149	0.19	0.217	0.796				
Pricing Policies	0.125	0.031	-0.013	-0.149	0.822			
Service Quality	-0.174	0.284	0.215	0.039	0.023	0.79		
Shopping Convenience	0.117	0.394	0.338	0.074	0.091	0.196	0.872	
Store Atmospherics	0.096	0.771	0.752	0.239	0.05	0.234	0.358	0.791

Source: Authors' Calculations

STRUCTURAL MODEL ASSESSMENTS

Structure model evaluations looked at how the independent and dependent variables interacted with each other (Hair et al., 2017). A bootstrapping procedure with 5000 suggested bootstraps without sign change was used to verify the required p-values for the study's hypotheses (Hair et al., 2020). The VIF value below five is a rule of thumb when calculating collinearity because some other factors like sample size also influence regression coefficients (O'Brien, 2007). The values of the VIFs (See Table 4) range from 1.052 to 2.468 were found in this study, which is lower than the threshold limits three (Mason and Perreault 1991; Becker et al., 2013), and it explained that the study did not have any concerns with collinearity (Hair et al., 2017).

Table 4: Inner VIF Value.

Constructs	Inner VIF Value
Store Atmospherics	2.468
Shopping Convenience	1.201

Operational Competence	1.126
Service Quality	1.134
Product Assortment	2.363
Pricing and Policies	1.052
After Sales Service	1.115

It was necessary to examine the significance and relevance of the path coefficients using the PLS Algorithm's bootstrapping procedure with a total of 5000 samples after the research of collinearity in the inner model had been carried out before. Table 5 results disclosed that store atmospherics is the most prominent retail store attribute that positively influences customer satisfaction ($\beta=0.604$; $p<0.001$), supporting H1.

The study indicated that two hypotheses were supported at a 1% significance level in addition to the shop atmosphere (Table V). Customers who purchase at Big Bazaar are more likely to be satisfied if they get quality service ($\beta=0.113$; $p<0.001$) and convenient shopping experience ($\beta=0.104$; $p<0.001$). So, alternative hypotheses H2 and H4 were duly supported by the result.

The hypotheses testing and the model assessment are well elucidated by Figure 3 as below:

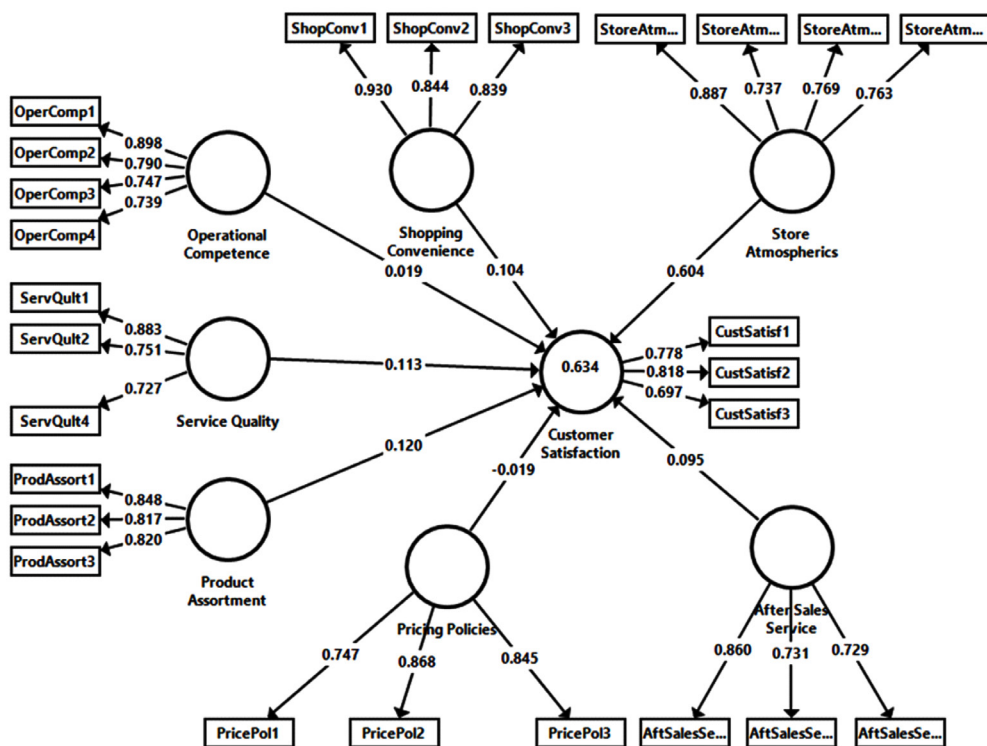


Figure 4: Structural Model Assessments

The results of the hypothesis testing (Table V) further revealed that two hypotheses are supported at a 5% significance level. Product Assortment ($\beta=0.12$; $p<0.05$) and after-sales service ($\beta=0.095$; $p<0.05$) have a moderately beneficial impact on Big Bazaar retail store customers. So, null hypotheses of H5 and H7 were rejected.

As per the result, pricing policies ($\beta=-0.19$; $p>0.05$) and operational competence ($\beta=0.19$; $p>0.05$) has a negative (non-significant) impact on overall customer satisfaction concerning Big Bazaar retail, which fails to reject the null hypotheses H3 and H6. The hypotheses testing and the assessment of the structural model are well elucidated by Table 5 as below:

Table 5: Results of Hypothesis Testing.

Hypothesis	Path Relationships	Std. Beta	t-values	CI 2.5%	CI 97.5%	Support
H1	Store Atmospherics -> Customer Satisfaction	0.604	11.48**	0.496	0.704	Yes
H2	Shopping Convenience -> Customer Satisfaction	0.104	2.71**	0.026	0.178	Yes
H3	Operational Competence -> Customer Satisfaction	0.019	0.51	-0.048	0.099	No
H4	Service Quality -> Customer Satisfaction	0.113	2.92**	0.038	0.189	Yes
H5	Product Assortment -> Customer Satisfaction	0.12	1.93*	0.002	0.244	Yes
H6	Pricing Policies -> Customer Satisfaction	-0.019	0.42	-0.093	0.08	No
H7	After Sales Service -> Customer Satisfaction	0.095	2.39*	0.022	0.177	Yes

Source: Authors' Calculations; Path Co-efficient (Note: * $p < 0.05$, ** $p < 0.001$.)

The R2 (coefficient of determination) of customer satisfaction was significantly high at 63.41 percent. In behavioral sciences, the value of R2 above 0.20 is considered high (Rasoolimanesh et al., 2017). So, as per the study, overall customer satisfaction is significantly determined by Store Atmospherics, Service Quality, Shopping Convenience, Product Assortment, and After-sales service. In addition, the Standardised Root Mean Square Residual (SRMR) fit indices were used to cross-examine the global fit criteria.

A global model fit indicator like SRMR is required in this study (Hair et al., 2020). The SRMR in this model is 0.066, which is below the threshold of 0.08 explain that the model under the study had good explanatory power (Hu and Bentler, 1999; Henseler et al., 2016).

The effect sizes f^2 and Q^2 were used to assess the predictive value and relevance of the proposed model. Independent factors have a 0.02 and above (little effects), 0.15 and above (moderate effects), and 0.35 and above (big effects) influence on the dependent variable (Cohen, 1988). The

shop atmosphere ($f^2=0.404$) has a substantial influence on customer satisfaction in this research, whereas the other factors have a minor effect on total consumer satisfaction. Finally, Stone-Geisser's(Q2), a Smart-PLS blindfolding process, was utilised to examine the structural model's predictive significance. The model's predictive relevance was measured using an omission distance of 7, and the result was 0.356 for customer happiness, showing that it has a significant predictive relevance (Chin, 2010; Hair et al., 2016).

CONCLUSION, MANAGERIAL IMPLICATION AND SCOPE OF FUTURE RESEARCH

According to IBEF (2021), the Indian grocery retail industry was valued US \$ 608 billion in 2020 and is predicted to expand to US \$ 1.3 trillion by 2024. The Indian retail industry is increasing at a CAGR of 9% to 11%, fuelled by urbanisation, rising per capita income, and a rise in the number of nuclear couples (Invest India, 2021). From a current anticipated market size of \$793 billion in 2020, the retail industry is predicted to grow to 1.5 trillion by 2030 (Invest India, 2021). Relaxation in govt policies is attracting multinational companies towards the Indian retail market. It's increase completion among the entire player in the market. Moreover, knowledgeable customers due to technological advancement seek more customer service from organized retails. Satisfying a customer in this scenario is a very difficult task for most companies.

Marketing research on organized retail has not been done very extensively. At the same

time, the importance of organized retailing is gaining propulsion. Raised in per capita income has changed the customers' perception, and customers are not ready to compromise on quality. However, the appeal of retail stores and the service given by retailers, have a big impact on the thoughts of customers. Many organized retailers are facing tremendous pressure to differentiate themselves from others due to huge competition. Accordingly, the study's major goal was to examine the relationship between Big Bazaar's retail store attributes and customer satisfaction. To validate the model and analyse the data, the SMART-PLS is used in this study.

The paper's findings succinctly support the impact of several retail store features on overall consumer satisfaction. It is evident from the outcomes that semi-urban and rural customers evaluate organized retail stores on five retail stores attributes. These are store atmospherics, shopping convenience, service quality, product assortment, and after-sales service. The study establishes that customers give maximum importance to store atmospherics before going to select any organized retails. The findings also suggest that customers give weightage to shopping convenience, service quality, Product Assortment, and after-sales service of retail stores before visiting there. The findings of the case of activewear specialty stores (Chang, 2015), completely oppose the result obtained in this study. For activewear specialty retailers, store attributes had little effect on customer satisfaction. In order to meet and exceed consumer expectations and boost customer satisfaction, retail shop owners and managers may benefit from this research's conclusions.

Overall consumer satisfaction is unaffected

by pricing strategies and operational competency, according to the report. Customers of semi-urban and rural areas are not concerned about waiting time in queue, several billing counters, or frequently buying benefits. In fact, due to low per capita income compare to urban areas, they visit different organized retail outlets occasionally and love to enjoy the ambiance inside the retail stores by standing in the queue.

Due consideration should be given to improving store atmospheres, shopping convenience, service quality, product assortment, and after-sales support in light of the findings of this study, as these traits are significant variables leading to total consumer satisfaction with Big Bazaar. An attractive store atmosphere should be created to increase the footfall of customers. A Variety of goods with better quality should be

displayed in retail stores. Training for personnel to increase service quality and after-sale service and frequently monitoring client satisfaction over time are examples of these initiatives.

Despite the fact that the study was conducted in the context of West Bengal Big Bazaar Retail Stores, the insights gained are equally valuable and can be applied to other retail stores in different parts of India to see if the customers behave in the same manner or not, despite the study's high predictive relevance. The link between the image of a retail business and customer satisfaction should be the subject of future research. Varied geographical areas have different customer preferences, which can disclose new information. The moderating impacts of other demographic characteristics could also be investigated for fresh insights.

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AN INTERACTION ANALYSIS AND ASSESSMENT OF RISK PERCEPTION, EQUITY INVESTMENT AND FINANCIAL INFORMATION AWARENESS

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ABSTRACT

The Investment decision of investors is subjective considering their dependence on various factors such as socio-demographic variables, risk perception, objectives, and financial information awareness. Behavioral finance molds the traditional definition of risk which implies deviation from actual return with the perception towards the risk which tends to vary from one individual to another. Risk perception plays an important role in determining investment choice. The study attempts to identify the prominent factors having impact on the risk perception of individual investors of Sikkim with the help of Factor Analysis. Primary data consisting of 250 individuals were collected by self-survey method. There are four factors influencing the risk perception namely, Risk Opportunist, Overconfident Risk Bearer, Unrealistic Anticipator, and Cognizant Pursuer. Binary logistic regression further enabled to understand their impact on the investment preference towards the equity shares. The study revealed a significant and positive

relationship between risk perception and financial information awareness.

Keywords: Risk Perception, Financial Information Awareness, Equity Shares, Binary Logistic Regression

INTRODUCTION

An investment decision involves a complex process of selecting the most appropriate option among the various investment alternatives. Investment decisions tend to vary from one individual to another under the influencing factors (Riffin & Ahmad, 2012).

As opposed to the traditional financial theory, behavioral finance argues that investors are prone to irrational and limited decision-making tendencies. The uncertainty arises in the financial markets on account of psychological attributes such as recognition and emotion biases (Bikas et al., 2013). Risk Perception reflects the extent to which an individual is intimidated by the risks associated with financial instruments. It is greatly influenced by personal sentiments such as concerns or experience. These perceptions which act as sensory organs then govern an

individual to take relevant actions with respect to investment decisions.

Kahneman and Tversky (1979) gave a new insight into behavioral finance through the introduction of the Prospect theory. The theory entails that the pain felt by people from incurring a loss is stronger than the pleasure experienced from an equal amount of gain. Thus human behavior is prone to risk aversion based on the situation. There lies a vast disparity in the risks displayed by investment instruments and risks perceived by individuals. Since the behavioral traits of an individual vary from person to person, so does the risk perception towards the various investment schemes. Analysis of the risk perception of the investors relative to their investment decision forms an integral part of the proposed study. Since the concept of the investment itself is founded on the existence of the significant relationship between risks and return. Hence, the proposed study simply attempts to take a step forward by probing into the arena of risk perceptions withheld by the individual investors and their impact on the investment decision.

Research Questions

What are the factors that influence the risk perception of individual investors?

Do risk perceptions impact investment preferences?

Is financial information awareness related to risk perception?

LITERATURE REVIEW

Wong et al. (2018) attempted to measure the risk attitude of individuals with their retirement choices in Hong Kong and the United Kingdom.

The study revealed a significant difference in the choice of retirement products with risk-seeking individuals opting for high-end risk products while risk-averse individuals preferring less risky products. The risk attitudes of risk-neutral individuals was observed to be similar to the risk-averse individuals.

Ponmuthumari and Mathi (2019) also conducted a similar investigation on the impact of risk perception on investment preference in India. The study revealed high-risk tolerance among the mutual fund investors in comparison to Life Insurance Corporation (LIC) investors. Similar findings were reported by Aren and Zengin (2016) indicating preference of high-risk appetite towards equities, portfolio, and foreign exchange investment while risk aversion tends to deposit schemes.

Ullah, Rehman and Khattak (2017) also agreed that the investment preference of individual investors is based on the safety factor indicating their risk aversion towards products other than bank deposits and insurance.

Bondia, Biswal and Panda (2019) further supported the above findings by indicating the prevalence of the mental account bias involving categorization of the stocks in terms of safe and risky by the investors in the Indian stock market scenario.

Singh and Kaur (2018) also considered low risk and maturity as crucial in deciding investment in various financial products.

In disagreement with the above findings Hube, Palan and Zeisberger (2019) identified the probability of incurring the loss as the main driver influencing risk perception that not only affects the asset price and trading behavior in the financial market but also explains the

preference of investors towards the investment avenue promising guaranteed return.

Singh and Bhattacharjee (2019) on the other hand identified the various issues related with information, technical and fundamental nature in of the market having considerable influence on the risk perception of investors.

Sindhu and Kumar (2014) highlighted the factors influencing risk perception towards the mutual fund namely, the uncertainty of returns, financial assets know-how, loss aversion, diversification of portfolios, and seeking professional and investment guidance.

Abdeldayem (2015) unanimously consented to the significance of both quantitative and qualitative factors such as profitability, depression and economic well being in predicting risk perception.

Sarkar and Sahu (2018) revealed that the demographic variables, awareness, and perceived risk have a significant influence on the investment behavior of individual investors. Sulaiman (2012) emphasized the predicting ability of demographic variables concerning the financial risk tolerance of investors.

Similarly Krishna, Sultana and Reddy (2019) posit significant influence of the various demographic variables such as gender, income, educational qualifications, and knowledge level on the risk-taking ability.

Geetha and Vimala (2014) also maintained that the risk-taking capacity of investors in Chennai is significantly influenced by the demographic variables except for gender. Capital appreciation, affordability, and liquidity were considered as the most important determinants.

The study by Oehler, Horn and Wedlich (2018) revealed that subjective risk aversion

predicted better objective risk aversion than socio-demographic variables. The objective risk aversion of young adults increased with the increase in the monetary stake. However, the subjective risk aversion of women was found to be more risk-averse than the young adults.

Similarly, Razen et al. (2020) also posit that younger males exhibit a higher level of risk-taking behavior especially with monetary stakes hence are more involved in gambling compared to smoking. However, older aged individuals showed a high level of involvement in both the risky field behaviors of gambling and smoking.

Chavali and Mohanraj (2016) in agreement with previous findings observed the significance of age and occupation in risk perception. The results demonstrated the risk-averse nature of the majority of investors who preferred assured gain and smaller certain losses.

Chattopadhyay and Dasgupta (2015) observed a low level of risk tolerance among the aged and married individuals having children and dependents. Similarly, other socio-demographic variables such as gender, educational qualification, income, savings, returns from investment, and investment amounts demonstrated significant influence on the risk attitude of investors.

A similar study conducted by Deb and Singh (2016) among the bank employees in Tripura, reckoned an increase in the investment volume with the decrease in risk perception. Risk-averse investors usually avoided investment in mutual funds.

Atchyuthan and Yogendrarajah (2017) revealed that demographic variables are not related to awareness level.

However, Chaudhery (2017) contradicted by suggesting the significant difference between

gender concerning awareness. A significant association was also observed between awareness level and education except for the income level.

Kumar and Mankani (2017) posit that investors displayed higher awareness of bank deposits and insurance compared to mutual funds and equity shares.

Azhar et al. (2017) reported the crisis faced by the youth of Malaysia in terms of financial unawareness having a significant influence on the investment scenario.

Lusardi and Mitchell (2014) also confronted similar circumstances of inadequate financial knowledge among the investors in the United States of America, Germany, Switzerland, Italy, Sweden, and France. A major gender difference was observed with the male having better financial awareness compared to female investors.

Patil and Nandawar (2014) also agreed to similar findings in the Indian context with male investors comprehending better financial awareness over female investors.

Research Gap

Most of the past research work has focused only on the broader concept of behavioral finance as an important determinant of the investment decision. However, an investigation into the risk perceived by investors on an individual level has not been explored in-depth. Most of the studies assessing the fundamental and technical issues were subjugated as risk perception influencing the individual investors. The current study attempts to fill that gap by accounting for the attitude and psychological mindset of individuals under the investment scenario.

A review of past research papers reveals few contributions in the field of financial

information awareness and their implications on risk perception. The majority of the papers have theoretically suggested the significance of financial awareness in deconstructing the risk perception therefore; the current research study will attempt to empirically understand the relevance of these two variables.

Objectives

1. To identify the factors influencing the risk perception of individual investors of Sikkim.
2. To assess the impact of risk perception on the investment preference towards the equity shares.
3. To determine the relationship between financial information awareness of equity shares and risk perception

Hypothesis

HO: There is no significant relationship between the identified factors influencing risk perception of Sikkimese and their investment preference towards the equity shares.

HO: Financial information awareness of equity shares is not significantly associated to the risk perception of Sikkimese.

RESEARCH METHODOLOGY

The research will attempt to conduct a quantitative approach with the application of a questionnaire survey. A descriptive research method was utilized for approaching the research problem.

Data Source

Data sources comprised both primary and secondary data. Secondary sources involved consulting research articles, websites, reports, and websites.

Sample Size and Sampling Method

The sample size consisted of 250 Certificate of Identification Holders (COI) of Sikkim. Purposive sampling method was administered for collecting data based on field survey

Questionnaire Development and Statistical Technique

The first part of the questionnaire consisted of the demographic profile of respondents and their preference to select or deselect equity shares investment along with their level of financial information awareness of equity shares. The coding was 1 for unaware, 2 for less awareness, 3 for moderate awareness, 4 for aware, and 5 for high awareness.

The second part of the questionnaire comprised of questions assessing the risk perception. Eighteen variables were summarized after the extensive literature review on which a Likert scale was implemented. Strongly disagree

is represented by 1, disagree represented by 2, neither agree nor disagree represented by 3, agree represented by 4 and strongly agree represented by 5. Reverse coding was applied to the opposite types of questions.

An application of item correlation on the scale measuring risk perception revealed a value of less than 0.2 for the items “I take precaution to avoid risky investments”, “Younger aged individuals take more investment risk”, and “I avoid risky investments as I prioritize liquidity”. The variables were deleted from further analysis due to their low correlation (Abubakar et al., 2020; R. Singh & Bhattacharjee, 2019). The total number of variables considered for the study was 15.

Exploratory Factor Analysis, Spearman's Coefficient of Correlation, and Binary Logistics Regression were conducted for fulfilling the research objectives.

Table 1: Literature review consulted for questionnaire development.

Sl. No.	Item or Variables	Literature reviews consulted
1.	I take precaution to avoid risky investments	(Sindhu & S. Rajitha, 2014)
2.	Investments with high level of risk is similar to gambling	
3.	If I have more money I will take more investment risk	
4.	I depend on my broker for investment decision	
5.	I intend to invest based on the familiarity as it makes it less risky	
6.	Diversification of portfolio helps to reduce risks	
7.	Younger aged individuals take more investment risk	
8.	Higher rate of return implies higher risk	
9.	I avoid risky investments as I prioritize liquidity	

10.	The investment is associated with a high degree of safety	(Pasewark & Riley, 2010)
11.	Conservative investors find investment appropriate	
12.	The investment has high probability of repaying the principal at maturity	
13.	I am confident about my investment decisions	(Abdeldayem, 2015)
14.	If there is a chance to win huge profits then I am willing to take high risks	
15.	I possess good knowledge about stock market investment	
16.	I am optimistic about my financial success	(Dorn et al., 2008)
17.	I enjoy risky activities	
18.	I independently take the full responsibility of my investment outcomes	

FINDINGS OF THE STUDY

Reliability

The value of Cronbach's alpha was 0.785 which means the scale is reliable (Chawla & Sondhi, 2011).

Factor Analysis

Table 2: KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.806
Bartlett's Test of Sphericity	Approx. Chi-Square	832.177
	df	105
	Sig.	.000

Since the KMO adequacy value is 0.806 and it is more than 0.5, factor analysis is considered relevant for the study. Bartlett's test of sphericity is significant as the p value is less than 0.05. Hence, the null hypothesis is rejected and it may be concluded that the correlation of coefficient matrix is significant (Hair et al., 2015). The sample size of 250 is appropriate as it represents five times the number of variables or items taken for the study. Factor analysis has been considered suitable for the given data set.

Table 3: Communalities.

	Initial	Extraction
Investments with high level of risk is similar to gambling	1.000	.552
If I have more money I will take more investment risk	1.000	.631

I depend on my broker for investment decision	1.000	.475
I intend to invest based on the familiarity as it makes it less risky	1.000	.545
I am optimistic about my financial success	1.000	.542
Diversification of portfolio helps to reduce risks	1.000	.416
I enjoy risky activities	1.000	.598
Higher rate of return implies higher risk	1.000	.471
If there is a chance to win huge profits then I am willing to take high risks	1.000	.548
The investment is associated with a high degree of safety	1.000	.592
Conservative investors find investment appropriate	1.000	.568
I am confident about my investment decisions	1.000	.663
The investment has high probability of repaying the principal at maturity	1.000	.514
I possess good knowledge about stock market investment	1.000	.602
I independently take the full responsibility of my investment outcomes	1.000	.518

Extraction Method: Principal Component Analysis.

The overall value of communalities is good ranging from 0.416 to 0.663.

Table 4: Total Variance Explained.

Component	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.	4.050	26.999	26.999	4.050	26.999	26.999	2.887	19.248	19.248
2.	1.740	11.599	38.598	1.740	11.599	38.598	2.069	13.796	33.044
3.	1.289	8.596	47.194	1.289	8.596	47.194	1.892	12.614	45.658
4.	1.155	7.701	54.895	1.155	7.701	54.895	1.386	9.237	54.895
5.	.858	5.721	60.616						
6.	.817	5.443	66.059						
7.	.811	5.410	71.469						
8.	.736	4.904	76.372						
9.	.680	4.531	80.903						
10.	.598	3.984	84.887						

11.	.531	3.539	88.426						
12.	.485	3.236	91.662						
13.	.466	3.106	94.768						
14.	.430	2.869	97.637						
15.	.354	2.363	100.000						

Extraction Method: Principal Component Analysis.

The above table reveals that the Eigenvalues of four components are more than 1 and these four components explain 54.8 percent of the total variance. In the field of social science, usually, a solution representing a variance of 60 percent or even less in certain cases is taken into consideration (Hair et al., 2015).

In factor analysis, a method of rotation is applied to the unrotated factor solution to produce a simpler and improved structure. Varimax rotation was applied and the improved rotated factor solution matrix sorted according to the size was obtained as output below.

Table 5: Rotated Component Matrix^a

	Component			
	1	2	3	4
If I have more money I will take more investment risk	.729	.186	.042	.250
I enjoy risky activities	.722	.220	-.047	-.164
I depend on my broker for investment decision	.659	-.010	.079	.186
I possess good knowledge about stock market investment	.656	.087	.096	-.393
If there is a chance to win huge profits then I am willing to take high risks	.641	.281	.155	.183
Diversification of portfolio helps to reduce risks	.455	.283	.358	-.031
Higher rate of return implies higher risk	.453	.357	-.149	.340
I am confident about my investment decisions	.094	.774	.234	.020
I am optimistic about my financial success	.214	.688	.034	.148
I independently take the full responsibility of my investment outcomes	.225	.681	.022	-.054
The investment is associated with a high degree of safety	.023	.094	.759	-.078
Conservative investors find investment appropriate	.143	-.080	.729	.101
The investment has high probability of repaying the principal at maturity	.013	.359	.614	.088
Investments with high level of risk is similar to gambling	.139	.106	-.086	.717
I intend to invest based on the familiarity as it makes it less risky	-.019	-.028	.387	.627

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Each item load significantly on one of the four factors. The loadings are within an acceptable range having a value of more than 0.45 (Hair et al., 2015).

Labeling the factors influencing risk perceptions

1. The first seven variables load significantly on the first factor. These are “If I have more money I will take more investment risk”, “I enjoy risky activities”, “I depend on my broker for investment decision”, “I possess good knowledge about stock market investment”, “If there is a chance to win huge profits then I am willing to take high risks”, “Diversification of portfolio helps to reduce risks” and “Higher rate of return implies higher risk”.

Assessment of these variables indicates a behavior that is receptive towards the risks but also reflects a calculated approach. A high probability of risk-taking based on the opportunity. Factor 1 may be labeled as “Risk Opportunist”. It indicates the awareness in terms of the tradeoff between return and risk.

2. The second factor comprises of next three variables with significant loadings. These include “I independently take the full responsibility of my investment outcomes”, “I am confident about my investment decisions” and “I am optimistic about my financial success” and Factor 2 may be labeled as “Overconfident Risk Bearer” since these variables highlight a conscious decision from the investors’ perspective where they are ready to take full ownership for their success or failure.

3. The third factor consists of three variables which are enumerated as “The investment is associated with a high degree of safety”, “Conservative investors find investment appropriate” and “The investment has a high probability of repaying the principal at maturity”.

“Unrealistic Anticipator” seems appropriate for the variables under factor 3 as the investors hold false expectations or beliefs towards the investment decision. It demonstrates a perception tending to irrational behavior.

4. The remaining two variables “I intend to invest based on the familiarity as it makes it less risky” and “Investments with high level of risk is similar to gambling” load significantly on the fourth factor.

These variables indicate the apprehensive attitude of investors who solely rely on their experience and comprehension of the investment scenario. Hence, Factor 4 may be aptly labeled as “Cognizant Pursuer” since it fully justifies an experience-based approach towards the investment decision.

Assessment of the impact of the factors influencing risk perception on the investment preference towards the equity shares

Binary Logistic Regression

A method of binary logistic regression was considered appropriate in order to understand the impact of the above-summarized factors on the risk perception of Sikkimese related to the equity share investment.

Regression model is shown below.

$$\text{Log}(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

The dependent variable was defined as Y (0 for non-selection and 1 for the selection of the equity shares). Predictor or Independent variables represented as X1 = Factor 1 (Risk Opportunist), X2 = Factor 2 (Overconfident Risk Bearer), X3 = Factor 3 (Unrealistic Anticipator) and X4 = Factor 4 (Cognizant Pursuer).

β_0 represents constant. $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and β_6 represent coefficients.
 μ represents the error.

Table 5: Omnibus Tests of Model Coefficients.

		Chi-square	df	Sig.
Step 1	Step	106.492	4	.000
	Block	106.492	4	.000
	Model	106.492	4	.000

The Omnibus Tests of Model Coefficients are significant since their p value is 0, which is less than 0.05. This suggests that the independent variables help predict the dependent variable.

Table 6: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	84.792a	.347	.649

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

The Pseudo R2 estimates reveal that the model fit is good. The given model accounts for 34 and 64 percent of the variance in the dependent variable

Table 7: Hosmer and Lemeshow Test.

Step	Chi-square	df	Sig.
1	1.851	8	.985

The Hosmer and Lemeshow tests reveal a value of 0.985, which is insignificant, indicating that the obtained model fit is acceptable and at a statistically significant level.

Percentage correctly classified is 92.4 percent which denotes that model holds good prediction.

Table 8: Variables in the Equation.

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	FAC1_1	2.431	.446	29.667	1	.000	11.367
	FAC2_1	1.172	.326	12.922	1	.000	3.230
	FAC3_1	.145	.323	.202	1	.653	1.156
	FAC4_1	-.791	.337	5.494	1	.019	.454
	Constant	-3.912	.561	48.711	1	.000	.020

a. Variable(s) entered on step 1: FAC1_1, FAC2_1, FAC3_1, FAC4_1.

All risk perception factors with the exception of Factor 3 (Unrealistic Anticipator) are significant at $p < 0.05$. Only three factors, Risk Opportunist, Overconfident Risk Bearer, and Cognizant Pursuer have a significant impact on the investment preference towards the equity shares. Therefore, further interpretation will be conducted for these three factors to evaluate their relationship with the predicted probabilities.

The original logistic coefficients of Factor 1 and Factor 2 are 2.431 and 1.172 respectively which indicates a positive relationship between these factors and predictive probabilities. This means odds of selection of equity shares increase with the increase in these values. Similarly, for Factor 4 and Constant, the logistic coefficients are -0.791 and -3.912 respectively which indicates the negative relationship so, the odds of selection of equity shares decreases. Now examining the exponentiated coefficients it is observed that for Factor 1, a unit increase in the predictor multiplies the odds of selection of equity shares by 11.367. Similarly, for factor 2 one unit changes in the predictor will reduce the odds of selection of equity shares by 223 percent. However, one unit change in Factor 4 will reduce the odds of non-selection of equity shares by 54.6 percent.

Determination of the relationship between financial information awareness and risk perception

Table 9: Correlations.

			FA_Equity Shares	Risk_Perception
Spearman's rho	FA_Equity Shares	Correlation Coefficient	1.000	.415**
		Sig. (2-tailed)		.000
		N	250	250
	Risk_Perception	Correlation Coefficient	.415**	1.000
		Sig. (2-tailed)	.000	
		N	250	250

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

The coefficient of correlation reveals a significant positive relationship between financial information awareness of Sikkimese related to equity shares and risk perception. Hence, the null hypothesis is rejected. The strength of the relationship is moderate. As the financial information awareness increased from unaware to high awareness the risk perception also increased from low to high level. This result is in disagreement with the findings of (Parimalarani, 2018) who suggested that the investors perceived shares and bonds as highly risky due to low awareness. Financial information awareness is not equivalent to financial literacy which implies that although the investors may be aware of stock markets but may not necessarily possess the adequate knowledge required for undertaking investment decisions. This may be the reason for the financial awareness not having desired influence on the risk perceived by investors. The difference between financial awareness and in-depth knowledge has also been highlighted by (Vasagadekar, 2014).

CONCLUSION AND DISCUSSION

Ledoux explains the implication of behaviorism and cognitive science in understanding the psychological aspect of contradictory actions of people in complete retaliation to their choice of making a certain decision. Much emphasis has now been relegated to emotions and perceptions to better comprehend the decision process in investment-related matters (Forbes, 2009). The paper has extensively evaluated the influencing factors of risk perception and their impact on the investment towards equity shares.

The study identified three factors, and these are labeled as: risk opportunist, overconfident

risk bearer, unrealistic anticipator, and cognizant pursuer.

The Risk Opportunist indicates the positive perception towards the investment decision. The conjecture “If there is a chance to win huge profits then I am willing to take high risks” has been exemplified by Briggs et al. (2021) in the investigation of the relationship between the lottery prize and equity participation. The results revealed that the probability of stock market participation increased with the windfall gains. However, this is in contradiction with the Prospects theory which attaches greater importance to pain from loss than the pleasure with equal gain (Kahneman & Tversky, 1979). The beliefs of individuals shape the perception which in turn influences the investment in risky financial assets. Similarly, wealthy individuals observed higher risk tolerance with financial literacy leading to improved financial attitude. This is in sync with the statements on “If I have more money I will take more investment risk” and “Higher rate of return implies higher risk”. Individuals possessing good knowledge about stock market investment and having an idea about diversification rely on their financial knowledge for decision making and are relatively risk-tolerant in nature (Hermansson & Jonsson, 2021). To alter the perception of the share market as a risky investment alternative, Parimalarani (2018) emphasized increasing the awareness level of investors through financial literacy. I enjoy risky activities is related to gambling behavior where the investors associate risk with excitement (Razen et al., 2020).

The Overconfident Risk Bearer reflects the highly optimistic situation which makes the investors quite vulnerable and this factor relates

with the Overconfidence biasness as mentioned by Zahera and Bansal (2018).

Factor 3 representing Unrealistic Anticipator is reflected in the Isolation effect by Kahneman and Tversky (1979) as it also demonstrates the attractiveness of the guaranteed return option over the other alternatives having the same level of probabilities and outcomes.

Cognizant Pursuer denotes that when an individual is faced with an unfamiliar situation considers the proposition as equivalent to gambling. This factor does not completely agree with either risk aversion or ambiguity aversion. Risk-averse individuals attempt to avoid risky portfolios despite having awareness of the given alternatives. On the contrary, Cognizant Pursuer considers the alternative risky due to their unfamiliarity. Similarly, it is also devoid of self-assessed financial knowledge and poor reasoning which defines the concept of ambiguity aversion (Dimmock et al., 2016).

The results of the analysis are consistent with Virlics (2015) who posits that decision making incorporates a subjective perspective involving risk and uncertainty which is greatly influenced by psychological and emotional elements.

An assessment of the impact of the identified factors of risk perception on the preference towards equity shares investment reveals a significant positive relationship between the two factors namely, Risk Opportunist and Overconfident Risk Bearer, and the predicted probabilities. This implies that the more Risk Opportunist a person is greater will be the chance of equity investment. Similarly, an Overconfident Risk bearer too indicates a higher probability of the outcome.

However the same does not hold true for the third factor representing Unrealistic

Anticipator since it does not qualify as a good predictor of equity investment outcome due to its insignificant relationship. This reveals a perceptual fallacy with regard to investment scenarios exclusive of prominent events.

The fourth factor namely, Cognizant Pursuer attempts to translate the experience into a cautious approach which is evidently seen in its significant but negative relationship with the predicted outcome. However, this finding is consistent with the results derived by Dimmock et al. (2016) which also confirms the lower stock participation among the investors with higher ambiguity aversion.

The study concludes that there exists a significant impact of risk perception on the investment preference towards the equity shares. This conjecture has also been upheld by Nigam, Srivastava and Banwet (2019) who define risk perception as a subjective and qualitative assessment by investors regarding the characteristics and severity. The study highlights the presence of an inherent risk within the customers towards the product, which makes them perceive the stock market and its product as highly risky. On the contrary, Areiqat et al. (2019) argue that risk perception does not affect investment decisions in the Amman stock exchange. The difference in views may be attributed to the number of factors such as demographic variables and financial literacy rate which tends to vary from person to person and also from place to place. Further, there exists a significant positive relationship between financial information awareness and risk perception but in no way does financial information awareness lead to the decrease in risk perception of individuals.

The study provides a significant contribution to the literature on behavioral biases pertaining to risk perception. According to Grable, Joo and Kruger (2020) financial choices differed greatly with respect to the risk preference category, for instance, risk avoiders differed from risk seekers in terms of less willingness to invest in equities and high preference towards fixed return assets. The variation in the risk perception may help segregate the customers in terms of risk profile such as risk-takers and risk-averse investors. Therefore, it may help in the identification of investment instruments convenient for relative customers based on their community. Since risk-takers are more likely to invest in equities, bonds,

and mutual funds than risk-averse investors. The results may enable the investment brokers, advisors, companies, and policymakers to pitch the investment instrument and policies as per the risk capacity of an individual. There lies a scope for further studies focusing on the rural areas as these are the areas where the penetration of technology and social media has become quite visible in recent years. Risk perceptions vary from individual to individual hence; the study in other states may highlight different perspectives. The research discovering the broad spectrum of factors influencing the perception of individuals will also help in the identification of obstacles related to the investment decision.

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ATTRIBUTES OF ORGANIZATIONAL CREATIVE CLIMATE: A PERCEPTUAL ASSESSMENT OF INDIVIDUALS

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ABSTRACT

Organizations today are constantly focusing on increasing their competitiveness. One of the ways of increasing competitiveness is by tapping the creative potential of the employees. One of the best ways in which organizations' can capture their employees' creativity is by creating a climate that nurtures creativity. Having a creative working climate nourishes and creates a suitable working culture that enhances the creative spark of the employees. Based on this premise, the study attempted to determine the attributes that facilitate the development of a creative climate and to examine the difference between the present state and the desired state of organization creative climate attributes. A sample of 78 marketing professionals were taken from media and advertising firms and quadrant analysis was employed for analysis. The results highlighted the attributes that require increased attention from organizations to enhance employee creativity. The paper also discusses the managerial implications and directions for future research.

Keywords: *creative climate, employee creativity, perceptual assessment*

INTRODUCTION

Creativity is one of the most important pillars of existence in today's competitive world for every organization. Managers realize that creativity does not happen in an intellectual vacuum or in the emotional icebergs, but it is a process that can be developed only with the help of a prevailing creative climate.

Research around the globe has shown that creative culture and general climate has led to the identification of key areas on which companies can focus to develop an effective climate in which people are not only creative, but where they are motivated to develop these ideas into value-adding contributions to the success of the whole organization. Organizations today are constantly focusing on increasing their competitiveness which can be easily done by apprehending the creative potential of the employees. A suitable organizational culture enhances the creative spark in an individual and increases the belongingness to the organization and typically consists of attributes such as freedom and autonomy, goal clarity, management practices, non-controlling supervision, information

sharing among co-workers, participative safety, resources, diverse perspectives, pioneering and venturous attitude, as well as the overall organizational systems and processes.

This paper intends to assess the creative climate attributes of the firms under study and suggest mechanisms or ways to tap the creative potential of their employees. The researchers aim to test the creative climate framework developed by Axelsson and Sardari (2011) in the context of the region and the organizations under study.

LITERATURE REVIEW

Creativity, organizational creativity, and creative climate

Creativity in its organic form can be defined as the ability to produce work that is both novel and useful and mainly revolves around generation and expression of ideas, which are new, original and actionable in addressing a specific problem, (Amabile, 1996; Sternberg & Lubart, 1999). A psychological orientation of creativity by Ekvall (1997) describes it as a new structure of the mind, a new configuration or a new formulation of meaning. Organizational creativity emerges as a result of the interaction among individuals in the domain of their expertise. It has been defined as the creation of valuable, useful new product, service, idea, procedure or process by individuals working together in a complex social system (Woodman et al., 1993).

Although creativity is an output of an individual's psychological process relying mainly on individual capabilities and traits, several contextual attributes exist within the organization that influence the creative potential

of the employees (Oldham & Cumings, 1997; Ekvall 1997). Watkin and Hubbard (2003) have mentioned that the climate as a measure of what employees perceive from the environment regarding how work should be done. Schneider (1987) has also addressed climate as the way by which members of the organization understand what is important for a creative organization. The climate often conveys expectations about acceptable behaviours and attitudes of employees. A creative climate is one that facilitates outcomes that are creative. The following section describes the creative climate attributes considered for the study.

Work characteristics

Work characteristics in the context of a creative climate attribute refer to an employee's work such as knowledge and skills, mental and physical demands and working conditions, that can be recognized, defined and assessed. Researchers have found that among the various work characteristics, the ones which are core in the context of creative contribution of employees comprises of challenge, freedom and goals (as depicted in the table below).

Amabile (1998) and Ekvall (1996) are of the view that an effective way to influence the creative potential of employees is by matching the people with the right jobs. According to Cumings and Oldham (1997) and Farr (1990), a challenging job requires variety of skills and talents and thus broadens the horizon for individuals in using their expertise and creative thinking abilities in their work. Another important work characteristic influencing creativity is autonomy (freedom) at work. Cumings (1965), Amabile (1998), Ekvall (1996), Feurer (1996), Cumings &

Oldham (1997) emphasize on the importance of autonomy in contributing to creativity. Contextually, autonomy refers to the liberty enjoyed by employees to determine the way work is carried out. Gray (2007), Anderson et al. (1992), Amabile (1998) highlight the importance of shared goals, involvement in goal setting, as well as the existence of a sense of mutual purpose which are considered central in enhancing the creative appetite of employees.

Management support

This category mainly consists of all those activities/responsibilities of managers that influence organizational creativity. By extending the adequate level of support and encouragement managers can greatly influence their employee's creativity (Williams, 2001). According to Amabile (1998) by maintaining a supportive attitude towards their employees, managers/supervisors help in nourishing their intrinsic motivation which in turn affects their creative behaviour. Cumings and Oldham (1997), Gray (2007) emphasize on the importance of non-controlling supervision as well as positive and informational feedback to assist the employees in developing their skills.

Co-worker support

Co-worker support refers to the support and cooperation among coworkers in creating an environment conducive for creativity. Cumings & Oldham (1997), Zhou and George (2001), Ekvall (1996) highlighted the role of stimulating co-workers in creating a constructive atmosphere for creative behaviour by extending the required help and support towards various creative activities. Cumings (1965), however identified secrecy among co-

workers to as a hindering attribute towards organizational creativity.

Safety

Safety comprises of the features in the organization that promote a safe physical and psychological space for the employees to express their ideas. Ekvall (1996), Dutton (1996), George (2007) recognizes the importance of emotional safety for the employees to indulge in creative pursuits. They argue that the importance of a climate that encourages and accepts mistakes made of employees as well as motivate them to assume the risk of exploring creative ideas and testing new ways. Safety has been found to have a positive effect on the level of ideas suggested, through a non-threatening climate (West, 1990; Anderson et al., 1992; Roffe, 1999). Another important attribute of a creative climate is considered to be playfulness and humour (Ekvall, 1996).

Resources

Resources are the required amount of time and money available or allowed to the employee to enhance their creative results. Several researches such as Amabile (1998), Cumings (1965), Ekvall (1996), Dutton (1996) underline the importance of sufficiency and feasibility of the resource allocations.

Diversity

Amabile (1998) views the importance of diversity in outlooks and backgrounds as an essential contributing feature in initiating creativity. For generating creative ideas, it is important to divert beyond the established patterns, and clearly, diverse opinions and perspectives help in achieving the desired status (Cumings, 1965; Roffe, 1999; Ekvall 1996)

Table 1. Literature review (Adapted from: Axelsson and Sardari, 2011).

Sl. No.	Attribute	Sub-elements	Author(s)
1	Work characteristics	Challenging work	Farr (1990), Ekvall (1996), Cumings (1965), Cumings and Oldham (1997), Amabile (1998), Feurer (1996), Anderson et al. (1992), Gray (2007).
		Autonomy (freedom) at work	
		Goals	
2	Management support	Employee support (Supervision)	Williams (2001), Amabile (1998), Cumings and Oldham (1997), Gray (2007).
		Involvement & idea support	
		Management practices	
3	Co-worker support	Co-worker attitude	Cumings & Oldham (1997), Zhou and George (2001), Ekvall (1996), Cumings (1965), Dutton (1996),
		Information sharing	
4	Safety	Safe idea expression	Ekvall (1996), Dutton (1996), George (2007), West, 1990; Anderson et al., (1992), Roffe (1999)
		Safe relations	
5	Resources	Time	Amabile (1998), Cumings (1965), Ekvall (1996), Dutton (1996)
		Money	
6	Diversity	People	Amabile (1998), Cumings, (1965), Roffe (1999), Ekvall (1996).
		Opinions	
7	Dynamism and Risk Taking	Pioneering and venturous attitude	Anderson (1992), Ekvall, (1996), Dutton (1996), Roffe (1999), Egan (2005).
8	Organizational Systems & Processes	Methods & Mechanisms	Amabile (1997), Dutton (1996) & Gordon (1985), Williams (2001) & Cumings (1965), Andriopoulous (2001) and Feurer et al. (1996)
		Evaluation & rewards	
		Structure	

Dynamism/Risk Taking

A dynamic environment is one that is characterized by eventful, excited and a non-routine work atmosphere. Members of a dynamic environment strive for continuous improvement in their work activities, which leads to the emergence of creative ideas and challenging of the status quo (Anderson, 1992). Risk taking environment view creativity as a

value exhibits a more tolerant climate, conveyed mainly through their organizational processes and practices (Ekvall, 1996; Dutton, 1996; Roffe, 1999; Egan, 2005).

Organizational systems and processes

Amabile (1997) stresses the role of appropriate systems and processes that foster creativity. Dutton (1996) & Gordon (1985) underscores the importance of Human Resource Management

(HRD) in enabling the employees to realize and increase their creative output. Williams (2001) & Cumings (1965) also highlight the importance of organizational systems and procedures (intrinsic and extrinsic rewards) to evaluate creative performance of the employees. Further the advantage of a flexible (flat) structure in promoting creativity has been recommended by Andriopoulous (2001) and Feurer et al. (1996).

OBJECTIVES

After considering the review of literature the following objectives for this research paper were set-

1. To determine the high and low attributes of Organizational Creative Environment with respect to media and advertising firms.
2. To examine the differences between present and desired state of Organizational Creative Environment attributes through Quadrant Analysis.

METHODOLOGY

Participants

The sample consisted of 78 marketing professionals from the media and advertising firms of Guwahati region. Initially, a total of 100 questionnaires were distributed out of which 78 completed questionnaires were returned (78% response rate).

Measures

The questionnaire to assess the creative climate attributes was based on the framework designed by Axelsson and Sardari (2011). The creative climate attributes measured were work characteristics, management support, co-worker support, safety, resources, diversity, risk-taking,

organizational systems and processes. The questionnaire consisted of a total of 58 items measuring the creative climate attributes. Out of these 58 items, 29 items measured the level of creative climate attributes in the current state and other 29 items measured the level of creative climate attributes in the desired state.

Procedure and data analysis

A self-report questionnaire was designed and completed by marketing professionals in Guwahati region of Assam. Respondents were informed about the purpose of the study and its confidentiality. The analyses were conducted using MS-Excel using quadrant analysis. The following section describes the analysis and findings of the study.

RESULTS

Descriptive statistics of respondents

A sample of 78 marketing professionals from media and advertising firms in Guwahati region were considered for the study. Table I summarizes the demographic variables of the respondents.

Out of the total 78 respondents, 36 per cent of the respondents were in the age group of 20-30 years, 24 per cent were in the age group of 31-40 years, 26 per cent were in the age group of 41-50 years and 14 per cent were above 51 years. With respect to gender, 58 per cent of the respondents were males whereas 42 per cent were females. Moreover, 37 per cent of the total respondents were married whereas a significant majority of the respondents (63 per cent) were unmarried. With respect to level of education, a significant proportion of respondents (44 per cent) were postgraduates, whereas 24 per cent

were graduates. On the other hand, 32 per cent of the respondents were neither graduates nor postgraduates but possessed certifications. In terms of experience, 32 per cent of the respondents had less than 1 year of experience,

21 per cent had an experience of 1-3 years, 15 per cent possessed experience ranging between 3-6 years, 14 per cent had experience between 6-9 years, and 18 per cent had more than 9 years of experience.

Table 2: Demographic variables.

Variables	Categories	Frequency	Per cent
Age	20-30 years	28	36
	31-40 years	19	24
	41-50 years	20	26
	51 years and above	11	14
Gender	Male	45	58
	Female	33	42
Marital Status	Married	29	37
	Unmarried	49	63
Education	Graduate	19	24
	Post Graduate	34	44
	Others	25	32
Experience	Less than 1 year	25	32
	1-3 years	16	21
	3-6 years	12	15
	6-9 years	11	14
	More than 9 years	14	18

Scale reliability

Reliability is the degree to which an assessment tool produces stable and consistent results. In order to establish the reliability of the scale Cronbach's alpha score was calculated which is the most frequently used measure of reliability. Cronbach's alpha score was found to be 0.737 which indicates high internal consistency.

Table 3: Reliability statistics.

Cronbach's Alpha	N of Items
.737	58

Organizational Creative Climate

The objective of this study is to determine the attributes that facilitate the development of a creative climate and to examine the difference between the present state and the desired state of organization creative climate attributes. In order to determine the level of the attributes facilitating the development of creative climate, mean score of each attribute was calculated for the current state and the desired state. Table 4 reflects the mean scores the current state and the desired state of the attributes.

Table 4: Mean score of creative climate attributes.

Attributes and sub attributes	Current State	Desired State
Challenge	3.018	4.828
Freedom	1.854	4.876
Goals	2.113	4.789
Work Characteristics	2.328	4.831
Supervision	1.894	3.345
Idea Support	2.012	4.139
Management Practices	2.086	3.234
Management Support	1.997	3.573
Coworker Attitude	4.543	4.734
Information Sharing	1.557	2.675
Coworker Support	2.202	2.111
Safe Idea Expression	2.987	3.045
Safe Relation	2.534	2.21
Safety	2.760	2.627
Time	4.688	1.765
Money	4.878	1.945
Resources	4.783	1.855
Diversity of People	4.012	2.001
Diversity of Opinions	4.018	1.987
Diversity	4.015	1.994
Risk Taking	4.569	4.827
Rewards	1.265	4.5

Structure	1.091	3.529
Methods and Mechanisms	1.158	4.252
Organization System and Processes	1.171	4.093

From the table it can be observed that in the current state the attributes organizational system and processes had the least mean score (1.171) followed by management support (1.997), coworker support (2.202), work characteristics (2.328), and safety (2.7605). Resources (4.783), diversity (4.015) and risk taking (4.569) attributes had a higher mean score. From this it can be inferred that in the current state respondents perceive a higher level of resources, diversity, and risk taking, and a lower level of support from management and coworker, lesser challenging work characteristics, and a lesser level of safety.

It can also be observed that in the desired state resources (1.855) had the least mean score, followed by diversity (1.994), coworker support (2.111), and safety (2.627). Work characteristic (4.831) attribute had the highest mean score in the desired state, followed by risk taking (4.827), and organization system and processes (4.093). The mean score for management support (3.573) was found to be on the neutral range for the desired state. We can therefore infer that respondents place a lot of importance on work characteristics, risk taking attitude and a good organizational process and system in order for them to be creative while placing lesser emphasis on diversity, coworker support and safety.

Quadrant analysis

Respondents indicated their perception of the current state of creative climate attributes in their respective organizations. Respondents also

indicated their perception of the desired level of creative climate attributes. The respondents' perception of their current state was plotted against the X-axis and the desired state was plotted against the Y-axis. Four quadrants emerged from this plotting. Quadrant A on the grid represents the attributes which are rated low by the respondents in the current state but has received a higher rating for the desired state, thereby representing factors that need immediate attention. Quadrant B lists all the factors rated highly by respondents for both the current state as well as the desired state, representing factors that are adequately present and needs to be maintained at the same levels. Quadrant C contains those attributes which have received a lower rating by the respondents for both the current as well as the desired state, representing factors which are of low priority. Whereas, Quadrant D covers those attributes which have received a higher rating in the current state but a lower rating in the desired state, representing factors which are overemphasized. The quadrant analysis is represented below.

It is evident from the figure that respondents attach high degree of importance to work characteristics, which includes factors such as challenge, freedom, and goal clarity, in being creative. Another factor considered important by the respondents is organizational system and processes to facilitate their creative pursuits. Organizational systems and processes refer to a facilitating team structure, proper methods and

mechanisms, and a reward culture. Lastly, the respondents indicated management support, which includes factors such as supervision, idea support, and management practices, as another important factor that promotes creativity. Though respondents attach high degree of importance to these three attributes, the current level of these are less in their respective organizations.

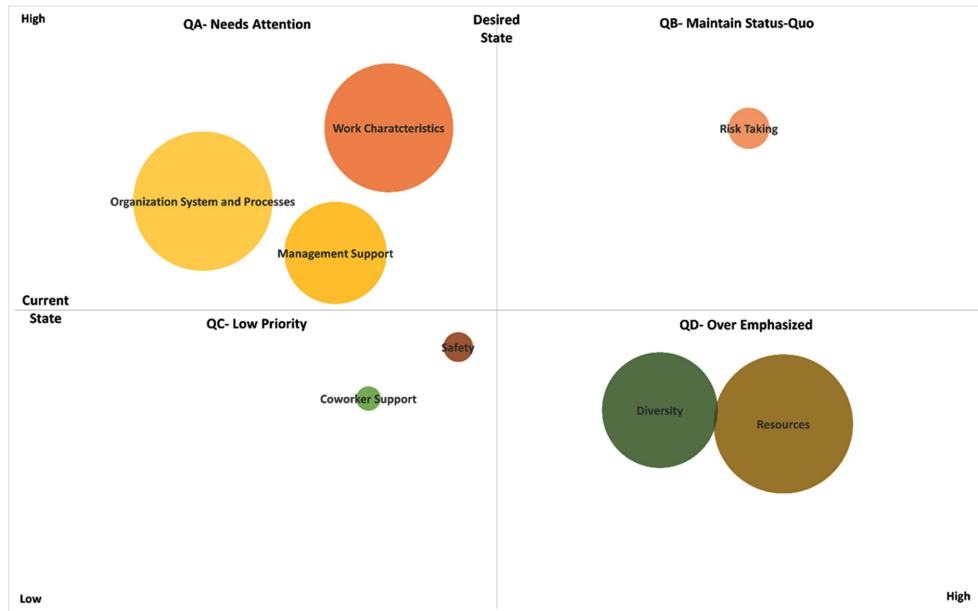


Figure 1. Quadrant Analysis

It can also be observed from the figure that respondents perceive the risk-taking level of their organizations and supervisors is satisfactory for the current state and the same needs to be maintained in the future. Respondents do not attach a lot of importance to coworker support and safety attributes of organizational creative climate for both the current as well as the desired state. This indicates the fact that respondents do not consider these two attributes to contribute to their creativity levels. In addition to this, the respondents indicated that in the current state their organizations focus on resources and diversity to increase creative levels of their employees. However, respondents do not share the same view and indicate that these two

attributes are over emphasized in their current systems.

DISCUSSION

This paper attempted to assess the creative climate attributes of the firms under study and suggest mechanisms or ways to tap the creative potential of their employees. The study also attempted to test the creative climate framework developed by Axelsson and Sardari (2011) in the context of the region and the organizations under study. The findings of the study revealed that in the current state respondents perceive a higher level of resources, diversity, and risk taking, and a lower level

of support from management and coworker, lesser challenging work characteristics, and a lesser level of safety. It was also found that in the desired state respondents place a lot of importance on work characteristics, risk taking attitude and a good organizational process and system in order for them to be creative while placing lesser emphasis on diversity, coworker support and safety.

The results of the quadrant analysis indicated that work characteristics, organizational systems and processes, and management support required immediate attention from the firms under study as respondents reported a higher discrepancy in these parameters with respect to their current state versus the desired state. The risk-taking element showed the least deviation and hence adequate efforts should be undertaken by the firms to maintain its status-quo. Co-worker support and safety were considered to be of a lower priority in terms of enhancing their creativity. And lastly, resources

and diversity were found to be over emphasized by firms as indicated by the respondents.

The creative climate framework proposed by Axelsson and Sardari (2011) considers eight attributes which enhance creative potential of the employees. However, managers can carry out an assessment of their organizational climates to highlight the relative importance of each attribute in the light of their respective area of operations. All eight attributes may not hold the same level of importance across all sectors or industries and hence managers need to be vigilant in exploring the relative importance of each attribute.

Future directions of research could focus on an inter-industry comparison of the attributes and how they vary across different sectors or industries. As the current framework mainly considered the underlying factors in the organizational context only, researchers can attempt to assess the impact of personal and psychological characteristics of the employees in addition to the organizational attributes that may enhance their creative output.

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COMPANY BOARDS AND THEIR IMPACT ON CORPORATE GOVERNANCE: EMPIRICAL EVIDENCE FROM INDIA & SINGAPORE

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ABSTRACT

Corporate Governance has taken center stage in the last few decades in developed as well as developing economies. Corporate Governance is the guiding principle, which determines how companies should be managed to take care of all its stakeholders. Governance of any company is primarily entrusted on its Board of Directors (BODs) or The Board. The main objective of this paper is to study the state of Corporate Governance in India and Singapore, with special emphasis on Corporate Governance aspects related to Boards. A customized questionnaire was deployed to collect primary data for the analysis. The findings reported in the paper are based on analysis conducted on empirical data collected from selected corporate executives from both countries, from diverse industrial segments. Descriptive statistics has been used to present the perception of the participants concerning the proliferation of the corporate governance code parameters related to Board of directors, in the companies across India and Singapore. The study observed that the proliferation of corporate

governance codes parameters related to Board of Directors, in the companies across India and Singapore significantly differed in terms of board composition, board development, accountability of the board of directors, remuneration committee, audit committee, risk assessment committee, CSR committee. However, there are still some gaps that need to be bridged.

Keywords: *Corporate Governance, Stakeholders, Board of Directors, India, Singapore*

INTRODUCTION

The system of rules, practices and processes by which a company is directed and controlled is Corporate Governance. It essentially involves balancing the interests of the many stakeholders in a company -these include its shareholders, management, customers, suppliers, financiers, government and the community.

Corporate governance broadly refers to the mechanisms, processes and relations by which corporations are controlled and directed. Governance structures and principles identify

the distribution of rights and responsibilities among different participants in the corporation (such as the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders) and include the rules and procedures for corporate affairs decisions.

L'Huillier (2014) defines CG as a means by which the manager is controlled to enhance shareholder value and profit of the organization. Corporate governance includes the processes through which corporations' objectives are set and pursued in the context of the social, regulatory and market environment. Governance mechanisms include monitoring the actions, policies, practices, and decisions of corporations, their agents, and affected stakeholders.

In another study, Vishy and Shleifer (1997) define CG as ways in which suppliers of finance to companies assure themselves of getting a better than market ROI (Return on Investments). Corporate governance has also been more narrowly defined as a system of law and sound approaches by which corporations are directed and controlled, focusing on the internal and external corporate structures with the intention of monitoring the actions of management and directors and thereby, mitigating agency risks which may stem from the misdeeds of corporate officers.

Corporate Governance is a relatively new field for researchers. Yao Huang and Yuh-Shan Ho discovered that the annual number of journal articles published and the number of journals devoted to Corporate Governance grew by twenty-one-fold and eleven-fold, respectively between 1992 and 2008. Exploratory research conducted by Srinivasan and Srinivasan (2011) reflects that out of 499 articles on CG in top

journals, 60 articles had reference to India. However, only 11 articles had India as a sample.

BRIEF HISTORY

Wright argues in *Corporation Nation*, that the governance of early U.S. corporations was superior to that of corporations in the late 19th and early 20th centuries because early corporations were run more like republics with many checks and balances against fraud and usurpation of power of managers and / or large shareholders.

In the 20th century, subsequent to the aftermath of the Wall Street Crash of 1929, legal scholars, such as Adolf Augustus, Edwin Dodd, and Gardiner C. Means pondered on the changing role of the modern corporation in society. US expansion after World War II through the emergence of multinational corporations saw the establishment of the managerial class. Studying and writing about the new class were several Harvard Business School management professors: Myles Mace (entrepreneurship), Alfred D. Chandler, Jr. (business history), Jay and Elizabeth MacIver (organizational behavior).

According to Lorsch and MacIver (1989), many large corporations have dominant control over business affairs without sufficient accountability or monitoring by their board of directors. Fama and Jensen (1983) established the principal-agent problem, as a way of understanding corporate governance: the firm is seen as a series of contracts. Over the past four decades, corporate directors' duties in the U.S. have expanded beyond their traditional legal responsibility of duty of loyalty to the corporation and its stakeholders.

In the first half of the 1990s, the issue of corporate governance in the U.S. received considerable press attention due to the wave of CEO dismissals (e.g., IBM, Kodak, Honeywell) by their boards. The California Public Employees Retirement System (CalPERS) led a wave of institutional shareholder activism (something only very rarely seen before), as a way of ensuring that, corporate value would not be destroyed by the cozy relationships between the CEO and the board of directors. In the early 2000s, the massive bankruptcies (and criminal malfeasance) of Enron and WorldCom, as well as corporate scandals, such as Adelphia Communications, AOL, Arthur Andersen, Global Crossing, Tyco, led to increased political interest in corporate governance. This is reflected in the passage of the Sarbanes-Oxley Act of 2002.

Interest in the corporate governance practices of modern corporations, particularly in relation to accountability of Board of Directors increased following the high-profile collapses of a number of large corporations during 2001–2002, most of which involved accounting fraud; and then again after the financial crisis in 2008. Corporate scandals of various forms have maintained public and political interest in the regulation of corporate governance. In the U.S, these include Enron and MCI Inc. (formerly WorldCom). Their demise is associated with the U.S. federal government passing the Sarbanes-Oxley Act in 2002, intending to restore public confidence in corporate governance. Comparable failures in Australia (HIH, One.Tel) are associated with the eventual passage of the CLERP 9 reforms. Similar corporate failures in other countries stimulated increased regulatory interest (e.g., Parmalat in Italy).

Issues related to corporate governance in India have also not been so different. It began with fraud / misrepresentation of financial results by Satyam to Sahara to Jet Airways, to name a few. In recent times, governance issues at IL&FS, DHFL and others have been in limelight. From time to time, Indian regulators have also taken serious note of these corporate governance failures and amended its companies act and CG Codes.

REVIEW OF LITERATURE

Empirical research on CG was conducted by Fan (2004), Financial Service Group Training Unit of Monetary Authority of Singapore (MAS). The author reported that while there is an increasing evidence of failure of certain governance structure to control and motivate managers to increase firm performance, the empirical evidences are mixed and give little coherent evidence for the shape of an optimal governance structure.

Chakrabarti et al. (2009) of Center for Financial research, in their working paper on Corporate Governance in India conclude that on paper, Indian Legal System provides one of the best investor protections in the world but due to overburdened courts, wide spread corruption and slow rate of passing judgment, the ground reality is quite different.

Naciti (2019) in her study on corporate governance brings out following highlights:

1. Firms respond to sustainability-related issues raised by stakeholders.
2. The composition of a board of directors influences firms' sustainability performance.
3. Both board diversity and separation of board chair and CEO role enhance environmental performance.

4. The board independence negatively influences social performance.

5. Strong corporate governance can be a valuable tool to mitigate agency problems.

Baysinger and Butler (1985) also report that the changes in Board Composition significantly affect the performance of an organization.

Adams et al. (2010) focus on the two questions most asked about boards:

- a) What determines their makeup and
- b) What determines their actions?

These questions are fundamentally intertwined, which complicates the study of boards because makeup and actions are jointly endogenous.

The survey conducted by Adams focused on how the literature, theoretical as well as empirical, deals or on occasions fails to deal with this complication. The authors concluded that most studies on boards could best be interpreted as joint statements about both the director-selection process and the effect of board composition on board actions and firm performance.

Andres and Vallelado (2008), in a study on banking sector analyzed that there is an inverted U-shaped relation between bank performance and board size, and between the proportion of non-executive directors and performance. Their results show that bank board composition and size are related to directors' ability to monitor and advice management and those larger and not excessively independent boards might prove more efficient in monitoring and advising functions, and create more value.

Ayuso and Argandona (2009) addressed the central question as to how to organize board composition in order to ensure responsible

corporate governance both from a CSR and from a good governance perspective. Adopting a stakeholder approach to corporate governance, they analyzed the arguments given by different theoretical approaches for linking specific board composition with financial performance and CSR, and discussed the empirical research conducted. Despite the inconclusive findings of empirical research, they argued that diverse stakeholders on the board would promote CSR activities of the firm, but at the same time will increase board capital (which ultimately may lead to a better financial performance). Authors also proposed a model for selecting board members based both on ethical and pragmatic arguments.

John and Senbet (1998) surveyed the empirical and theoretical literature on the mechanisms of Corporate Governance. They focused on the internal mechanisms of corporate governance (e.g., corporate board of directors) and their role in ameliorating various classes of agency problems arising from conflicts of interests between managers and equity holders, equity holders and creditors, and capital contributors and other stakeholders to the corporate firm. They also examined the substitution effect between internal mechanisms of corporate governance and external mechanisms, particularly markets for corporate control.

Aina (2013) analyzed with the aid of comparative law, the Code of Corporate Governance in Nigeria and its effect on the board structure, the role, effectiveness and duties of the non-executive directors (NEDs) and how their independence can be assured, guaranteed and monitored to enhance the

board's effectiveness, ensure full compliance with the codes of corporate governance. As per her study, the regime of compliance and regulation is extremely weak in Nigeria and she proposes for a specialized regulator agency to monitor compliance with the codes, upgrade standard and harmonize the different codes.

Sarkar (2009) argues Boards responsibility and accountability to detect internal crisis early on and act in a timely manner to put the organization back on track before difficulties become irreversible. The paper also examined some important policy issues related to board independence based on 'lessons of experience' from implementing board reforms across the countries. The paper seeks to put in perspective the progress made in India regarding the adoption of international best practices for the constitution and functioning of independent boards.

Didier and José (2014) highlights boards effectiveness to be dependent on

- 1) People and builds on their quality, focus and dedication,
- 2) Information Architecture,
- 3) Structures & Processes and
- 4) Group Dynamics.

Sonnefeld (2002) analyzed the meltdown of once great companies such as Adelphia, Enron, Tyco and WorldCom. The author observed that the board of all these companies followed all procedures and rules prescribed for functioning of an effective board. Boards were meeting regularly, had equity involvement, the age of board members was appropriate, past CEOs were also present on some of the boards, there were enough independent directors on board,

board size was right and all committees were in place and functioning. Robustness and effective social systems distinguishes exemplary boards, concludes the author. There ought to be a culture of respect, trust and candor among board members that fosters a culture of open dissent. Board performance must be evaluated regularly. The highest performing companies as per the author are those that have extremely contentious boards that regard dissent as an obligation and that treats no subject as undiscussable.

Corporate Governance and pivoting role of Board of Directors

Boards need to prioritize the focus of their oversight based on the unique circumstances facing the corporation. Although the details will vary across corporations, the focus should be on:

1. Corporate performance and strategic direction.
2. CEO selection, compensation and succession.
3. Internal controls, risk oversight and compliance.
4. Crisis preparedness.
5. Shareholder activism and shareholder engagement.
6. Board composition, leadership and performance.

While the board has much to attend to, in most circumstances the majority of board time should be reserved for discussions on corporate strategy and performance. The Blue Ribbon Commission report of the National Association of Corporate Directors emphasizes the role of the board in providing guidance through the development of a strategic plan through an iterative discussion with management. The board should also give special attention to

supporting appropriate long-term investment and prudent risk-taking in the face of significant short-term pressures for immediate returns or other conflicts.

Rebuilding Trust

Corporations create wealth for shareholders, but their contributions to the economy extend well beyond the return of profit. They provide employment, support innovation, purchase goods and services, pay taxes, and support various social and charitable programs. Given the important role that corporations play in our society, concerns about the use of corporate power and expectations for the board continue to expand, especially related to the oversight of risk management, compliance and social responsibility.

Long Term Fiduciary Focus

The primary challenge for boards is to carry out their fiduciary duties in the face of pressures from certain shareholders seeking to influence board decisions. Boards must continue to exercise independent and objective judgment on issues that are reserved by law to the board's fiduciary judgment. These issues range from strategic direction and corporate social responsibility to executive compensation and dividend policy. At the same time, boards must reach out to all key stakeholders and other key constituents to understand their views and explain board decisions.

Strategy, Risk Management and Company Performance

The primary function of the board to direct and manage the affairs of the company has not changed over time. Board responsibilities and activities revolve around issues related to strategy, risks management and company performance.

Board Agenda

In her regular column on corporate governance issues, Gregory explores 12 important areas requiring board attention at all times. Among them, the most important ones are - Strategic planning, Risk management, corporate performance, Management development (and succession). The majority of board time and attention should be focused on these matters.

Shareholder Influence Management

Shareholder influence will continue to grow in future, especially in relation to (but not limited to) proxy voting and the annual meeting. Boards and management teams will need to continue to improve their approaches to shareholder communication and engagement.

Shareholder Communications

Boards need to identify the company's key shareholders and the issues about which they care most. Together with management, the board should make extra efforts to engage with these shareholders. Effective engagement often requires moving beyond management's typical investor relations focus.

Communications relating to: Board composition, executive compensation, board leadership and other key governance practices, significant substantive matters, such as corporate strategy and risk management. Enhanced shareholder communications should be designed to: provide the board with an early warning about perceived vulnerabilities and shareholder concerns, encourage investors to make company-specific decisions.

Director Elections

The broad adoption of majority voting as the standard for director elections among S&P

500 companies, along with the likelihood of shareholder proposals seeking proxy access, have the potential to shift the focus of the forthcoming proxy seasons from executive compensation to director elections.

Majority Voting

Boards should expect a concerted effort from shareholders to extend acceptance of majority voting beyond the S&P 500 to the next tier of companies in future. Boards at companies that have not yet adopted a majority-voting standard, or a director resignation policy in the event a director fails to receive a majority of the votes, should be prepared to address this issue.

Board Composition and Diversity

Board composition should relate to the company's strategic needs, which change as a company and its business environment evolve. In addition, shareholders and key constituents are interested in the value that diverse perspectives bring, including those related to gender and racial diversity. Yet, as on date very few boards have women directors, most of the boards have no minority directors. Boards should be sensitive to board composition needs and diversity concerns, and consider whether board culture and processes provide sufficiently for change. Along with considering the company's strategic direction when evaluating board composition, boards should assess individual director capacity and contributions annually.

Executive Compensation

The say on pay vote will still be high on the shareholder agenda in future. Say on pay acted as a 'release valve' allowing shareholders to let off steam in 2011, resulting in fewer withholdings and against campaigns targeting

individual directors in elections. To bolster shareholder support boards and compensation committees should: Demonstrate restraint regarding compensation decisions, and expect pay for performance to continue as the primary measure for shareholder approval. Shareholders have shown particular sensitivity to: pay levels relative to peers; and pay increases out of proportion to performance trends. Explain the company's compensation philosophy in clear and understandable proxy disclosures.

Board Leadership Structure

Shareholder pressure to separate the chairperson and CEO roles is likely to grow. In 2011, at least four companies saw majority support for shareholder proposals calling for an independent chair. According to Spencer Stuart, 41% of S&P 500 boards currently split the chairperson and CEO roles, compared with 26% a decade ago, and about 21% have independent chairs. Companies should expect to see more shareholder proposals for the board to implement a policy requiring that the chair position be held by an independent director, beginning with the next CEO succession (if not before). In India, we have a long way to go on this as well as women directors on boards.

Succession Planning

Shareholders are showing more interest in succession planning. Over the past several years, the number of shareholder proposals seeking greater disclosure related to succession planning has increased. However, this is an area where detailed disclosure can be difficult, other than with respect to the board's overall process. In reviewing their processes, boards should consider the central components of succession

planning, such as the company's Management development efforts, Strategic direction and future leadership needs. Boards should be prepared to make succession decisions when the need arises in accordance with the company's long-term plans, and in an efficient manner. This requires developing and accessing internal candidates, as well as scanning for sources of potential external candidates.

Boards should ensure they are spending adequate time on management development and succession planning, even though there may be more pressing and immediate demands for board attention and a natural discomfort in raising succession issues with a well-performing CEO.

Corporate Responsibility

Shareholder focus on corporate responsibility will likely magnify in the coming years. In 2014, both the number of social and environmental proposals brought by shareholders and the support for these proposals increased. Boards should expect disclosures regarding the corporate impact on natural resources to be an important topic, with an emphasis on water and air quality and supply chain sustainability.

Compliance Program Effectiveness

Boards should work with management to ensure a corporate culture in which employees are encouraged to report compliance and ethical concerns through the company's internal channels. Boards should assess the quality of the company's messaging and communicate at every opportunity that internal reporting is expected, valued and critical to the company's success. Encouraging employees to come forward with concerns internally may be more challenging given that employees are eligible for awards

through the SEC's whistleblower program for providing original information on violations of federal securities law. This includes, for example, violations of the Foreign Corrupt Practices Act, which may attract significant fines and bounties.

The challenge is to establish a culture that encourages internal reporting of concerns to support compliance system effectiveness.

In 1995, John G Smale, former chairman of board of General Motors said that the board is responsible for the successful perpetuation of the corporation. That responsibility cannot be relegated to management. A board of directors is expected to play a key role in corporate governance. The board has responsibility for: CEO selection and succession; providing feedback to management on the organization's strategy; compensating senior executives; monitoring financial health, performance and risk; and ensuring accountability of the organization to its investors and authorities. Boards typically have several committees (e.g., Compensation, Nominating and Audit) to perform their work.

RESEARCH METHODOLOGY

In order to collect primary data on some of the key aspects of Corporate Governance related to the boards in the two countries, a customized survey questionnaire was developed. First, a pilot survey was conducted deploying the questionnaire to test the internal consistency and reliability of the data. The results are represented in the Table 1 and Table 2 (See Appendix)

After a small modification in the questionnaire; it was rolled out for a detailed survey. Senior Executives, Company Secretaries, Board Members, Independent Directors and similar

profiles in both countries were randomly selected for the survey. 112 responses from senior Indian Corporate Executives and 68 responses from Singaporean Corporate Executives were received.

RESULTS AND DISCUSSION

Nationality of the respondents

The majority of the surveyed respondents were from India (62.2%), while 37.8% of the respondents belonged to Singapore.

Industry sector of the companies

Table 3 (See Appendix) indicates that the majority of the companies in Singapore (39.7%) belonged to the Agriculture sector followed by 22.1% of the companies representing the Banking and Finance sector. Singaporean companies representing the Infrastructure Construction sector corresponded to 13.2%, while an equal proportion of the companies represented the Mining (10.3%) and the Aviation and Marine sector (10.3%). A small proportion of the companies (4.4%) belonged to the IT sector. Furthermore, the majority of the companies in India (25.9%) belonged to the Infrastructure construction industry followed by 23.2% of the companies representing the cement industry. The Indian listed companies in the banking and finance sector corresponded to 11.6%, while companies in the agriculture sector corresponded to 10.7%. An equal proportion of the Indian companies belonged to the IT (8.9%) and the aviation and marine sector (8.9%). Indian companies representing the Petrochemical sector corresponded to 7.1%, while those representing the Mining sector corresponded to 3.6%. These findings reflect a

diversified sectoral structure of the Indian and Singaporean economies where the majority of the companies in Singapore operated in the Agricultural sector, indicating the market capitalization of this sector in Singapore while the Infrastructure Construction sector is likely to dominate the Indian market.

Board diversity

As can be seen in Table 4 (See Appendix), the majority of the companies in India (51.8%) and Singapore (88.2%) had female directors on board, indicating the importance of diversity on the Board of directors as an essential element in corporate for better decision-making and corporate growth. In addition, it can be inferred that the gradual rise in the number of female directors on Board might indicate better monitoring of committees and maintenance of turnout record.

Implications for non-compliance of corporate governance

As presented in Table 5 (See Appendix), the majority (25.1%) of the study participants in companies in India responded that non-compliance of corporate governance requirements could result in compliance followed by explaining the reason for non-compliance. Besides, the participants responded that that non-compliance of corporate governance requirements in the Indian companies could result in penalties such as imposition of fines (22.0%), legal action (21.8%), delisting from the stock exchange (19.2%) and criminal and legal cases against the chairperson or CEO (11.9%). With respect to the companies in Singapore, the majority (26.7%) responded that non-compliance of corporate governance requirements can result in compliance followed

by explaining the reason for non-compliance. the participants responded that that non-compliance of corporate governance requirements in the Indian companies can result in penalties such as legal action (22.4%), imposition of fines (20.8%), delisting from the stock exchange (19.6%) and criminal and legal cases against the chairman or CEO (10.6%). These data indicate that consequences of non-compliance to corporate governance will lead to direct and indirect losses to the companies.

Board development

With respect to the Indian companies, the respondents strongly agreed to complying with the requirements of reappointment of Board of Directors ($m = 4.402 \pm 0.843$) and reappointment of Directors for effective corporate governance implementation ($m = 4.295 \pm 0.718$), all as per the corporate governance code mandate. Besides, they agreed regarding the suitability of the term of Directors ($m = 4.205 \pm 0.556$) and mandatory number of Independent Directors ($m = 4.134 \pm 0.844$) as per the corporate governance code for effective implementation of corporate governance. However, the respondents were neutral regarding declaring the actual reason by the Independent directors of their companies if they quit before their tenure ($m = 3.036 \pm 1.368$). With respect to the Singaporean companies, the respondents strongly agreed to all the questions regarding the implementation of corporate governance code in the light of board development. The respondents strongly agreed to complying with the requirements of reappointment of Board of Directors ($m = 4.765 \pm 0.427$), reappointment of Directors ($m = 4.779 \pm 0.514$), suitability of the term of

Directors ($m = 4.500 \pm 0.504$) and mandatory number of Independent Directors ($m = 4.456 \pm 0.502$) all as per the corporate governance code mandate for effective corporate governance implementation. Besides, they strongly agreed regarding declaring the actual reason by the Independent directors of their companies if they quit before their tenure ($m = 4.515 \pm 0.586$). Refer Table 6 in Appendix.

Accountability of the Board

The respondents agreed regarding clear roles and responsibilities of Directors towards corporate governance implementation ($m = 4.196 \pm 1.030$), comprehensive roles, responsibilities and accountability of boards of directors as per the corporate governance code mandate for effective implementation of corporate governance ($m = 4.205 \pm 0.632$), responsibility and accountability of Independent directors for any financial irregularity in the companies ($m = 3.571 \pm 1.176$) and setting up of legal system to hold accountable the defaulters of corporate governance code ($m = 3.768 \pm 1.013$). Besides, the respondents strongly agreed regarding environment safety and governance reporting of companies' annual reports ($m = 4.277 \pm 0.830$), presence of whistle blowing policy of the companies ($m = 4.455 \pm 0.758$), maintenance of anonymous identity of the whistle blower in the companies ($m = 4.500 \pm 0.697$). In addition, the respondents agreed that Independent directors on the boards are not independent ($m = 3.438 \pm 1.229$), and strongly agreed that board of directors of the companies attend the cases reported by whistle blowers on a priority basis ($m = 4.375 \pm 0.712$). With respect to the Singaporean companies, the respondents strongly agreed to the majority of

the questions regarding the implementation of corporate governance code in the context of board accountability. The respondents strongly agreed regarding clear roles and responsibilities of Directors towards corporate governance implementation ($m = 4.779 \pm 0.418$), comprehensive roles, responsibilities and accountability of boards of directors as per the corporate governance code mandate for effective implementation of corporate governance ($m = 4.809 \pm 0.396$), environment safety and governance reporting of companies' annual reports ($m = 4.353 \pm 0.481$), presence of whistle blowing policy of the companies ($m = 4.809 \pm 0.396$), maintenance of anonymous identity of the whistle blower in the companies ($m = 4.500 \pm 0.504$) and board of directors of the companies attending the cases reported by whistle blowers on a priority basis ($m = 4.485 \pm 0.503$). Besides, the respondents agreed that the Independent directors are held responsible and accountable for any financial irregularity in the companies ($m = 3.515 \pm 1.299$), legal system is set up to hold accountable the defaulters of corporate governance code ($m = 4.191 \pm 0.432$) and that Independent directors on the boards are not independent ($m = 3.985 \pm 0.763$). Refer Table 7 in Appendix.

Remuneration

With respect to the Indian companies, the respondents strongly agreed that their companies comply with the requirement of nomination and remuneration committee ($m = 4.223 \pm 0.732$) and its composition ($m = 4.304 \pm 0.792$) as per the corporate governance code mandate. Besides, they agreed that the nomination and remuneration committee meets as per the requirements of corporate

governance code ($m = 4.205 \pm 0.556$) and its decisions are accepted and implemented by the board of directors of the companies ($m = 4.080 \pm 0.673$). However, they were neutral regarding the selection of the Independent directors by the nomination and remuneration committee ($m = 3.232 \pm 1.388$). With respect to the Singaporean companies, the respondents strongly agreed with the perception that the selection of the Independent directors should be done by the nomination and remuneration committee ($m = 4.809 \pm 0.432$). Also, they strongly agreed that their companies comply to the requirement of nomination and remuneration committee ($m = 4.338 \pm 0.477$) and its composition ($m = 4.559 \pm 0.500$) as per the corporate governance code mandate, the nomination and remuneration committee meets as per the requirements of corporate governance code ($m = 4.397 \pm 0.522$) and its decisions are accepted and implemented by the board of directors of the companies ($m = 4.324 \pm 0.679$). Refer Table 8 in Appendix.

Audit

The respondents strongly agreed that their companies comply with the requirement of Internal Audit committee ($m = 4.464 \pm 0.827$, 4.882 ± 0.325) and its composition ($m = 4.384 \pm 0.750$, 4.941 ± 0.293) as per the corporate governance code mandate. Besides, they strongly agreed that the Internal audit committee receives required financial details of the companies ($m = 4.446 \pm 0.827$, 4.882 ± 0.325) meets as per the requirements of corporate governance code ($m = 4.313 \pm 0.806$, 4.441 ± 0.500) and its findings and recommendations are implemented by the board of directors of the companies ($m =$

4.295 ± 0.731, 4.368 ± 0.644). Refer Table 9 in Appendix.

Risk assessment

With respect to the Indian companies, the respondents strongly agreed to comply with the requirement of the risk assessment committee as per the corporate governance code mandate ($m = 4.357 \pm 0.708$). Besides, the respondents agreed that the composition of the risk assessment committee of their companies is as per the corporate governance code mandate ($m = 4.071 \pm 0.965$), the Internal audit committee meets as per the requirements of corporate governance code ($m = 3.973 \pm 0.843$) and identification of business risks beforehand by the risk assessment committee ($m = 4.080 \pm 0.784$).

With respect to the Singaporean companies, the respondents strongly agreed to complying to the requirement of risk assessment committee ($m = 4.632 \pm 0.621$) and its composition ($m = 4.471 \pm 0.503$) as per the corporate governance code mandate, meeting as per the requirements of corporate governance code ($m = 4.529 \pm 0.503$) and identification of business risks beforehand by the risk assessment committee ($m = 4.574 \pm 0.498$). Refer Table 10 in Appendix.

Corporate social responsibility (CSR)

The respondents strongly agreed that their companies comply with the requirement of CSR committee ($m = 4.589 \pm 0.562$, 4.824 ± 0.384) and its composition ($m = 4.464 \pm 0.670$, 4.515 ± 0.503) as per the corporate governance code mandate. Besides, they strongly agreed that the CSR committee meets as per the requirements of corporate governance code ($m = 4.375 \pm 0.712$, 4.471 ± 0.585) and has been able to identify projects affecting lives of communities ($m =$

4.295 ± 0.666, 4.544 ± 0.502). Refer Table 11 in Appendix.

Summary

The data analysis presents the results of quantitative analysis of the study. Descriptive statistics has been used to present the perception of the participants concerning the proliferation of the corporate governance code parameters related to Board of Directors, in the companies across India and Singapore. The study observed that the proliferation of corporate governance codes parameters related to Board of Directors, in the companies across India and Singapore significantly differed in terms of board composition, board development, accountability of the board of directors, remuneration committee, audit committee, risk assessment committee, CSR committee.

CONCLUSION

Ever since its initiation, India has made reasonable progress in developing a Corporate Governance Code, which is most suitable to its corporations. However, there are still some gaps that needs to be quickly bridged such as a) further sharpening the clarifying roles, responsibilities and accountabilities of BODs, b) increased women representation on boards, c) separation of roles and responsibilities of Chairman and CEO / MD of companies, d) whistleblower directives, e) safeguarding financial interests of minority shareholders, f) independence and powers to independent directors, g) participation of key senior employees while formulating important policies of the company, h) risk management committees and their performance review, i)

executive compensation, j) CSR activities, k) pollution and environment protection l) quality consciousness, m) internal audit reviews, n) more detailed financial disclosures, o) Statutory auditors, CFO and CEO be totally responsible for any financial misappropriation, to list a few.

Further, implementation of key aspects of CG Code be made mandatory by law and not left voluntary. Government of India to designate

a legal entity and this agency should be given sufficient powers to implement CG codes and practices, as a single point responsible agency. Finally, somewhere, we have lost to educate our children on ethics and high morals. It is suggested that Ethics and Moral science be included as a mandatory subject at middle school curriculum and later on, Business Ethics be a mandatory subject in all higher education curriculums.

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APPENDIX

Table 1: Reliability analysis.

	Cronbach's Alpha	N of Items
Factor_1	0.972	21
Factor_2	0.954	11
Factor_3	0.919	6
Factor_4	0.666	12

Table 2: KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.608
Bartlett's Test of Sphericity	Approx. Chi-Square	263.941
	df	105
	Sig.	0.000

Table 3: Industry sector of the companies.

	India		Singapore	
	Frequency	Percent	Frequency	Percent
Cement	26	23.2	0	0.0
Mining	4	3.6	7	10.3
Banking and finance	13	11.6	15	22.1
Petrochemical industry	8	7.1	0	0.0
IT	10	8.9	3	4.4
Engineering (aviation and marine)	10	8.9	7	10.3
Infrastructure construction (thermal power, telecom)	29	25.9	9	13.2
Agriculture	12	10.7	27	39.7
Total	112	100.0	68	100.0

Table 4: Women director(s) in the Board of the company.

	India		Singapore	
	Frequency	Percent	Frequency	Percent
Yes	58	51.8	60	88.2
No	54	48.2	8	11.8
Total	112	100.0	68	100.0

Table 5: Implications of non-compliance of corporate governance code in the company.

Implication	India		Singapore	
	Frequency	Percent	Frequency	Percent
Comply and explain the reason for non-compliance	97	25.1	68	26.7
Legal Action against the company	84	21.8	57	22.4
Financial Penalty to the company	85	22.0	53	20.8
Delisting of company from the Stock Exchange	74	19.2	50	19.6
Criminal and Legal Proceedings against the Chairman/CEO	46	11.9	27	10.6
Total	386	100.0	255	100.0

Table 6: Descriptive statistics for board development.

Board development	Mean	Std. Deviation	Mean	Std. Deviation	t	Sig
The term of Directors as specified in the Corporate Governance Code is suitable for effective implementation of Corporate Governance	4.205	0.556	4.500	0.504	-3.571	0.000
My company complies to the requirements of reappointment of Board of Directors as specified in Corporate Governance Code	4.402	0.843	4.765	0.427	-3.299	0.001
The reappointment of Directors as specified by Corporate Governance Code is serving the purpose of effective Corporate Governance implementation	4.295	0.718	4.779	0.514	-4.859	0.000

Mandatory number of Independent Directors as specified by Corporate Governance Code are enough for effective implementation of Corporate Governance	4.134	0.844	4.456	0.502	-2.854	0.005
Independent directors of my company declare the actual reason of their resignation, if they quit before the completion of their term:	3.036	1.368	4.515	0.586	-8.448	0.000

Table 7: Descriptive statistics for board accountability.

Accountability	Mean	Std. Deviation	Mean	Std. Deviation	t	Sig
In my company, Directors have clear roles and responsibilities towards Corporate Governance implementation	4.196	1.030	4.779	0.418	-4.448	0.000
The roles, responsibilities and accountability of Boards of Directors as mandated by the Corporate Governance Code are comprehensive for effective implementation of Corporate Governance	4.205	0.632	4.809	0.396	-7.075	0.000
Independent Directors are held responsible and accountable for any financial irregularity in my company	3.571	1.176	3.515	1.299	0.302	0.763
The Independent Directors on the Boards are not independent.	3.438	1.229	3.985	0.763	-3.308	0.001
The legal system is geared to bring to books the defaulters of Corporate Governance code:	3.768	1.013	4.191	0.432	-3.267	0.001
Annual reports of companies contain Environment Safety and Governance Reporting:	4.277	0.830	4.353	0.481	-0.689	0.492
My company has a Whistle Blowing Policy:	4.455	0.758	4.809	0.396	-3.559	0.000
The identity of the Whistle Blower in my company is kept anonymous	4.500	0.697	4.500	0.504	0.000	1.000
The Board of Directors of my company attend the cases reported by Whistle Blowers, on priority:	4.375	0.712	4.485	0.503	-1.118	0.265

Table 8: Descriptive statistics for remuneration committee.

Remuneration	Mean	Std. Deviation	Mean	Std. Deviation	T	Sig
Independent directors should be selected by Nomination and Remuneration committee	3.232	1.388	4.809	0.432	-9.092	0.000

My company complies to the requirement of Nomination and; Remuneration Committee as per the code	4.223	0.732	4.338	0.477	-1.155	0.249
The Composition of Nomination and Remuneration Committee of my company is as per the Corporate Governance Code:	4.304	0.792	4.559	0.500	-2.383	0.018
Nomination and Remuneration Committee meets as per the requirements of Corporate Governance Code	4.170	0.746	4.397	0.522	-2.206	0.029
Decisions taken by Nomination and Remuneration Committee are accepted and implemented by the Board of Directors of my company:	4.080	0.673	4.324	0.679	-2.343	0.020

Table 9: Descriptive statistics for audit committee.

Audit	Mean	Std. Deviation	Mean	Std. Deviation	t	Sig
My company complies to the requirement of Internal Audit committee as per the code	4.464	0.827	4.882	0.325	-3.984	0.000
The composition of the Internal Audit Committee of my company is as per the Corporate Governance Code	4.384	0.750	4.941	0.293	-5.854	0.000
Internal Audit committee gets required information about the financial details of my company	4.446	0.745	4.397	0.493	0.485	0.628
Internal Audit committee meets as per the requirements of Corporate Governance Code	4.313	0.806	4.441	0.500	-1.185	0.238
The findings and recommendations of the Internal Audit Committee of my company are implemented by the Board of Directors:	4.295	0.731	4.368	0.644	-0.679	0.498

Table 10: Descriptive statistics for risk assessment committee.

Risk assessment	Mean	Std. Deviation	Mean	Std. Deviation	t	Sig
My company complies to the requirement of Risk Assessment Committee as per the code:	4.357	0.708	4.632	0.621	-2.645	0.009
The composition of the Risk Assessment Committee of my company as per the Corporate Governance Code:	4.071	0.965	4.471	0.503	-3.157	0.002
Internal risk assessment committee meets as per requirements of Corporate Governance Codes	3.973	0.843	4.529	0.503	-4.930	0.000
The risk assessment committee of my company has been able to identify business risks well in advance:	4.080	0.784	4.574	0.498	-4.645	0.000

Table 11: Descriptive statistics for corporate social responsibility.

Corporate Social Responsibility	Mean	Std. Deviation	Mean	Std. Deviation	T	Sig
My company complies to requirement of CSR Committee as per the code	4.589	0.562	4.824	0.384	-3.031	0.003
The composition of CSR Committee of my company is as per the Corporate Governance Code:	4.464	0.670	4.515	0.503	-0.535	0.593
CSR Committee meets as per requirements of Corporate Governance Codes:	4.375	0.712	4.471	0.585	-0.932	0.353
CSR Committee of my company has been able to identify projects that impact the lives of communities around my company's establishments	4.295	0.666	4.544	0.502	-2.662	0.008

EMPLOYEE SATISFACTION WITH SOCIAL SECURITY PROVISIONS (GRATUITY, PF, AND PENSION): AN EMPIRICAL STUDY IN THE SELECTED ORGANIZATIONS

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ABSTRACT

In a developing country like India, social security provisions and measures have a two-fold significance. Social security provisions constitute essential steps towards the aim of a welfare state by bringing improvements in the living standard and safeguarding people from uncertainties that may arrive in the future. The Human Resource Management department in companies is worried about the management of people at the workplace, and it is essential for them to secure the cooperation of workers and employees to increase productivity and to earn good profits. The productivity of employees will be high only if they are delighted with their employer and with the working environment at their workplace. Good and satisfactory social security provisions will make employees satisfied with their jobs and will improve their performance as well. Someone who feels safe and satisfied with their jobs gives good performance and improves the production at their job. A sample of 250 respondents was collected from respondents.

Keywords: *Social Security, Provident Fund, Retirement, Gratuity, Labor Welfare, Job Satisfaction*

INTRODUCTION

A kind of guarantee provided by the company to their employees that makes employees feel safe and secured is called Social security. Social security provisions are provided by the company to their employees in the form of provident fund, pension, gratuity, insurance, overtime allowances. It may also include paid leaves, night allowances, family insurance, etc. Employees working in an organization or factory face many challenges, and to make them feel secure and safe, they have to be given some protection and maintenance to improve their living conditions and for their welfare, which ultimately increases their productivity at work. Existence of social security provisions, employees feel safe and are not worried, thinking if anything happens to them, who will take care of their family as they have provisions of social security with them. For an employee, social security is a kind of

protection in the form of compensation that is in the form of money in case of lost or reduced income or service that may be the result of an event or situation faced by an employee due to accident, old age, maternity, illness, or in case of death. Social security provided to employees has a significant and positive influence on the job satisfaction of employees. The association of social security measures with job satisfaction has been a strong relationship. The firms must maintain and keep on improving the service quality provided to employees through social security in terms of health service and other facilities. The companies must also pay more attention to the job satisfaction of employees, their salaries and wages, their working conditions and atmosphere of the organization, promotions, and their relations with business partners (Gunawan, Ilyas, & Naningsih, 2018). Social security is a dynamic concept and is considered in almost all developed and advanced nations globally and is an indispensable chapter of national programs. It is a security furnished by society with the proper organization against uncertain risks and contingencies by which an employee can get exposed. These risks might be such significant that an individual cannot afford or fight alone. The companies must provide reasonable social and welfare measures to their employees to encourage them to enhance their productivity and make the company earn profits in the market. It is the responsibility of a company to make their employees feel safe by providing them various benefits to ensure the welfare of their employees and to make them feel satisfied with their jobs.

Social security measures and employee welfare schemes are significant elements that influence

effective recruitment processes that encourage employees in the organization. These measures also improve the relationships of employers and employees and help in industrial peace and relations. The facilities of social security and employee welfare improve the loyalty and morale of employees and enhance their productivity at the organizational and individual levels. Employee welfare facilities include medical benefits, housing schemes, recreation, and educational facilities for the family of employees to improve their living standards (Murugesan & Paul, 2020). Some of the essential elements to retain employees and feel satisfied with their jobs is to provide them good services and social security benefits. Monetary rewards and benefits are fast forgotten. Thus, companies must think of something different and beneficial for their employees to enjoy forever. Fringe benefits are a significant portion of the compensation package that is paid to workers, but their influence on the job satisfaction of employees is yet to be confirmed. Fringe benefits can also impact the satisfaction from the job in an opposed way as well. As compared to wages, fringe benefits are usually less taxed and can be purchased by employers at less cost and the cost of it in market is a little high. Fringe benefits are desirable by employees and are included in compensation packages. Hence it increases the job satisfaction of employees (Saranya, 2017).

LITERATURE REVIEW

Dushi, Iams, & Trenkamp (2017) opined that social security provisions that are provided by the company to their employees is a kind of social insurance program that gives an inflation-indexed annuity for the lifetime to

aged beneficiaries. However, over time, the trend in the pension schemes provided by the employer, societal changes, and the rules of social security measures have changed the income distribution by sources among aged employees. The author revealed that as per the survey that was conducted in the study, it is found that around half of the aged population who are living in households are receiving at least 50% of their family income through social security provisions. Around one-quarter are receiving 90% of their family income through social security provisions.

Chaubey & Rawat (2016) explained that employees working in the industrial sector require welfare services to enable them to adapt to the surroundings, working, and economic environment. Such schemes are initiated by the employer to strengthen their manpower mentally and physically. Basic amenities and improvement in working conditions that are included in employee welfare schemes are insurance coverage for employee and their family, cafeteria in the premises, crèche and daycare facilities for kids of employees, clean washrooms, clean and safe drinking water, dustbins, first aid facility, restrooms, etc. It is noticed that all these facilities available for the employees at their workplace give them job satisfaction and make them feel motivated and also increase their productivity.

Thakur (2020) found that social security measures and other employee benefits are instrumental in satisfying employees from their jobs. A significant role is played by employee satisfaction in the attainment of goals of the company. Schemes included in employee benefit packages are social security, pension

benefits, and severance pay. Companies must work on improving the work environment by providing them other traditional benefits as well such as retirement benefits. It also includes pension plans to give them financial security even after retirement. Many public sector units provide retirement benefits to their employees like Pension, which is a deferred income collected by the employee during their working period and later on given back to them once they retire from their job.

Pradeep & Kalicharan (2016) stated that social security provisions are provided to employees and are a vital factor in the industrial system to give protection to employees and their dependents in case of any contingencies or unemployment. It includes schemes like medical insurance, provident fund, compensation, maternity benefits, and gratuity. These benefits create good relationships between employer and employees and also create a practical and sound work environment, meet legislative needs, safeguard against any uncertain event.

Asha, Bhai, & Nayana (2017) revealed that social security benefits that are received by employees give them the ability to face any unfortunate events like death, accidents, illness, unemployment or even retirement. Social security provisions are considered as an essential measure of welfare that is needed by the working-class people as it helps them during the hardship of their lives. Effective administration and management are needed to run these schemes properly and efficiently. The study also revealed that most of the employees surveyed in the study were not satisfied with the benefits provided by their companies.

Tarafdar, Karmoker, & Akter (2021) explained that the study's goal was to identify the influence of fringe benefits on the level of loyalty and satisfaction of employees from their jobs. It is identified that the retirement benefits, insurance coverage, paid leaves, development and educational opportunities, and flexible working hours have influenced employees' loyalty in a positive manner. It is suggested that companies must also provide medical benefits along with health insurance plans. Family covered with life insurance reduces a lot of worry of employee that ultimately increases their efficiency and productivity at work. Similarly, a retirement benefit program assists employer to plan their retirement.

Adjeikwame (2019) studied about the influence made by fringe benefits on the engagement and satisfaction of employees in their jobs, and it is found that it makes a positive influence. Remuneration and compensation packages of employees must also be improved by employers to help them meet their family necessities and needs adequately. Some of the major fringe benefits are accommodation allowances, medical benefits, insurance coverage, and educational opportunities.

Artz (2010) stated that fringe benefits make up a considerable portion compensation package that an employee receives, and it can influence the job satisfaction of employee in several ways. The influence of fringe benefits on job satisfaction has not been revealed in the study. It is found that the child care or day care facility is only useful for single parent or single worker. For employees who are married, for them the health insurance that is provided by the employers was found to be having significant

and negative relation with job satisfaction. These benefits are usually suited to employees who have a family as they have dependents who will value these benefits.

Sharma & Jaiswal (2018) explained that the purpose of their study was to analyze the influence of the incentive packages that employees receive and how it influence their attitude towards fringe benefits. The outcome of the study shows a strong association between the attitude of employees and the incentive packages. However, employers and decision-makers must take efforts to review the incentive packages at different levels to make employees feel satisfied with the job and become more committed.

Nisar & Siddiqui (2019) stated that those employees who receive fringe benefits from their employer are found to be staying in the organization for a longer time as compared to those who do not receive facilities like fringe benefits. However, these days' employees are expecting more offerings like fringe benefits to do compensation with their work. For an organization providing fringe benefits to their employees is an essential policy as employees as it gives flexible working hours, insurance, sick leaves, paid leaves, overtime facilities, etc. For a company fringe benefits are essential as it [positively and directly influence the satisfaction level of employees and also increase their productivity.

Salisu, Chinyio & Suresh (2015) found that the compensation is something that an employee received as a reward for their hard work and the contribution that they give to the organization. It is found that allowances did not found to be making influence on the job

satisfaction as it is paid regularly and is related to certain circumstances. The lump-sum amount of gratuity can be used to satisfy the basic needs of employees after their retirement. Pension is something that an employee received on monthly basis after their retirement and it is provided in public sector units.

Karunakaran & Shilpa (2020) opined that the facility of Pension ensures an employee of older age the rights, dignity, and the security of income. In the present century, the major challenge facing by the state is the provisions of economic security to aged employees. Though the amount of Pension is one of the major income source for elderly people but its sustainability and inadequacy is always questioned. Most of the pensioners have at least one dependent for whom they have to keep on handling the burden of family even after their retirement.

Ahmad, Yei & Bujang (2013) found that employees who get the benefits of leaves, retirement plans, and loans stay longer with the employer as all these things motivate them, make them feel positive about their job and satisfied with the job as well, and ultimately increases the retention rate. It is observed that the benefit of leaves was found to be dominant among the other three benefits. It is suggested that apart from these three benefits, employers must also provide benefits like insurance, allowances, and healthcare facilities as it may create a positive impact on employees.

PROBLEM DESCRIPTION

The whole study is regarding how social security measures impact the job satisfaction of employees with special reference to gratuity, pension, and provident fund. The study has attempted to

identify the level of satisfaction from job after receiving social security measures. There are employees for whom the social security measures make different influence on their job satisfaction. Employers expects various benefits from their employers but sometime they do not get benefits as per their expectations as different employer provide different social security benefits. An attempt has been made to find out which category of employees are satisfied or dissatisfied with the benefits that are provided by their employer in the study: Employee Satisfaction with Social Security Provisions (Gratuity, PF, and Pension): An Empirical Study in the Selected Organizations.

STUDY'S OBJECTIVES

1. To check the satisfaction level for gratuity, PF, and Pension.
2. To find the impact of gender on satisfaction with gratuity, PF, and Pension.
3. To ascertain the impact of age on satisfaction with gratuity, PF, and Pension.

METHODOLOGY

The study is empirical in nature. 250 respondents participated in the study. The data was collected from them through a structured questionnaire. Chi-Square test was done to identify the results. The method of sampling was convenience sampling.

FINDING OF THE STUDY

Table 1 displays the gender, showing male respondent as 52.40%, and female respondent as 47.60%. Looking at the Age of the Respondents, those who are of 25 to 40 years are 36.40%,

those between 40 to 55 years are 30.80%, and those who are 55 years and above are 32.80%. With reference to the Satisfaction Level,

respondents who are satisfied are 34.80%, those who are neutral are 27.60%, and those who are dissatisfied are 37.60%.

Table 1: Details of the Respondents.

Variable	No. of respondents	%
Gender		
Male	131	52.40%
Female	119	47.60%
Total	250	100%
Age		
25 to 40 years	91	36.40%
40 to 55 years	77	30.80%
55 years & above	82	32.80%
Total	250	100%
Satisfaction Level		
Satisfied	87	34.80%
Neutral	69	27.60%
Dissatisfied	94	37.60%
Total	250	100%

Table 2: Chi-Square Test to know the impact of gender on satisfaction with gratuity, PF, and Pension.

Age of the Respondents	Satisfaction Level			Total
	Satisfied	Neutral	Dissatisfied	
Male		37	61	131
Female	69	31	19	119
Total	102	68	80	250
Value of Chi-square				34.7894
Degree of freedom				2
p-value				0.00001

Null Hypothesis: There is no significant impact of gender on satisfaction with gratuity, PF, and Pension.

Alternate Hypothesis: There is a significant impact of gender on satisfaction with gratuity, PF, and Pension.

Alternate hypothesis is accepted as it shows that there is significant impact of gender on satisfaction with gratuity, PF, and Pension.

Table 3: Chi-Square Test to know the impact of age on satisfaction with gratuity, PF, and Pension

Age of the Respondents	Satisfaction Level			Total
	Satisfied	Neutral	Dissatisfied	
25 to 40 years	17	31	43	91
40 to 55 years	15	23	39	77
55 years & above	51	14	17	82
Total	83	68	99	250
Value of Chi-square				46.8702
Degree of freedom				4
p-value				0.00001

Null Hypothesis: There is no significant impact of age on satisfaction with gratuity, PF, and Pension.

Alternate Hypothesis: There is a significant impact of age on satisfaction with gratuity, PF, and Pension.

Alternate hypothesis is accepted as it shows that there is significant impact of age on satisfaction with gratuity, PF, and Pension.

DISCUSSION

An employee expects security for themselves and their family with the hard work to do in their jobs. They feel satisfied and secured with the help of benefits they receive in the form of social security provision that are provided by the employer. Employer to retain their employees and to make them secured and satisfied with their job attract employees with their provisions. All these benefits motivate employees to give their best performance and help the company to achieve their goals,

it ultimately increases the productivity of employees as well as company, and it also develop healthy and positive relationship between employers and their employees.

CONCLUSION

Instability of the economy around the world has resulted in lay off of employees in many organizations. This strain and stress in the economy have made a strong influence on the satisfaction level of workers because of job insecurity. Job insecurity makes a direct

influence on satisfaction of employees from their jobs. Therefore, the system of social security has a significant influence on employees and make them feel secure in case of any kind of uncertainties like job loss, death, accident, etc. Social security is a guarantee provided by the company to their employees that makes employees stay longer with the company as well as satisfied due to so many benefits that they are receiving. Companies to retain their valuable

employees attract them towards themselves by providing them different benefits like Pension, provident fund, gratuity, paid leaves, travel allowance, sick leaves, insurance coverage, maternity leaves, etc. This study was conducted to find out how provident fund, Pension, gratuity makes influence on job satisfaction of employees. Chi-square test was applied to find result of study, there is a significant influence of gender and age on satisfaction with gratuity, PF, and Pension.

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IMPACT OF MARKETING, SOCIO-ECONOMIC AND CULTURAL VARIABLES ON CONSUMER CHOICE OF HEALTH INSURANCE

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ABSTRACT

In an econometric framework, the present study is an examination of the relationship between the consumers' choice for health insurance and its determinants. The Structural Model assessment has been employed to study the impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice in Health Insurance segment. The results have found to be statistically significant which shows that there is impact of Socio-Economic Variables, Marketing Variables, and Cultural values on Consumer Choice.

Keywords: *Marketing Variables, Socio-Economic Variables, Cultural Variables, Consumer Choice, Health Insurance*

INTRODUCTION

In the recent past in US, we have witnessed examples of stimulating consumer choice whereby the Patient Protection and Affordable Care Act of 2010 has mandatorily introduced health insurance exchanges at state level in the U.S. In India despite the introduction of Ayushman Bharat- – Pradhan Mantri Jan Arogya Yojana in 2018 and other State Govt.

schemes, 30% of the total population which accounts for 40 crore individuals is still devoid of health insurance coverage (NITI Aayog, 2021). This uncovered section of society has been given the name of missing middle which spreads across rural and urban areas constituting all sorts of people organised in formal and informal sectors. Therefore, the need is realised to design an insurance cover to match the unmet demand of this missing middle. The problems aggravates when in the process of making optimal choices, the consumers' also do not mind switching insurance providers to get maximum utility of the money spent.

In such an environment it is pertinent for insurance providers to know about the factors and variables that influence consumers' purchase of health insurance and how these factors affect the consumers' choice of health insurance provider. The contribution of this study is an examination of the relationship between the consumers' choice for health insurance and its determinants, in an econometric framework.

The rest of the paper is organized as follows. Section 2 provides, a literature review of the empirical research related to marketing, socio-economic and cultural variables that are

pertinent determinants of health insurance and present our hypothesis. Section 3 presents research methodology including hypotheses and empirical model. Section 4 presents the findings and interpretations. Finally, Section 5 concludes the paper by drawing upon some important policy implications from our findings.

REVIEW OF LITERATURE

We have clustered main variables determining consumer choice of health insurance into three major categories namely marketing, socio-economic and cultural variables. The sub variables have been identified and listed under the main variables discussed below.

Marketing Variables

The existing literature on health insurance which focusses on consumer choice of switching to another health insurance have shown consumers are sensitive to variation in marketing variables (such as premiums, out of pocket costs and additional benefit packages, service quality, customer satisfaction etc.) though the impact on consumer choice vary across different countries. (Laske-Aldershof, T. et al, 2004, Dijik, M.V. et al 2008 Pendzialek, J. B., et al 2016, Pendzialek, J. B. et al 2017, Salim, T.A., 2017).

Pendzialek J. B et al. 2016 investigated the impact of marketing variables namely premium, additional benefits and customer service on consumers preferences in German health insurance sector. Consumers' preference of health insurance plan is also associated with factors like physician patient relationship, cost of plans and address to individual's special needs. The decision to choose involves factors like physical proximity to care, less paper work, less

waiting times, attractiveness of care providers' premises, availability of educational programs, responsiveness of present care arrangements technical competence and quality (Mechanic, D. 1989)

A huge literature puts forward the heightened consumer sensitivity to product features like out-of-pocket costs and premium being the direct cost which weigh heavily in the minds of consumers, as compared to other features like co-payments which are just an additional cost. (Moustafa et al., 1971, Cutler and Reber, 1998; Royalty and Solomon, 1999; Strombom, et al, (2002); Nichols et al., 2004; Marquis, M.S et al., 2006; Abraham et al., 2006; Buchmueller, 2006; J. Schwartz et al., 2013; Politi et al., 2014).

Consumers have also found to be sensitive to the healthcare provider network (Shepard, 2015; Tumlinson et al., 1997; Nichols et al., 2004; Ericson and Starc, 2014), additional benefits (Tumlinson et al., 1997; Romley et al., 2012; Politi et al., 2014), and perceived service quality (Berg, V. et al., 2008; Rice et al., 2014; Leon, S. & Nakayama, M, 2020). Another set of studies have demonstrated consumer sensitivity to perceived service costs also (Lee and Cunningham (2001), Spathis et al. (2004), Tam (2004), Berry et al., (2002), Bielen and Demoulin (2007), McGuire et al. (2010), Sarkar et al. (2011), and Chiu et al. (2014), Kotler and Keller (2012), Abu-Salim, T. et al (2017).

The private insurers offer features which not only add feathers to their cap but also fill up the coverage gaps left open by the public insurance. In Australia with 47% of the population having private hospital cover with

private health insurance covering many out-of-hospital services such as dentistry not covered by Medicare (public insurance) (Biggs, A (2013). For the purpose of this study, we have classified marketing variable into five categories namely; product features (MV1), additional benefits (MV2), service quality (MV3), provider network (MV4) and perceived service costs (MV5) as they have been found relevant in making Health Insurance provider choice.

Socio-Economic Variables

The health insurance industry has displayed the relevance of socio-economic factors to set important pre-conditions for the expression of consumer choices. Socio-economic variable identified from literature are; Income Level (SE1), Education (SE2), Urbanisation (SE3), Financial Risk Preferences (SE4) and Social security Systems (SE5) as they have been found relevant in making Health Insurance provider choice.

Income level has shown to cast a strong and significant effect on the decision to health insurance. (Beenstock et al. (1988), Outreville (1990), Browne et al. (2000), Costa and Garcia(2003), Esho et al. (2004), Elango and Jones (2011), Park and Lemaire (2012), Feyen et al. (2013), Trinh et al. (2016) and Lee and Lee (2020).

Education is also important factor in the choice making. We have included insurance literacy skills in education variable. These studies reported that people are not able to clearly understand health insurance jargon and terms like coinsurance, deductible, out of pocket expenses, prior authorization, formulary, HMOs etc (Quincy, 2012a; Loewenstein et al.,2013, Politi et al. 2014,

Barcellos et al. 2014). People with better health insurance comprehension are more likely to choose lower-cost plans (Barnes, Hanoch, and Rice (2015). Therefore, they do not know how to combine the information available to make a good health insurance choice.

Urbanization and insurance coverage have found to be positively correlated (Barrese et al, 2016). Urbanization creates income accelerating economic opportunities for the individuals which in turn produce income effect on the both health insurance demand and choice.(Liu, G et al, 2003). Levels of urbanisation has also shown to impact the health insurance coverage and also utilisation of health care (Lin, et al 2011).

Financial Risk and health insurance connection has also been investigated by a number of studies. For a normative analysis of choice in health insurance, consumers' individual risk preferences need to be elicited and decision quality to be based on them. (Kairies-Schwarz, N. 2017). It is also found that higher the wealth at risk entails more likelihood of holding health insurance. (Mahoney, N, 2016)

Social security systems could also be an important factor in exercising consumer choice. Loosing any form of public health insurance can have impact on the personal health care costs and thus impact financial well-being at individual level (Argys L.M et al, 2020). The gaps and inflexibilities in social health systems create new dynamics by inducing the consumers to make choice in favour of private players (Tynkkynen, L.K et al, 2018). Consumer perception about not up to the mark quality and capability of public systems

(Costa-Font, J. and Jofret bonet, M., 2008) and consumer dissatisfaction (Colombo, F. and Tapay, N. 2004) regarding same have found to be important drivers of consumer choice for private health insurance.

Cultural Variables

Culture is also identified to play a vital role in explaining differences in consumer choices across countries for both life and non life insurance products, (Hofstede 1983, House et al. 2004, Hofstede et al. (2010), Minkov (2011) and Trinh, C. T. et al (2020). Hofstede's cultural variables have shown to have significance for the entire insurance industry (Park, Borde, and Choi (2002). Further, Park and Lemaire (2012) exhibited that countries with low power distance, high individualism and uncertainty avoidance, have shown to display higher growth rate of non-life insurance consumption as compared to other countries. In an earlier study Trinh et al (2016) investigated the cultural variables namely uncertainty avoidance, individualism, masculinity and power distance (Hofstede et al., 2010) and long-term orientation, indulgence and hypometropia (Minkov, (2011). It has been found that hypometropia and indulgence are relevant for the non-life insurance expenditure in both developed and developing nations.

Therefore, we have used cultural variables as a potential predictor of consumers' choice in particularly health insurance sector in India. Based on the findings of Park and Lemaire (2012) and Trinh et al (2016) we have selected items namely Power distance (CV1), individualism (CV2), uncertainty avoidance (CV3), hypometropia (CV4) and indulgence (CV5) for our construct of Cultural variables.

Consumer Choice

The consumer choice can be established as a dependent variable which is indicated in Customer loyalty (Butt and De Run 2010; Kumar and Srivastava 2013), Customer trust (Iglesias, O., Markovic, S., Bagherzadeh, M. et al. 2020), Customer patronage (Rahman, M. S. et al 2017), Switching behaviour (Laske-Aldershof, T., 2004), Customer satisfaction (Abu-Salim, T et al, 2017) and Customer experience (Richardson, A., 2010)

RESEARCH METHODOLOGY

Objectives of the Study: To study the Impact of Marketing, Socio-Economic and Cultural Variables on Consumer Choice of Health Insurance.

Hypothesis of the Study: Based on the preceding discussion, we propose the following testable hypotheses:

Ho (Null Hypothesis): There is no Impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice.

H1 (Alternate Hypothesis): There is Impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice

Research Methodology:

The research is descriptive in nature. The study has been conducted during last months of 2021 and a structured questionnaire has been used for data collection. In all 164 usable responses have been received and further analysed.

Statistical Tools:

The Structural Model assessment has been employed to study the of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice.

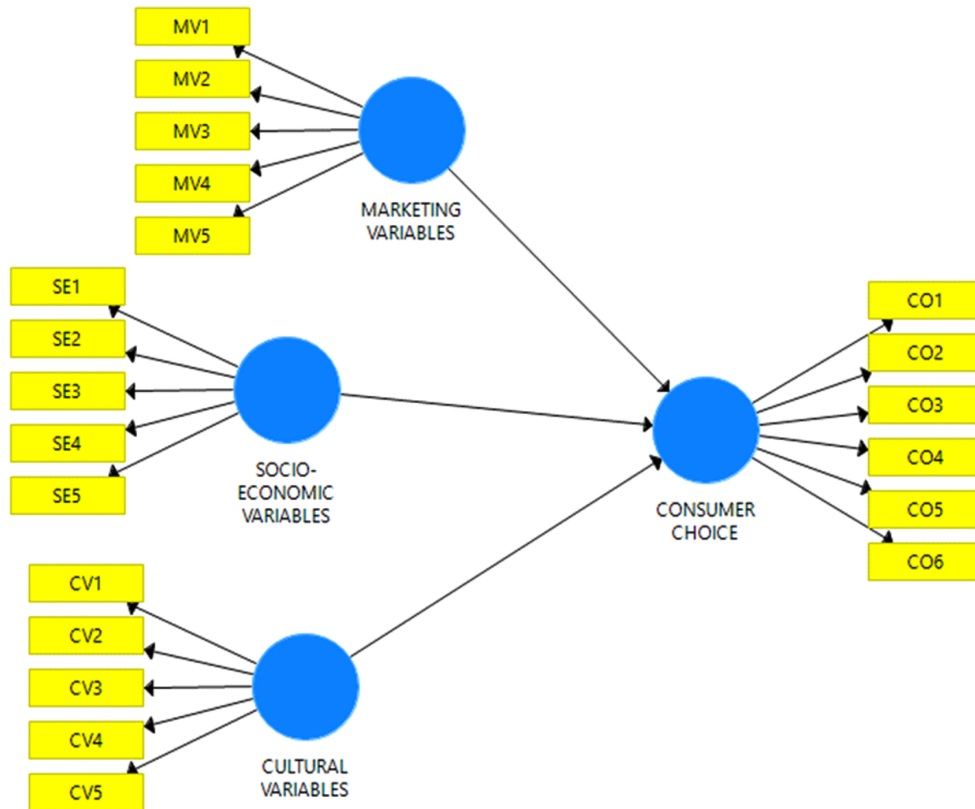


Figure 1: Impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice.

Source: Authors Own Compilation

INTERPRETATION

The Graphical representation shows Marketing Variables, Socio-Economic Variables and Cultural values as exogenous variables and consumer choice as endogenous variable.

Table 1: Measurement Model Assessment.

Particulars	Cronbach Alpha	R-Square	Composite Reliability	Average Variance Expected
Marketing Variables	0.860	0.56	0.896	0.590
Socio-economic Variables	0.836	0.525	0.844	0.608
Cultural Variables	0.833	0.63	0.896	0.611

Source: Authors Own compilation The outer model was first assessed by values of composite reliability of Marketing Variables (0.896), Socio-economic variables (0.844) and Cultural Variables (0.611)

to assess internal consistency which is greater than the prescribed value of 0.70 (Hair,2013). The average variance Expected (AVE) of Marketing Variables (0.896), Socio-economic variables (0.608) and Cultural Variables (0.611) is found to be greater than 0.50 (Hair, 2006) which helps to assess convergent validity. Haier, 2013 shows Cronbach Alpha of all indicators are equally reliable. The Cronbach's Alpha of Marketing Variables (0.860), Socio-economic variables (0.836) and Cultural Variables (0.833) are found to be greater than 0.70 which shows the model is the perfect fit. The values of r-square is greater than 0.50 which shows that the model has applicability for development of real estate sector in India.

Path Coefficients

Particulars	Original Sample	Standard Error	T Statistics
Marketing Variables> Consumer Choice	0.341	.101	3.390
Socio-economic Variables> Consumer Choice	0.345	.071	4.481
Cultural Variables> Consumer Choice	0.291	.099	2.967

Source: Authors own Compilation

The Inner model was assessed to test the relationship between the exogenous and endogenous variables. The path coefficients were obtained by using non-parametric, bootstrapping routine technique given by Vinji & Huiwen (2010). In this, the three exogenous variables are Marketing Variables (3.390), Socio-economic Variables (4.481) and Cultural Variables (2.967) have the t- values greater than 1.96 which reflects that alternative hypothesis (There is Impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice) is accepted.

The Impact of Socio-economic variables (0.345) is found to be greater than Marketing Variables (0.341) and Cultural Variables (0.291) on consumer choice which depicts that Socio-economic variable is playing important

role in determining consumer choice of health insurance.

The Impact of Marketing variables (0.341) is found to be greater than Cultural Variables (0.291) on consumer choice which depicts that Marketing is the next important factor after socio-economic variables in determining consumer choice of health insurance.

The Cultural Variables (0.291) is found to have the least impact on Consumer Choice.

CONCLUSION

Like any other commodity, the selection of health insurance plan is found to be a cognitive process in which consumer choices are impacted by marketing, socio-economic and cultural variables. The interplay of these factors interferes in big way in consumer choice making process

in response to their individual needs. The paper shows that there is impact of Marketing Variables, Socio-Economic Variables and Cultural values on Consumer Choice.

Suggestions

- The health insurers can use these variables as a checklist for factors to consider in designing health insurance product.
- The health insurer should focus on Socio-economic variables (Income Level, Education, Urbanization, Financial risk and Social security Systems) to meet the demand of a wider consumer base.

- In a culturally diversified country like India Cultural Variables have found to have least impact, therefore health insurers must focus all their energy on socio-economic and marketing variables.

Despite a number of significant findings, the present research was unable to capture other important factors like Behavioural and Life style variables that could influence consumer choice in health insurance sector. In future more detailed analysis is required to identify and understand other factors that stimulate or compress consumers choice of health insurance.

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INFLUENCE OF BRAND LOYALTY AND BRAND EQUITY THROUGH SOCIAL MEDIA MARKETING ON BUYING INTENTION TOWARDS ELECTRONIC HOME APPLIANCES

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ABSTRACT

To grab the consumer base, marketers are devising strategies to integrate their advertising and marketing campaigns across multiple channels. Among these channels of marketing, social media continues to be the most preferred marketing tool. The objective of this paper is to study the impact of social media on consumer buying decisions, considering brand equity and brand loyalty in relation to electronic home appliances. In the present study, 497 respondents are collected through self-structured questionnaires. A model has been developed and tested using structural equation modeling. Thus, the study makes a significant contribution that will be helpful for marketers to improve the quality of their products and attain maximum consumer satisfaction. It is found that brand equity and brand loyalty have both direct and indirect impact through social media marketing on consumer buying intentions.

Keywords: *Social media marketing, buying intention, brand loyalty*

INTRODUCTION

Today, marketers adopt a technological platform to attract consumers and to create an impact on their purchasing behaviour with a view to increase market value in the competitive world. Among all these platforms, social media has a high influence on purchasing behaviour (Kumar et al., 2020). The emerging demand of consumers compelled the industries to change their marketing strategies applying social media. Social media provides a communication channel where people can interact with each other and share their own consumption perspectives, product preferences, opinions, and experiences that affects their purchase decision (Aji et al., 2020). Moreover, social media helps in building relationships with customers and forming a positive image of the brands in the consumers' eyes. It's true for every non-traditional tool of marketing communications; social media is eagerly explored, dug up, and utilized by the companies. Thus, the industry needs to frame effective marketing strategies, using Social Media to rebuild in a positive way (Salem and Salem, 2019).

Social Media could be dynamic or progressive. In this manner, the effectiveness of modern advancement in social media must be measured to discover out and imply best promoting techniques. Finally, the Web 3.0 era, which changes the way of business and characteristics of the social media stage, is almost to arrive both at professionals, academicians and may put into the use of studies to uncover the conceivable impacts of artificial intelligence, cloud computing, online characters and the genuine confluence of web, mobile devices and other supplies on brand (Erdoğan and Cicek, 2012).

Business should ensure use of social media in marketing is measured by its application types, social effects and advanced technologies which will improve brand loyalty and purchase intention. Thus, this will motivate and connect consumer to engage more with social media that force the buying decision (Almohaimmed, 2019). Along with social media marketing (SMM), brand loyalty and brand equity are taken as brand components that may influence consumer buying intention effectively. Brand Loyalty (BL) increases the firm values by strengthening their market share that helps in attracting the potential customers and leads to the overall reduction in marketing cost that nourishes the brand within the competitive market (Atilgan et al., 2005). Brand loyalty towards a single brand retains the customer from the beginning to the end (Zia et al. 2021).

A review of the relevant literature has revealed that previous studies examined the effect of social media marketing and brand attitude towards buying decision (Atilgan et al., 2005, Erdoğan and Cicek, 2012; Abzari

et al, 2014; Boon-Long and Wongsurawat, 2015) from management point of view (Vries and Carlson, 2014) but Electronic Home Appliance (EHA) has not been explored from customers' point of view with regards to SMM and buying intention through brand loyalty (Verma, 2020). While social media activities bring an opportunity to minimize bias and misunderstanding toward brands and create a medium to exchange messages and ideas over the world virtually (Kim and Ko, 2012), it becomes an interesting area for research to understand the impact of brand loyalty and brand equity (BE) on social media and buying intention, which will help to match the changing consumers' behavior (Muchardie et al., 2016). Changes in consumer behaviour caused firms to rethink about their brand marketing strategies within SMM. Presently, a significant research attention focused the consumer more than on the firm (Yazdanian et al, 2019) towards EHA.

Social media is an alluring avenue for future research that might be to trace the dynamism of social media and buying behavior of consumer, considering brand equity (Sohail et al., 2020). So, this research gives a direction for worldwide brand players taking everything in mind using social media for marketing to promote their product and brand (Balakrishnan et al. 2014). Currently, a critical goal of the research is to shift to the consumer rather than to the industry (Yazdanian et al, 2019). The rational of this research is to analyze the impact of brand loyalty on SMM from customer viewpoint, and the relationship among all constructs. To fill the literature gaps, as found above, this study has developed in the following ways. First, it has

combined the concept of Brand equity, Brand loyalty and SMM, and the objective of the study follows. The next section is a discussion of the literature review to characterize the meaning of the main concepts. Then the conceptual framework is proposed, and the hypotheses are generated. The third section reviews the research methodology, and the fourth section presents the results of the study. Finally, the last section includes the conclusion of the study, theoretical and practical implications, and the limitations of the study with avenues for future research.

REVIEW OF LITERATURES

Brand Loyalty and Buying Intention

Loyalty to a brand was found to be one of the most important drivers of customer purchase intention. It influences the consumer to repurchase a particular brand and even they are ready to buy at a higher price for its characterized brand. Thus, loyalty is considered as a huge asset for a company, so it becomes important for the marketer to determine the antecedents of brand loyalty (Sohail et al., 2020). A customer always goes with an optimistic, preferential, and behavioral affinity within the course of a perceived, marked, and labelled substitute or development choice of their brand (Salem and Salem, 2019; Zia et al., 2021). When consumers have a positive mentality towards a particular brand, their commitment to that brand increases, and they will resist changing to an alternate brand. Brand loyalty encourages customer buying intention. Accordingly, Brand loyalty is connected to the consumers' recurring buying behaviours subsequently over time (Almohaimmed, 2019). Brand

loyalty has a significant effect on customer purchase intention (Sasmita and Suki, 2014). Almohaimmed (2019) classified buying intention as a deliberate act of consumers to buy one of the items and their cognitive attitude that how a person intends to buy a particular brand. Thus, buying intention is strongly affected by customers' attitude toward brand loyalty (Yazdanian et al. 2019)

Brand Loyalty and Social Media Marketing

SMM plays a vital role in E-marketing strategies that connect and build customers relationship which has a positive influence on buying behavior and enhance brand performance (Ebrahim, 2019). SMM became an important tool to build brand loyalty (Godey et al., 2016). Social media focuses Brand loyalty that helps to retain the customer and foster business sustainability (Sasmita and Suki, 2015) that results in improving brand loyalty and buying decisions, moderated on SMM application types, its social effects, and enabling technologies (Almohaimmed, 2019). SMM channels especially online communities and online advertisements are the key measures for promoting brand loyalty (Balakrishnan et al., 2014). The study upholds and describes the important role of brand loyalty to appreciate the buying behavior of consumers through SMM activities. People who tend to be more dedicated towards the brand are more loyal ones and they are mentally attached to the brand influencing through SMM (Salem and Salem, 2019). Erdoğan and Cicek (2012) examined the effects of communication and campaigned through social media and concluded a positive effect of these on brand loyalty. Thus, Social media marketing has a significant positive effect

on brand loyalty (Bilgin, 2018; Yazdanian et al., 2019; Sohail et al., 2020) and vice versa brand loyalty has positively been affected by social media marketing activities (Seo and Park, 2018).

Salem and Salem (2019) argued that SMM has an indirect significant impact on various stages of brand loyalty. So, there is a need for marketers to develop effective marketing strategies in order to build brand loyalty.

Brand Equity and Buying Intention

Buying behaviour of consumers is a complex process that relies on their buying attitude and perceptions (Imtiaz et al, 2021). So, there is a need to make a marketing strategy focusing on brand equity that builds and attracts potential customers to buy the products, by understanding their buying behaviour (Zia, et al., 2021). Along with this, marketers should be engaged in social communication to build brand equity to improve buying intention (Kim and ko, 2012). Brand equity generates customer involvement that motivates and increases their buying intention (Imtiaz et al., 2021; Verma, 2020). Brand equity describes as not only consumer preference but also include more favoured towards marketing response (Raji et al., 2018). Creating strong brand equity of products and services, positively affect consumer attitude. Brand Equity encompasses a noteworthy impact on buying intention and attracts potential buyers (Rizwan et al., 2021). Brand equity has a positive influence on customers' purchase intention (Aji et al., 2020).

Brand Loyalty and Brand Equity

Loyalty is a core dimension of brand equity, Brand loyalty is considered as the attachment

that a customer towards brand (Balakrishnan et al., 2014). Brand loyalty is a centre measurement of brand equity and is described as a leading consequence that guides the improvement of brand equity (Zia et al., 2021). Thus, brand loyalty is considered as an effective tool of brand equity (Atilgan et al., 2005). In addition to this, brand loyalty is one of the assets of brand equity (Rizwan et al. 2021) because consumers developed brand loyalty by creating a positive output of brand equity which significantly choose of brand preference over other brands (Zhang et al., 2014). Brand loyalty has an important and positive effect on Brand Equity (Zia et al., 2021; Sasmita and Suki, 2015). Brand equity is also affected by factors such as brand association and brand loyalty. Hence, brand association and brand loyalty are the other vital factors for consideration by marketers and practitioners in gaining young customer positive acceptance of the product or brand (Sasmita and Suki, 2014). Sasmita and Suki (2014) described brand loyalty as a link in the chain of effects that indirectly connects with brand equity.

Brand Equity and Social Media Marketing

Brand equity serves as an overall set of liabilities and assets related to a brand. Brand equity is studied as an emerging aspect in social media marketing to reach consumer satisfaction (Imtiaz et al, 2021). Social media marketing should always be active and proactively influence consumer attitudes toward choosing a brand (Kumar et al., 2020). Strong brand equity can spread messages and influence more consumers through SMM that affect the buying decision of potential consumers. SMM proves a platform that will provide interactive

information related to brands equity in trends. Product promotion through social media marketing creates and builds brand equity in the mind of consumer effectively (Aji et al., 2020). The administration of social media marketing will develop the brand equity upon which customers rely as an important source of information in decision-making (Ebrahim, 2019). As so, brands equity should engage in social media activities to expect positive commitments to improve consumer values (Kim and Ko, 2012). Thus, social media offer different values to businesses by enhancing brand popularity (Manzoor et al., 2020). Social media interactivity and rewards help build stronger brand equity (Barreda et al., 2020).

Social Media Marketing and Buying Intention

Social Media marketing provides scope for effective interaction that builds the confidence of a potential consumer and result in influencing their buying decision (Abzari et al., 2014; Aji et al., 2020). As SMM is more trustworthy and influences consumer buying intention, social media help to compare variety and differentiate brand (Sanny et al., 2020). Social media is an important source of information that influences consumers' purchasing decisions (Ebrahim, 2019), a combination of their interests and the possibility of buying a product. The development of social media improves connecting people in real-time that other media cannot do (Manzooret al., 2020).

SMM channels especially online communities and online advertisements are the key measures for promoting buying intention (Balakrishnan et al., 2014). Thus, its components progressively impact the fundamentals of purchase intention, creating a new marketing communication style as mediating factor. Highly accessible information via social media does not have a positive implication on consumers' purchasing behaviour (Kumar et al., 2020).

Past studies have assessed the effect of social media marketing on purchasing behaviour still these have been in limited context. For example, indifferent research work, the effect of SMM on brand trust and brand loyalty for hotels (Tatar and Erdogmus, 2016), brand equity impact purchase intention on health insurance industry (Rizwan et al. 2021), brand equity impact in beverage industry (Atilgan et al., 2005), SMM impact on buying decision in tea industry (Aji, et al. 2020), social media marketing of airline products (Moslehpour et al., 2020) have been studied. Still, there are no sufficient reviews that give marketers with data on how social media marketing affects consumers buying intentions especially towards electronic home appliance products.

This research work will examine the impact of brand loyalty and brand equity on buying intention through SMM focusing over electronic home appliance from customer point of view in Western Odisha. Similar study was also conducted by Verma (2020).

This study proposes the research framework as shown in Figure 1.

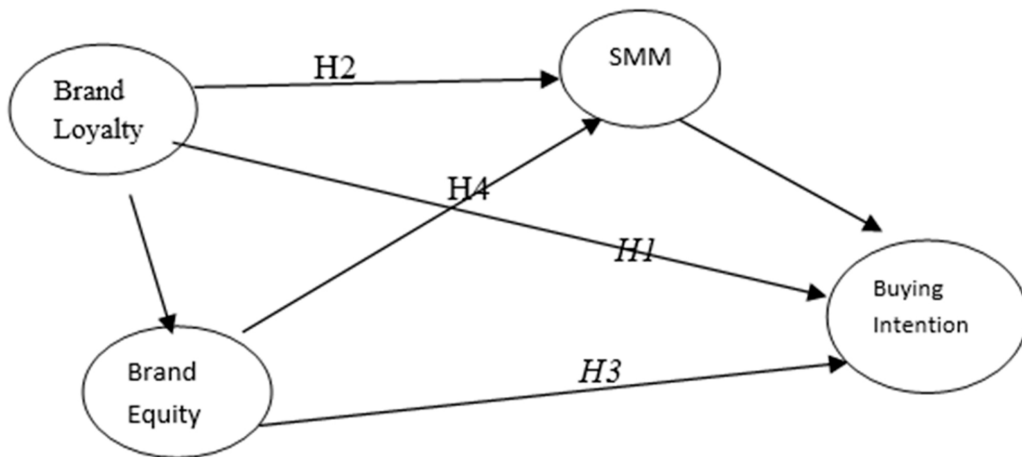


Figure 1: Theoretical Framework

Sources: Authors own findings

OBJECTIVES

The research work is conducted with the following objectives.

1. To study the impact of brand loyalty on buying intention.
2. To analyze the impact of brand loyalty on buying intention with the mediation effect of social media marketing.
3. To measure the impact of brand equity on buying intention
4. To diagnose the impact of brand equity on buying intention with the mediation effect of social media marketing.

HYPOTHESES

H01: There is no impact of brand loyalty on buying intention.

H02: There is no effect of brand loyalty on buying intention with the mediation effect of social media marketing.

H03: There is no impact of brand equity on buying intention.

H04: There is no effect of brand equity on buying intention with the mediation effect of social media marketing.

RESEARCH METHODOLOGY

Data and Measuring Tool

The study is based on a quantitative survey using self-administrated questionnaires. Out of 502 questionnaires distributed and restrained among the customers buying electronic home appliance, influenced from social media marketing and brands composition in western Odisha. 497 questionnaires were collected. Data were analysed using structural equation modelling to examine the effects of independent variables (Brand loyalty, brand equity, and social medial marketing) on dependent variable (i.e., Buying intention) along with mediating role of brand equity and SMM towards buying intention.

Further, structural equation modelling (SEM) helped in examining the hypothesized relationships among the constructs in this research (Suki and Suki, 2013).

Reliability and Validity Test

Following measures are adopted for reliability and validity test.

Reliability

Cronbach's Alpha > 0.70 (Cronbach, 1951; Cortina 1993; Taber, 2016)

Composite Reliability > 0.70 (Bagozzi& Yi, 1988, Dragan &Topolsek, 2014)

Convergent Validity Bagozzi& Yi, 1988)

Discriminant Validity AVE > MSV >ASV (Fornell&Larcker, 1981; Dragan &Topolsek, 2014)

Table 1: Reliability and Validity Estimates.

Constructs	Cronbach's Alpha	C.R.	AVE	MSV	ASV
Brand Equity	.909	.911	.720	.711	.600
Social Media Marketing	.879	.882	.652	.504	.459
Buying Intention	.931	.933	.776	.607	.557
Buying Loyalty	.950	.951	.830	.741	.574

Source: Authors' own findings

Note:CR: Composite Reliability; AVE: Average Variance Extracted, MSV: Maximum Shared Variance; ASV: Average Shared Variance.

Table 2: Inter Construct Correlation.

Constructs	Brand Equity	Social Media Marketing	Buying Intention	Brand Loyalty
Brand Equity	0.848			
Social Media Marketing	0.672	0.807		
Buying Intention	0.779	0.710	0.881	
Brand Loyalty	0.861	0.648	0.749	0.911

Table 3: Model Fit Indices.

Model	Recommended Value	Obtained value
Normed Chi-Square (Hinkin,1995)	< 3	2.406
GFI (Hooperet.al., 2008; Bagozzi& Yi, 1988)	> 0.90	0.944

AGFI (Muenjohn&Armstrong, 2008)	> 0.80	0.922
CFI (Browne and Cudeck,1992; Byrne, 2016)	> 0.80	0.981
RMSEA (Bollen,1989; Browne and Cudeck,1992)	< 0.08	0.053
TLI (Browne and Cudeck,1992; Byrne, 2016)	> 0.95	0.977

Source: Authors' own findings

The table 1 and 2 above reflects the reliability and validity parameters of four constructs. The present study satisfies all the parameters of reliability and validity. Model fit indices are also within the recommended criteria.

Note: GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index; CFI: Comparative Fit Index; RMSEA: Root Mean Square Error of Approximation; TLI: Tucker Lewis Index.

Analysis of Demographic Profile

Table 4: Sample Characteristics (n=497).

Measure		Frequency	Percentage
Gender	Female	225	45.41
	Male	272	54.59
Age	less than 25	135	27.10
	25-35	203	40.84
	35-45	45	8.96
	45-55	29	5.78
	more than 55	85	17.32
Education	High school	7	1.40
	Under-graduate	64	12.94
	Graduate	140	28.09
	Post Graduate	226	45.42
	Doctorate/Professional	54	10.86
	Other	6	1.29
Occupation	Student	174	35.08
	Working	241	48.59
	Self employed	52	10.56
	Retired	30	5.77

Marital status	Married	117	23.50
	Unmarried	377	75.89
	Others	3	0.61
Income level (per month in rupee)	Less than 15000	173	34.86
	15001-25000	60	12.15
	25001-35000	53	10.75
	35001-45000	33	6.57
	More than 45000	178	35.67
Social media platforms	Facebook	50	10.16
	WhatsApp	195	39.24
	Instagram	94	18.92
	Youtube	113	22.71
	Twitter	23	4.58
	LinkedIn	19	3.78
	Snapchat	3	0.61
Social media influenced	Yes	266	53.58
	No	104	20.92
	May be	127	25.50
Preferable brand	Philips	79	15.93
	Whirlpool	45	9.16
	Samsung	163	32.87
	LG	97	19.52
	Haier	12	2.39
	Bosch	5	0.99
	Sony	54	10.96
	Others	42	17.18
Preferable product	Cooking and food preparation appliances (microwave oven, grinder etc.)	109	21.91
	Cleaning appliances (washing machine, Vacuum etc.)	27	5.57
	Entertainment appliances (TV, speaker, headphone etc)	290	58.36
	Other appliances (AC, Refrigerator, printer etc.)	71	14.16

Sources: Authors' own findings

The demographic analysis portrays that a greater number of male respondents participated in the survey. Youth are the major participants and large numbers of respondents belong to highest income level category. WhatsApp and youtube are the largely used social media platforms and a greater number of respondents like to purchase entertainment appliances (TV, speaker, headphone etc.) of Samsung brand. The demographic features of respondents match the study requirements.

MODEL AND DISCUSSION

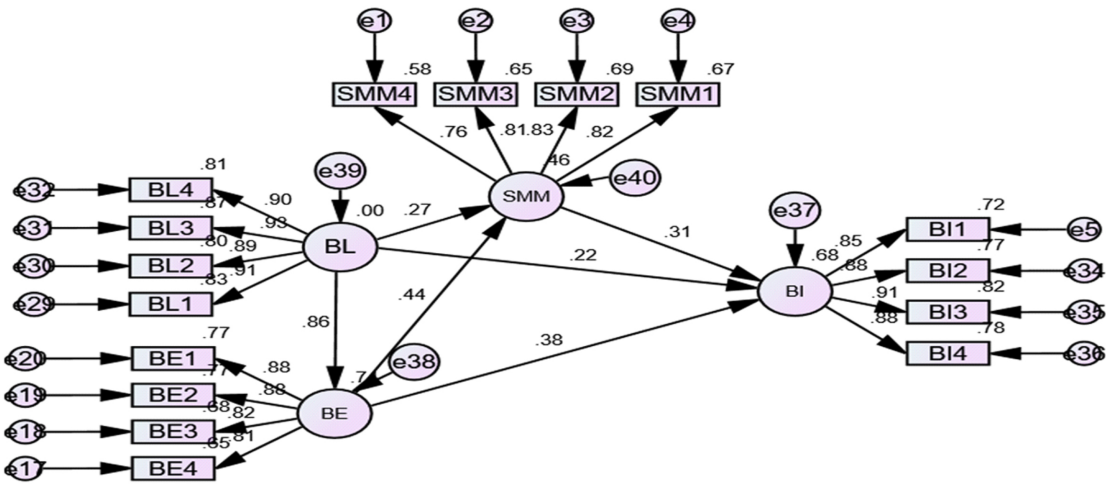


Figure 1: Path Analysis of the Structural Model

Source: Authors’ own findings

Table 5: Parameters Estimates.

Hypothesis	Estimate	S.E	C.R.	P	Remark
BE <--- BL	.746	.037	20.320	***	Supported
SMM <--- BE	.439	.092	4.752	***	Supported
SMM <--- BL	.233	.078	3.007	.003	Supported
BI <--- SMM	.341	.052	6.551	***	Supported
BI <--- BE	.419	.083	5.039	***	Supported
BI <--- BL	.209	.067	3.132	.002	Supported

Source: Authors’ own findings

Note: Estimate: standardized beta co-efficient; SE: standardized error; CR: critical ratio; P: P value; ***: P < 0.001).

This section of the study discusses the results of hypothesis testing; along with the direct and mediating effect. All the variables are significant at 1% level as the P value is .000. Results show that the first hypothesis (H1) is that “BL is a significant impact of BI with highest estimation of .746 which is consistent with the work of Yazdanian et al., (2019); Salem & Salem, (2019) and Sohail et al., (2020).

H2 is the hypothesis of the mediating role of SMM (Panigyrakis et al. 2019) between BL and BI. Brand loyalty has an optimistic and substantial effect on buying intention through SMM (Almohaimmeed 2019). The analytical evidence reveals that SMM plays an important mediating role between BL with BI (Yazdanian et al, 2019; Balakrishnan et al., 2014).

H3 is also supported and indicates that BE has a positive and significant impact on BI which matches the finding of Rizwan et al., 2021. Brand equity has a significant impact towards consumers’ purchase intention (Aji et al., 2020; Atilgan et al., 2005; Verma, 2020; Jeon and Yoo, 2021).

H4 is the hypothesis of the mediating role of SMM on BE and BI. Result of the analysis shows that SMM acts as a significant mediating variable, and this finding is consistent with the previous study of Verma (2020).

POLICY IMPLICATIONS

This study contributes to existing research on SMM, which has theoretical and policy implications. The study provides comprehensive framework to prior literature, which demonstrates the dimensions of SMM and its influence on brand components and purchase intention (Langaro et al., 2015; Balakrishnan et al., 2014;

Salem and Salem, 2019). While previous studies determine the elements of SMM (Kim & Ko, 2012), This research integrates brand loyalty and brand equity with equal importance to SMM for consumer buying decision.

This study suggests a roadmap for managing effective SMM activity and guides marketers to improve the use of social media for building brand loyalty in turn to leads a great market share (Chaudhuri and Holbrook, 2001). Its marketers’ responsibility to gather all relevant information and incorporate into their marketing strategies to attract consumer using social media marketing in promoting brand loyalty and brand equity (Atilgan et al., 2005; Rizwan et. al, 2021). This research, therefore, provides marketers with strategies that improve brand loyalty, results in purchase intent which was also recommended by Almohammad (2019).

CONCLUSION

Brand loyalty is considered as huge asset of business (Sohail et al., 2020). Brand loyalty encourages customer buying intention (Almohaimmeed, 2019) through SMM, became an important tool to build brand loyalty (Godey et al., 2016). The purpose of conducting this study is to analyse how brand loyalty and brand equity impact buying intention directly and through SMM as mediating factor. The findings indicate that the proposed model has better fit to the data sample. Results of the entire constructs of the proposed model (BL, BE, SMM, BI) are positively related with each other’s and all the findings are positively significant with the proposed model. Observing the results, brand loyalty is highly correlated with buying intention specify that participants

attentive to the brand loyalty and obtain information available in social media for buying the electronic home appliances.

SCOPE FOR FURTHER RESEARCH

The scope of the research work is limited to western Odisha and has been covered only to

the electronic home appliance only which can be expanded. The study is conducted with four factors like brand loyalty, brand equity, buying intention and social media marketing. The number of variables can be increased. Similarly, the number of sample size can be increased substantially to get robust result.

APPENDIX 1: SELECTION OF CONSTRUCTS.

Construct	Codes	Factors
Social Media Marketing (Salem and Salem, 2019; Sohail et al., 2020; Cheung et al., 2019; Kumar et al., 2020)	SMM1	Social media provide customized information.
	SMM2	Advertisements reviews on social media influence to buy.
	SMM3	Interesting contents in social media about particular brand.
	SMM4	Entertaining to spend time using social media.
Brand Loyalty (Vries and Carlson, 2014)	BL1	Recommend this brand to other people.
	BL2	Say positive things about this brand to other people.
	BL3	Support for favorite brand.
	BL4	Loyal to preferable brand.
Brand Equity(Memon et al., 2019).	BE1	Want to be engaged with favorite brand.
	BE2	Willing to go for positive word of mouth.
	BE3	Active Community feeling for favorite brand.
	BE4	Recognize the characteristics of my favorite brand.
BI(Moslehpur et al., 2020)	BI1	Information through social media influence to buy.
	BI2	Consider buying in future.
	BI3	Plan to purchase.
	BI4	Positive influence on purchase intention

Source: Authors' own compilation

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INFLUENCE OF COGNITIVE BIASES ON CONSUMER BUYING BEHAVIOUR

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ABSTRACT

All human beings without exception, are in some way or the other, consumers of goods & services. Thus, a day in the life of a person is full of consumer decisions. Cognitive bias can have a significant impact on the decisions and judgments people make, often resulting in deviations from rational thinking and decision making. This applies to consumer decisions as well. Marketing literature mentions cognitive biases that influence consumer decision making. The present paper focuses on six cognitive biases that affect decision making of consumers & tries to study their influence on a consumers across demographic factors. It also investigates which bias / biases exert the major influence on the buying process, how consumers view their own buying behaviour & how marketers use the cognitive biases for their advantage. The paper is based on empirical research.

Keywords: *Cognitive bias, consumer buying behaviour, confirmation bias, anchoring effect, loss aversion*

INTRODUCTION

Human beings are considered as the most intelligent & superior living species. They have the power of thinking which has been the mother to varied inventions & discoveries. It is the creativity & the inquisitive nature of man that has led the cave dwellers transition to luxurious pent houses & sky rises. Endowed with innumerable strengths, we tend to think we are perfectly rational beings. This is perhaps the greatest perceptual bias which we nurture.

Cognitive research spanning over decades has shown that more than often, we value perception or beliefs over reality which creates common mistakes in reasoning & hence we no longer remain rational beings.

COGNITIVE BIAS

The Collins Dictionary defines cognitive as “relating to the mental process involved in knowing, learning, and understanding things” and bias as “to prefer one person or thing to another, and to favour that person or thing.” When people process and interpret information in the world around them, an error occurs in their thinking which affects the decisions

and judgments that they make. This error is known as cognitive bias. Cognitive biases force the decision maker to take non-rational and suboptimal decisions for themselves or other individuals influenced by the decision (Kahneman and Tversky 1973).

This happens because often, we do not have the time or willingness or both, to passionately and delicately evaluate every piece of information available to us before taking a decision and implementing it. We, thus operate on the default thinking mode heavily basing our decision on cognitive cues and shortcuts. Jonathan (2008) calls this type of thinking as “fast and loose” though it should be “slow and deliberate”. A lot of importance is placed on being aware about the cognitive biases because they have a considerable impact on a person’s decision making. In fact, they pervade all levels of our thinking shaping many real-world decision-making contexts, so their understanding is important for taking informed and rational decisions.

COGNITIVE BIAS IN CONSUMER BUYING BEHAVIOUR

A very prominent influence of cognitive biases on real world decision making has been observed in the context of consumer buying behaviour. Several cognitive biases impact our rational decision making. As consumers, however, we may like to believe that our purchase decisions are taken after a very careful and rational thought, but the hard reality is that we all are too often irrational in practice. Since cognitive frames create simplified mental models of choices (Houdek, 2016), customer decision making process becomes less complex & less

time taking, so the customer does not mind. They actually act as mental shortcuts in making a choice because it is practically impossible for the customer to process all the information available for various alternatives while taking a decision.

Kovic and Laissue (2016) point out that marketing efforts, specifically promotion, do not create a tendency of irrational decision making in a consumer, which is actually their inherent trait; they only aggravate it. These biases in customer decision making not only aid in directing the marketing efforts towards a customer, but also increase the customer’s vulnerability towards irrational decision making. In other words, marketing has the ability to increase the customer’s tendency of making errors in decisions but it cannot create cognitive biases. Their impact on consumer behavior is inevitable.

Marketing efforts do not compel a customer to make a choice. Our freedom to choose the product or service in question remains unchanged before and after exposure to marketing efforts. Marketing affects us in more finer and subdued ways to take us along the journey from a prospective customer to an actual customer. Marketing, according to Thaler and Sunstein (2009) can be seen as a nudging mechanism. According to them, “nudging is the idea that cognitive biases can be exploited through choice architecture”. Wilkinson (2003) describes nudging as a form of manipulation because by changing certain aspects of a choice situation, people are clearly coaxed into taking decisions that are not only governed but also desired by external actors. Eventually, customers pick options which many times are contradictory to their real, rational preferences.

According to Kovic and Laissue (2016), there are two dimensions along which cognitive biases affect consumer behaviour; they can create preferences, or they can alter the order of existing preferences. Customers interpret an alternative or consider a choice based on their expectations about prominent attributes of a product, or consideration sets (Roberts & Lattin, 1997). In this process, other dimensions of an option are either completely or partially overlooked leading to consumers, generally ignoring or giving up on better products from their consideration sets.

Some of the biases which affect consumer buying behaviour and how a business uses them to increase its conversions have been discussed below:

Confirmation Bias

The phrase coined by English psychologist Peter Wason in 1960 refers to our tendency to interpret information in such a way that conforms to our existing ideas beliefs. We are likely to favour any information that supports our point of view and shun options that go against it. Though we feel our thought process is very rational, the truth is that this bias causes us to hear what we want to hear making us excessively adamant on our view.

Anchoring effect

First discussed by Tversky and Kahneman (1974), anchoring bias occurs when people place more significance on the first piece of information they receive. Wickens and Hollands (2000), have pointed out that new information is processed on the basis of one's prior belief and it also shapes future beliefs.

Loss Aversion

It refers to our tendency to give more weight to avoiding losses than receiving gains when

making a decision. Research reveals that the reason behind this that the psychological value of loss is twice as more as gain.

Halo Effect

Halo effect arises when one characteristic of a person overshadows his other characteristics. We fall prey to this bias when we determine specific personality traits of someone by generalizing their overall impression. Halo effect can make us develop either negative or positive bias. Disliking a certain aspect of something predisposes us to think negatively about every other thing related to it. Likewise liking a certain aspect makes us view every other thing in a positive light.

This explains a customer's irrational preference for German brands while buying cars, knowing fully well that the country of origin is not the actual utility which he wants to maximize. Similarly organic labels can impact preference order by creating a misperception about quality or taste (Lee, et al., 2013).

The Mere Exposure Effect

Also known as the familiarity principle, it refers to the tendency to get induced to acquire a good or service by merely being exposed to that good or service. Exposure thus, develops a preference for a good or service.

Risk Compensation Effect

Also known as Peltzman Effect, it is based on a study conducted by Professor Sam Peltzman and refers to our tendency to adjust our behavior based on the level of perceived risk. In his study Peltzman (1975) found out that people believe they can afford to be reckless when they are mandatorily using seatbelts and other safety devices. It implies that we tend to take more risks when we feel protected and safe.

OBJECTIVES

The paper aims to:

- Analyse the influence of cognitive biases on decision making of consumers across age, gender and level of education.
- Investigate which bias / biases exert the major influence on the buying process.
- Understand how consumers view their own buying behaviour
- Study how marketers use the cognitive biases for their advantage.

METHODOLOGY

Research Design: This research design for the study was descriptive. Primary data were collected through a Questionnaire. For the analysis of data, Descriptive Statistics and Cross Tabulation were used, in AMOS 23.0.

Development of Questionnaire: A multi-item approach was used to design the survey. To improve validity and reliability, each construct

was measured by several items. Previous literature was used to borrow items of the variable. All the variables were rated by using a five-point Likert scale ranging from totally disagree (1) to totally agree (5). An online self-reported questionnaire was developed having questions divided into three segments. The first segment included demographic features of the respondents (Age, Gender, City, Highest Qualification, Professional Qualification (if any), and Income). The second section revolved around cognitive biases related dimension questions (Confirmation Bias, Anchoring Effect, Loss Aversion, Halo Effect, The Mere Exposure Effect, and Peltzman Effect). The third section was meant to collect consumers' view towards their own buying behaviour. The development of the measurement items was guided by the objectives of the study. Two items each were used to assess the impact of each of the six biases under study. The measurement items of all the constructs are mentioned in Table 1.

Table 1: Measurement Items.

Cognitive Biases	Measurement items for each Bias
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.
	6. I am most likely to buy a product/service if I am informed that
	an attractive offer related to it is expiring in a few hours.

Halo Effect	7. I check the claims of a product of being organic before buying them.
	8. If I am satisfied with a company's current products, I will buy its new products also.
Exposure Effect	9. I have gone for sudden, unplanned purchases.
	10. I have bought some products after seeing them in the cart of others.
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.

Sample and Data Collection: Secondary data has been gathered from journals, articles, books, blogs and websites. The target population for this study was individuals involved in shopping. Primary data was gathered using a self-administered questionnaire. The sampling method used in the study was convenience sampling. This was an online study conducted through google form. Snowball sampling technique was also used. The respondents were motivated to circulate the survey to a maximum number of respondents. The questionnaire was shared with a total of 200 respondents. 181 completed questionnaires were received, with a response rate of approx. 90.5%. After removing outliers and incomplete responses, data from 153 responses were used for the final analysis. As mentioned by Kline (2011) the rule of thumb regarding the sample size and model parameter is 10:1 i.e., a minimum of 10 responses per item. In this study, a minimum of 120 samples was required as the study has 12 parameters/items.

Data Analysis:

Data collected through online survey was analyzed with the help of SPSS statistics software. The tools which were used for analysis were descriptive statistics and cross tabulation.

Table 2: Demographic Characteristics

Items		Total population (153)	Percentage (%)
Age	20 years & below	6	3.9
	21-30 years	43	28.1
	31-40 years	56	36.6
	41-50 years	41	26.8
	51-60 years	4	2.6
	61-70 years	3	2.0
Gender	Male	108	70.6
	Female	45	29.4

Family income	up to Rs. 5 Lakhs	55	35.9
	Rs. 5 - 10 Lakhs	38	24.8
	Rs. 10 - 15 Lakhs	25	16.3
	Rs. 15 -20 Lakhs	12	7.8
	Rs. 20 - 25 Lakhs	5	3.3
	above 25 Lakhs	18	11.8
Highest qualification	High School	1	0.7
	Intermediate	5	3.3
	Graduation	27	17.6
	PG	120	78.4

Table 2 describes the demography of the respondents. In the sample, majority of respondents are between 20 to 50 years, are males, are post graduates, more than 50% lie in the annual family income of greater than 5 lakhs.

Table 3: Analysis of the influence of cognitive biases on decision making of consumers across age.

Cognitive Biases	Variables for each Bias	Consumer's Agreement according to Age					
		20years & below	21-30 years	31-40 years	41-50 years	51-60 years	61-70 years
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website	3.26%	21.56%	28.10%	20.26%	1.96%	0%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it	3.92%	22.22%	24.83	20.9%	2.61%	1.30%
Average influence of Confirmation Bias across the Age		3.59%	21.89%	26.46%	20.58%	2.28%	0.43%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	3.26%	23.52%	26.79%	23.11%	1.96%	0.65%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.						
Average influence of Anchoring Effect across the Age		2.93%	19.92	23.52%	19.72%	1.96%	0.97%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	3.92%	23.52%	27.45%	22.87%	2.61%	1.30%

	6. I am most likely to buy a product/ service if I am informed that an attractive offer related to it is expiring in a few hours.	3.26%	11.11%	15.03%	7.18%	1.30%	0%
Average influence of Loss Aversion across the Age		3.59%	17.31%	21.24%	26.46%	1.95%	0.65%
Halo Effect	7. I check the claims of a product of being organic before buying them.	3.26%	18.95%	26.14%	18.95%	2.61%	0.65%
	8. If I am satisfied with a company's current products, I will buy its new products also.	3.26%	25.49%	31.37%	22.22%	2.61%	0.65%
Average influence of Halo Effect across the Age		3.26%	22.22%	28.75%	20.58%	2.61%	0.65%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	1.96%	15.03%	17.64%	9.15%	1.30%	0.65%
	10. I have bought some products after seeing them in the cart of others.	1.30%	6.53%	10.5%	5.22%	0.65%	0.65%
Average influence of Exposure Effect across the Age		1.63%	10.78%	14.07%	7.18%	0.97%	0.65%
	11. One of the important criteria for choosing a brand is the after sales service offered by it	2.61%	22.22%	30.71%	22.22%	2.61%	1.30%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	2.61%	12.41%	20.26%	11.76%	1.96%	0.65%
Average influence of Peltzman Effect across the Age		2.61%	17.31%	25.48%	16.99%	2.28%	0.97%

From Table 3 it is clear that all the biases impact the decision making of those consumers whose age is mostly between 20 years to 50 years.

Table 4: Analysis of the influence of cognitive biases on decision making of consumers across gender.

Cognitive Biases	Variables for each Bias	Consumer's Agreement(%) according to Gender	
		Male	Female
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	50.98%	24.18%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	52.94%	22.87%
Average influence of Confirmation Bias across the Gender		51.96%	23.52%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	52.94%	22.22%

	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	44.44%	14.37%
Average influence of Anchoring Effect across the Gender		48.69%	18.29%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	58.16%	23.52%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	26.79%	11.11%
Average influence of Loss Aversion across the Gender		42.47%	17.31%
Halo Effect	7. I check the claims of a product of being organic before buying them.	50.98%	19.60%
	8. If I am satisfied with a company's current products, I will buy its new products also.	57.51%	28.10%
Average influence of Halo Effect across the Gender		54.24%	23.85%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	28.10%	17.64%
	10. I have bought some products after seeing them in the cart of others.	18.30%	6.53%
Average influence of Exposure Effect across the Gender		23.20%	12.08%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	56.86%	24.83%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	32.67%	16.99%
Average influence of Peltzman Effect across the Gender		44.76%	20.91%

Table 4 suggests that decision making of females are more influenced by these biases in comparison to males because in the sample there are 70.6% male respondents and 29.4% female respondents, so the ratio of influence is more in females.

Table 5: Analysis of the influence of cognitive biases on decision making of consumers across income.

Cognitive Biases	Variables for each Bias	Consumer's Agreement (%) according to Income					
			Rs. 5-10 Lakhs	Rs. 10-15 Lakhs	Rs. 15-20 Lakhs	Rs. 20-25 Lakhs	Above Rs 25 Lakhs
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	29.41%	16.33%	11.76%	5.22%	2.61%	9.80%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	28.10%	16.99%	15.03%	5.22%	2.61%	7.84%

Average influence of Confirmation Bias across the Income		28.75%	16.66%	13.39%	5.22%	2.61%	8.82%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	29.41%	16.33%	14.37%	5.88%	2.61%	6.53%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	19.60%	14.37%	11.11%	3.26%	2.61%	7.84%
Average influence of Anchoring Effect across the Income		24.50%	15.35%	12.74%	4.57%	2.61%	7.18%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying It.	26.79%	20.26%	15.03%	5.88%	3.26%	10.45%
	6. I am most likely to buy a product/ service if I am informed that an attractive offer related to it is expiring in a few hours.	18.95%	7.18%	6.53%	1.96%	1.30%	1.96%
Average influence of Loss Aversion across the Income		22.87%	13.72%	10.78%	3.92%	2.28%	6.20%
Halo Effect	7. I check the claims of a product of being organic before buying them.	26.79%	13.72%	15.03%	3.92%	2.61%	8.49%
	8. If I am satisfied with a company's current products, I will buy its new products also.	31.37%	20.91%	14.37%	6.53%	2.61%	9.80%
Average influence of Halo Effect across the Income		29.08%	17.31%	14.7%	5.22%	2.61%	9.14%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	9.80%	10.45%	6.53%	3.92	1.96%	6.53%
	10. I have bought some products after seeing them in the cart of others.	11.11%	4.57%	4.57%	1.96%	0.65%	1.96%
Average influence of Exposure Effect across the Income		10.45%	7.51%	5.55%	2.94%	1.30%	4.24%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	26.79%	20.26%	15.03%	6.53%	2.61%	10.45%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	19.60%	9.80%	9.15%	4.57%	1.30%	5.22%
Average influence of Peltzman Effect across the Income		23.19%	15.03%	12.09%	5.55%	1.95%	7.83%

According to Table 5, there is an inverted U shape curve (Graph 1) and the impact of biases are maximum on lower income levels and it decreases with increase in income, but again it raised with higher level of income.

Graph 1: Analysis of the influence of cognitive biases on decision making of consumers across Income.

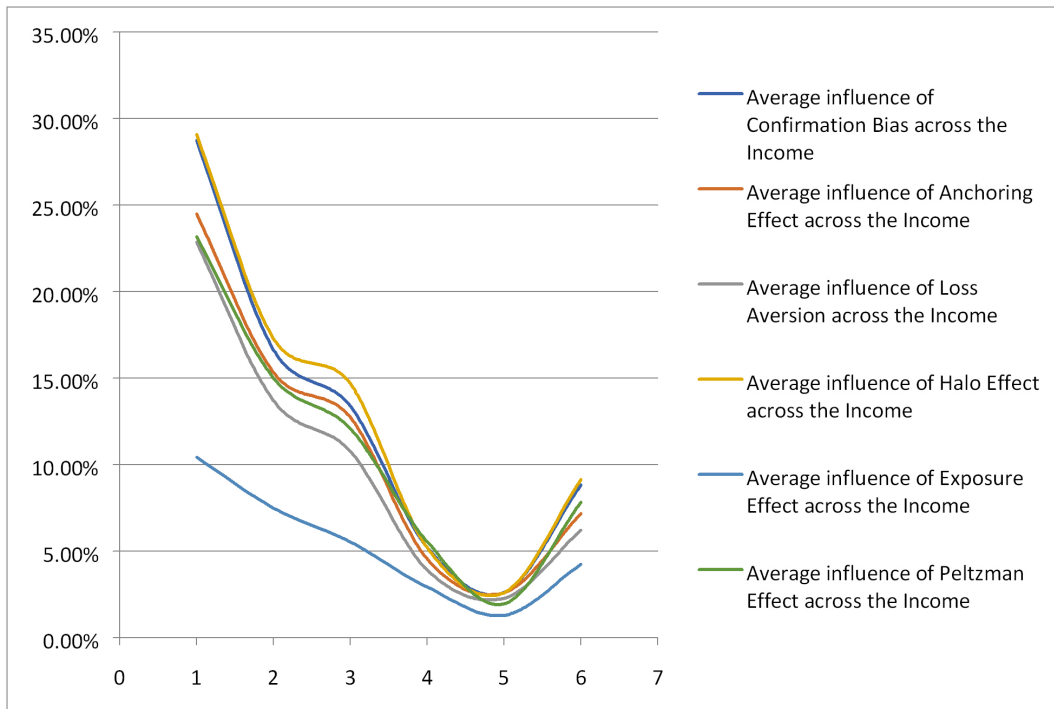


Table 6: Analysis of the influence of cognitive biases on decision making of consumers across Education.

Cognitive Biases	Variables for each Bias	Consumer's Agreement (%) according to Education			
		High school	Intermediate	Graduation	Post Graduation
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	0%	1.96%	13.72%	59.47%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	0.65%	2.61%	15.03%	57.51%
Average influence of Confirmation Bias across the Education		0.32%	2.28%	14.37%	58.49%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	0.32%	2.28%	14.37%	58.49%

	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	0.65%	1.30%	12.41%	44.44%
Average influence of Anchoring Effect across the Income Education		0.65%	1.95%	12.74%	51.63%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	0.65%	2.61%	14.37%	64.05%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	0.65%	2.61%	6.53%	28.10%
Average influence of Loss Aversion across the Education		0.65%	2.61%	10.45%	46.07%
Halo Effect	7. I check the claims of a product of being organic before buying them.	0.65%	2.61%	9.80%	57.51%
	8. If I am satisfied with a company's current products, I will buy its new products also.	0.65%	1.96%	13.72%	57.51%
Average influence of Halo Effect across the Education		0.65%	2.28%	11.76%	57.51%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	0.65%	0.65%	8.49%	35.94%
	10. I have bought some products after seeing them in the cart of others.	0%	0.65%	6.53%	17.64%
Average influence of Exposure Effect across the Education		0.32%	0.65%	7.51%	26.79%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	0.65%	1.96%	13.07%	66.01%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	0.65%	0.65%	9.80%	38.56%
Average influence of Peltzman Effect across the Education		0.65%	1.30%	11.43%	52.28%

According to Table 6, all biases have almost equal impact on respondents irrespective of their educational background. The ratio of different level of education of respondents and impact of biases are majorly same.

Table 7: Influence of Cognitive Biases on Consumer Buying Behaviour.

Cognitive Biases	Measurement items for each Bias	Average Agreement of Consumers	
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	75%	75.4%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	75.8%	
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	75.1%	66.95%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	58.8%	
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	81.7%	59.8%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	37.9%	
Halo Effect	7. I check the claims of a product of being organic before buying them.	70.6%	78.1%
	8. If I am satisfied with a company's current products, I will buy its new products also.	85.6%	
Exposure Effect	9. I have gone for sudden, unplanned purchases.	45.7%	35.25%
	10. I have bought some products after seeing them in the cart of others.	24.8%	
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	81.7%	65.65%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	49.6%	

From Table 7, it is clear that all cognitive biases under study influence consumer's buying behavior. Halo effect has the maximum impact, followed by confirmation bias. Anchoring effect, peltzman effect & loss of aversion occupy the third, fourth & fifth position respectively. The mere exposure effect lies at the last in terms of its influence on buying behaviour.

Table 8: How consumers view their own buying behaviour?

Parameters		Consumer's Response (%)
1. I am most likely to buy a product of a particular brand when	I am convinced about its quality.	53.6
	I am impressed by its promotion.	2.0
	I go through the feedback of a satisfied customer.	39.2
	It is offered at a discount.	5.2

2. I buy a product when it is offered at a discount because	I am attracted by the huge difference between its original & discounted price.	45.8
	There is lot of advertising related to the offer.	5.2
	My friends bought it & I do not want to lose the chance.	8.5
	Do not want to buy it at high price when I may require it.	40.5
3. My willingness to buy a new product will be the highest when I am offered	discount	22.9
	free trial	25.5
	great sales pitch	5.9
	great deals	45.8
4. I choose to buy new products of a company mainly because	Its earlier products are good	43.1
	It has a great promotion strategy	5.2
	Quality of the new products is very good	50.3
	Others are buying it	1.3
5. Many times, I end up buying products not mentioned in my shopping list because	I am forgetful & thus unable to write all the products required in my shopping list.	26.1
	When I see a product in the store, I develop an urge to buy it	40.5
	Looking for products is a good way to pass time while standing in the billing queue & I end up buying some of them.	22.2
	I want to surprise my family	11.1
6. I prefer a well known brand because	It enhances my status in the society	5.2
	I feel that it is less risky in terms of quality to spend on it	71.2
	I am very brand conscious	12.4
	It is always very socially responsible	11.1

The outlook of consumers towards their own buying behavior is analyzed in Table 8. Data suggests that consumers are most likely to buy a product of a particular brand when they are convinced about its quality. They buy a product when it is offered at a discount because they are attracted by the huge difference between its original & discounted price. Consumer's willingness to buy a new product will be the highest when they are offered with great deals. Consumer chooses to buy new products of a company mainly because quality of the new product is very good. Many times, consumer end up buying products not mentioned in their shopping list because when they see a product in the store and develop an urge to buy it and data also suggest that consumer prefer a well-known brand because they feel that it is less risky in terms of quality to spend on it.

The last objective was studied with the help of secondary data. As mentioned in the literature review, marketing is a nudging mechanism because marketing efforts neither create cognitive biases in customers

or force them to make a choice; the freedom of choice still rests with the customer. Marketing efforts create incentives that potential customers respond to not only when they are making rational decisions but also when they act irrationally under the influence of cognitive biases. Since human beings possess bounded rationality & not perfect rationality they have their own set of preferences & thus, are susceptible to marketing nudges via their cognitive biases.

Marketers use the anchoring effect by displaying the original price first and then the discounted price or comparing monthly and annual plan charges or displaying expensive products first, to convince customers that they are getting a better bargain. When customers want to “confirm” that they made the right decision, marketers give them this confirmation through customer reviews, testimonials, money-back guarantees and lists of best clients can have such a drastic impact on conversions, thus making use of the confirmation bias.

Marketers use the loss aversion bias to enhance their conversion rates by offering free trials and samples. A very similar nudge are time-limited offers (Aggarwal & Vaidyanathan, 2003) which convince us that if we do not buy immediately, the price for the item will rise and we will indirectly lose money in the future.

From a marketing perspective, halo effect can be a very good or bad thing, depending on the opinion people form a brand. Companies utilise halo effect to their advantage by leading with their star product, delivering the right kind of user experience and displaying evidences of it. Marketers use the mere exposure bias, prompting customers to go for spontaneous, unplanned consumption or impulse buying (Stern,1962)

by placing certain products near checkout area of supermarkets. Marketers leverage Peltzman Effect to their advantage by offering “no questions asked” return/refund/replacement policy, “try and buy” offers, quick and reliable service, etc.

FINDINGS

The following main findings can be drawn from the data analysis:

- Cognitive biases exercise a huge influence on consumer buying behaviour.
- The influence of cognitive biases on decision making varies across consumer demography. These biases have the maximum impact on consumers between 20–50 years. The impact on gender could not be clearly derived from the analysis.
- Influence of cognitive biases is greatest on consumers of either very high or low-income levels. This influence does not vary across the educational levels of the customers.
- Of all the cognitive biases, halo effect exerts the major influence on the buying process & mere exposure effect has the least impact.
- Consumers’ decision to buy a product is based on their conviction about its quality, discounts & offers associated with it & its brand.
- Majority of the consumers make impulse purchases.

CONCLUSION

Cognitive biases are undesirable & to a great extent unavoidable errors in our thinking. They influence all our decisions, including our decisions as a consumer. They assume significance not merely because they exist but because our thinking is systematically riddled

with cognitive biases. They cannot be ignored or overlooked as a borderline phenomenon. The errors in our thinking make us susceptible to marketing efforts, and marketing efforts

increase the probability that, as consumers, we make irrational decisions. Thus, these biases need to be understood both by the consumer & the marketer.

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INVESTIGATING THE EFFECT OF ECONOMIC DETERMINANTS ON STOCK MARKET RETURNS: AN INTROSPECTION

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ABSTRACT

Similar to everything else in life, higher the risk, larger is the return. Distinct from other investment options, stock market investments are riskier but the rewards are also equally handsome and attractive. The foremost reason behind such risk is market volatility or fluctuations. By nature the stock market is exceptionally erratic. Many times for unknown reasons the shares prices can go up or come down randomly. Owing to this impulsiveness, investments in such markets are deemed to be risky proposition. Nevertheless, if time is invested in properly studying the market and its randomness in detail, rewards can be reaped substantially. The foremost step towards this is to comprehend the reasons behind stock price movements. Using step-wise regression this paper examines the impact of few macroeconomic indicators on BSE Sensex. Results suggest a model where FDI significantly influences the fluctuations in the stock market in India.

Keywords: *BSE Sensex, Stock Market, FDI, Stepwise Regression, India*

INTRODUCTION

Nearly every one of us in life, these days have countless objectives and ambitions to attain. We make efforts to make certain that we accomplish those aims. Careful financial planning remunerates us with decent returns so that items may be struck off one after another from the list of desires. Investment is believed to be one of the most important aspects of financial planning in future. With the thought that our savings will mature steadily like a well-watered plant, we put in our money in a variety of financial elements to offset inflation and to create a fund,. The most ordinary form of investment is in gold, real estate, public provident fund, mutual fund investment etc among several other investment options. There are a few assertions that such deals will be secure, although simultaneously, the expected returns are on the lesser side and hence these are typically low risk and low return investments. Nonetheless, if one is geared up to assume risks with their investments subsequently there are additional alternatives that are high risk and huge yield investment options. This merely suggests that one will get larger returns at the

cost of higher risk. Investment in the stock market is the most general and accepted way to accomplish this. The place where investors can purchase and sell bonds and shares is called a stock market. Mediators like BSE and NSE are stock exchanges that permit purchase and sale of stock. The question now is what is a stock or a share? When a company is created or established, the real owners could be that person or group of people who provide finance to the company. At this moment, if further capital is raised for the company, either for global expansion or diversification, then making their company public is one of the alternatives i.e. to offer the company to the public by asking them to buy shares of the company. People become part owners of the company in which they buy shares.

The most basic factor affecting the stock market is the forces of demand and supply. An inequality between demand and supply will increase or decrease the stock price like in case of all commodities. Supposing people have queued up to buy potatoes but there is an abrupt paucity of potato supply, then the potato price will instantly go up. Likewise, if everyone wishes to purchase a company's shares that is performing well then there will be a shortage of shares and vice versa. This leads to rising or falling stock prices of the company. If public money is involved anything that is ensuing within the company will straightforwardly have an impact on the share price of a company. Lowering debt, unbeaten product launches, rising revenue and flow of investor capital leads to increase in the stock price of the company as demand for the shares of such a company goes up. On the contrary, increasing debt,

product failures, heavy losses then most of the shareholders would want to sell off their holdings thereby leading to falling stock price. Additional issues that can make stock prices fluctuate consist of mergers and acquisitions, changes in the management of the company, takeovers, etc. Investor's emotions can in addition have an impact on stock prices. The course of stock market performance is decided by the way investors invest money in the stock market. When investors take great amount of risks and invest belligerently the price of stocks tends to rise. The prices will go south if investors are more passive and restrained and prefer protection to risk. In this aspect there are two market forms: bullish market and bearish market. When investor confidence is at its high he chooses to invest aggressively. When this happens, stock prices go up flowing increased demand. This is known as a bullish market. When investor is more troubled about taking risks, losing the investment and investing with lower confidence keeping safety in mind the stock price sooner or later comes down. Such a market is called a bearish market.

The policy decisions of RBI affect stock prices directly. In India, interest rates are fixed by RBI which keeps varying at usual intervals to even out disturbances in the economy. Logically, higher the rate of interest more will be the loans that the companies will have to pay which will be followed by reduced profits. This will result in lowering of stock prices. On the contrary, falling interest rates mean increased corporate borrowings. Borrowings at lower cost are as good as saving money which leads to earning higher profit. Hence the stock will experience rising prices. One of the main issues influencing

Indian stock market is the country's political environment. The stock price will drop if the investors find the political climate ominous, government looking frail, posing war risk or if the public opinion concerning the present government is not fine. The stock price soars if the government emerges out to be sturdy with sufficient support from the public. Investors invest enthusiastically when government has aggressive developmental policies, whereas government with a frail developmental program could result in decreasing stock prices. Stock market is also affected by news and further by current events. Political uproar, civil riots, wars, terrorist attacks are examples of few such current events. These events drastically push the stock prices down and have an effect on the market instability. Floods, earthquakes and other natural calamities considerably reduce the stock price. Devastation of assets and other properties force companies to sustain huge losses that lead to fall in prices of stock. Sales drop owing to collapse in the manufacturing and transport support system. Consequently stock prices clearly descend with the occurrence of natural disasters. In addition the exchange rates between Indian rupee and other countries 'currency is one of the aspects concerning stock prices. A sturdy rupee signifies growing economy leading to higher stock prices. On the other hand, there are diverse consequences for various people in conditions where INR's performance is apprehended. With rupee moving up, Indian commodities' prices in foreign countries shoot up. This leads to falling demand, decreasing sales, increasing losses and increased exporters' suffer, pushing the stock prices to go down. However when goods

are bought by importers at lower prices and their cost of production goes down it leads to increased revenue and finally upward moving stock prices. On the contrary, when the rupee grows weaker, precisely the exporters' stock price moves up, and that of importers fall. Hence, stock market investments can produce high returns in contrast to other investment options. But it also brings with it considerable risks. It cannot be refuted that calculated risks will yield substantial returns that will certainly be consistent with the risks. Timing of investment is most important factor while making investment in any market.

LITERATURE REVIEW

Variety of factors influencing the securities market can be categorized into a range of groups. Different authors attempt to outline stock price behaviour theories with the purpose of demonstrating intricacy of occurrence. Tvaronaviciene Manuela et al (2006) tested the impact of certain factors on stock prices practically. Stock prices of Lithuanian companies and few macroeconomic variables like gross domestic product, inflation, foreign direct investment, consumer price index, broad money, state budget revenue and expenditure, average profitability of governmental bonds have been used. Mondal Md. Saheb Ali et al (2010) intended to analyze effect of profitability, liquidity, dividend rate, leverage, firm size and growth on stock price of some companies listed on stock exchange of Dhaka. Qualitative factors like goodwill of the company; company announcements; market emotion; Annual General Meeting; technical influence; report given by analysts ;unanticipated situations;

international circumstances; media; publicity; amendments in government policies; political commotion have an impact on pricing of stocks. EPS; net income; dividend; market capitalization; PE ratio; ROI; merger; stock split; retained earnings; demand and supply of stock; margin loan; inflation; interest rates and exchange rates affect the stock price.

Narayan Paresh et al (2014) inspect the stock price determinants using panel data modeling techniques of few Indian banks. Granger causality test on the selected banks disclosed the causality path and sign. They found evidence of panel cointegration among stock prices, economic activity, interest rates, and exchange rates for thirteen banks. Results advocated a rise in share prices of banks because of economic activity and depreciation of currency and vice versa with an increase in the interest rate. In the long run only economic activity Granger-caused stock prices. Sharif Taimur (2015) et al identified the key factors affecting Bahrain stock prices by analyzing panel data set of 41 companies from 2006 to 2010. Variables like earnings per share, dividend yield, return on equity, dividend per share, price earnings, debt to assets, book value per share and firm size were considered for the study. Bahrain market share prices were majorly affected by dividend per share, price earnings, book value per share, dividend yield, return on equity and firm size.

Shafiqul Alam et al (2016) Md. Rubel Miah and Md. Abdul Karim spotted the major force that affects share prices in the capital market of Bangladesh. Panel data of seven cement companies listed on the Dhaka Stock Exchange (DSE) was considered for a period 2006 to 2015. Gross Domestic Production,

Consumer Price Index, Earning per Share, Net Asset Value per Share, Price Earnings Ratio and Interest Rate Spread (IRS) have been found to be the key determinants of stock prices in cement industry. Fouzan Al Qaisi et al (2016) investigated twenty insurance companies listed on Amman stock exchange for factors like Return on Equity (ROE), Debt Ratio, age of the company, size of the company and Return on Asset (ROA) for the period 2011 to 2015. Results found that age of company, Return on Asset, Debt Ratio and the size of the company have an impact on the stock prices. Bhargava Arpit et al (2016) used time series regression to study the relationship between macro variables and stock prices for the period 2004-2013 on quarterly data. Exchange rate, oil prices and inflation were found to have significant impact over stock prices. Whereas inflation and exchange rate were negatively related to stock prices, there was a positive relation with oil price and gold price did not have any significant effect on the stock prices. Further a study by Om Hari et al (2017) analyzed the factors affecting market price of shares the impact of various factors namely, Dividend per Share, Earning per Share, Return on Equity, dividend payout ratio, Debt equity Ratio, Total asset turnover ratio and Dividend Yield on the market price of shares. The results would further help in analyzing how the Market Price per Share is affecting the dividend policy. Correlation, Muticollinearity and regression Analysis were carried out on 4 industries comprising of pharmacy, automobile, textile and software industries of which 31 companies were selected for a period of 5 years from 2012 to 2016. Findings suggest that all the selected

independent variables have an impact on the market price per share and industries bearing high dividend payout ratio have more market price per share.

Singh Dharmendra (2018) attempted to explain the determinants of twenty-six non-financial companies share prices of Muscat Securities Market, Oman for a period ranging from 2011 to 2016. Random effect model regression analysis revealed a significant positive effect of EPS on stock price and so is Debt ratio (leverage). The firm size and dividend payout were found to be not significant whereas inflation is negatively related to stock prices. Factors affecting stock price of Ho Chi Minh Stock Exchange listed companies (HOSE) were analyzed by Hung Nguyen Khac et al (2019). Linear regression results of data collected from the financial statements of 100 companies listed on HOSE from 2015 to 2018 came up with five factors namely inflation rate, earnings per share, interest rate, gold price, exchange rate having an effect on stock price. The results showed that EPS, interest rate and USD/VND exchange rate had a positive relationship with stock price. However gold price and CPI had a negative correlation with stock price. A review study was carried out on the determinants of stock prices of developed and developing economies. Of the various internal and external factors found to be influencing the prices of shares from the review of various research papers Almashaqbeh Mohammad et al (2021) concluded few factors namely ownership structures, value relevance of accounting information, audit quality and relationship between them to be the most imperative determinants of share prices. According to Sukesti Fatmasari et al

(2021) size of the company does not affect the stock price whereas stock prices were positively affected by Debt Equity Ratio and Net Profit Margin. As far as constructs were concerned ROA was found to be a good mediator in the relationship among constructs. 136 listed manufacturing companies of Indonesia Stock Exchange (IDX) were considered for the study period ranging from 2014-2018. Test used was Warp PLS statistical test tool to prove the proposed hypothesis. Stock market is impulsive and to find out the stock prices one has to keep abreast of various internal & external factors affect the stock prices. Multiple regression test established significant and positive relationship between price earnings ratio, price book value and exchange rate with stock prices of NSE 100 and exchange rate and dividend yield ratio had a negative relationship with the same. Quarterly time series data of the variables were considered from 2003-04 to 2013-14. (Nathani Navita et al)

OBJECTIVE OF THE STUDY

In the times of yore, India has surfaced as one of the investment haven in the opinion of different foreign nations. The reasons are thriving economic growth and altering and comparatively more attractive foreign investment policies structured by the government. Due to the changed circumstances, where massive foreign investment has flooded the Indian market followed by improved probability of susceptibility and destabilization of an economy, a need was sensed to inspect the cause effect relationship between macroeconomic indicators on the Indian stock market movement. Again the paper intends to explore

the best fitted research model representing the explanatory relationship among economic and financial market indicators.

FORMULATED HYPOTHESES

H1: Causal effect of GDP per person employed is significant on BSE 500.

H2: Industry (including construction) value added has major contribution on variance of BSE 500.

H3: Infant Mortality rate explains most of BSE 500.

H4: Gross savings has significant effect on BSE 500.

H5: Cause effect relationship between Broad money and BSE 500 is significant.

H6: Significant causality exists between Foreign direct investment, net inflows and BSE 500.

H7: Causal effect of Foreign direct investment, net outflows is significantly present on BSE 500

H8: Final consumption expenditure explains most of BSE 500

DESIGN AND METHODOLOGY

The present study is an effort to examine statistical data concerning the selected macroeconomic variables acting as independent variables namely GDP per person employed, Industry (including construction) value added (% of GDP), Mortality rate infant (per 1,000 live births), Gross savings (% of GDP), Broad money (% of GDP), Foreign direct investment, net inflows (% of GDP), Foreign direct investment, net outflows (% of GDP), Final consumption expenditure (% of GDP) and the response variable i.e. BSE 500. Literature review revealed number of variables in the

realm of stock market. Data for the variables used in the study have been collected from secondary sources like www.bseindia.com and www.worldbank.org for the period 1999 to 2018. In order to be able to select maximum number of variables only those variables have been considered which were had an annual frequency. BSE 500 was incorporated in the study, as it is the only index that confines data of its stock positions on annual basis.

Evaluation of the data in the current study was done through Step-wise Regression technique. SPSS was meticulously employed. In this method independent variables are introduced or taken out from the regression equation one by one. The rationale of this technique is to choose a subset of variables from among many independent variables which explain a major portion of variation in the dependent variable.

RESULTS AND DISCUSSION

Step-wise regression analysis was carried out on the data. Stepwise regression is a statistical technique to build a model by adding or removing predictor variables based solely on the t-statistics of their estimated coefficients. It either adds the most significant variable or eliminates the least significant variable. It does not consider all possible models, but produces a single regression model when the algorithm ends. Results indicated that all the variables excepting FDI (net inflows and net outflows) were found to be insignificant in predicting the dependent variable. A detailed explanation of the data analysis is presented below.

Table 1: Model Summary.

Model	R-square	Adjusted R Square	R-square change	F change	Sig F change
1.	.899	.893	.899	159.605	.000
2.	.901	.889	.002	.426	.523
3.	.903	.885	.002	.388	.542
4.	.921	.900	.017	3.308	.089
5.	.930	.905	.009	1.862	.194
6.	.930	.898	.000	.042	.842
7.	.966	.946	.035	12.451	.004*
8.	.967	.944	.002	.518	.487

The R square values of all possible regression models are on the higher side. However the change in R square from one model to another was found to be significant while moving from the sixth model to the seventh model (F change=12.451, $p < 0.01$). In this regard it may be concluded that the seventh model is the best fitted model. R square is known as coefficient of determination. It determines the amount of variance explained by causal variables of outcome variable.

Table2: Stepwise Models of Impact of Independent Variables on Sensex.

Model	Independent Variable Introduced	Value of 'Constant' term	Standardized β Coefficients
1.	GDP	-1.726E-016 ($p > 0.05$)	$\beta_1 = .948$ ($p < 0.05$)
2.	GDP, Industry	-1.444E-016 ($p > 0.05$)	$\beta_1 = .957$ ($p < 0.05$), $\beta_2 = .051$ ($p > 0.05$)
3.	GDP, Industry, Infant Mortality rate	-3.707E-016 ($p > 0.05$)	$\beta_1 = 1.381$ ($p > 0.05$), $\beta_2 = .118$ ($p > 0.05$), $\beta_3 = .421$ ($p > 0.05$)
4.	GDP, Industry, Infant Mortality rate, Gross savings	-3.704E-016 ($p > 0.05$)	$\beta_1 = 2.453$ ($p < 0.05$), $\beta_2 = -.297$ ($p > 0.05$) $\beta_3 = 1.799$ ($p > 0.05$), $\beta_4 = .693$ ($p > 0.05$)
5.	GDP, Industry, Infant Mortality rate, Gross savings, Broad money	-3.443E-016 ($p > 0.05$)	$\beta_1 = 1.465$ ($p > 0.05$), $\beta_2 = -.010$ ($p > 0.05$) $\beta_3 = .303$ ($p > 0.05$) $\beta_4 = .418$ ($p > 0.05$) $\beta_5 = -.467$ ($p > 0.05$)
6.	GDP, Industry, Infant Mortality rate, Gross savings, Broad money, Foreign direct investment, (NI)	-3.451E-016 ($p > 0.05$)	$\beta_1 = 1.483$ ($p > 0.05$), $\beta_2 = -.040$ ($p > 0.05$), $\beta_3 = .334$ ($p > 0.05$), $\beta_4 = .448$ ($p > 0.05$), $\beta_5 = -.482$ ($p > 0.05$), $\beta_6 = .026$ ($p > 0.05$)

7.	GDP, Industry, Infant Mortality rate, Gross savings, Broad money, Foreign direct investment (NI), Foreign direct investment (N0)	-3.196E-016 (p>0.05)	$\beta_1 = 1.155$ (p>0.05), $\beta_2 = -.297$ (p>0.05), $\beta_3 = .107$ (p>0.05), $\beta_4 = .196$ (p>0.05), $\beta_5 = -.084$ (p>0.05), $\beta_6 = -.403$ (p>0.05), $\beta_7 = .588$ (p<0.05)
8.	GDP, Industry, Infant Mortality rate, Gross savings, Broad money, Foreign direct investment (NI), Foreign direct investment (N0), Final consumption expenditure (FCE)	-1.904E-015 (p>0.05)	$\beta_1 = 1.054$ (p>0.05), $\beta_2 = -.329$ (p>0.05), $\beta_3 = .156$ (p>0.05), $\beta_4 = -.415$ (p>0.05), $\beta_5 = .044$ (p>0.05), $\beta_6 = -.385$ (p<0.05), $\beta_7 = .602$ (p<0.05), $\beta_8 = -.574$ (p>0.05)

a. Dependent Variable: BSE500

b. All values of IV and DV are standardized

c. $\beta_1 =$ GDP, $\beta_2 =$ Industry, $\beta_3 =$ Infant Mortality rate, $\beta_4 =$ Gross savings, $\beta_5 =$ Broad money, $\beta_6 =$ Foreign direct investment (NI), $\beta_7 =$ Foreign direct investment (N0), $\beta_8 =$ Final consumption expenditure (FCE)

A restricted set of regressors in the joint model were identified by stepwise regression model that was estimated with the most prominent factors. This technique permits a few or all of the independent variables from a set of variables in a standard linear regression to be selected mechanically. The estimated coefficients with corresponding p-values and adjusted R-squares are reported in Table 1 and 2 achieved from stepwise regression models to check the effect of independent variables chosen for the study in India on the benchmark index.

The regression equation for the same is:

$$Y_1 = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + u$$

Where Y= BSE SENSEX, $X_1 =$ GDP, $X_2 =$ Industry, $X_3 =$ Infant Mortality rate, $X_4 =$ Gross savings, $X_5 =$ Broad money, $X_6 =$ Foreign direct investment (NI), $X_7 =$ Foreign direct investment (N0), $X_8 =$ Final consumption expenditure (FCE); a= intercept (constant), $\beta =$ regression parameter; u= standard error.

It can be observed that FDI has a significant impact on performance of the BSE Sensex. The stepwise regression picks up only FDI as the key factor responsible for fluctuations in the dependent variable thereby making FDI the most dominant variable affecting BSE Sensex. . Again, FDI has a positive bearing on performance of Sensex. The result corresponds to the findings of Claessens, Klingebiel, & Schmukler (2001), Baker, Foley and Wurgler, 2004, Desai et al (2005), Adam & Tweneboah (2009), and Kalim & Shahbaz (2009), Adam & Tweneboah (2009) and I.Al-Halameh and Sayah (2010).

CONCLUSION

Investing in stock markets with accurate research and right perceptiveness can help one make consequential gains. Stock market is a risky option to invest for the reason that markets respond to a mixture of internal as well as external factors. In addition, nearly all of these factors are afar the control of investors. Unpredictability of the stock market is an essential element which if not dealt with suitably, can cause losses. There are a host of variables that affect stock price movement. Yet the finest of analysts in the field cannot precisely foresee the behavior of stock price that would change now and then. If long run investment is desired then daily unexpected price movements should not be a worry. On the other hand when one is intending for short run profits then several factors affecting stock market should be properly evaluated.

A rich store of literature exists on impact of various factors on stock market returns; still the world lacks any consensus on same. In order to examine the same step-wise regression was carried out in the present study. The results revealed significant and strong positive correlation between BSE Sensex and FDI (Net outflows) and negative correlation with FDI (Net inflows). When a company takes control over ownership in a business entity in another country then it is known as Foreign Direct Investment (FDI). Here foreign companies are directly engaged in routine operations of the business entity in the other country. The intention of making this investment is establishing a lasting interest. This long-term interest separates FDI from foreign portfolio investments, where investors inertly hold securities from a foreign country. A

lasting interest starts when an investor acquires a minimum of 10% voting power in a firm. This connotes FDI do not just bring money with them, but also technical know-how, knowledge and dexterity. In general, FDI is said to have occurred when an investor starts business operations in a foreign country or obtains foreign business assets together with creating ownership or controlling interest in the foreign company.

Investment coming into the domestic country or reporting economy is known as Foreign direct investment net inflow. Investments made by the residents of the domestic country or reporting economy to businesses based in foreign economies is FDI net outflow. When more capital flows into foreign companies the markets become larger and there is efficient allocation of funds. The reason behind the negative correlation between BSE Sensex and FDI (net inflows) is perhaps FDI inflows into the private companies existing in India that are traded on the stock exchange. This leads to dwindling market share of public companies which will simultaneously translate in reduced market capitalization of the stock market. Consequently this can be seen having an unfavorable impact on BSE Sensex. The analysis points out that FDI (net outflows) have a significant positive link with stock market returns. The results are consistent with the findings of Sahoo Pravakar et al (2021), Tsagkanos Athanasios et al (2019), Jan Knoerich (2017), Sadig Ali J. Al (2013). Supply chain linkages could be a major reason behind this favourable impact of FDI (net outflows) on BSE Sensex. Once firms start FDI abroad, they may restructure their home country strategies in sales and procurement. Few of their suppliers in turn

may go well with them and start investments in foreign companies. The newly created demand due to increased production abroad is likely to raise the domestic suppliers' demand. This shall pass from tier-1 suppliers to tier-2 and so on and so forth. Throughout such input-output linkages, FDI positively affects the performance of stock markets. Looking at the findings of

the study the study recommends more policy changes relating to various groups of investors and suppliers of materials at various tiers for increased participation in FDI and recognition of India in the international financial market. This is because increase in FDI also will have positive influence on several other sectors of the country.

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ITEM ANALYSIS OF AN GENERAL MANAGEMENT AWARENESS/ LEARNING ASSESSMENT TEST IN BUSINESS SCHOOL FOR ITS DIFFICULTY INDEX, DISCRIMINATION INDEX, AND DISTRACTOR ANALYSIS

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ABSTRACT

Nowadays, Item analysis is an important tool to know the functionality of the set items used in a test, prepared to access the learning level of student. An item which is a multiple-choice question with more than one option out of one is a correct answer called a key and the rest is an incorrect answer(s) called a distractor(s). The main objective of the distractor is to divert the student from the correct answer. Good distractor(s) is always a plausible answer. So to understand the function of the distractor(s), the distractor analysis is very important. In this study, we analyzed the different statistics of item analysis namely difficulty index, discrimination index, distractors, etc. and understand how they are functioning.

Keywords: *Assessment test, item analysis, difficulty index, discrimination index, distractor analysis.*

INTRODUCTION

Item analysis of any assessment test helps to improve the quality of items including its stem as well as distractors. It is an important and relatively simple procedure conducted after

the administration of a test. It provides useful information about the reliability and validity of a test item. It tells how the items vary between different levels from difficult to easy. With the difficulty and discrimination index, the questions were able to discriminate between students who performed well on the test, from those who did not. Distractors analysis is an important tool that provides information regarding the individual distractors and the key of a test item. These tools help to modify, improve or remove particular items so they can be further used in subsequent exams.

Multiple choice questions (MCQs) are important tools for any examination or test conducted on a large scale. It is the only source of information for item analysis. (Burud and Agarwal, 2019). Since the item analysis can perform on the responses of these multiple-choice questions. The trend of use of multiple-choice questions has been growing day by day in high stake and low stake examinations/ tests in all countries. The items used in these tests should have a good standard to maintain the fairness, accuracy, and quality of the test (Deepak, at. el., 2015). Carefully

and scientifically constructed multiple-choice questions were able to assess a higher-order cognitive skill such as applications, interpretation, analysis, application, and knowledge.

There are two major types of multiple-choice tests, (i) criterion-referenced tests (CRTs) and (ii) norm-referenced tests (NRTs). Criterion-Referenced Tests (CRTs) are used to decide whether or not an individual can demonstrate mastery in an area of content and competencies while Norm-Referenced Tests (NRTs) where the goal is usually to rank the entire set of individuals to make comparisons of their performances relative to one another (Burud and Agarwal, 2019).

The construction of a quality multiple-choice question or item is an art where the item writer has to use scientific rules to construct the good, quality, and reliable items. The same skill is required for all three levels of items; easy, average, and difficult items. It is not true that easy items can construct by ignoring its rule and only for the construction of difficult items, rules are applicable. Every item has two parts; the first part is a question statement called 'stem' and the second part is options. Minimum two options should be in a multiple-choice question. In common practice, four options of multiple-choice questions are preferred. Options have two parts, the first part is key i.e. correct answer or solution of the given stem and another part is called distractors. Distractors are incorrect answers or solutions of the stem but this incorrect answer closed to the key (correct answer) to distract the respondent. There is no fixed position of the key in a set of options. It may appear at any position. An

essential characteristic of distractors is that all options shall present plausible answers and if possible none shall be incorrect. In the overall process, the designing or selection of proper distractors is a very tedious job. Mostly these distractors are responsible to change the nature of an item easily, average, or difficult.

Distractor analysis is an integral part of item analysis. It uses some parameters of item analysis such as item difficulty and item discrimination. The distractor analysis tells how the distractors apart from the key are functioning. Frequencies of the selection of distractors is distracting the students or respondents. A test developer would expect that the distractor is selected by enough of the low achieving candidates for it to be an effective and viable distractor. For analysis of the effectiveness of the distractors, both the item difficulty and item discrimination index can be used. (Asamaah and Ocansey, 2019)

METHODS

The study was conducted in the year 2018-19 in the state of Maharashtra (India) with help of the District Education Authority. The data is collected through the Principal Investigator of this study. In total 60 business schools participated. The schools were selected by sampling procedure 'Probability Proportion to Size' (PPS). From each sampled school maximum of 30 students were selected by a robust random sampling procedure. A criterion was fixed that minimum enrolment must be 10 in that particular school. The test was conducted on General Awareness about Management. The items were prepared on different competency levels considering her/his academic skill in understanding, interpreting, analyzation, etc.

about the content/topic. The test booklet had 15 items with three distractors and one key in each item. In total, 45 distractors and 15 keys were in the test. The test was administered to 659 students. The objective of the test was (i) to know the general awareness of the students in the core contents of Management, and (ii) to identify gaps in their learning. Thirty (30) minutes were allotted to the students to finish the test.

During the evaluation, one mark was awarded to the correct answer and a zero mark for the incorrect answer. So the highest score on the test was 15 and the minimum score was 0. With the score earned by the students, difficulty level, difficulty index (DFI), power of discrimination as measured by the discrimination index (DI), and distractor analysis (DE) for all incorrect options had been analyzed.

ITEM ANALYSIS PROCEDURE

Before feeding the data into database software for analysis, the data was cleaned for irrelevant entries. During the cleaning, some entries such as blank or multiple selections of options were reported against a few items. The percentage of such responses was 2.58 ± 0.42 . They remain in the dataset for further analysis. Responses of the items for 45 distractors were analyzed and

various indices like difficulty index (DIF_I), discrimination index (DI), and distractor efficiency (DE), were analyzed as:

Item Difficulty Index

Item Difficulty Index (DIF_I) can be determined from a certain portion of the group of students. Arrange the students in ascending or descending order according to their performance in the test score. Identify high scorers 27% of students and low scorers 27% of students from upper and lower groups. A general guideline for the interpretation of item difficulty index values is provided in the following table 1 (Adegoke, 2013; Zubairi and Kassim, 2006 and [24]). Thus, the item difficulty index can be defined as below (see, Singh, 2009)

$$DIF_I = \frac{UpG + LwG}{N_U + N_L}$$

where,

UpG = Group of 27% students with a high ability to respond to the given test item correctly;
LwG = Group of 27% students with low ability to respond to the given test item correctly;

N_U = Number of students who answered the test item correctly in the upper group

N_L = Number of students who answered the test item correctly in the lower group

Table 1: Interpretation of Item difficulty Index.

Difficulty Index (p)	Interpretation
$p \leq 0.30$	Difficult
$0.31 \leq p \leq 0.70$	Moderate Difficult (Average)
$p \geq 0.71$	Easy

Item Discrimination Index

Item Discrimination Index (DI) is defined as an unbiased index of absolute difference in the number of discrimination made between the upper group and the lower group – it is proportional to the net discriminations made by the item between the groups. It is clear from the following formula that the difference between the proportion of correct answers of the top 27% and the bottom 27% of students (Singh, 2009)

$$DIF_I = \frac{(UpG - LwG)}{N_U} ; (\because N_U = N_L)$$

where,

UpG = Group of 27% students with a high ability to respond to the given test item correctly;

LwG = Group of 27% students with low ability to respond to the given test item correctly;

N_U = Number of students who answered the test item correctly in the upper group (= N_L)

Since its proportion ranges from -1 to +1. The item discrimination index can be evaluated in the following term:

Table 2: Interpretation of Discrimination Index.

Discrimination Index (D)	Item Evaluation
$D \leq 0.19$	Poor items; should be removed or completely revised
$0.20 \leq D \leq 0.29$	Marginal item and needs improvement (revision)
$0.30 \leq D \leq 0.39$	Reasonably good item, possibly little or no revision is required
$D \geq 0.40$	Very good item. It is functioning quite satisfactorily

Ref.: Ebel and Frisbie, 1991 and Bichi, 2015

Distractor Efficiency

Distractor Efficiency (DE) is calculated as Non Functional distractor (NFD) from the distractor that has been selected by less than 5% of the students. In this study, about in average 2.58 ± 0.42 % (SD) items had either Null or multiple responses. So the range of non-functioning distractors was extended to 10%, as a special case.

RESULT AND DISCUSSION

The assessment test of students was conducted on general awareness about Management subject. A total of 659 students appeared for the test. There were 15 multiple-choice questions (items) in the test booklet. Every item had three distractors with a key (correct answer). The mean score achieved was 5.64 ± 3.06 (maximum 15 marks). Mean scores according to groups were: lower 2.42 ± 0.96 ;

middle 5.07 ± 0.95 ; upper 9.83 ± 1.90 . For analysis of item statistics, students were classified into two groups based on their performance in the test. High-scored 27% students grouped as an upper group and low scored 27% students grouped as a lower group. The p-value, DI, and DE were analyzed for each item (Table 4).

Table 3: Summary of Test Statistics Variables.

Number of Items	15
Students	659
Mean Score	5.64 ± 3.06
Mean Score (Upper Group)	9.83 ± 1.90
Mean Score (Lower Group)	2.42 ± 0.96
Item Difficulty Index (p)	0.41 ± 0.06

Table 4: Item-wise Difficulty Index and Discrimination Index.

Items	Item Difficulty Ratio	Lower Group (Item Difficulty)	Upper Group (Item Difficulty)	Item Difficulty Index	Item Discrimination Index
Item_1	0.31	0.13	0.58	0.36	0.44
Item_2	0.48	0.21	0.79	0.50	0.57
Item_3	0.37	0.11	0.65	0.38	0.54
Item_4	0.47	0.25	0.64	0.44	0.39
Item_5	0.45	0.17	0.79	0.48	0.62
Item_6	0.37	0.13	0.71	0.42	0.57
Item_7	0.44	0.24	0.67	0.46	0.43
Item_8	0.30	0.10	0.65	0.37	0.56
Item_9	0.27	0.12	0.49	0.30	0.37
Item_10	0.38	0.10	0.78	0.44	0.68
Item_11	0.30	0.20	0.40	0.30	0.21
Item_12	0.40	0.15	0.71	0.43	0.56
Item_13	0.42	0.18	0.67	0.42	0.49
Item_14	0.34	0.11	0.70	0.41	0.59
Item_15	0.34	0.21	0.59	0.40	0.38

The analysis of item difficulty indices and discrimination indices for all 15 items was given in table 5. A workout for distractor efficiency was also conducted. About 87% of items had an average level (of difficulty) with a mean p-value 0.42 ± 0.04 (SD) whereas 2 (13.33%) items were too difficult. On other hand, 73.77% of items had an excellent discrimination index. Their mean discrimination index was 0.51 ± 0.12 (SD). They properly discriminate between high scorer and low scorer students. Distractor analysis gives an opportunity to study the responses made by the students on each alternative of the item. The analysis of all these items explained how the options were functioning and how distractors distract students to select the proper key. Almost all items were discriminated between high scorer students and low scorer students. In total 45 distractors out of which 4 (26.67%) were non-functioning distractors (NFDs). Only item 11, is weak to discriminate. This item required some revision.

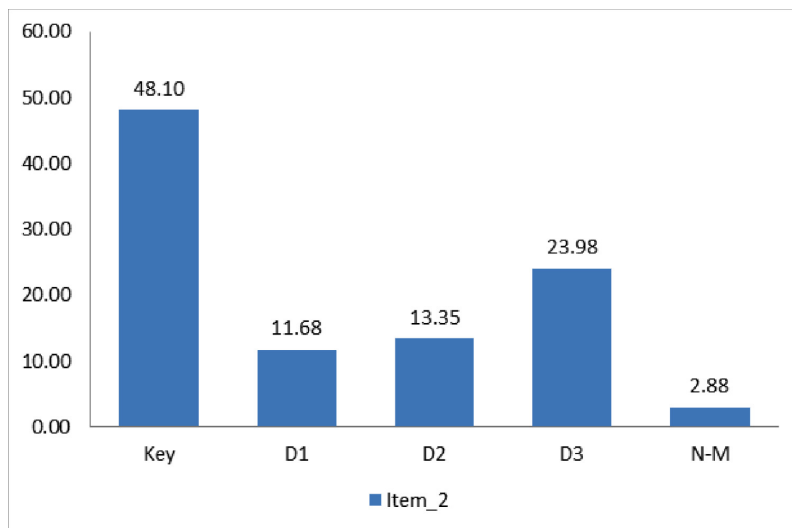
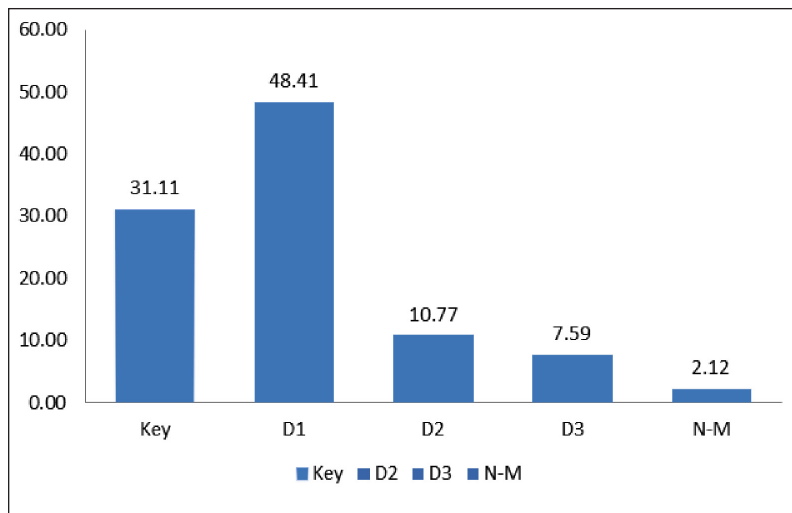
Table 5: Classification of Items according to difficulty and discrimination indices.

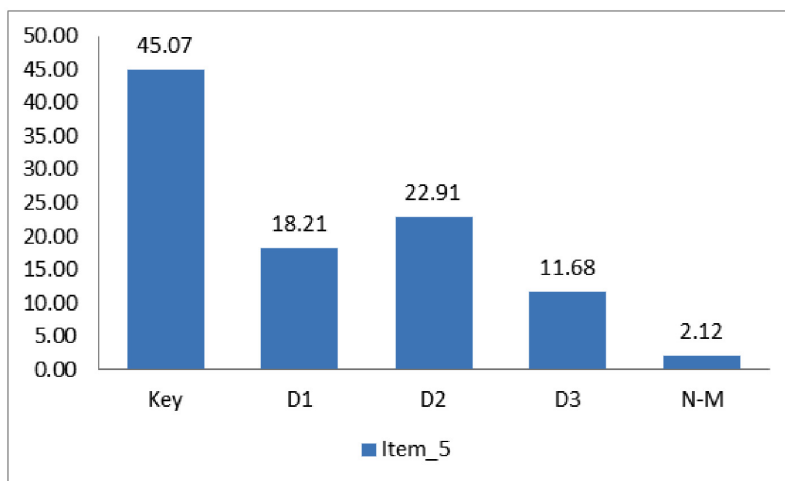
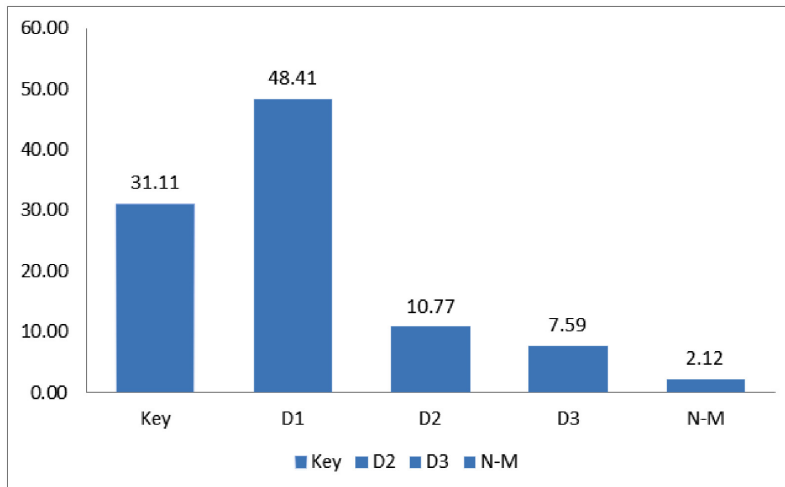
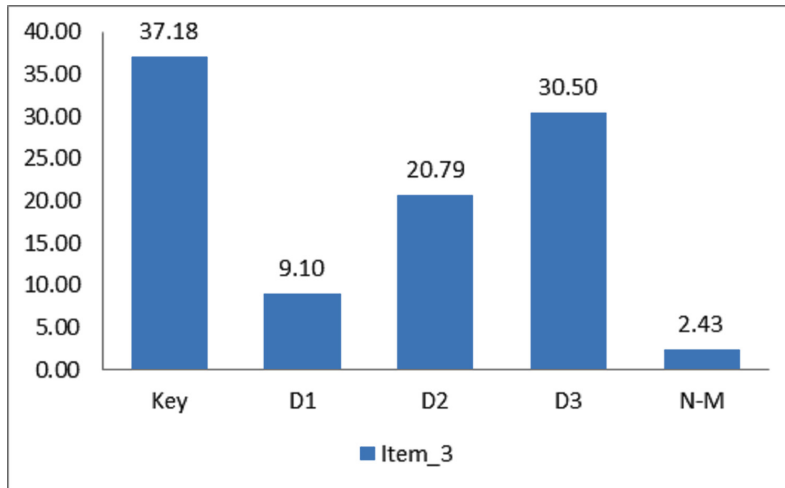
(A) Difficulty Indices					
p-value	Interpretation	Mean p-value	Standard deviation	DE (%age)	Items (n=15)
$p > 0.70$	Easy	--	--	--	0 (n=0%)
$0.3 - 0.70$	Average	0.42	0.04	92.31%	13 (86.67%)
< 0.30	Difficult	0.30	0.00	100.00%	2 (13.33%)
(B) Discrimination Indices					
D	Interpretation	Mean D	Standard deviation	DE (%age)	No. of Items (n=15)
$D \geq 0.40$	Excellent	0.55	0.07	90.91%	11 (73.77%)
$0.3 \leq D \leq 0.39$	Good	0.38	0.01	--	1 (13.33%)
$0.2 \leq DI \leq 0.29$	Marginal	0.21	--	100%	1 (6.67%)
$D \leq 0.19$	Poor	--	--	--	--
(C) Between Difficulty Indices (p) and Discrimination Indices (D)					
p value/D	$p \leq 0.30$	$0.31 \leq p \leq 0.70$		$p \geq 0.71$	Total
$D \leq 0.19$	--	--		--	--
DE (%)	--	--		--	--
$0.2 \leq DI \leq 0.29$	1 (6.67%)	--		--	1 (6.67%)
DE (%)	75%	--		--	75%
$0.3 \leq D \leq 0.39$	1 (6.67%)	13 (86.67%)		--	14 (93.33%)
DE (%)	75%	83.33%		--	79%

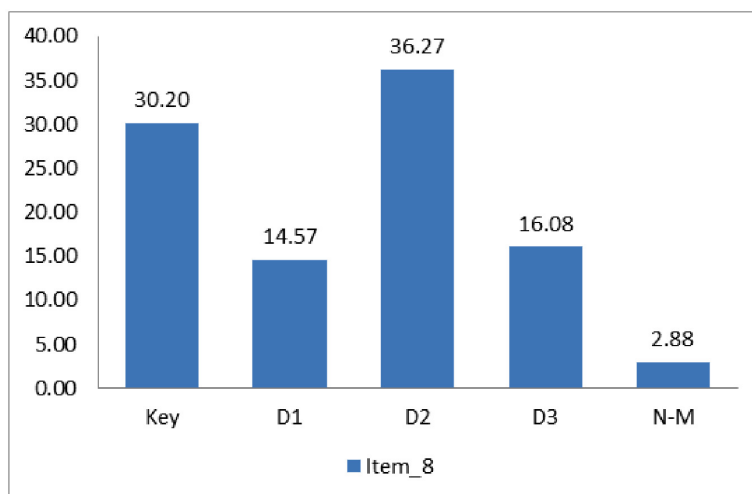
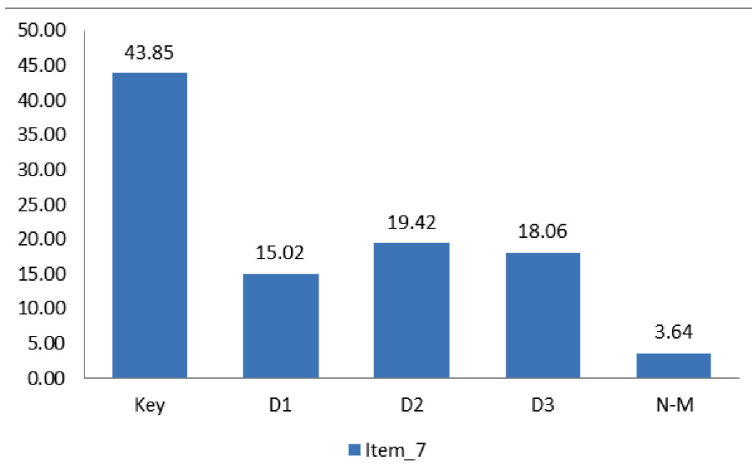
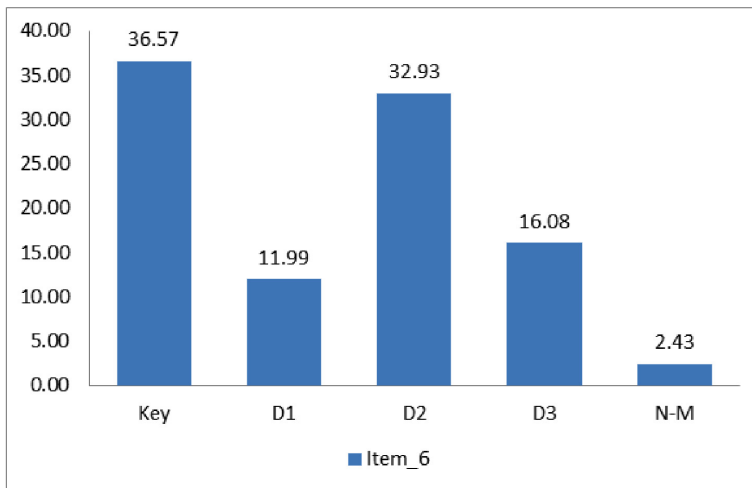
D ≥ 0.40	--	--	--	--
DE (%)	--	--	--	--
Items (15)	2 (13.33)	13 (86.67%)		15 (100%)

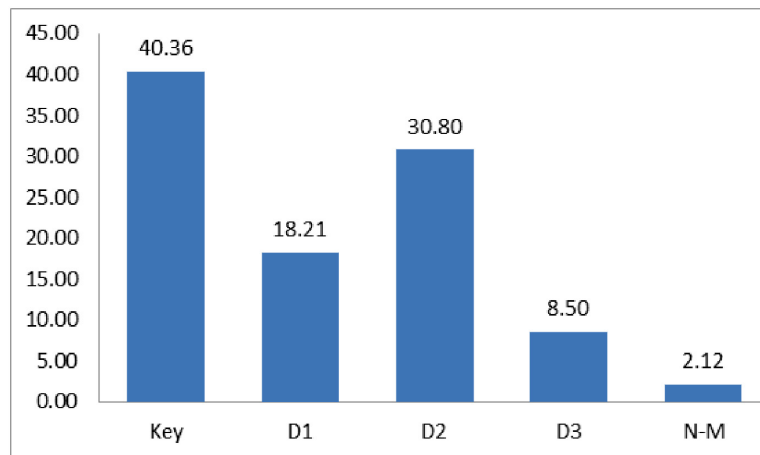
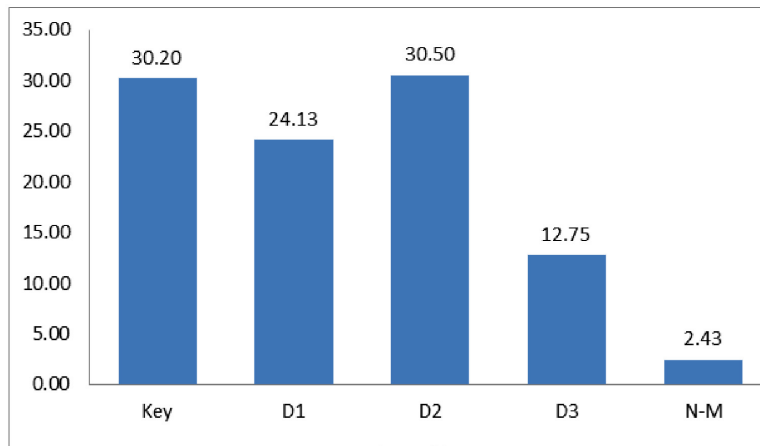
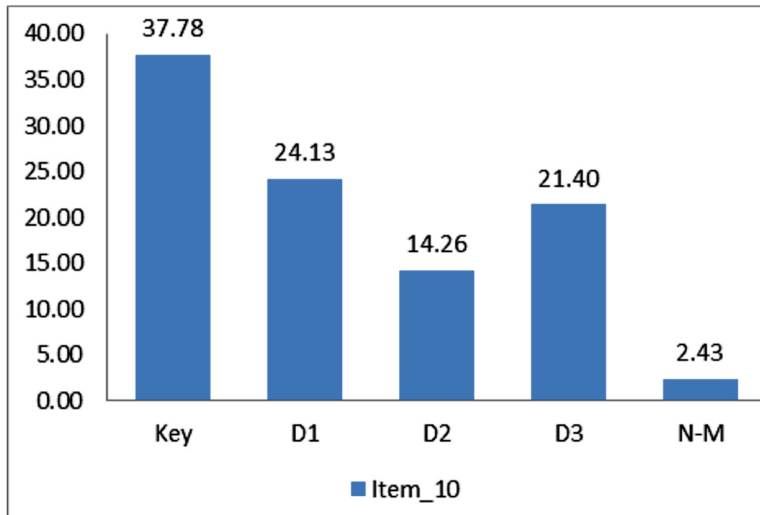
Ref.: Hingorjo, and Farhan, 2012

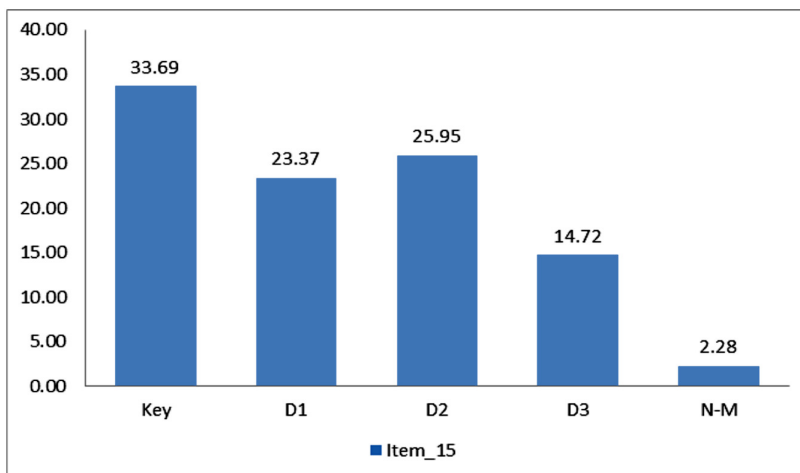
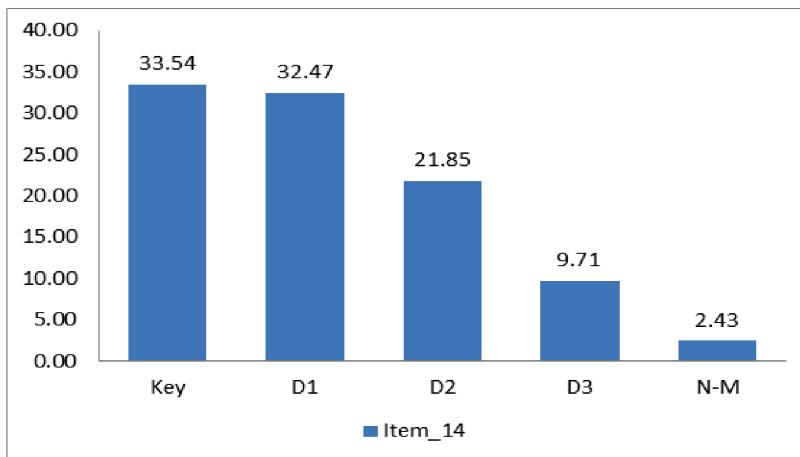
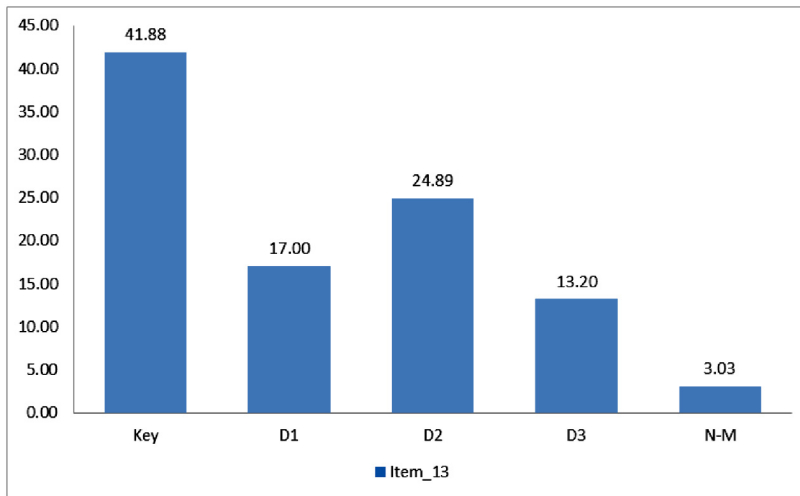
In items 1, 8, 9, and 11, one distractor was much closed to the key so the maximum number of students selected that distractor instead of the key. However, the rest two distractors were unable to distract students, maybe they were far away from the correct answer. Similarly, items 3, 6, and 14 had one distractor close to the key but score less than the key. Detail description of keys and distractors is given below in the form of bar charts for each item.

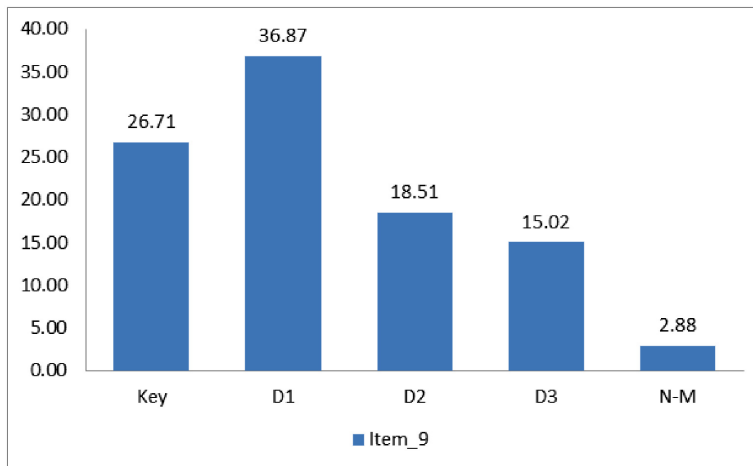












Note:

Key: Correct Answer

D1: Distractor 1

D2: Distractor 2

D3: Distractor 3

D4: Distractor 4

N-M: Students response either Null or Multiple

Figure 1: Percentage of Responses of Keys and Distractors

Note: For simplicity and easily understanding the position of the key is shifted to first in all the below graphs

CONCLUSION

Analysis and findings of this study imply that item analysis has an important role in determining the quality of assessment tools, especially regarding the multiple-choice questions (items). Well-constructed multiple-choice questions (items) are a good assessment tool to assess the level of cognition. Two item statistics i.e. item difficulty indices and discrimination indices can be used to judge the quality of the items since these two indices produce almost the same item characteristics.

The study was conducted on 659 students to assess their general awareness about their core

subject Management at the terminal year in the business schools. The quality test items were used in this assessment exercise. Item analysis should be maintained in test development and evaluation, because of its importance in the investigation of reliability and in minimizing measurement errors.

It is observed that almost all items were in the range of $0.31 \leq p \leq 0.70$ (difficulty index) and two items were a little more difficult but none of the items had an easy level. The discrimination indices of almost all items had good levels and were easily discriminated the items. Only a few items required a minor revision to function properly.

Hence, the study has been able to establish that an individual item in a test with moderate difficulty and a good positive discrimination power is ideal for a good test. Item analysis results that are generated may be influenced by many factors which include examinees having a poor understanding of difficult topics, ambiguity in wordings of the items or even inappropriate key, instructional procedure applied, it may also be due to personal variations in students' intelligence level (Bichi, 2015).

The limitation of the study was the assessment test had only limited test items to assess the general awareness about Management subject in the students. This limited number of items is unable to cover all the topics of the particular level curriculum. Due to this limitation, this assessment test exercises is unable to analyze

the effect of Bloom's level of questions effects on distractor efficiency and discriminatory index. The present findings are encouraging demonstrating that a good item will have a good discrimination index and difficulty index (Burud and Agarwal, 2019)..

Finally, it is concluded that item analysis is an important aspect of quality assurance and quality improvement of any tests. The indices of item analysis must be analyzed holistically. Revision of test items (multiple choice questions) must be based on the good difficulty index, discriminatory index, and functional distractors. Also, it is recommended that a suggested that training on test development and construction should be regularly organized for item developers and teachers to enhance more skills in test construction.

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LINKAGE BETWEEN EURO FUTURES AND SPOT MARKET: EMPIRICAL EVIDENCE FROM INDIA

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ABSTRACT

Expanding trade between India and European Union countries leads to increased EUR/INR transactions which make the currency market more volatile and riskier to trade. Traders and investors who are exposed to currency fluctuations try to hedge their risks by investing in euro futures contracts. In this study, we assess EUR-INR spot and futures prices from January 2010 – December 2019 using Grangers causality, Johansen's cointegration, and VECM techniques. Stationarity of employed dataset is confirmed using ADF test. Existence of long run equilibrium between euro-rupee futures and spot market and at least one cointegrating vector is confirmed using Johansen's cointegration. The Granger causality results signify one-way causality between the price series where, futures prices lead spot prices. The ECT is considered to be significant. Thus, we conclude that the euro futures market at National Stock Exchange (NSE) is efficient and performs price discovery function. Traders, retail investors, policy makers and mutual fund managers who diversify their investments can advance from this study.

Keywords: *Euro Futures, Error Correction, Cointegration, Causality, Currency Derivatives*

INTRODUCTION

Currency Derivatives initiated on August 29, 2008 at the National Stock Exchange (NSE), India with US dollar - Indian Rupee (USD/INR) being the first traded currency pair. Currency derivatives were introduced to limit the instability of the spot market and amplify the price discovery mechanism (Gupta, 2017). In harmony with international application of currency derivatives in trading, National Stock Exchange of India gave its nod for trading in currency derivatives denominated in Euro (EUR) in February 2010 (Sahu, 2012). While deciding futures prices market respondents compare present futures contract prices with spot value that is presumed to be at the maturity of futures contract (Bose, 2007).

Currency futures carry out the purpose of transferring risk and price discovery mechanism. The mechanism of price discovery is referred to as using futures contract prices to price the spot market transactions. Quintessence of price discovery lays on the reality if additional data appears initially in spot market or in futures market (Unlu and Ersoy, 2012). Price discovery has an important role to play for market investors, hedgers and speculators.

United States being the largest destination for Indian exports, much of the existing literature focuses on the currency derivatives denominated in US dollar. Some of these studies are Goyal and Mittal (2014), Kharbanda and Singh (2017), Singh and Tandon (2018), Yadav and Sharma (2019), Unlu and Ersoy (2012). For instance, Vadivel, Veeramani and Raghutla (2020) report that USD/INR exchange rate pass-through provides heterogeneous data that change whole price index in India. Nath and Pacheco (2018) find one-month USD/INR futures and forwards are unbiased estimates of spot prices. However, there is dearth of studies on Euro-Indian rupee futures market. European Union being one of the biggest economy and sizeable trading block in the World categorizes as first for international investments. EU bags the rank of second largest destination for Indian exports encompassing over 14% of the total exports. Goods traded between India and European Union has gone up by 72% in last decade. Resultantly, European Union has become India's one of the largest trading partners accounting for 11.1% of total Indian trade in 2019. European Union has adopted Euro as its official currency for the 19 countries of the Eurozone as well as non-euro member countries namely Sweden, Poland, Romania, Hungary, Croatia, Bulgaria and Czech Republic. It is also being held as an international reserve currency in other nations including India.

A couple of studies on EUR/INR futures market can be discerned from the literature. These are Sahu (2012), Kumar et al. (2017) and Kumar Poornima and Sudarsan (2017). However, Sahu (2012) analyses the effect of EUR/INR futures trading on EUR/INR spot rate instability while Kumar, Poornima and

Sudarsan (2017) studies both USD/INR and EUR/INR markets. Kumar et al. (2017) finds that EUR/INR spot prices Granger causes EUR/INR futures prices, but not conversely. Such conclusions raise the question of price discovery mechanism in EUR/INR futures market while the same is taking place in EUR/INR spot market. However, they further report that the INR-EURO spot has imperceptibly diminished since the launch of currency futures in Indian market. Thus, it leads to some further questions. Whether equilibrium in both short and long run exists in EUR/INR spot and futures markets? Does EUR/INR Futures market lead or lag EUR/INR spot market? Is EUR/INR futures market informationally efficient and performs the functions of risk management and price discovery? The present study intends to scrutinize answers to these questions.

With this backdrop, where USD/INR currency pair has been given thought to frame relation between spot and futures while there is a very shallow pool of literature on association between EUR/INR spot market and futures market, and strategic importance of the India's trade with EU, we are motivated to take up this study. The focus of the study is to assess the linkage among euro futures and spot markets and to investigate the mechanism of price discovery in the Indian euro currency futures market. The rest of the paper has been bifurcated in four sections. Section two portrays the review of literature. Section three gives an overview of the data and methodology employed for analysis. Section four demonstrates empirical results and discussion. Section five gives a brief account of the conclusion, research implications and opportunities for future research.

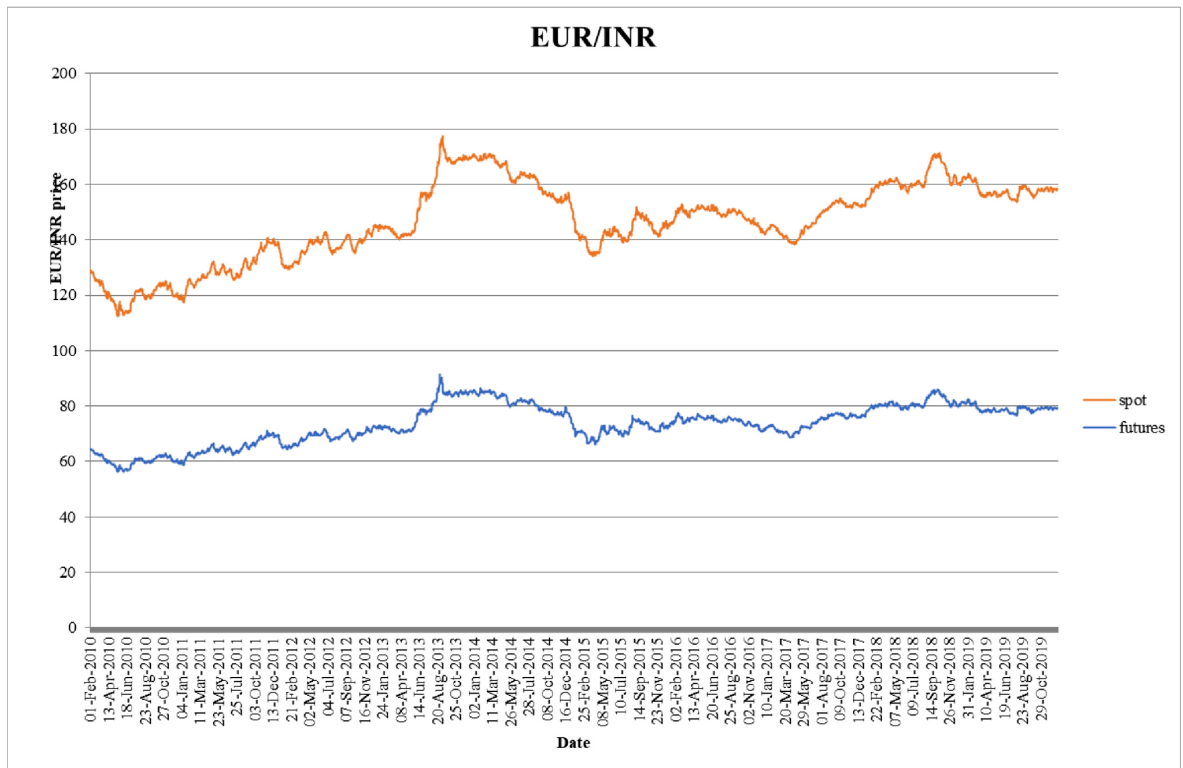


Fig 1: EUR/INR spot prices and futures contract values

LITERATURE REVIEW AND OBJECTIVES OF RESEARCH

Table 1 presents a brief of some important studies available in the literature. It can be gleaned from Table 1 that there exists two-way causality among futures and spot price series (Turkington and Walsh, 1999), (Floros, 2009), (Unlu and Ersoy, 2012), (Zhou, Dong and Wang, 2014), which is in contradiction to results of (Floros and Vougas, 2007), (Sahu, 2012). Further, it surfaces from the literature that a vast pool of studies is available on USD and a few studies are focused on Euro. European Union comes under India's one of the topmost trading partners making Euro one of the widely traded currencies in India. It was in the year 2010 EUR/INR futures were allowed to be traded (Gupta, 2017). This study is one of its kinds and investigates the linkage among Euro futures prices and spot prices. The intents of this study are as per the following:

- To inspect cointegration between euro/rupee spot and futures markets.
- To assess causality among euro/rupee spot and futures markets.
- To analyze the price discovery mechanism of euro/rupee futures markets

Table 1: Brief of Literature Review.

Year	Author(s)	Objective	Methodology	Findings
1999	Turkington and Walsh	To investigate the high-recurrence causal connection between Australian share price futures and All-Ordinaries	ADF, ARMA, VAR	There exists bi-directional causality. Price discovery is moderate which proposes absence of favored market for informed trading in this climate.
2003	Bandivadekar and Ghosh	To assess the impact of futures on spot market unpredictability listed in S&P CNX and BSE	GARCH	Sensex volatility declined due to market effects while S&P CNX volatility declined due to market and futures effect.
2006	Tse, Fung and Xiang	To ascertain price discovery mechanism in currency (Japanese, Euro, and Yen) futures and spot markets.	Hasbrouck information share model, Gonzalo and Granger permanent-transitory model	The outcome portrays electronic trading stages encouraging price discovery than floor trading. Futures market traders may educe information from spot prices.
2007	Floros and Vougas	To explicate price discovery mechanism of futures market over the crisis (1999 to 2001)	Bivariate GARCH	Futures market has been identified with price discovery mechanism than spot market.
2009	Floros	To ascertain price discovery mechanism, causality and lead-lag association among the prices of South African futures and cash.	Johansen's Cointegration, VECM, Granger Causality, Error correction model with TGARCH errors.	Bi-directional causality exists.
2011	Rastogi	To ascertain how exchange traded currency derivatives impacts spot exchange unpredictability.	ARCH-LM, GARCH (1,1)	Spot market found to be weak-form efficient
2012	Sahu	To contemplate the effect of EUR/INR futures trading on EUR/INR spot rate unpredictability	ADF, GARCH	No impact of EUR/INR futures introduction on spot rates
2012	García, Gaytán, and Wolfskill.	To provide evidence as to acknowledge or dismiss the Efficient Markets Hypothesis.	ADF	Findings reports autocorrelation among currency spot prices and thereby rejecting Efficient Markets Hypothesis (EMH) in its weak form.

2012	Unlu and Ersoy	To examine association among Turkish Lira-US dollar spot rate and Turkish Lira-US dollar futures contract traded in Turkish derivatives exchange.	Cointegration test, Error Correction Test	Long run association among foreign currency spot & futures market. Two-way causality exists in the short run and long run.
2014	Zhou, Dong and Wang	To examine volatility spillover impact among futures and spot market in Chinese stock market	VAR, TVP-VAR	Bi-directional volatility spillovers exists between CSI spot and futures markets. Changes in futures volatility decreases fluctuations in spot market volatility.
2014	Goyal and Mittal	To examine the consequences of currency futures on exchange rate unpredictability.	GARCH (1,1)	USD/INR volatility has increased after the introduction of currency futures in India.
2017	Kumar Poornima and Sudarsan	To measure, compare and test the volatility causation between Indian futures and spot market.	ADF, PP, GARCH, E-GARCH, T-GARCH and Granger Causality	USD/INR and EUR/INR spot return granger causes USD/INR and EUR/INR futures return, but converse does not exist. However, Bi-directional causality exists in INR-GBP. Volatility of GBP/INR spot and EUR/INR spot has been moderately decreased since the introduction of currency futures in India.
2017	Martinez and Tse	To examine the effect of Tick-size reduction on market quality and informed trading for EUR, JPY and MXN futures contract	Probability of Informed Trading (PIN), Barclay and Hendershott model, Hasbrouck model	Spreads are significantly reduced, indicating lower transaction costs. Price variance reduced after tick size reduction, supporting increased market quality.
2017	Kharbanda and Singh	To examine lead-lag association among futures and spot market in India	ADF, PP, KPSS, Johansen's cointegration test, VECM	Futures market lead spot market for the USD, EUR, JPY and GBP
2018	Kharbanda and Singh	To comprehend price discovery mechanisms and interconnection among futures and spot markets.	ADF, PP, KPSS, Johansen's cointegration, VECM	Spot prices follow futures prices to accomplish equilibrium, Indian FX market is informationally inefficient.
2018	Singh and Tandon	To analyze the efficiency of US dollar at NSE India	Runs test, ADF, Johansen Cointegration, Granger Causality	Presence of bi-directional causality and cointegration between USD spot and futures.

2018	Nath and Pacheco	To examine effectiveness and volatility of USD/INR.	GARCH, EGARCH, CCC – DCC GARCH (1,1)	USD/INR Futures and forward rates are unprejudiced appraisals of spot rates. Volatility has increased after the introduction of futures
2019	Yadav and Sharma	To survey the impact of arbitrage opportunities on currency futures market in India	Johansen's cointegration, VEC Granger Causality/Block Exogeneity Wald test	Short run arbitrage opportunities in the currency futures market lead to long run equilibrium in the spot market.
2020	Vadivel, Veeramani and Raghutla	To examine time varying characteristics of USD/INR pass through and Wholesale price index	Flexible least square approach	Both export-import of products and services assume fundamental job in USD/INR and wholesale price index fluctuations, also USD/INR pass-through provides heterogeneous data that change WPI in India.

DATA AND METHODOLOGY

Data

The dataset comprises of 2383 data points each of euro spot and euro futures prices. EUR/INR spot and futures prices are gathered from Reserve Bank of India and National Stock Exchange of India website respectively spanning from January 2010 to December 2019. The collected values are the daily closing prices of the spot and futures market. All computations are done using R studio and MS – excel.

Methodology

This segment encompasses the research techniques and tools that have been utilized in this study. Augmented Dickey-Fuller (ADF) test confirms the stationarity in time series. For cointegration among two time series, we used Johansen cointegration. To analyze strength and direction of causality among Euro spot and futures, we used the Vector Error Correction Model (VECM) and Granger causality.

1. Augmented dickey fuller test (adf)

Generally, in practice the majority of the time series are non-stationary at their level form, which can be made stationary on first differencing.

$$\Delta x_t = x_t - x_{t-1} \quad (1)$$

Where, Δx_t is the first order difference. Time series made stationary using first order differencing can be called as “Integrated of order one” denoted by I (1) (Baumöhl, and Lyócsa, 2009). Stationarity test can be done using ADF test which helps to detect the unit root presence in a general time series (Xiao and Phillips, 1998).

2. Johansen cointegration test

Cointegration test examines stability in the long run between two markets (Babatunde and Adefabi, 2005). This study employs Johansen cointegration which computes trace and maximum eigenvalue test statistic. Null hypothesis of no co-integration between

Euro spot and futures price series against the alternative of cointegration has been examined for both the tests. Johansen's cointegration test is an improvement over Engle – Granger cointegration. It dodges the issue of picking a reliant variable and issues which arise when errors are carried from one stage then on to another. Also, it can detect multiple cointegration vectors. The cointegration test is assessed by the rank of the matrix Π .

$$\Delta X_t = \Pi X_{t-1} + \epsilon_t \tag{2}$$

The following equation represents the kth order VAR model of Johansen's test.

$$\Delta Y_t = \mu + \Pi Y_{t-1} + \sum_{i=1}^{k-1} \Gamma_i \Delta Y_{t-i} + \epsilon_t \tag{3}$$

Where $\Delta Y_t = Y_t - Y_{t-1}$ denotes difference operator, Π denotes coefficient matrix for the first lag, Γ_i are the matrices for the differenced lag, and ϵ_t is the noise term.

Johansen's cointegration employs two approaches namely, trace, λ_{trace} and max eigenvalue, λ_{max} which is a likelihood ratio for which test statistic can be computed using following mathematical equations respectively:

$$LR(\theta, \theta+1) = -T \ln(1 - \lambda_{\theta+1}) \tag{4}$$

$$LR(\theta, n) = -T \sum_{i=\theta+1}^n \ln(1 - \lambda_i) \tag{5}$$

Where $LR(\theta, \theta+1)$ is likelihood ratio of maximum eigenvalue test statistic for null hypothesis rank $(\Pi) = \theta$ versus the alternate hypothesis of rank $(\Pi) = \theta+1$. For trace test, $LR(\theta, n)$ is the likelihood ratio for null hypothesis rank $(\Pi) = \theta$ versus the alternate hypothesis of rank $(\Pi) \leq n$.

3. Vector error correction model (vecm)

VECM can be applied to non – stationary series which are cointegrated. The upside of the Error Correction Model lies in its quality of catching both the short run and long run equilibration among two time series (Bekhet and Yusop, 2009). If series are found to be non – cointegrated, we can directly proceed to Grangers causality test and hence VECM is not required. A significant negative Error correction term denotes short term fluctuations among series will result in a long run stable relationship (Asari et al, 2011). VECM is estimated using following equations:

$$\Delta X_t = \beta_{X0} + \sum_{i=1}^n \beta_{xi} \Delta X_{t-i} + \sum_{i=0}^n \delta_{xi} \Delta Y_{t-i} + \varphi_x Z_{t-1} + \mu_{Yt} \tag{6}$$

$$\Delta Y_t = \beta_{Y0} + \sum_{i=1}^n \beta_{yi} \Delta X_{t-i} + \sum_{i=0}^n \delta_{yi} \Delta Y_{t-i} + \varphi_y Z_{t-1} + \mu_{Xt} \tag{7}$$

Where X is spot prices and Y is futures prices, β_{X0} and β_{Y0} are intercepts, Z_{t-1} is error correction term and β_{xi} , β_{yi} , β_{xi} and β_{yi} are short run coefficients.

4. Granger causality

Granger causality is applied on stationary time series. Granger causality is used to inspect one-way causality, two – way causality and synchronous adjustments between spot prices and futures contracts (Ajayi, Friedman and Mehdian, 1998). It estimates the lead-lag association among Euro futures and spot price series. Mathematical equations of Grangers causality are as follows: -

$$X_t = \theta_0 + \sum_{i=1}^n \theta_i X_{t-i} + \sum_{j=1}^n \gamma_j Y_{t-j} + \epsilon_t \tag{8}$$

$$Y_t = \beta_0 + \sum_{i=1}^n \beta_i X_{t-i} + \sum_{j=1}^n \alpha_j Y_{t-j} + \epsilon_t \tag{9}$$

Where X and Y are spot price and futures prices respectively, θ_0 and β_0 are constants and ϵ_t and ϵ_t are error terms. Granger causality has been utilized to examine the causality among

Euro futures and spot prices. For mathematical equation (8), if the null hypothesis is rejected, we conclude that Y_t Granger causes X_t . Similarly, causality for mathematical equation (9) is tested.

RESULTS AND DISCUSSION

Augmented dickey fuller (adf) results

ADF test is applied on euro futures and spot prices. The findings are tabulated in Table 2 from which it can be inferred that euro futures and spot prices contain unit root at level form as p-value is greater than 5% significance level. Further, the series are integrated of order one at which p-value is less than the significance level of 5%. Hence, it can be said series are stationary at first order integration.

Table 2: ADF test results.

VARIABLE		DICKEY-FULLER TEST STATISTIC	P-VALUE
Futures Price series	Level form	-2.0151	0.5719
	Difference of degree 1	-13.127	0.01
Spot Price series	Level form	-2.0028	0.5771
	Difference of degree 1	-13.365	0.01

Note: Critical values for ADF test are -2.89 & -3.45 at 1% and 5% level of significance.

Johansen cointegration results

Johansen Cointegration test is delicate to lag length. Optimal lag selection can be done using Akaike's Information Criterion (AIC). Low AIC value is considered better, number of chosen lags for Euro is 8. The alternate hypothesis stands accepted rejecting the null as p-value is less than 0.05 at $r = 0$ which implies there is cointegration among futures and spot prices (see Table 3). The null hypothesis stating there is at most one cointegrating vector among the two-time series is accepted as p-value is greater than 0.05. Resultantly, we can say there is at most one cointegrating vector between futures and spot prices. Hence futures and spot prices of Euro are linked in the long run and would always converge.

Table 3: Eigen and Trace test statistic at vectors 0 and 1.

Null hypothesis	Eigen value	Trace test		Maximum eigen value test	
		Statistics	P-value	Statistics	Statistics
$R = 0$ (none)	0.153328	397.6239 (15.49471)	0.0001	394.9663 (14.26460)	0.0001

R≤1 (at most 1)	0.001119	2.657635 (3.841466)	0.1031	2.657635 (3.841466)	0.1031
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figures in parenthesis () represent critical values at the significance level of 5%.

Vector error correction model results

The results of Johansen cointegration imply the existence of long-run association between futures and spot price (see Table 3) which has been applied to ascertain the short-run properties of the futures and spot series. For a stable long-run association between spot market and futures market, the error correction term (ECT) must be significantly negative. It also indicates the speed of adjustment and signifies any changes in the short run relationship will ascent to a stable long run relationship. Spot prices at lag 1, 2, 4 and 5 are significant implying that there is short run causality of its own lag on spot prices, the Error correction term (ECT) signifying about 28% of disequilibrium is corrected whereas futures prices at different lags are insignificant which infers long run causality on futures derived from spot market. Hence, it is inferred that futures market prices makes less adjustment than the spot market prices to reach equilibrium. This is similar to the findings of Kharbanda and Singh (2017).

Table 4: VECM result for EUR/INR spot and futures.

VARIABLES	SPOT	FUTURES
ECT	-0.2809(0.0152) ***	-0.0214(0.0166)
INTERCEPT	0.0501(0.0084) ***	0.0105(0.0092)
SPOT – 1	0.0995(0.0202) ***	-0.0048(0.0222)
FUTURES – 1	-0.2308(0.0241) ***	0.0445(0.0264)
SPOT – 2	0.0453(0.0197) *	-0.0285(0.0216)
FUTURES – 2	-0.1613(0.0238) ***	-0.0454(0.0261)
SPOT – 3	0.0236(0.0192)	0.0156(0.0210)
FUTURES – 3	-0.1238(0.0234) ***	-0.0411(0.0256)
SPOT – 4	0.0766(0.0191) ***	-0.0129(0.0209)
FUTURES – 4	-0.1267(0.0229) ***	0.0195(0.0250)
SPOT – 5	0.0520(0.0190) **	0.0071(0.0208)
FUTURES – 5	-0.1670(0.0225) ***	0.0289(0.0247)
SPOT – 6	0.0164(0.0187)	0.0121(0.0205)
FUTURES – 6	-0.1936(0.0223) ***	-0.0112(0.0245)
SPOT – 7	0.0110(0.0184)	-0.0042(0.0202)
FUTURES – 7	-0.0602(0.0221) **	-0.0146(0.0242)
SPOT – 8	-0.0127(0.0183)	-0.0448(0.0200) *

FUTURES – 8	-0.0383(0.0215)	-0.0303(0.0235)
SPOT – 9	-0.0242(0.0182)	0.0191(0.0200)
FUTURES – 9	0.0278(0.0212)	-0.0420(0.0232)
F – STATISTIC	40.15	1.973

Significance Codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05

Granger causality

Granger causality is sensitive to lag length selection which is chosen using AIC criterion. Number of lags chosen is 1. We accept null hypothesis (H01) stating EUR spot does not Granger cause EUR futures thereby, rejecting the alternate hypothesis as p – value turns out to be smaller than the significance level of 0.05. We can infer there exists one-way causality in EUR/INR currency pair, where the futures leads the spot prices. However, the results of our study are in contradiction to Kumar, Poornima and Sudarsan (2017) which states euro has one-way causality where spot market leads futures market.

Table 5: Granger causality test result for EUR/INR.

CURRENCY	NULL HYPOTHESIS	P - VALUE
Euro	EUR Spot prices does not Granger cause EUR futures prices	0.4002
	EUR Futures prices does not Granger cause EUR spot prices	0.01236*

* implies rejection of null hypothesis

CONCLUDING REMARKS

This study focuses on the Euro being the world’s second most traded currency. National Stock Exchange of India gave its nod for trading in currency derivatives denominated in euro in February 2010. To analyze the causal relationship secondary data has been compiled spanning from January 2010 to December 2019 from the websites of RBI and NSE, India. The dataset comprises of spot and futures market daily closing prices. EUR/INR spot and futures prices are not stationary in their level form and hence have been converted to stationary series on first order differencing by applying ADF test. Further, the

long run equilibrium between the two is assessed by Johansen’s cointegration which computes trace and Eigenvalue test statistics. Null hypothesis at vector 0 is rejected and accepted at vector 1. From this, we can infer that there is at least one cointegrating vector and the presence of long run equilibrium between spot and futures prices of EUR/INR.

Further from the results of VECM, we can say spot prices at lag 1, 2, 4 and 5 are significant implying there is short run causality of its own lag on spot prices and Futures prices at different lags are insignificant which infers long run causality on futures market is derived from spot market.

Granger causality is sensitive to lag length which is computed using AIC. The findings of the study shows the existence of one – way causal relation between futures and spot prices, futures contract prices lead spot prices and vice versa does not exist. Thus, we can conclude the existence of equilibrium in the long run between the two markets with futures market taking a lead role in price discovery mechanism.

The findings of this study can assist various participants of foreign trade in India and similar economies. The results are useful to government

officials, importers, exporters, investors, MNCs and many more. The exporters and importers can take positions in EUR/INR futures contracts and hedge against forex risk. Retail investors and mutual fund managers who diversify their investments can be benefitted from this study. This study may also be beneficial to policy makers in taking a rational decision. This study could, therefore, be further extended by employing other currency derivatives traded in India, examining price discovery, lead-lag relationship and market efficiency.

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MEDIATING ROLE OF SOCIAL ISOLATION IN THE RELATIONSHIP OF PERSONALITY TRAITS AND BURNOUT

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ABSTRACT

This research is of great significance for discovering if social isolation mediated the relationship of personality and burnout. There were 270 responses collected from the employees working in service and manufacturing industries. The findings of the study indicated that the social isolation has an effect on burnout. Moreover social isolation acts as a partial mediator between burnout and personality traits.

Keywords: *Pandemic, Personality Traits, Social Isolation, Burnout*

INTRODUCTION

Personality is one of the foundational psychological mechanisms that manage an individual's cognitive system and behaviour patterns. It's been suggested that people's personality characteristics reflect their perceptions and beliefs and estimate one's behavioural responses. The Big Five Personality Traits possess extraversion, agreeableness, conscientiousness, openness and neuroticism. Extraversion (E) personality traits cover social, outgoing, violent, and energetic traits, according to Barrick and Mount (1991). They are inspired with appreciation, social esteem, designation, and power. Extraversion is

relative to commitments (Erdheim, Wang and Zickar, 2006). Extroverts revel in networking, interrelationships, and interdependence, even though they are typically dynamic and energised. They are commonly task-oriented and pushed by way of a robust work ethic. They are energetic, confident, talkative, amiable, and sensitive. Extraversion has a nice relationship with overall performance however a weak relation with team development.

Agreeableness (AGB) is characterised with the aid of features such as flexibility, leniency, support, belief, decent, and patience; these people constantly take precedence over the hobbies of others over their personal. Agreeable people are helpful as well as courteous (Organ and Lingl, 1995). According to Judge et. al., (1999) the essence of AGB is mutual support, the precept of trust, and the pleasantness in the relationship. Barrick et. al (1998) reported that the managers who are agreeable continue to thrive on team building, team development, and solidarity; they motivate the team to speak more effectively described through (Stewart, Neubert and Mount, 1998). Being agreeable attributable to a tremendous work environment (Halfhill et al., 2005). There is a need for awareness as an end result of affiliation and association is one of the driving forces for agreeable people.

Conscientiousness (CoN) is an extensive job involvement tendency. It echoes dedication, accountability, dependability, cautious, systematic and tenacity. CoN in accordance to Hochwarter, Perrew, Ferris, and Guericco (1999), contributes to job commitment, satisfaction, and involvement. Barrick and Mount (1991) found that being intellectual, original, inquisitive, nicely educated, one-of-a-kind, creatively penetrating, and broad-minded is what openness entails. Employee commitment, venture orientation, and in the end organisational success are all influenced with the aid of OP to journey (Srivastava, Chandra, and Shirish, 2015). John and Srivastava (1999) describe NE with Anxiety, depression, and stress. It suggests the social facet of the persona and consists of features like anxiety, depression, rage, apprehension, and uncertainty.

Individuals that are open to experience are curious about their surroundings, creative, have a vivid imagination, and a love for variety (McCrae & Costa, 2010; McCrae & John, 1992). The BTI divides this attribute into five dimensions: aesthetics, actions, values, ideas, and imagination. Burnout and openness to experience can have a beneficial link (Deary et al., 1996; Roccas, Sagiv, Schwartz, & Knafo, 2002; Zellars, Perrew, & Hochwater, 2000). Hurt et al. (2013) observed no statistically significant association between any of the dimensions and Exhaustion or Cynicism. In contrast, Piedmont (1993) discovered a link between Values and Depersonalisation. More recently, Țănculescu (2019) discovered that values were adversely associated to exhaustion and cynicism, as well as aesthetics, actions, and ideas. Neurotic humans do not socialise or

respond to others because of their inner concern and apprehension, and they mostly become aware of negative responses from others (Watson and Clark, 1997). Individuals with high NE show off negative behaviour, which leads to poor undertaking team overall performance (Deinert et al., 2015). This attitude, in turn, helps to decrease the chances of venture success.

Freudenberger (1974) coined the term Burnout "BO" in the early 1970s to describe a country of fatigue or frustration precipitated via professional relationships that failed to produce the predicted rewards. BO arises as an end result of research into emotion, arousal, but instead how people cope with emotion and control their arousal. Maslach and Jackson (1981) described BO as a psychological syndrome characterised via emotional exhaustion (EoE), depersonalisation (DPO) and reduced personal accomplishment that can manifest in people working with different people. It is a psychological syndrome characterised by EoE, DPO, and reduced personal accomplishment that can occur in people who work in some capacity with other people. BO is a mental disorder characterised by Emotional Exhaustion (EoE), Depersonalisation (DPO), and a lack of accomplishment knowledge. EoE is an abbreviation for energy discharge and emotional resource consumption. This dimension can be thought of as the establishment of job BO. DPO isolates workers from others and fosters negativity among coworkers, customers, and the organisation. This aspect of job BO is common among employees who must regularly communicate with others (such as teachers, students, customers, and patients) in order to do their jobs. Physical isolation promotes social isolation (Waite and Hughess, 1999).

Garcia et. al., (2005) reported that neurotic and introverts experience more burnout while individuals who has and open personality are less emotionally exhausted in stressful situations (Zimmerman, 2008). They are less likely to suffer from lack of personal accomplishment because their personality helps them be positive in difficult situations. According to Seppala and King (2017) increasing number of individuals are feeling tired and lonely at work. A significant correlation between feeling lonely and work exhaustion has been identified. Social Isolation (SI) is a condition where a person lacks experience related to social belonging, is less engaged, has a limited variety of social contacts, is lacking in pleasant and fine relationships. It can be noted that those who are socially isolated have fewer resources to mobilise than those who are not. The work from home disconnects employees from their friends, peers, supervisors, and the spirit that relies on going out and socialising to relieve stress.

Due to working from home situation people are facing adverse effect on health and mental health The current research has tried to explore already validated relationship of Personality and Burnout. Traits of Personality is the independent variable and burnout a dependent variable. Burnout is an occupational phenomenon not a medical condition. It affects individual both physically and psychologically. Burnout can get aggravated with the presence of the mediating variable Social Isolation. In last 40 years, there has been a significant increase in the literature on burnout, personality traits and social isolation. However, no study has been undertaken that combines the three constructs under scope of study in the situation of pandemic.

The pandemic has forced every one of us to confine ourselves at home. The study will help us identify that if the mediating variable Social Isolation is significantly influencing the burnout or not. As the earlier relationship of personality and burnout are researched and some personality traits have been found to be having faced burnout more than the other personality traits.

MATERIAL AND METHOD

Objective of the study

1. Does the Traits of Personality affects Burnout (BO) significantly?
2. Does Social Isolation statistically significantly mediate the effect of Traits of Personality on BO.

HYPOTHESIS OF THE STUDY

H01: Traits of Personality has a statistically significant effect on BO.

H02: Traits of Personality has a statistically significant effect on Social Isolation.

H03: Social Isolation has a statistically significant effect on BO.

H04: Social Isolation has a statistically significant mediating effect between Traits of Personality and BO.

The table 1 represents demographics of study's participants. The gender distribution of the sample is approximately 38.9% male (n=105) and 61.1% female (n=165). The age distribution of sample respondents is dominated by respondents aged 25 to 35, who contribute for 61.9% (n=167), followed by respondents aged 36 to 45, who contribute for 25.9% (n=70), and respondents aged 46 to 45, who contribute for 12.2 % (n=33). In terms of industry, it can be seen that 29.3% of respondents (n=79) are from manufacturing,

while 5.2 % of respondents (n=14) are from chemical. Approximately 8.9 % of respondents (n=24) are from the pharmaceutical industry, while 17.8 % are from other backgrounds (n=48). IT accounts for approximately 24.8 % of respondents (n=67). In the management hierarchy, the majority of respondents (57.8 %)

are from middle management (n=156), while 23.3 % are from top management (n=63). And only 18.9 % of respondents (n=23) are from the bottom management. The table shows whether the respondents are from Gujarat or not, with 90.4 % (n=244) from Gujarat and 9.6 % (n=26) from elsewhere.

Table 1: Descriptive Data of the Sample Balance.

VARIABLE	CATEGORIES	FREQUENCY	Percent
GENDER	Male	105	38.9
	Female	165	61.1
AGE	25 – 35	167	61.9
	36 – 45	70	25.9
	46 – 55	33	12.2
INDUSTRY	Manufacturing	79	29.3
	Chemical	14	5.2
	Pharma	24	8.9
	Educational	38	14.1
	IT	67	24.8
	Others	48	17.8
LEVEL OF MANAGEMENT	Top	63	23.3
	Middle	156	57.8
	Bottom	51	18.9
WITHIN STATE OF GUJARAT	Yes	244	90.4
	No	26	9.6

This study used SEM with AMOS 26.0 to create a research model to represents the relationships between the three study variables. The research tool required each respondent to provide demographic details viz. gender, age group, industry, level of management, and Gujarat state.

Table 2: Reliability Statistics of Scales.

Variable	Cronbach's Alpha	No of Items
Personality Traits	.921	5
Social Isolation	.890	6
BO	.929	9

To measure Personality Trait, data is collected using the Ten Item Measurement Tool (TIPI). Respondents scoring high on the UCLA Loneliness Scale do not have as many friends or communicate as people who score low (Russell et al., 1994). Loneliness is also linked to workplace BO, chronic illness, and a lack of exercise (Hawkley, Thisted, & Cacioppo, 2009). MBI is the most widely used tool for measuring BO in the world (Randall, 2013). "Reliability is a measure of how consistent multiple variables are" (Hair et al., 2009). The accuracy of the measurement process and its accuracy must be determined by the reliability of the scales (Cooper and Schindler, 2008). SPSS 22.0 statistical software is used to analyse the data. First, the missing data are checked, and then the scales' reliability is tested. Cronbach's alpha values show that three of the scales are highly reliable, with values of 0.921, 0.890, and 0.929, respectively (Table 2 Reliability Statistics of Scales). As a result, the variables are internally consistent and we can conclude that all mutations in nature are the same. The 270 sample was drawn from Gujarat residents working in the information technology, manufacturing, education, and financial services sectors. Respondents were

identified and contacted through social media platforms such as LinkedIn. SPSS 22.0 is used to conduct the analysis.

RESULT AND DISCUSSION

Confirmatory factor analysis

Using validation criteria, the researchers examined the scales' variability and bias (CFA). The verification factor analysis results are shown in table below. The difference between the output (AVE) and the combined reliability is used to express flexible performance (CR). The value of AVE and CR for the sort of individual construct is 0.53 and the combined reliability is 0.78, respectively, in the social classification and in the exhaust construction (Table 3 Results of confirmatory factor analysis). AVE estimates, which ranged from 0.688 to 0.865 in all constructs, are variance measures defined by the hidden variance of the random measurement error (Netemeyer et al., 1990). These measurements were observed to be superior to the recommended lower limit of 0.5. (Fornell and Larcker, 1981). As a result, all three trials concerning the dynamic performance of the scale were supported.

Table 3: Results of confirmatory factor analysis.

Measure	FL	CR	AVE
PERSONALITY TRAITS(PT)			
PT1	0.776		
PT2	0.847		
PT3	0.870		
PT4	0.833		
PT5	0.862		

SOCIAL ISOLATION (SI)			
SI1	0.709		
SI2	0.666		
SI3	0.745		
SI4	0.788		
SI5	0.695		
SI6	0.775	0.92	0.70
BO (BO)			
BO_1	0.779		
BO_2	0.803		
BO_3	0.835		
BO_4	0.825		
BO_5	0.767		
BO_6	0.787		
BO_7	0.846		
BO_8	0.655		
BO_9	0.628		

Structural model

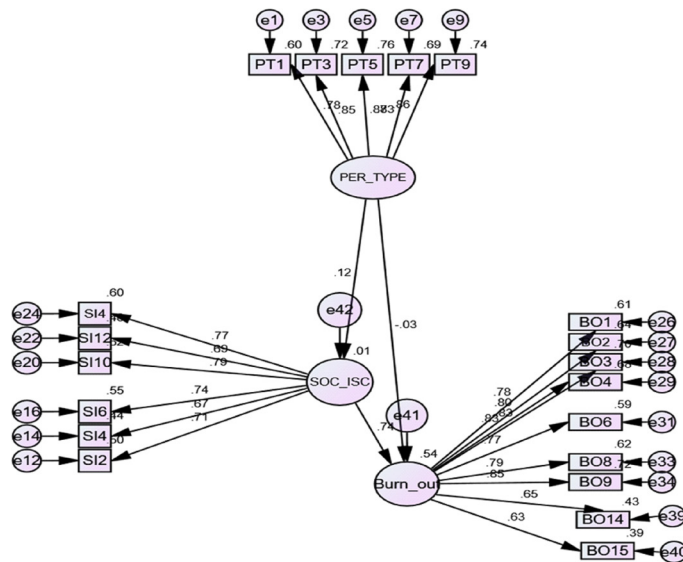


Figure 1: Validated research model

Figure 1- Validated research model shows the role of social isolation as a mediator between personality traits and burnout. The research hypotheses developed in line with the research model are introduced below. The corresponding model figures appear adequate, as shown in Table 4 Model fit summary for the research model. The overall model equity test produced a result of 5. 125.647, with 94 degrees

of freedom (df) and a probability value less than 0.016. The p value indicates that the overall fit of the model is less than what is desired. Even though the absolute equity test is more sensitive to sample size and abnormality, the ideal equilibrium ratio is greater than df. The proposed research model has a ratio of 1.337, which falls within the recommended brackets [3-1] (Chin and Todd, 1995).

Table 4: Model fit summary for the research model.

Fit statistics	Recommended value	Model value
Chi-square (X^2)/degree of freedom (df)	≤ 3.000	2.328
GFI	≥ 0.900	0.88
AGFI	≥ 0.800	0.85
CFI	≥ 0.900	0.94
TLI	≥ 0.950	0.93
RMSEA	≤ 0.080	0.07

In addition to the metric mentioned above, we report some relevant indicators. In order to show the height of the proposed research model, equal descriptive statistics compare the set model to the basic model and the independent model. The following indices are reported: the accuracy index (GFI), the correct GFI (AGFI), the appropriate comparison index (CFI), and the TLI. Gerbing and Anderson (1992) identified CFI as one of the most powerful and potent symptoms. The root is also defined as the equilibrium square RMSEA, which measures the degree of freedom with a degree of diversity.

Table 5: Path coefficients and hypotheses testing.

Constructs' relationship	Standardised regression	Critical ratio	Significance (p)	Standardized Total Effects	Standardized Total Effects	Hypothesis – supported
	weight	(CR)				YES NO
PT -> SI	0.122	1.798	0.072	0.122	0	H1 – YES
PT -> BO	-0.028	-0.566	0.572	0.062	0.90	H2 – NO
BO -> SI	0.739	9.589	0.001	0.739	0	H3 - YES

The GFI should be greater than or less than 0.90 (Hoyle, 1995), which is 0.88, indicating that it is correct, whereas the AGFI should be greater than or less than 0.80. (Chin and Todd, 1995). CFI figures should be greater than or less than 0.90. TLI is extremely limited and requires a value of 0.95

or higher (Hu and Bentler, 1999). Finally, it has been proposed that RMSEA represents an accurate error and indicates a positive correlation between the hypothesised model and the visible data when it is less than 0.06. Table 5 Path coefficients and hypotheses testing displays these figures, which were all obtained in accordance with the recommended standards.

Given the equitable functionality of the model equity, it is appropriate to examine the coefficients of each method corresponding to our theories, as shown in Table 5. One of the theories is accepted, but the other is not. Personality traits, for example, have a strong influence on social isolation (e.g., H1), and personality traits and BO do not interact (e.g., H2). Isolation also has a positive effect on BO (e.g., H3). The findings also revealed that, in the absence of the combination of personality traits and social isolation, which have a negative impact on each other (0.122, $p < 0.05$), all coefficients between new and social classification are the strongest and most significant at the $p < 0.001$ level.

Figure 1 shows a validated research model with methodological coefficients and the significance of each relationship. It also depicts the model's variation as represented by the dependent variables (e.g., personality variables). The model's highest variance in the BO (54 percent) indicates that the basic combination of variables used in the study model is critical and determines the majority of the model variables.

According to the findings, Personality Traits have a statistically enormous effect on BO, and SI has a statistically significant mediating impact between Personality Traits and BO. Personality traits, has a strong influence on social isolation (e.g., H1), and personality traits and BO do not

interact (e.g., H2). Isolation also has a positive effect on BO (e.g., H3). The findings also revealed that, in the absence of the combination of personality traits and social isolation, which have a negative impact on each other (0.122, $p < 0.05$). Studies found that NE anticipated more stressful and adverse effect (Kroencke et al., 2020). Garbe et al. (2020) discovered that human beings with excessive CoN and those who felt extra threatened with the aid of the coronavirus stockpiled in a similar study. Emotionality, in turn, estimated the perceived threat. Blagov (2020) discovered that self-proclaimed modern-day health behaviour, such as social distancing and hygiene, was positively related to AGB, CoN, and NE and negatively related to Extraversion. Respondents with CoN (Abdelrahman, 2020) characteristics were more compliant, whereas those with Extraversion were less compliant.

Wolff et al. (2020) published that humans who get bored easily had a harder time adhering to guidelines, whereas those with high strength of mind adhered greater easily. Despite an expanding body of lookup on man or woman variations in how human beings behave, feel, and suppose during a crisis. Because of variations in forced methods and the strictness of the condition, it is hard to generalise findings from one United States to another. BO prices amongst docs are higher than these in other professions, in accordance to Dyrbye et al. (2008). Study by Alfuqaha and Alsharah (2018), revealed that BO has elevated amongst Jordanian healthcare providers. According to studies, healthcare companies work in a fast-paced, unpredictable, and ever-altering environment. Even though they deal with a variety of diseases, anxious events, and emergency situations, they do

no longer have ample time to recover, placing them under constant stress (Bonyan et al, 2020). Isolation leads to BO and influences the performance.

Krauss & Fussell, (1990) founded that isolated personnel at the lower tiers are not appropriate to be assured of their abilities and knowledge, which can put them at a wonderful drawback in performing their jobs. They operate much less nicely in managing interpersonal relationships and coordinating hard tasks. According to social learning principle (Bandura, 1977, 1986), personnel who leave out work interactions are greater in all likelihood to operate tasks with limited understanding and feedback. As a result, they are extra probable to ride nervousness, solitude, and diminished psychological or even physical fitness (DeWall & Baumeister, 2006), all of which reduces their job performance. According to Lee, Dean, and

Jung (2008), social connectedness mediates the relationship between extraversion and well-being. According to Penley and Tomaka (2002), conscientious human beings perceived themselves as capable of meeting situational demands, which influenced compliance and coping with contact restrictions all through the pandemic.

This study focuses on a specific but important aspect of Burnout (BO), Social Isolation and Personality Traits. The findings of this study indicate that personality traits have no effect on Social Isolation and BO. Besides that, the findings indicate that social isolation has an effect on BO and Burnout if not addressed by organization has a negative and significant impact on organization commitment (Shrivastava and Misra, 2012). Moreover, social isolation acts as a partial mediator between BO and personality traits.

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MODELLING THE FACTORS AFFECTING FINANCIAL LITERACY OF WOMEN TOWARDS DIGITAL PAYMENTS USING ISM AND MICMAC APPROACH

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ABSTRACT

In today's ever-changing technological era, the innovative and improvising advancements has facilitated the digital payments progressively and has become the most prominent constituent of financial literacy in the midst of the women's society. This study aims at determining the factors which affects the level of financial literacy of women towards digital payments. The ten selected influencing factors of women's financial literacy are identified from the study of literature. Interpretive Structural Modelling (ISM) and MIC-MAC approach has been applied to test how one factor's impact the other influencing factor. The outcomes of the study makes the valuable contribution to researchers in the terrain of behavioural finance and advancement of technical era as well as growth of financial literacy.

Keywords: *Digital payments, ISM model, MICMAC approach, women's financial literacy*

INTRODUCTION

The term financial literacy states the knowledge and attitude towards the financial aspects of economy. It defines the ability to understand the financial concepts, investment options, financial risk attitude, management of financial resources and the overall financial decisions.

Financial literacy empowers women to take their financial decisions. Women's literacy in terms of his financial skills, financial knowledge, financial attitude, management of her personal finances determines the level of women's financial literacy. In emergency times, women is said to be intelligible and literate if she could manage her finances smartly. In recent times studies have shown that women is more efficient than men in planning the financial strategy and are able to take right financial decisions by ensuring the best alternatives of using digital services.

Emerging economy is a digital economy which deals with cashless transactions. Cashless payments always helps economies grow. In today's digital financial era, women are not lagging behind in using e-cash payment

methods. Even in present times, emergence of new financial behaviour can be observed among women and that is of cashless transactions, may it be for purchasing goods from e-commerce websites, signing of business contracts online, or even booking movie tickets online, paying bills and many more.

OBJECTIVES OF THE STUDY

- To determine the factors affecting financial literacy of women towards digital payments.
- To ascertain the interrelationship among these factors affecting financial literacy of women towards digital payments.

LITERATURE REVIEW

Dharmesh K. Mishra, Sushant Malik, Asmita Chitnis, Dipen Paul, Subham Sushobhan Dash (2021) examined the factors affecting financial literacy financial inclusion among women of self-help groups. A small number of the features are limitations to financial knowledge and financial enclosure which are gender difference, access to education, customs, personal finance, absence of faith in financial institutions, distance and absence of accurate guidance. The learning will be beneficial for the bankers and policymakers to be attentive of the elements that impact financial inclusion and financial learning among women, and integrate the same for applying prosperous mediations for women SHGs in India.

N. P. Abdul Azeez and S. M. Jawed Akhtar (2021) determined in the study that the basic elements of the modern economy have been limited to more accrediting to digitalization which is a driving force for innovative, constant and competitive digital growth. There is a

worldwide trend in the modifications and implementation of financial services which is a milestone of a global movement. These certain alterations may consists of several undertakings in the roles and responsibilities, facilities of finance and products to the distribution channel. These incredible changes in the digital financial services will be on-going in a justifiable manner and acts as a catalyst for the future enhancement and upliftment. Determinants like the level of education and income, occupation, gender, landholding and type of ration card have a positive coefficient and found statistically highly significant with digital financial literacy of respondents in the rural areas.

Rishi Manrai ,Utkarsh goel and Prashant dev Yadav (2021) explored the factors manipulating the implementation of digital payments by the semi-rural women in India. The study extended the factors of unified theory of acceptance and use of technology UTAUT-2, with observed credibility and self-determination theory to understand the routine behaviour of the rural Indian women. The study checked the mediating role of some constructs besides challenging the direct relationship. The study was accompanied in the rural portions of the adjoining areas of Delhi, where the females from different states, education and financial background live.

Rym Ayadi and Mais Shaban (2021) emphasised the role of digital financial inclusion as a pillar of resilience to respond to exogenous shocks and pandemics, such as the present health crisis around the world, and mentions the rapid arrangements to reach the unbanked via digital financial services, in the direction to relief these vulnerable groups between the current stimulating conditions and recovery period.

They adopted innovative digital approaches of financial inclusion that accelerates the reach to underserved populations, particularly those in the informal sector, giving them the capability to benefit from government support, to save, make payments and access credit, enabling them to withstand these shocks and to gain a path towards formality.

Erin B. Taylor, Anette Brolos (2020) focused on women as consumers – but as consumers of all types of financial services, whether for personal use or business use. It studies the methods in which digital financial services are created, and promoted to women. They presented case studies of a few services specifically designed for or marketed to women, examining the rationale behind the services' gendered focus and the ways they are marketed. The core initiatives to bring financial tools into application to assist women commenced in the area of socio-economic development. Financial services are available for women across a wide range of transaction types, including savings, budgeting, insurance and investment.

Ani Caroline Grigion Potricha, Kelmara Mendes Vieirab, Guilherme Kirchc (2018) identified that a significant relationship between financial literacy and gender; the proportion of men is higher among those with a high level of financial literacy. However, the conclusions recommend that better efforts should be made for women, particularly those who are single and have lesser levels of education and earnings. National strategies are directing to reduce gender inequalities which should be implementing on critical areas, such as financial literacy. However, an approach should be established to measure individual financial literacy.

Akshita Arora (2016) observed that the lower level of financial literacy is one of the greatest concerns for Indian women since independence. Although our country has made notable progress in this area but still lots of things needs to be improved. The outcomes suggests that women have achieved relatively better in terms of financial approach and behaviour as compared to financial knowledge score. Also, the single women overtake married women in terms of their financial literacy score.

Dr. Garima Baluja (2016) identified that financial planning is becoming important for financial well-being of an individual. While on the one hand, the role of financial planning is largely acknowledged, on the other hand the rationale of financial literacy is still lagging behind, especially for women. Furthermore, the level of financial literacy among the Indian women populace has not been largely identified and documented. Hence, the requisite arises to recognize in detail in the concern of financial literacy among women in India. although it is imperative that women should be given equal authority to take financial decisions as taken by men, yet mostly Indian women are facing some cultural, financial, psychological and physical barriers that are creating limitations in becoming financially literate.

Ms. Ashlin Mathew, Ms Shilpa Elizabeth George, Dr. Akanksha Khanna (2015) found and compared the level of financial literacy about digital wallets among the people belonging to Gen X, Y and Z in India. The launch of digital India movement in 2015 boosted the growth of fintech in the country. Digital wallets are an essential aspect of fintech which were a beneficial for the Indian population throughout the period

of demonetization. Thereafter, it became a very popular sensation in the country. Even though it has become a preferred mode of payment, still there is a long way to go for achieving the goal of digital India.

Monika Dwivedi ,Prof. (Dr.) Harsh Purohit, Divya Mehta (2015) targets to analyse the NCFE report on financial literacy and financial inclusion in India on the basis of occupation, geographical area and gender mix. The description is analysed while seeing these parameters and it displays that urban population is more financially literate than rural population, similarly men are more economically literate than women. The paper also throws light on NCFE report on financial education in school which can help the future generation by making them more financially aware about managing their finances and also highlights the role of universities in improving financial literacy.

Melissa A. Donohue (2011) examined that women are facing increasing financial responsibility, while at the same time, the consumer financial world is evolving at an extraordinary pace. These trends make an imperative that we better understand the evolving nature of gender-based inequities across our current socio-economic systems and intentionally examine those areas that are most essential in accelerating the narrowing of these gaps. The consequences of the study direct that the assumptions are going on longer in which woman simply need better financial knowledge in order to reach a definite level of financial behaviour, without increased access to capital.

Narang, S. A., & Dawar (2021) states that it is also very important to know that how much an investor can bear the risk, risk value may fluctuate

it can be either high and low or it be mediocre, intensity of risk defines what decisions investor is going to take. This paper points out the factors that have significance in the procedure of decision making. The study is analysed using Interpretive Structural Modelling and MIC-MAC Approach.

RESEARCH METHODOLOGY

Interpretive structural modelling (ISM) and MIC-MAC approach is applied to identify and analyse the critical success factors i.e., factors affecting financial literacy of women towards digital payments. This integrated model illustrates the relationship among the different inhibiting factors.

CONCEPTUAL FRAMEWORK

Financial literacy of women towards digital payments are influenced by several factors which are categorised into three broad categories that are : Demographic factors , Socio-Economic factors and Wealth factors.

Factors Influencing financial literacy of women towards Digital Payments

a. Financial knowledge

Financial knowledge is essential for planning and managing the monetary aspects of the company. Nowadays, women are more business-oriented than men hence financial knowledge is essential for running the operations of the business.

b. Financial service orientation

Banks are increasingly aiming at service orientation to successfully deal with business challenges. Special digital assistance is provided to women which thus, aims at increasing the financial literacy of a woman.

c. Financial Record-keeping

Financial literacy helps women to keep record of financial transactions, they are able to maintain the books using digital services where all the statements are automatically generated and it is very easy to analyse and assess the funds and they are able to allocate them properly.

d. Funds utilisation

Most of the women often are not aware of the allocation of funds and utilisation of money. As we know that the advancements in digital services and financial literacy has made easier task for women.

e. Allocation of funds

Allocation of funds is prominent and imperial step of planning financial strategy. Financial literacy in women using digital services has made a lot easier for them to plan and allocate the funds accordingly.

f. Financial technology

Digital services provides assistance to financial literacy of women. Digital services like bank account, Payments , credit and debit facilities, ATM etc are provided to the customers. Digital financial literacy is required at every level of the entrepreneurial world as the advancements made in the recent year's digitalisation has become the need of the hour.

Digital financial literacy is having the knowledge about the acquired skills, tools and developing the necessary habits to constructively use the digital devices for the financial services.

g. Financial performance

Financial performance refers to a subjective measure which assess how the firm or an organisation can utilise its assets from its major

mode of assets and helps in generating the revenues for the benefit of an organisation.

h. Financial Security

Financial literacy in women ensures the financial security in them. Financial security refers to when one can be in peace of mind where people don't have to worry about the income that covers all the expenses. Utilization of digital services ensure the security of all the transactions.

i. Financial application:

Financial knowledge and its application are essential for financial planning and financial management of the monetary aspects of the company. In today's digital era, women are more business-oriented than men hence, financial knowledge is essential for running the operations of the business.

j. Financial stability:

Financial attitude is the ability to make appropriate financial decisions and reflection of attitude and behaviours using digital financial literacy. It is state of mind of person about the finances which is acquired by their environment and family background.

IMPERATIVE STRUCTURAL MODELLING (ISM)

Introduction: ISM Model

ISM is a process of learning doctrine theory. In this method set of different directly and indirectly elements are interrelated to each other and arrange into comprehensive structural model Interpretive Structural Modelling (ISM) is a well-established technique for classifying relationships among specific identified items, which describes a problem or an issue. Though,

the direct and indirect relationships between the factors describe the situation far more correctly than the individual factor taken into separation. Therefore, ISM improves insights into collaborative understandings of these relationships.

Structural self-interaction matrix (ssim)

Structural Self interaction Matrix (SSIM) shows the relationships between two elements (i and j). Based on the estimation of our research and knowledge, SSIM as shown in Table.1

was developed. Four symbols were used to recognize the direction of relationship between the elements (i and j) The symbols are:

- V depicts the relation from an element i to element j but not in both directions
- A depicts the relation from an element j to element i but not in both directions
- X depicts both the direction relations from an element i to j and j to i.
- 0 (zero) depicts the relation between the elements does not appear valid.

Table 1: Structural Self-Interaction Matrix (SSIM).

Variables	1	2	3	4	5	6	7	8	9	10
1)Financial knowledge		A	V	X	X	V	V	V	V	V
2)Financial service orientation			V	V	V	V	V	V	O	V
3)Record keeping of financials				A	O	A	V	A	V	V
4)Funds utilization					A	V	V	V	O	V
5)Allocation of funds						V	V	O	O	V
6)Financial technology							V	V	V	V
7)Financial performance								A	V	A
8)Financial security									A	A
9)Financial application										A
10)Financial stability										

Reachability matrix

The SSIM layout is now changed into the reachability matrix layout. Table.2 by transforming the information in each entry of the SSIM into 1's and 0's in the reachability matrix. The rules for changing 1's and 0's are:-

- If the (i,j) entry in the SSIM is a V, then (i,j) entry in the reachability matrix will be 1 and (j,i) entry will be 0.
- If the (i,j) entry in the SSIM is an A, then (i,j) entry in the reachability matrix will be 0 and (j,i) entry will be 1.
- If the (i,j) entry in the SSIM is an X, both (i,j) entry and (j,i) entry of the reachability matrix will be 1.

- If the (i,j) entry of the SSIM is a 0, then both (i,j) entry and (j,i) entry of the reachability matrix will be 0.

Table 2: Reachability Matrix.

Variables	1	2	3	4	5	6	7	8	9	10	Driving Power
1	1	0	1	1	1	1	1	1	1	1	9
2	1	1	1	1	1	1	1	1	0	1	9
3	0	0	1	0	0	0	1	0	1	1	4
4	1	0	1	1	0	1	1	1	0	1	7
5	1	0	0	1	1	1	1	0	0	1	6
6	0	0	1	0	0	1	1	1	1	1	6
7	0	0	0	0	0	0	1	0	1	0	2
8	0	0	1	0	0	0	1	1	0	0	3
9	0	0	0	0	0	0	0	1	1	0	2
10	0	0	0	0	0	0	1	1	1	1	4
Dependence Power	4	1	6	4	3	5	9	7	6	7	

This matrix is further divided into a final reachability matrix as shown in Table.3. The final reachability matrix is made by incorporating transitivity. The transitivity of the context relation is a basic hypothesis made in ISM. It states that if an element A is related to B and B is related to C, then A is indirectly related to C. The Table.3 shows the final reachability matrix with all the transitivity.

Table 3: Final Reachability Matrix.

Variables	1	2	3	4	5	6	7	8	9	10	Driving Power
1	1	0	1	1	1	1	1	1	1	1	9
2	1	1	1	1	1	1	1	1	1*	1	10
3	0	0	1	0	0	0	1	1*	1	1	5
4	1	0	1	1	1*	1	1	1	1*	1	9
5	1	0	1*	1	1	1	1	1*	1*	1	9
6	0	0	1	0	0	1	1	1	1	1	6
7	0	0	1*	0	0	0	1	1*	1	1*	5
8	0	0	1	0	0	0	1	1	1*	1*	5
9	0	0	1*	0	0	0	1*	1	1	1*	5
10	0	0	1*	0	0	0	1	1	1	1	5
Dependence Power	4	1	10	4	4	5	10	10	10	10	

Iteration table

In next step Table 4 to Table 8 is created which depicts Level Partitioning Iterations-1-5. It is the expansion of partition level. A series of iteration table can be made on the final reachability matrix. These partitions are made to finalise the hierarchy of the elements. If the relationship in reachability and the interaction completely agree then the top priority is attained and the remaining is eliminated from the subsequent interaction. Hence, this process leads to the final interaction.

Table 4: Level Partitioning Iterations-1

Elements(Mi)	Reachability Set R(Mi)	Antecedent Set A(Ni)	Intersection Set R(Mi) \cap A(Ni)	Level
1	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
2	2,	2,	2,	4
3	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
4	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
5	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
6	6,	1, 2, 4, 5, 6,	6,	2
7	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
8	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
9	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
10	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1

Table 5: Level Partitioning Iterations-2

Elements(Mi)	Reachability Set R(Mi)	Antecedent Set A(Ni)	Intersection Set R(Mi) \cap A(Ni)	Level
1	1, 3, 4, 5, 6, 7, 8, 9, 10,	1, 2, 4, 5,	1, 4, 5,	
2	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	2,	2,	
3	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
4	1, 3, 4, 5, 6, 7, 8, 9, 10,	1, 2, 4, 5,	1, 4, 5,	
5	1, 3, 4, 5, 6, 7, 8, 9, 10,	1, 2, 4, 5,	1, 4, 5,	
6	3, 6, 7, 8, 9, 10,	1, 2, 4, 5, 6,	6,	
7	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1

8	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
9	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
10	3, 7, 8, 9, 10,	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,	3, 7, 8, 9, 10,	1
1 2 3 4				

Table 6: Level Partitioning Iterations-3

Elements(Mi)	Reachability Set R(Mi)	Antecedent Set A(Ni)	Intersection Set $R(Mi) \cap A(Ni)$	Level
1	1, 4, 5, 6,	1, 2, 4, 5,	1, 4, 5,	
2	1, 2, 4, 5, 6,	2,	2,	
3		1, 2, 4, 5, 6,		1
4	1, 4, 5, 6,	1, 2, 4, 5,	1, 4, 5,	
5	1, 4, 5, 6,	1, 2, 4, 5,	1, 4, 5,	
6	6,	1, 2, 4, 5, 6,	6,	2
7		1, 2, 4, 5, 6,		1
8		1, 2, 4, 5, 6,		1
9		1, 2, 4, 5, 6,		1
10		1, 2, 4, 5, 6,		1

Table 7: Level Partitioning Iterations-4

Elements(Mi)	Reachability Set R(Mi)	Antecedent Set A(Ni)	Intersection Set $R(Mi) \cap A(Ni)$	Level
1	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
2	1, 2, 4, 5,	2,	2,	
3		1, 2, 4, 5,		1
4	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
5	1, 4, 5,	1, 2, 4, 5,	1, 4, 5,	3
6		1, 2, 4, 5,		2
7		1, 2, 4, 5,		1
8		1, 2, 4, 5,		1
9		1, 2, 4, 5,		1
10		1, 2, 4, 5,		1

Table 8: Level Partitioning Iterations-5

Elements(Mi)	Reachability Set R(Mi)	Antecedent Set A(Ni)	Intersection Set $R(Mi) \cap A(Ni)$	Level
1		2,		3
2	2,	2,	2,	4
3		2,		1
4		2,		3
5		2,		3
6		2,		2
7		2,		1
8		2,		1
9		2,		1
10		2,		1

Conical Matrix

Table 9: Conical Matrix(CM)

Variables	3	7	8	9	10	6	1	4	5	2	Driving Power	Level
3	1	1	1*	1	1	0	0	0	0	0	5	1
7	1*	1	1*	1	1*	0	0	0	0	0	5	1
8	1	1	1	1*	1*	0	0	0	0	0	5	1
9	1*	1*	1	1	1*	0	0	0	0	0	5	1
10	1*	1	1	1	1	0	0	0	0	0	5	1
6	1	1	1	1	1	1	0	0	0	0	6	2
1	1	1	1	1	1	1	1	1	1	0	9	3
4	1	1	1	1*	1	1	1	1	1*	0	9	3
5	1*	1	1*	1*	1	1	1	1	1	0	9	3
2	1	1	1	1*	1	1	1	1	1	1	10	4
Dependence Power	10	10	10	10	10	5	4	4	4	1		
Level	1	1	1	1	1	2	3	3	3	4		

Table 10: Reduced Conical Matrix (CM)

Variables	3	7	8	9	10	6	1	4	5	2	Driving Power	Level
3	1	1	1*	1	1	0	0	0	0	0	5	1
7	1*	1	1*	1	1*	0	0	0	0	0	5	1
8	1	1	1	1*	1*	0	0	0	0	0	5	1
9	1*	1*	1	1	1*	0	0	0	0	0	5	1
10	1*	1	1	1	1	0	0	0	0	0	5	1
6	1	1	1	1	1	1	0	0	0	0	6	2
1	0	0	0	0	0	1	1	1	1	0	9	3
4	0	0	0	0	0	1	1	1	1*	0	9	3
5	0	0	0	0	0	1	1	1	1	0	9	3
2	0	0	0	0	0	0	1	1	1	1	10	4
Dependence Power	10	10	10	10	10	5	4	4	4	1		
Level	1	1	1	1	1	2	3	3	3	4		

Formation of ISM based model.

To generate this ISM model, the levels of the elements identified above with the help of final reachability matrix is used. The diagraph of the ISM model shows that Financial service orientation directly influence financial knowledge, funds utilisation and allocation of funds. This implies that use of digital financial assistance upgrades the financial knowledge, appropriate utilisation and allocation of funds. All these three factors influence financial technology. This in turn, shows that financial knowledge, funds utilisation and funds allocation decides the importance and application of technology by the firms.

Since, Financial technology is at the middle which implies that it influence the remaining factors- Record-keeping of financials, financial performance, financial security, financial application and financial stability. All these factors are found to be interdependent.

In a nutshell, Record-keeping of financials, financial performance, financial security, financial application and financial stability influence each other. These factors are observed at the top-level. Thus, financial technology is the main influencer, which influence and is influenced by other factors.

Digraph

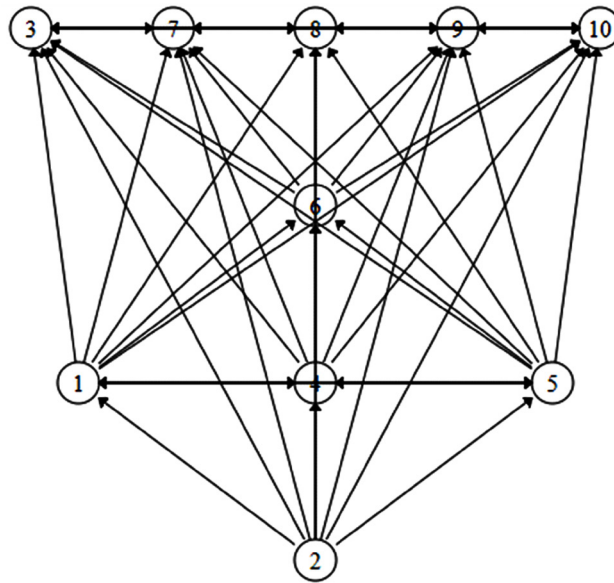


Figure 1a: Digraph of Interpretive Structural Modelling

Final Model*

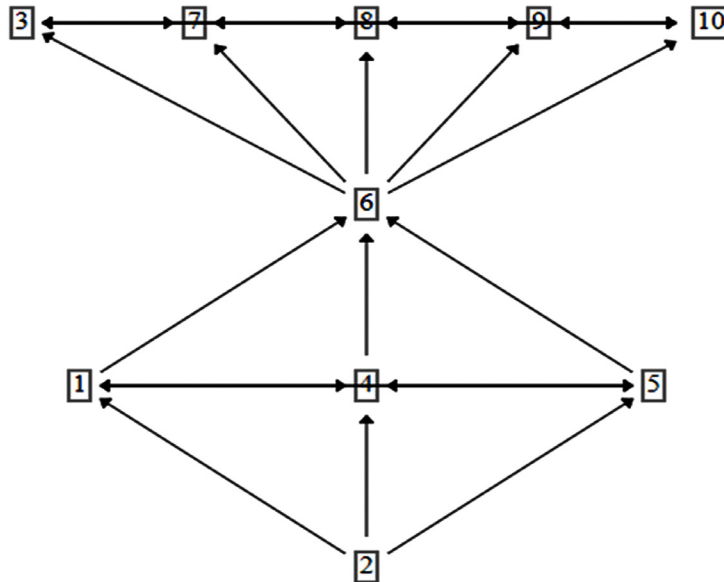


Figure 1b: Interpretive Structural Modelling

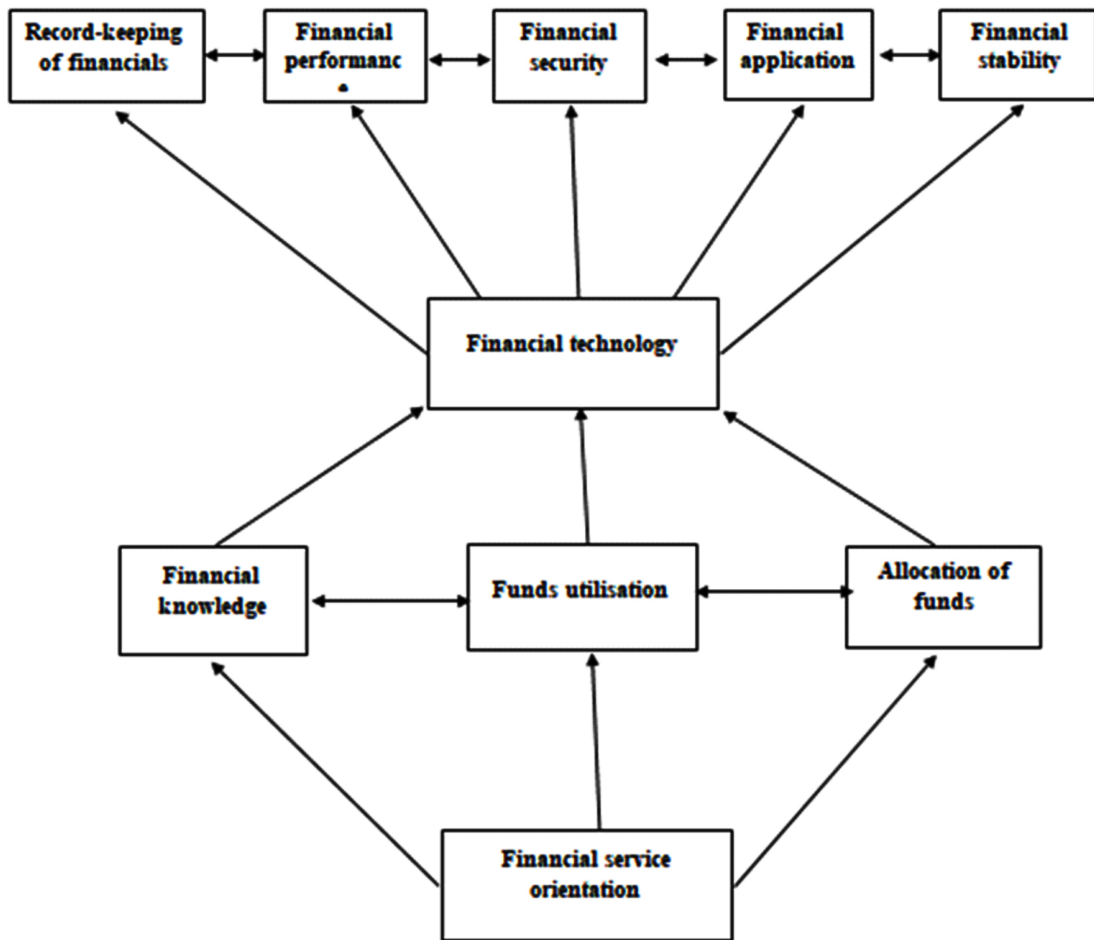


Figure 1c: Final Model: Interpretive Structural Modelling

MIC-MAC Analysis

The MIC-MAC Analysis as shown in Fig.2 helps to categorize the variables into four clusters that are autonomous, dependent, linkage and independent dimensions.

The Autonomous group is located in the south-west quadrant which states variables which have weak driving power and weak dependence. They are relatively incoherent from the model.

The Dependent group is located in the south-east quadrant and has weak driving power but very strong dependence.

The Third group or the Linkage group is located in the north-east quadrant. The Linkage variables have very strong driving power and also very strong dependence.

Fourth group is located in the north-west quadrant it includes the independent quality extent which have strong driving power but weak dependence.

MICMAC

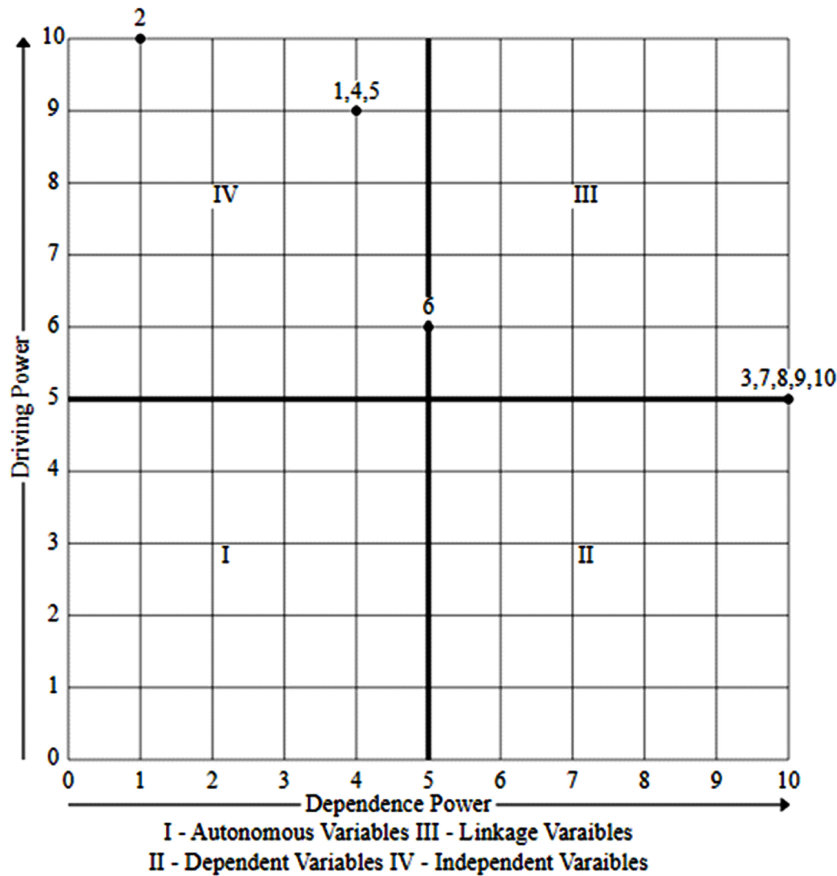


Figure 2: MIC-MAC

Factors affecting the level of financial literacy of women towards digital payments are identified in third and fourth quadrant which clearly exhibits that all identified factors have high driving power. This implies positive influence of every factor on the other. In other words, the level of financial literacy of women towards digital payments is highly correlated.

Third quadrant which shows high driving power and high dependence power concludes that the top level factors- Record-keeping of financials, financial performance, financial security, financial application and financial stability are the prime factors which influence financial literacy of women towards digital payments. These parameters are independent to each other.

Fourth quadrant depicts the high driving power and low dependence power. This shows that factors like financial service orientation, financial knowledge, funds utilisation and allocation are the prime factors to drive other remaining factors.

Limitations of the study

There may be many elements to a problem or issue. Increase in the number of elements to a problem or issue increases the difficulty of the ISM methodology. Hence, limited number of elements in the development of ISM model is considered. Other elements which are least affecting a problem may not be taken in the construction of an ISM model.

CONCLUSION

In a nutshell, the study focuses on 10 factors influencing the level of Financial Literacy of women towards digital payments in India. Factors are duly analyzed with the help of ISM; it is classified into two groups which are driving power and dependence. After dividing all the factors in two groups, a hierarchy is formed on the basis of the rating which is concluded from driving power and dependence. This process is undertaken to determine the level of financial literacy of women towards digital payments. According to ISM model, financial technology is the factor identified which influence other factors especially for those which are located above, as shown in the Fig.1c. Financial Service Orientation is identified as a baseline factor which is interconnected to other factors. The final result

of this study is accomplished from Mic-Mac analysis which shows that none of the factors are identified as weak driving power as well as weak dependence power. Record-keeping of financials, financial performance, financial security, financial application and financial stability lie in the linkage group which exhibits a very strong driving power and also very strong dependence. Also, women need to give the high importance to these factors while conducting any survey or a decision on financial literacy because they have high driving power and dependence power. Last factor which is financial knowledge, funds utilisation and funds allocation have low dependence power but high driving power and these lie in independent group. These factors must be treated before important factors are looked upon. Factors which are termed as important by the women are those factors which must be looked by them in every financial period and comparatively the factors which are less important must be looked by the women in the end. This process is further carried forward with the help of ISM model, one of the hierarchical model, which may help a women to make financial decision about the financial literacy and to find out the significant and most relevant factors which affects financial literacy of women towards digital payments.

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NEW DIMENSIONS OF CONSUMER WELFARE LEGISLATIONS IN INDIA VIS A VIS CONSUMER EDUCATION: AN ANALYTICAL STUDY

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ABSTRACT

The emergence of the concept of welfare state has influenced gradual development of the role of the government for protecting the interests of consumer's. In Indian scenario the impact of British rule has been to transform from duty conscious society to the right conscious society. Since Independence we have adopted the concept of welfare state under new constitution this has called for great intervention of state protecting the rights and interests of consumers as against strict adherence to caveat emptor principle. In the end of the nineteenth century, in the modern commercial age, the advancement in the commercial transaction, standard form of contract, globalisation brought an era of consumerism where consumers started facing exploitation by strong business class. In order to maintain social harmony legal intervention was called. By the end of nineteenth century the Anglo American jurists had summarised the whole jurisprudence upon the basis of rights of contract duty base. Gradually the emphasis was shifted from individual interests to social

interest. The emergence of the concept of welfare state has influenced gradual development of the role of the government for protecting the interests of consumer's. In the Indian scenario the impact of British rule has been to transform from duty conscious society to the right conscious society. Since Independence we have adopted the concept of welfare state under new constitution this has called for great intervention of state protecting the rights and interests of consumers as against strict adherence to caveat emptor principle. Need for protecting the interests of consumers also felt in our country. Several laws for consumer's protection were there since 1947, but enactment of consumer's protection Act, 1986, and new Amendment in 2002 gave more protection to consumers. The enactment of Competition Act, 2002 by replacing of MRTP Act, 1969 brought new dimensions to protection of consumer's interests in India.

Keywords: *consumer education, concept of consumerism, consumer Protection Act, 1986, New Amendment Act, 2002, the competition Act, 2002, consumer protection Act, 2019*

INTRODUCTION

Traditionally consumer education has been considered about making aware people from any exploitation, money management and understanding credit. But many jurists take the broader view that it should be education for living with the major emphasis on the economic, environmental, political and social decisions that learners will make today, tomorrow and in the future. In the beginning of nineteenth century the doctrine of laissez faire dominated the whole economic scene all over the world, it was an era when the supporters of the individualistic approach thrived where it was believed that there should be least interference in the freedom of contract so that the sanctity of contract may be maintained. So far as the consumers were concerned it was the view that the doctrine of caveat emptor should dominate the economic scene.

The Sale of Goods Act, 1930, caste upon a duty to the buyer to be careful while purchasing a good. If the goods are not suitable, the seller will not be responsible under the principle of 'caveat emptor' it is a general rule of contract of sale. A buyer is under obligation to examine the goods to his best skill and judgement and satisfy himself before purchase. The seller is not responsible for the selection and suitability of the goods to be purchased by the buyer. The seller is not under any obligation to disclose any defects.

In the end of the nineteenth century, in the modern commercial age, the advancement in the commercial transaction, standard form of contract, globalisation brought an era of consumerism where consumers started facing exploitation by strong business class. In order to maintain social harmony legal intervention

was called. By the end of nineteenth century the Anglo American jurists had summarised the whole jurisprudence upon the basis of rights of contract duty base.

Gradually the emphasis was shifted from individual interests to social interest. The emergence of the concept of welfare state has influenced gradual development of the role of the government for protecting the interests of consumer's. In the Indian scenario the impact of British rule has been to transform from duty conscious society to the right conscious society. Since Independence we have adopted the concept of welfare state under new constitution this has called for great intervention of state protecting the rights and interests of consumers as against strict adherence to caveat emptor principle. Need for protecting the interests of consumers also felt in our country. Several laws for consumer's protection were there since 1947, but enactment of consumer's protection Act, 1986, and new Amendment in 2002 gave more protection to consumers. The enactment of Competition Act, 2002 by replacing of MRTP Act, 1969 brought new dimensions to protection of consumer's interests in India.

HISTORICAL DEVELOPMENT OF CONSUMERS LAWS

History reveals that the interest of the sellers and buyers have involuntary pulled apart, the former trying to obtain the highest price and latter hesitating to be exploited. Before dealing with the present legal position of consumer laws, a brief discussion of the historical development of the consumerism and the law prevailing in ancient and medieval India will be discussed.

Consumer movements in America

In early economic history of America private ownership was protected and the free competition was given recognition. Competitive activities in U.S. led to passing Sherman Act, 1890. The economics condition changed after formation of Consumers League in 1891. Federal Trade Commission, which was formed in 1914 recommended time to time amendments in laws to prevent unfair methods of competition. Neither tort based remedies nor contract based remedied helped the consumers by 1940. Recognition of consumer's rights by 1962 by President Kennedy gave a further impetus to the consumer's rights movements. After several attempts Uniform Commercial Code 1952 came into existence. Consumers awareness along with legislative consciousness, improved the consumers condition in U.S.A .

Consumer Movements in England

Contrary to the U.S. approach, in England consumers were being protected by judicial activism alone for a considerable period up to 1965. Yet the condition of consumers was not satisfactory, as the judge's views were dominated by the laissez faire approach and by the maxim "Caveat Emptor ." Uniformity in the judicial decisions can now be found in England. Era of Codification began in England in the last part of the 19th Century. But the laws were codified in parts upon the demands of the businessmen. Sale of Goods Act was enacted in 1889, which continued to protect the consumer sale transactions as well, recognizing several exceptions to the "Caveat Emptor" rule, up to 1979 [in 1979 New sale of goods was enacted replacing old one] However, the earlier Sale of Goods Act was supplemented

by Supply of Goods (Implied Terms) Act, 1979, Consumer Credit Act, 1974 and Unfair Contract Act 1977 etc. Anti-trust kind of situation of U.S. also attracted attention and became a matter of concern in England, which led to the passing of Restrictive Trade Practices Act, 1956, Monopolies and Restrictive Trade Practices (Inquiry Control) Act. 1948, Resale Prices Act, 1964, Fair Trading Act, 1973 and Competition Act, 1980. Aforesaid enactments were felt necessary as the judicial check upon monopolies and unfair trade practices had proved ineffective. Certain laws were also enacted which provided penal punishments, like (Weights and Measures) Act etc. In England too, consumer consciousness grew in intensity, and this started influencing the political and economic atmosphere. The Monopoly Committee also made several proposals to make the laws more consumer oriented. These proposals thus formed the basis of the Consumer Protection Act, 1987 and a new Consumer Credit Act, 1978 was also enacted.

Consumer Movements in India

It has been seen that the consumer movement in India is gaining momentum these days. The historical development of Indian legal system reveals that consumer's interest was also protected in the past. We can divide the legal development in India in three stages for proper appreciations-

- The Ancient period,
- The Medieval period and
- The pre-independence period.

All the three stages of the developments reveal that whatever might have been the idea behind the laws, the public welfare was the ultimate

goal. The protections which were available to the consumer, public, during the above three periods in seriatim will be a matter of discussion in this part of paper. The development of consumer laws in our country thereafter shall be discussed in the subsequent part of this paper.

Consumer movement during Ancient Period

Ancient Hindu Law was a mixture of law and religion, as aptly observed by the English judges, 'vinculum juris and vinculum pudoris' was not discernible in the earlier Hindu Law. The Indian society has been a duty conscious society. The idea of civil wrongs was overshadowed by criminal wrongs in Hindu Jurisprudence. It may be noticed, that even for the breaches of contracts, punishments were prescribed. In this sense, consumer was a better protected lot in those times. Indian law of torts was not as advanced as the English Law of Torts . In 18 titles of Manu only an incidental reference of compensation has been made by him. But later Smritis evolved this further, and included the tort of fraud in different cases. Even the contract law was incomplete and defective. Wherever, the seller transgressed his contractual duties, he was required to pay fine, as the default was viewed as an offence; a consumer also had a war of replacement or a right to claim a refund of price. He also had a right to rescission in several cases, but these rights were subject to the principle of 'Caveat Emptor'.

Under law of crimes, provisions were made to ensure standard weights and measures, realizing the criminal tendency prevalent amongst traders . There were also rules for preventing adulteration and for strict adherence

of quality control. A Superintendent of Commerce was also appointed to enforce the trade regulations covering sale of goods and also for enforcing the terms of services. In fact the whole law meant for consumer protection, provided punishments, perhaps with an avowed objective of expiating the law breaker from sin, committed by him due to non-adherence of the duties fixed by Dharma .

Consumer movement during Medieval Period

Moghuls ruled India in the Medieval Period. They were much concerned with the expansion of their Empires and thus they had not much concern for the public in general and consumers in particular. Muslim Law was applied when both the parties were Muslims and the law of defendant, when one party was Hindu and the other was a Muslim. Muslim law was also dominated by the religion, as civil law was mixed with religion. Moreover, except Akbar, all the other rulers were strict enforcers of 'Sharia' and 'Hedaya' was the standard legal text book in Muslim ruled India. In absence of consumer associations, there was no voice of the consumers. Yet, law of sales was much concerned with the interests of consumers . Exceptions to 'Caveat Emptor' rule were recognized under Muslim law of sale, which recognized warranty of title and warranty of free from all defects. Several options to cancel the bargain were available to the consumers in cases of absence of consent, or fraud or where the goods were defective. Freedom of contract and sanctity of contract was also recognized under Muslim law, as it did not allow stepping in for completing the bargain. It may still be submitted that the position of consumers was not satisfactory during this period.

Consumer movement during Pre Independence Period

In pre-independent India, gradually the common law principles came to be applied by the British. Codification of laws was embarked upon, and in this process, laws came to be enacted even prior to the creation of public opinion in their favour.

From consumer's angle, Indian Contract Act 1872 was enacted, which also provided for the regulation of Sale of Goods. Later on in 1930, this part was repealed and re-enacted as Sale of Goods Act. The other two enactments, viz. Transfer of Property Act and Specific Relief Act also came to be enacted and had a bearing upon the consumers. Law of Torts did not develop in India at the same speed as it did in England. Indian Courts were apt to follow the law, as laid down in *Donoghue v. Stevenson*. Various provisions of the Indian Penal Code 1860, also declared certain activities of the traders as penal offences, Sections 272-276 dealt with the penalty for adulteration of food and drink, Section 486 further made sale of goods marked with false counterfeit property mark, punishable. Further Sections 415-425 made cheating an offence.

Indian economic-scene was also dominated with scarcity of goods during the World Wars. Various laws were thus enacted as emergency measures to solve the problem of scarcity of essential items. Hence the licensing system and commodity control measures were introduced by the Britishers in India through the enactment of Defence of India Act, 1939 and Essential Supplies Act, 1946 etc. Formation of Consumer Co-operatives was supported, which was regulated through the Cooperative Societies Acts, 1904 and of

1912. In the last phase very many other laws too came to be enacted, for the efficient and satisfactory functioning of the public utility services like electricity, transportation, posts and telegraphs etc.

Pre-independent India pictured a plethora of laws, which in some way or the other protected the consumers of India. Significantly, contrary to the duty based laws and rules prevalent in ancient India, these laws recognized the rights of the persons, whose interests were sought to be protected by these. These laws enacted by the Britishers, transformed the socio-economic scene from duty-based to a right-based society. Perhaps, this was the beginning of the arena, wherefrom the Indian people started becoming more conscious of their rights, forgetting the duties which they owed to their fellow beings. It may be submitted, that amongst other factors, this factor has attributed much towards the worsening of the conditions of Indian Consumers, though it had also laid base, for a strong case for consumer movement in India.

LEGISLATIVE CONSCIOUSNESS AND JUDICIAL ACTIVISM TO PROTECT THE CONSUMERS IN INDIA

After gaining, independence, we adopted welfare State concept under our new Constitution. Various protections and rights of Indian public were sought to be ensured through legislative consciousness and judicial activism. Process of codification of the laws in the country continued to favour consumers as against producers. The Governments, under the Constitution, were to pursue the policies according to the Directives' set out under Chapter IV. These Directives

came to be reflected in various Industrial Policy Resolutions. A mixed economy was adopted, wherein both public and private Sectors were to work together. More so, consumer protection against high prices and bad quality was specifically included in Industrial Policy Resolution of 1980.

In order to improve the economic conditions, State monopoly and nationalization of various industries was felt necessary. The Courts too responded in the favour of the government policies, yet it refused to grant blanket protection to all the legislations meant for creating State monopoly. It came to be established that all laws were to pass the two tests of reasonableness and public interest. However, these restrictions were allowed to go to the extent to prohibition, if the consumer and public interest demanded it. Thus various Control Orders passed under Essential Commodities Act and Industrial Development and Regulation Act came to be challenged before the courts. The courts significantly played an activist role, and tried to tilt the balance of competing interests of consumers and traders, in the favour of consumers.

Price Fixation was also considered as a part of social control, which became unavoidable under a socialistic pattern of society, which aimed at to achieve the common good. This was achieved by the Government under the Industrial Development and Regulation Act, 1957, Essential Commodities Act, 1955 and Tariffs Commissions Act etc. Supreme Court examined the price fixation aspect in several cases, beginning from Premier Automobiles and another v. UOI to Union of India v. Cynamide India Ltd .

In Shree Meenakshi Mills v. Union of India case Supreme Court, reviewing the cases decided between 1954-1973, held that price fixation and maintenance of a price line was necessary and was to be upheld, in order to give preference to the consumer 'interest over the interests of producers and traders.

This consumer oriented approach came to be dominated in the decision of Cynamide's case, wherein the court made the following three relevant suggestions with respect to price fixation domain. Legislative action, plenary or sub-ordinate is not subject to the rules of natural justice. Particularly where the legislator has not chosen to provide for any notice or hearing, no one can insist upon it.

Where matters involves commercial or technical prudence, court cannot assess that it would be hazardous for the courts to venture on a guess work as compared to the technical assessment that is made, correctness of which is not disproved by cogent materials. Court can only interfere upon finding mala fides or extraneous considerations.

The right to consumer education has been recognised under 6(f) of the consumer protection Act, 1986 as "the right to consumer education" one can surely access the importance of consumer education in a country like India where large section of the consumer is poor and illiterate. The concept of consumerism is yet to take a final shape in India. Unless the consumers are aware of their rights and remedies, unless the consumers are unites and have the power to call the boycott of a particular traders or items, protection of there shall remain a myth. In this connection the role of consumer's councils is very important.

The basis of consumers rights have also been recognised under Indian Constitution

- a. Right to life –Article 21
- b. Right to basic need –Article 21 and 47
- c. Right to healthy environment- Article 47, 48-A, and 51-A

Indian Judiciary has also been performing an activist role in various pronouncements from M.C. Mehta v. UOI .

CONSUMER REDRESSAL AGENCIES UNDER CONSUMER PROTECTION ACT, 1986

Under the Consumer Protection Act, 1986 consumer Dispute Redressal Agencies have been established at District, State and National level.

1. District Forum
2. State Consumer Dispute Redressal Commission
3. National Consumer Dispute Redressal Commission

The supreme court of India is the final court of appeal. In Patel Roadways Ltd. Birla Yamaha Ltd , has been held that the consumer Dispute Redressal Agencies are vested with the power of adjudication of all types of consumer disputes. In Charan Singh v. Healing Touch Hospital , the Supreme Court recognised these Agencies as quasi-judicial bodies; hence these agencies should arrive at a conclusion based on reason. Their obligation not only introduce clarity but it also exclude, or at any rate minimise, the chances of arbitrariness and the higher forum can evaluate the correctness of those reasons. In the year 2003 Supreme Court of India passed three different judgements after considering

the importance of redressal for a constituted under the Act, 1986.

In state of Karnataka v. Vishwabharti House Building Co-op Society , where the constitutionality of the Redressal Forums was under challenged the Supreme Court upholding their constitutionality held that their establishment was within the legislative competence of parliament as Article 323A and 323B do not derogate from that legislative competence.

In another case State of Rajasthan v. Anand Prakash Solanki , held that the transfer of President and members of District Forum from one district to another district by the state government is permissible.

In CCI Chambers Co-op, Hsg Society Ltd. v Development Credit Bank Ltd , the court has held that such forums have been constituted at various level under the Act, with the avowed object of providing summary and speedy remedy. The justice has to be delivered observing the principle of natural justice, taking care of such grievance as an amendable to their jurisdiction. The prime objects are to relieve the conventional courts of their burden which is ever increasing and delaying the disposal due to technicalities.

Legislative Enactments

Most of the laws enacted, in consumer's interest, were Central enactments, however, some of these were also passed by the States, as earlier said, the laws enacted in favour of consumers were challenged before the courts, but the courts refused to go into the question of substantive reasonableness of these laws. Yet, the procedural reasonableness of these laws was stringently reviewed by the courts.

This inference can be derived after a review of the Supreme Court's approach towards the laws pertaining to the field of price control, commodity control and advertisement control. Some of these were even enacted, to regulate the supply and distribution of commodities in normal times.

Promotion of the health of consumers was also felt necessary by the Government. From time to time several committees were appointed by the Government to examine the health aspect, in order to fulfil the mandate guaranteed under Art 47 of the Constitution. These gave several recommendations from time to time, which led to the enactment of Prevention of Food Adulteration Act, 1955, Drugs Act, 1940, Drugs and Cosmetics Act, 1940 etc. These enactments, when they passed the constitutional test were upheld by the Supreme Court. It may be submitted, that these enactments have not been able to provide a healthy atmosphere to the consumers. Menace of adulteration of food and drugs is rampant, and prices of drugs consumers. The new Health Policy, 1987 was announced by the Ex-Prime Minister Mr Rajiv Gandhi Government, but it being anti-consumer, and being against the patient's interest, was criticized severely. In fact this policy has given a free hand to the manufacturers to manufacture hazardous drugs and to escalate prices of essential drugs. In this scenario, our Supreme Court in Vincent's case, again has acted as a watch-dog and has issued elaborate guidelines, to be followed by the government, to manifest the objective of promotion of health of the public.

Many problems faced by the Indian Consumers today, pertain to the deficient

services rendered by the public utility services. Notably, these public enterprises enjoy monopoly in certain important fields. But in due course of time these monopolies have become powerful. They are no longer concerned with the welfare of the consumers, utilising these services. After the dilution of the locus standi concept, since the decision of S.P. Gupta vs. Union of India, many cases have come up before the courts highlighting the deficiencies in the working of these public utility services. The courts have gradually followed utilitarian approach to deal with the problem.

CONSUMER PROTECTION ACT, 2019: A NEW DIMENSION ENSURING EFFECTIVE RESOLUTION OF DISPUTES.

The Indian consumer market has gone through a drastic change over the last two decades with the advent of digital technologies internet, rapid penetration of e-commerce etc. The Consumer Protection Act 1986, being only legislature for protecting the rights of the consumers that gradually become non effective to deal with rapid changes in the consumer marketplace, especially dealing with online shopping and misleading advertisements. Therefore it was felt to replace with the consumer protection Act, 2019. The new Act empowers and protects consumer's rights through various provisions Consumer's protection councils, consumer's disputes redressal commissions, mediation Product liability etc.

Simplified dispute resolution process

State and District commissions can now review their own orders. Now it's easy while

approaching consumer commission through e-filing of complaint and videoconferencing for hearing, deemed admissibility after 21 days of filing, appeals only on question of law after second stage. Central Consumer Protection Authority has been established to conduct investigation into violations of consumer's rights and institute complaints and prosecutions. Impose penalties on manufacturers of misleading advertisements.

E-commerce

E-commerce has been defined as buying or selling of goods or services including digital products over digital or electronic network. Section 2(16) of CPA 2019, the central government has been authorized to take measures and make rules to prevent unfair trade practices in e-commerce. Sections 94 & 101(2)(z g) of CPA 2019 In case of products being sold through online platforms, without charging any fees separately amounts to providing services needs to be ascertained. It is not clear whether off-shore e-commerce would also get covered and eventual enforcement of CPA 2019 qua such entities.

False or misleading advertisements

CCPA has also been empowered to take actions against false or misleading advertisements. CCPA can impose a penalty of up to INR1 million, and up to INR 5 million for every subsequent violations. It is important to note that such penalty can be imposed on endorsers too, thereby bringing actors/actresses in the scope of penalty. However, the endorser would be exempted from any liability if s/he establishes that they undertook due diligence to verify the veracity of the claims before endorsing the same. Therefore, endorsers/actors/celebrities will also have to conduct a thorough due

diligence/ research before signing up for any advertisements.

Penalties

The quantum of monetary penalty, in case of defiance of any order of commissions, have also been raised under the provisions of CPA 2019 Section 72 of CPA 2019. The commissions can now impose fines ranging from USD 350 to USD 1400, whereas earlier they could have only imposed fines in the range of USD 28- USD 140.

Increase in the pecuniary jurisdiction of the commissions

Appellate commissions to an extent, thereby ensuring swifter disposal of cases.

CONCLUSIONS

The Indian consumer marketplace has a drastic shift over the past few years with respect to technologies and fast prevalence of e-commerce. The Consumer Protection Act, 1986 was the only legislation to shield the rights of consumers now had become less effective to deal with fast changes in the consumer marketplace. Consequently it has been replaced by the new Consumer Protection Act, 2019.

Numerous cases were pending in the consumer's courts and there was delay in execution of cases. The new Act provides more effective mechanism for consumers in every aspect. The new Act empowers and protects consumer's rights through various rules. Consumer's protection councils, consumers dispute redressal commissions, mediations, product liability, rules of e-commerce and direct selling.

Central Consumer Protection Authority has been established to conduct investigation into violations of consumer's rights and institute complaints and prosecutions. Impose penalties on manufacturers of misleading advertisements.

It may also be worth mentioning that the consumers have been denied effective representation in the various bodies of these public sector companies. Effective representation of consumers can only solve the problem. Consumer is required to be represented at least in those meetings where

decisions affecting the interests of the consumers are going to be taken. The right to consumer education" one can surely access the importance of consumer education in a country like India where large section of the consumer is poor and illiterate. The concept of consumerism is yet to take a final shape in India. Unless consumers are aware of their rights and remedies, unless the consumers are united and have the power to call the boycott of a particular traders or items, protection of consumers interests shall remain a myth.

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OPTIMUM ALLOCATION OF FUND ACCORDING TO RISK PROPENSITY OF THE INVESTORS: A STUDY BASED ON NIFTY DATA

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ABSTRACT

Risk management plays a vital role in portfolio analysis. It requires adequate knowledge in finance and application of sophisticated techniques. In the allocation of fund analysis, Markowitz mean-variance model is the most popular one. Later, Sharpe's single index model and arbitrage pricing theory have been developed. But all these techniques have not considered the risk perception and risk propensity of the investors. Risk perception of the investor depends on so many factors and it ultimately affect risk propensity of the investors (value system of the investors). In this study an attempt has been taken to analyse the approaches of allocation of fund based on the risk propensity of the investors. The study is conducted on taking NIFTY 50 securities. Finally the results of different approaches are compared with the results of the Markowitz mean –variance portfolio optimisation.

Keywords: *Portfolio Optimisation, Optimistic, Pessimistic, Mean-Variance, Euclidean distance*

INTRODUCTION

Risk management is one of the vital areas in finance. It also plays a vital role in portfolio management. A portfolio is a combination of different assets .It includes physical assets such as land, building, as well as financial assets such as shares, bonds.etc. Portfolio selection problem deals with optimum allocation of investor's fund in different assets or securities. It requires adequate knowledge in finance and application of sophisticated techniques. In allocation of fund analysis, the mean –variance approach of Markowitz (1952, 1959) is most popular and pioneer one. It is based on two parameters of security return: expected return and the variance. The main objective of investors is to maximise return or minimise risk from that investment. The main problem of forming portfolio is the determination of weights for allocation of fund to different assets or stocks. Every investor invests money for earning return from that investment. The external environment of investment is same for all investor but the earnings from the investment varies from investor to investor. There are some investors who are willing to take risk for getting higher return. They are

known as risk takers. On the other hand, there are some investors who are willing to reduce risk. They are known as risk averters. There are another type of investors, known as common investor who behaves randomly for taking investment decisions. Common investors formed portfolio in haphazard and unplanned way. According to different risk propensity of investors, investors assign different weights to different assets. Investment pattern of one investor varies from another investor due to different risk propensity of the investors. In this context an attempt has been taken to analyse the different approaches of allocation of fund based on the risk propensity of the investors.

OBJECTIVES OF THE STUDY

The main objectives of the study are the followings

1. To determine optimum allocation of funds according to the risk propensity of the investors.
2. To compare the results of optimum allocation of funds based on the risk perception of the investors with optimum allocation of funds based on Markowitz mean variance model.

LITERATURE REVIEW

For selection of optimal portfolio, a large number of studies have been conducted. The most popular model of selection of optimum portfolio is Markowitz model (1952). It requires huge number of information for determination of optimum portfolio. After that William Sharpe developed single index model. Here it is assumed that security return is dependent on the market index.

Later, Arbitrage pricing theory (APT) was developed by Ross (1976). APT is a multifactor model. According to APT, expected return of a security is a function of macro- economic factors. Sensitivity of each factor is measured by specific macro-economic beta. Expected price of security can be calculated with the help of estimated expected rate of return. If the price of any security differs from expected price, then equilibrium is achieved through arbitrage. But in all these studies, allocation of fund to different securities is done based on risk and return dimension of securities. For this purpose, different sophisticated techniques such as genetic algorithm (Hachloufi(2012) Sefiane,S & Benbouziane,,M (2012) Sinha, Chandwani, and Sinha, (2013)), anti-colony optimisation (Haqiqi, and Kazemi, (2012)), particle swarm optimisation (Kendall and Su (2005)), Non-smooth optimisation methods (Beliakov, G & Bagirov, A (2006)), Heuristic algorithms (Mansini & Speranza, (1999) , Mansourfar,(2013)) ,Shrinkage technique (Okhrin & Schmid, (2008)) and fuzzy technique have been used. Schaerf (2002) used local search technique for constrained portfolio optimisation. But allocation of fund not only dependent on risk return characteristics of individual securities, but also dependent on the risk perception and risk propensity of the individual investor. Here risk perception of investor is dependent on so many factors. Abdeldayem (2015) identified different factors such as worry & anxiety, probability of loss, diversification, earnings volatility and liquidity that affect the perception of investor regarding risk. He studied the impacts of perception of investors on the portfolio management.

On the other hand risk propensity refers tendencies of the investors to take risk or to avoid risk. Risk perception of the investor affect the risk propensity of the investor or the value system of the investors. So optimum allocation of funds is dependent on the risk return characteristics of individual securities, techniques used, risk perception and risk propensity of individual investors. In their study, Roy, Mitra and Chowdhury(2010) applied heuristic procedure to compute securities weights. They have considered for risk taker and risk aversive investor. In their study an attempt has been made to study the influence of risk taking propensity of investor on the expected return and risk of portfolio and to examine how closely they are related to the optimum portfolio Panja and Roy (2014) also used heuristic procedure for studying risk- based selection of portfolio. In their study, City Block distance method is applied to measure the departure of heuristic solution from the optimum solution. Ramalakhmi et. all (2019) studied the impact of behavioural and cognitive biases on the financial decisions of investors. Chowdhary and Subramanian (2019) have found that personality plays an important role in the investment decisions of the investors.

From the literature, it has been observed that a large number of studies have been conducted for studying the impact of different factors on the financial decisions and determining the weights of securities in a portfolio by using different advanced techniques. In this study, an attempt has been taken to study the impact of the risk propensity of investors on the portfolio return and risk.

TYPE OF INVESTORS BASED ON RISK PROPENSITY

Investors may be categorised according to risk propensity in to three categories:

Risk taker: Risk takers are those type of investors who prefer more returns at any cost of risk. They are willing to take risk for any level of risk. They are more conscious about their returns from the investment. For determination of weights, they emphasize on returns of securities. They assign more weights on high income generating securities. They are known as optimistic investors.

Risk adverse Investors: Risk averse investors wants to avoid risk. They prefer lower returns with lower level of risk. They are satisfied with lower level of return. They assign high weight to the security that is associated with lower level of risk. They are known as pessimistic investors.

Common investors: Most of the investors prefer a satisfactory level of return with a moderate level of risk. They lie in between risk taker and risk adverse investor. Some time they assign weight equally or sometime they assign weight haphazardly to the securities.

METHODOLOGY

Data

The empirical study is based on data set in the S& P CNX Nifty constituents. There are fifty companies in S& P CNX Nifty 50. For our studies, the companies which are included in the index, are considered initially, it is a well diversified stock index accounting for several industries of the economy. For this purpose nifty constituents as on 3rd April, 2020 has

been considered. Monthly share prices of fifty stocks have been collected for the period April, 2015 to march, 2020 from www.moneycontrol.com. Monthly returns of fifty stocks have been computed using the following formula.

For computation purpose, Microsoft Excel, R software have been used and LINGO 8.0 has been used for optimisation purpose.

Techniques used for the study

For selection of stocks, average monthly returns and standard deviation are computed for fifty stocks. Stocks are ranked according to return per unit of risk. From that, top ten stocks have been selected from fifty stocks. The main objective of the study is to study how risk propensity of an investor affects the allocation of funds to different stocks for constructing a portfolio. In the following way, optimistic, pessimistic and common investors determine their weights to different stocks.

Optimistic Investor (Risk taker investor):

They want to maximise their return at any level of risk. So they assign maximum weight to the stock which generates maximum return and least weight to the stock that generate lower return. According to their approaches, weight of a security is directly related with expected return of that security. A locational shift is needed to ensure non-negativity in the system. Here locational shift is done taking lower mean return of security as origin. So, optimistic investor determines weight of any security in the following way.

$$W_i^{optimistic} = \frac{(\bar{R}_i - \bar{R}_{min})}{\sum_1^n (\bar{R}_i - \bar{R}_{min})} (1)$$

Where, \bar{R}

\bar{R}_i = Average monthly return of ith security.

\bar{R}_{min} = Minimum average monthly return

Pessimistic investor (Risk averse investor):

pessimistic investors satisfied with lower return. They are more concerned with the risk of the portfolio. They want to reduce risk. They assign least weight to that security that is associated with maximum variance and assign maximum weight to that security with lower variance. According to their approaches, weight of any security is inversely related with the variance of that security. So pessimistic investor determines weight of any security in the following way.

$$W_i^{pessimistic} = \frac{1}{\sum_i^n \frac{1}{\sigma_i}} (2)$$

Where,

σ_i = Standard deviation of return of ith security

Common investor: They are neither optimistic nor pessimistic. They are not interested in maximum return. They allocate their fund equally to all security. They determine weight of each security in the following way.

$$W_i^{common} = 1/n (3)$$

Where n= Number of securities considered for formation of portfolio.

After calculating weight of optimistic, pessimistic and common investors, portfolio return and portfolio risk are calculated for

optimistic, pessimistic and common investor in the following way.

$$\text{Portfolio return}(R_p) = \sum_{i=1}^n R_i X_i \quad (4)$$

$$\text{Portfolio variance } (G^2_p) = \tilde{x}^T \Sigma \tilde{x} \quad (5)$$

Where,

n = number of securities considered for formation of portfolio.

x_i = Proportion of fund invested in security I in the portfolio.

\tilde{x} = weight vector T

R_i = Represents the average return on ith security.

Σ = Variance-Covariance matrix of returns of the securities

Optimum solution as per Markowitz mean variance framework:

In the mean-variance framework, investors consider that portfolio which minimizes risk subject to a given return level. The optimum portfolio is determined on the basis of minimum variance of the portfolio. The Markowitz model can be presented in the following way.

Objective Function:

Minimise Portfolio variance

$$(G^2_p) = \tilde{x}^T \Sigma \tilde{x}$$

Constraints

Budget constraint:

$$\sum_{i=1}^n x_i = 1$$

$$x_i \geq 0$$

Minimum return constraints:

$$\sum_{i=1}^n R_i x_i = R_L$$

Where,

n = number of securities considered for formation of portfolio.

x_i = Proportion of fund invested in security I in the portfolio.

\tilde{x} = weight vector

R_i = Represents the average return on ith security.

Σ = Variance-Covariance matrix of returns of the securities.

At last, in order to check the closeness of different solutions according to risk propensity of investor with optimum solution as Markowitz mean –variance model, Euclidean distance is measured. If two points are P (X_1, Y_1) and Q (X_2, Y_2), then the distance from P to Q is given by

$$PQ = \sqrt{(X_1 - X_2)^2 + (Y_1 - Y_2)^2}$$

FINDINGS OF THE STUDY

Selection of securities on the basis of return per unit of risk.

The return and standard deviation of fifty stocks are given in the table 1. Table 1 shows that average monthly return of Bajaj Finance Ltd. (3.75%) is the highest and average monthly return of Tata Motor (-2.245%) is the lowest among fifty stocks. On the other hand, standard deviation of returns of company Tata Motors is highest. So risk of security in case of Tata Motor is the highest and risk of security in case of Hindustan Unilever Ltd. is the lowest. So from the return perspective, Bajaj Finance is preferable since it yields highest average rate of return. Similarly an investor, who wants to reduce risk, prefers the lowest standard deviation security (Hindustan Unilever Ltd). So both risk and return are important in selection of a security.

Table 1: Average monthly return and standard deviation of NIFTY stocks.

Sl. No.	Name of company	Aver. Monthly return (%)	Standard deviation (%)	Ratio	Rank
1.	Sun Pharmaceutical Industries Ltd.	-1.296	8.363	-0.155	47
2.	Cipla Ltd.	-0.454	6.922	-0.066	41
3.	ITC Ltd.	-0.202	5.964	-0.034	38
4.	GAIL(India) Ltd.	-0.092	8.626	-0.011	34
5.	ONGC Ltd.	-1.446	8.59	-0.168	49
6.	BPCL	0.902	10.372	0.087	16
7.	Mahindra & Mahindra Ltd.	-0.741	8.901	-0.083	44
8.	Zee Entertainment Enterprises Ltd.	-0.741	8.901	-0.083	45
9.	Tech Mahindra Ltd.	0.196	8.436	0.023	27
10.	Bharti Infratel Ltd	-0.96	11.1	-0.086	46
11.	Dr. Reddy's Laboratories Ltd.	0.202	7.683	0.026	25
12.	Power Grid Corporation of India Ltd.	0.35	5.698	0.061	20
13.	Larsen & Toubro Ltd.	-0.154	8.219	-0.019	35
14.	Indian Oil Corporation Ltd.	0.243	9.202	0.026	26
15.	Reliance Industries Ltd.	1.931	8.055	0.24	6
16.	Bharti Airtel Ltd.	0.725	8.291	0.087	17
17.	Bajaj Finserv Ltd.	2.783	11.851	0.235	7
18.	Britannia Industries Ltd	1.756	6.853	0.256	4
19.	Vedanta Ltd	-1.074	13.049	-0.082	43
20.	JSW Steel Ltd.	1.237	9.416	0.131	12
21.	Adani Ports and Special Economic Zone Ltd.	0.121	10.207	0.012	31
22.	Bajaj Finance Ltd	3.75	11.961	0.314	2
23.	NTPC Ltd.	-0.451	6.591	-0.068	42
24.	HCL Technologies Ltd.	0.179	6.153	0.029	24
25.	Hindustan Unilever Ltd..	1.819	4.943	0.368	1

26.	Coal India Ltd.	-1.347	7.083	-0.19	50
27.	Bajaj Auto Ltd.	0.352	7.454	0.047	23
28.	UPL Limited	0.43	9.05	0.048	22
29.	Kotak Mahindra Bank	1.334	6.35	0.21	8
30.	HDFC Bank Ltd.	1.139	6.062	0.188	10
31.	Infosys Ltd.	0.657	6.092	0.108	15
32.	Tata Consultancy Services Ltd.	0.885	6.763	0.131	13
33.	Eicher Motors Ltd.	0.153	9.091	0.017	30
34.	Hero Motocorp Ltd.	-0.356	7.48	-0.048	40
35.	Hindalco Industries Ltd	0.215	11.76	0.018	29
36.	UltraTech Cement Ltd.	0.643	7.934	0.081	18
37.	Tata Motors Ltd.	-2.245	14.447	-0.155	48
38.	Nestle India Ltd.	1.732	6.06	0.286	3
39.	Tata Steel Ltd.	0.101	10.049	0.01	32
40.	Grasim Industries Ltd.	-0.335	8.233	-0.041	39
41.	Wipro Ltd.	0.12	5.852	0.021	28
42.	Asian Paints Ltd.	1.501	5.917	0.254	5
43.	HDFC Ltd.	0.808	6.871	0.118	14
44.	Maruti Suzuki India Ltd.	0.699	9.347	0.075	19
45.	State Bank of India	0.003	10.171	0	33
46.	Shree Cement Ltd.	1.289	8.592	0.15	11
47.	Titan Company Ltd.	1.976	9.534	0.207	9
48.	ICICI Bank Ltd.	0.546	9.014	0.061	21
49.	IndusInd Bank Ltd.	-0.339	12.086	-0.028	37
50.	Axis Bank	-0.191	9.185	-0.021	36

Source: Compiled by the author

To consider risk and return dimension of a security simultaneously, return per unit of standard deviation of a security is taken into consideration. For that purpose, return per unit of risk is calculated separately for fifty securities and arranged in ascending order and on the basis of that, ten

securities are considered for portfolio formation. The list of selected ten securities is given in Table 2. These ten securities are considered for portfolio formation.

Table 2: List of selected ten stocks or securities for portfolio construction.

Sl. No	Name of Company	Aver. Monthly return(%)	Standard deviation(%)	Mean/standard deviation	Rank
1.	Hindustan Unilever Ltd..	1.819119	4.942696	0.368042	1
2.	Bajaj Finance Ltd	3.74984	11.96069	0.313514	2
3.	Nestle India Ltd.	1.732452	6.059773	0.285894	3
4.	Britannia Industries Ltd	1.755813	6.852693	0.256222	4
5.	Asian Paints Ltd.	1.501119	5.916528	0.253716	5
6.	Reliance Industries Ltd.	1.930551	8.055307	0.239662	6
7.	Bajaj Finserv Ltd.	2.78333	11.85073	0.234866	7
8.	Kotak Mahindra Bank	1.333699	6.349743	0.21004	8
9.	Titan Company Ltd	1.976331	9.534287	0.207287	9
10.	HDFC Bank Ltd.	1.138948	6.061848	0.187888	10

Source: Compiled by the author

Portfolio construction according to risk propensity of investors

In portfolio formation, the main problem is the determination of weight of individual security. The risk taking propensity of an investor influences the determination of weight of individual securities. An optimistic investor wants to take more risk for getting high return. So return is the important factor for optimistic investor. An optimistic investor will assign more weight to that security that yields highest return. An optimistic investor determines weight of individual securities using the equation no. (1). Table 3 shows the weights of ten securities for optimistic investor. Portfolio return and risk have been calculated with help of equation

Table 3: Optimistic investor's weights to different stocks.

Sl. No.	Name of Company	Aver. Monthly return(%)	Weight
1.	Hindustan Unilever Ltd..	1.819119	0.0816
2.	Bajaj Finance Ltd	3.74984	0.3134
3.	Nestle India Ltd.	1.732452	0.0712
4.	Britannia Industries Ltd	1.755813	0.074

5.	Asian Paints Ltd.	1.501119	0.0435
6.	Reliance Industries Ltd.	1.930551	0.095
7.	Bajaj Finserv Ltd.	2.78333	0.1974
8.	Kotak Mahindra Bank	1.333699	0.0234
9.	Titan Company Ltd	1.976331	0.1005
10.	HDFC Bank Ltd.	1.138948	0
Total weight			1.00
Port folio Return			2.6
Portfolio Risk			54.68

Source: Compiled by the author

An optimistic investor assigned more weight to Bajaj Finance Ltd. According to optimistic investor, 31.34% of the total fund is to be allocated for security of Bajaj Finance Ltd since the mean monthly return of this security is the highest (3.74%). As mean return of HDFC bank is the lowest among ten securities, for that reason, optimistic investor would not allocate fund to HDFC bank. After getting weights of individual securities, portfolio return and risk have been calculated using equations (4) and (5). An optimistic investor will earn monthly portfolio return 2.6% and his portfolio variance will be 54.68%..

On the other hand, pessimistic investor will prefer lowest variance securities. Pessimistic investor is more concerned about the risk of securities. They are not willing to take risk. They prefer lower return for lower level of risk. They will assign more weight to the lowest variance security. Using equation no-(2), weights of different securities are determined. Table 4 shows the pessimistic investor's weight to individual securities. Pessimistic investors will assign more weight (14.43%) to Hindustan Unilever Ltd since it has lowest standard deviation of returns (4.94%) and least weight (5.96%) to Bajaj Finance Ltd. Pessimistic investors will earn monthly portfolio return 1.82% for portfolio variance 23.25 %.

Table 4: Pessimistic investor's weight to different stock.

Sl. no	Name of the company	Standard deviation(%)	Weight
1.	Hindustan Unilever Ltd..	4.942696	0.1443
2.	Bajaj Finance Ltd	11.96069	0.0596
3.	Nestle India Ltd.	6.059773	0.1177
4.	Britannia Industries Ltd	6.852693	0.1041

5.	Asian Paints Ltd.	5.916528	0.1206
6.	Reliance Industries Ltd.	8.055307	0.0886
7.	Bajaj Finserv Ltd.	11.85073	0.0602
8.	Kotak Mahindra Bank	6.349743	0.1123
9.	Titan Company Ltd	9.534287	0.0748
10.	HDFC Bank Ltd.	6.061848	0.1178
Total weight			1
Port folio Return			1.82
Portfolio Risk			23.25

Source: Compiled by the author

A common investor is not concerned with high return or risk. He expects a moderate return with a moderate level of risk. He invests his fund haphazardly or in unplanned way. Generally a common investor assigns equal weight to each of the security. Here ten securities are considered for construction of portfolio. So weight of each security will be 0.10 and his expected portfolio return and variance will be 1.92% and 29.19 % respectively (Using eqn. (4) and eqn. (5)). Table 5 shows the assignment of weight by a common investor.

Table 5: Common Investor's weight to different stock.

Sl. no	Name of the company	Weight
1.	Hindustan Unilever Ltd..	0.10
2.	Bajaj Finance Ltd	0.10
3.	Nestle India Ltd.	0.10
4.	Britannia Industries Ltd	0.10
5.	Asian Paints Ltd.	0.10
6.	Reliance Industries Ltd.	0.10
7.	Bajaj Finserv Ltd.	0.10
8.	Kotak Mahindra Bank	0.10
9.	Titan Company Ltd	0.10
10.	HDFC Bank Ltd.	0.10
Total weight		1

Port folio Return	1.97
Portfolio Risk	29.19

Source: Compiled by the author

Optimum allocation to different assets as per mean-variance model of Markowitz

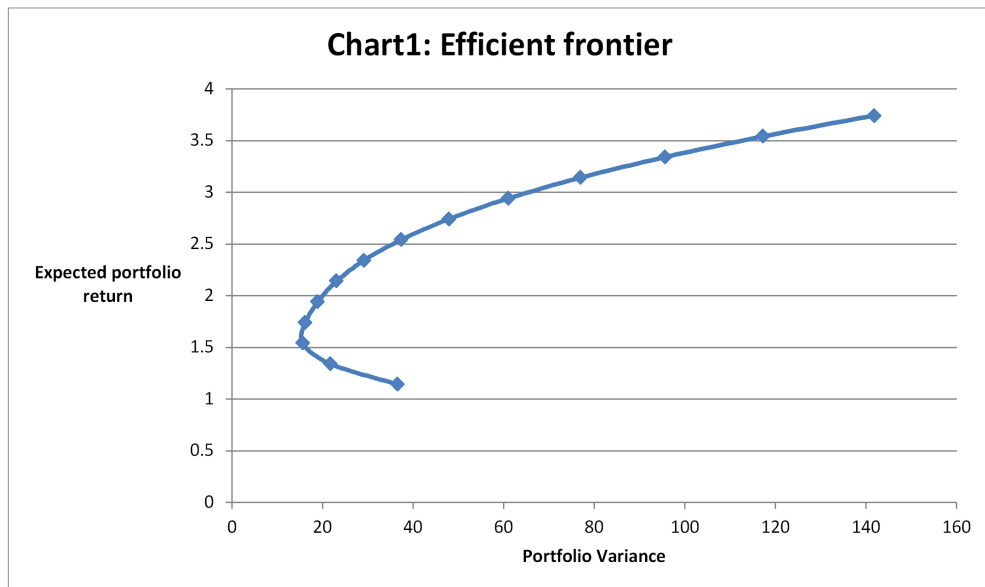
After considering optimistic, pessimistic and common investor's portfolio construction, Markowitz optimum portfolio construction has been considered here. Construction of optimum portfolio may be formed in two alternative ways:- either minimisation of portfolio variance subject to a given level of portfolio return or maximisation of return subject to a given level of risk. Here former alternative has been considered. For each return level, there is a optimum solution. Generally if return level increases, then portfolio variance increases. Here optimum solution is determined on the basis of minimum portfolio variance. The minimum monthly return level is 1.14% and the maximum monthly return level is 3.75 %. Here optimum solution is determined using LINGO 8.0 software for each return level starting from return level 1.14. In each step, return level is increased by 0.20.

Table 6: Portfolio variance under different return levels as per Markowitz mean-variance framework.

SI No.	Expected monthly portfolio return (%)	Portfolio Variance (%)
1.	1.14	36.63
2.	1.34	21.72
3.	1.54	15.66
4.	1.74	16.22
5.	1.94	18.95
6.	2.14	23.11
7.	2.34	29.11
8.	2.54	37.35
9.	2.74	47.92
10.	2.94	61.01
11.	3.14	76.94
12.	3.34	95.71
13.	3.54	117.32
14.	3.74	141.78

Source: Compiled by the author

Efficient frontier is shown In Chart 1, It is a locus of combination of portfolio risk and expected portfolio return



At return level 1.54%, portfolio variance is minimum, optimum portfolio is determined at return level 1.54% and on that return level, portfolio variance is minimum. Optimum allocation as per Markowitz mean-variance model to different stock at return level 1.54% is presented in table 7.

Table 7: Optimum allocation as per Markowitz mean-variance model.

Sl. No.	Name of the company	Weights
1.	Hindustan Unilever Ltd..	0.3867
2.	Bajaj Finance Ltd	0
3.	Nestle India Ltd.	.1424
4.	Britannia Industries Ltd	0
5.	Asian Paints Ltd.	.1478
6.	Reliance Industries Ltd.	0
7.	Bajaj Finserv Ltd.	0
8.	Kotak Mahindra Bank	0
9.	Titan Company Ltd	0
10.	HDFC Bank Ltd.	.3231

Total weight	1	76.94
Port folio Return	1.54%	95.71
Portfolio Risk	15.66	117.32

Source: Compiled by the author

Table 3 shows that optimistic investors will generate monthly portfolio return of 2.6% for portfolio variance level 54.68%. On the other hand, pessimistic investor's monthly portfolio return and variance will be 1.82% and 23.25 respectively (as depicted in table 4). Common investor lies in between them. Common investor will earn monthly portfolio return 1.97% and portfolio variance will be 29.19% for common investor. But if the investor follows mean-variance model of portfolio optimisation, then portfolio variance is minimum at the monthly return level of 1.54%. At that return level, portfolio variance is minimum (15.66%). Portfolio return and variance under different situations are given in table 8.

Table 8: Expected monthly portfolio return and portfolio variance of optimistic, pessimistic, common investor and Markowitz mean –variance Model.

	Expected monthly Portfolio Return (%)	Expected portfolio Variance (%)
Optimistic Investor	2.6	54.68
Pressimistic Investor	1.82	23.25
Common Investor	1.97	29.19
Optimum Portfolio	1.54	15.66

Source: Compiled by the author

To check the closeness between optimum allocations as per risk propensity of investors and optimum allocation as per mean –variance model using Euclidean distance method. It is shown in table 9

Table 9: Euclidean distance.

	Description	Euclidean Distance
1.	Distance between optimist's allocation and optimum portfolio	69.19
2.	Distance between pessimist's allocation and optimum portfolio	13.46
3.	Distance between common investor's allocation and optimum portfolio	23.99

Source: Compiled by the author

From the above table, it is clear that allocation based on Markowitz mean-variance model provides better results and allocation based on pessimistic investor's views is more closure to the optimum portfolio.

IMPLICATIONS OF THE STUDY

From the analysis, it is clear that an optimistic investor assigns maximum weight to the security whose mean return is higher than other security and assigns least weight to the security whose mean return is lowest. If the investor follows this approach, his return as well as risk will increase. On the other hand, a pessimistic investor wants to avoid risk, he will assign maximum weight to the security whose variance is lower than other security. As a result, it will reduce the return and risk level of the investor. A common investor lies in between optimistic and pessimistic investor. He is interested in a moderate level (average level) of return and risk. portfolio variance as per mean-variance model is lower than portfolio variances that are computed based on risk propensity of optimistic, pessimistic and common investors. So optimum allocations as

per Markowitz mean –variance model provides lower portfolio variance at lower level of return. Allocation based on pessimistic investor's view is more closure to the solutions that is generated by applying Markowitz mean-variance model. So this study will help the present and potential investors in deciding optimum allocation of their funds to different assets or forming portfolio based on their risk taking capacity.

LIMITATIONS AND FUTURE SCOPE OF THE STUDY

In this study, an attempt has been taken to show how investors allocate their fund according to their risk propensity. But risk propensity and risk perception depend on so many factors. In this study these factors are not taken into consideration. So there is a scope of analysing the impact of different factors on the risk perception and risk propensity of the investors.

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PERCEIVED ORGANIZATIONAL SUPPORT, PSYCHOLOGICAL EMPOWERMENT, AND JOB PERFORMANCE: MEDIATING ROLE OF ORGANIZATIONAL JUSTICE

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ABSTRACT

The study tries to explore the relationship between perceived organizational support and psychological empowerment with job performance. Further, it has also examined the mediating effect of organizational justice in the study. Sample for the study was collected from educationist working in higher educational institutions. Total 325 sample was used to study the relationship among study variables. Analysis of the study was done using IBM SPSS and AMOS software version 22. The findings of the study suggest that except one construct (i.e. meaning) of psychological empowerment rest all (i.e. competence, self-determination and impact) have significant influence on job performance. Whereas perceived organizational support is found related with job performance. The mediating effect of organizational justice is found between POS and JP whereas it partially mediates between PE and JP. The study is unique which tries to understand the relationship of study variables in context of higher educational institutions in India.

Keywords: *Psychological Empowerment, Perceived Organizational Support, Job Performance, organizational Justice, India*

INTRODUCTION

Empowerment helps not only employees but also the organization. Various researches are done in the area of empowerment. It was fascinating to know the significance of empowerment in a diverse context. It has enriched the existing literature adding various perspectives of empowerment. With the passage of time age of psychological empowerment has come (Amor, Xanthopoulou, Calvo, & Vázquez, 2021). Psychological empowerment is to have an excellent experience that employees have out of their satisfaction and motivation. Various studies have been done on psychological empowerment and job performance. It was verified in multiple types of research whether psychological empowerment is associated with job performance. Organizations started putting a lot of effort into having such an environment to improve the employees' performance (Sun, 2016; Li, et al. 2018; Malik, Sarwar, & Orr, 2021). In some

studies, psychological empowerment does not consistently help to have job performance (Liden, Wayne, & Sparrowe, 2000). It is necessary to understand in which context this phenomenon is not working and failed to increase employees' job performance. Psychological empowerment is used as a strategy in organizations. It gives a competitive edge to an organization (Kumar, Gupta, and Mishra, 2020; Gupta, Mishra, & Kumar, 2021). It brings flexibility in the process, which is useful for innovative behaviors in an organization. People's performance in an organization is greatly aligned with HR practices and how psychological empowerment of people is done (Olcer & Florescu, 2015).

Attaining and retaining skillful/competitive employees in an organization have become the need of the hour. Competent individuals are the most precious things which an organization has. It is an important strategy to achieve the organizational outcome as well. Acquiring skillful people is an arduous task and, if performed appropriately, will help in making an organization great. There is a lack of skilled people, and their competition has increased. It has become a severe concern in an organization to retain the people. The various strategy has been adopted to retain skilled employees in organizations. Employers are using powerful branding techniques to attract qualified employees for them. Employer and their role for organizational support enhance the motivation of employees. Employees always reciprocate in support of the employer if they are provided a favorable environment (Arasanmi & Krishna, 2019). Blau, 1964 has argued that social exchange theory helps in reciprocating perceived organizational support. "The social exchange involves reinforcement and contingent reciprocal

connections among performers in interdependent contexts". It is further argued that "Social exchange may involve a personal investment of resources, efforts, identity, attachment and commitment for some benefits". Previous studies have explained that employees perceiving organizational values contribute towards organizational success. The theory of social exchange applies to retaining employees as well. Employers' values are essential for achieving a positive attitude of employees towards organizations (Shah, Khattak, Zolin, & Shah, 2019). It is found that employees' perception of perceived organizational support determines the level of job performance done in an organization. Social exchange theory is essential for employer branding and helps attain the employees' job performance and positive attitude towards organizations. It is found that committed employees stay in organizations for a long and contribute to an organization's success. It can be developed through appropriate employer strategy using social exchange theory as a tool (Arasanmi & Krishna, 2019).

Organizational justice guides an organization towards fair practices and a rational approach. Perceived organizational support and psychological empowerment (PE) are essential to enhancing job performance. POS and PE are found suitable for job performance, but it is found in the study that in the case of PE, organizational justice (OJ) partially mediates the relationship. While in the case of POS, it was found that OJ fully mediates the relationship. It is important to note that it may be actual or factual in the case of POS. Therefore, the certainty of job performance cannot be ensured. That is why OJ fully mediates the relationship. PE is developing trust in people that organizations have faith in them, which is

reflected from the study results that OJ partially mediates the relationship. “The concept of justice is considered to be a social construct. What is perceived as justice is dependent on what the majority of a group consider it to be”. Therefore, organizational justice is defined “as individuals’ opinion of what is fair in the organization”. The organizational justice practices will help develop a positive mindset of employees, which is of utmost importance to sustain and achieve the organizational goals (Ajala, 2017).

LITERATURE REVIEW

Psychological Empowerment and Job Performance

Psychological empowerment is found to be an essential thing that helps motivate individuals in organizations. It is found in some of the previous studies that if employees in organizations are empowered, they have the ability to make decisions. Such practices will help the organizations achieve success, and the organization will perform effectively in the future. Various studies have highlighted that psychological empowerment has a significant relationship with job performance in the organization. (Suryani, 2019, Shah, Khattak, Zolin, & Shah, 2019; Iqbal, Ahmad, Nasim, & Khan, 2020; Kooij, De Lange, & Voorde, 2022; Helmy, Adawiyah, & Banani, 2019). It is found that empowerment reflects positive feelings, trust, commitment, and satisfaction. Chiang & Jang, (2008). It is evident empowered people feel happy and proud of their jobs. They feel more energetic and confident about their work.

H1a: Meaning is associated with job performance

H1b: Competence is associated with job performance

H1c: Self-determination is associated with job performance

H1d: Impact is associated with job performance

Perceived organizational support (POS) and job performance

Perceived organizational support is considered as organizational values, cares for people and their well-being. It is the perception of people in an organization that reflects organizational concern, support, and appreciation to employees. Most of the studies have reflected that Perceived organizational support is closely related to employees’ job performance in the organization. Therefore, it is hoped that POS will improve people’s performance in firms. Rockstuhl, et al. 2020; Saadeh, & Suifan, 2019; Jehanzeb, 2020; Akgunduz, Alkan, & Gök, 2018; Shah, & Asad, 2018; Chen, & Eyoun, 2021). Perceived Organizational Support is important for employees. It shows the level of commitment employees have in the organization. According to Organizational Support Theory (OST) “when the organization values the involvement of employees, belief of perceived organizational support is developed which help organizations to enhance employee retention”.

H2: Perceived organizational support is closely related to job performance.

Organizational Justice as a Mediator

Organizational justice is about perceiving fair practices by employers to all employees in the organization. Organizational justice comprises; distributive justice, procedural justice, and interactional justice. It is about the equitable distribution of organizational resources. The processes to achieve the desired

outcomes are fair across the organization and interpersonal aspects of the organization (Chang & Smithikrai, 2010). It is found in previous research that the practices of justice in any organization change people's perceptions. It is a critical practice that must be ensured at every step in any organization. Some of the research highlights that organizational justice improves people's job performance (Malhotra, Sahadev, &

Sharom, 2020; Onn, Yunus, Yusof, Moorthy, & Na, 2018; Perreira, Berta, & Herbert, 2018). It is found that organizational justice mediates the relationship between PE & JP and POS and JP.

H3: Organisational Justice mediates the relationship between PE and JP.

H4: Organisational justice mediates the relationship between POS and JP.

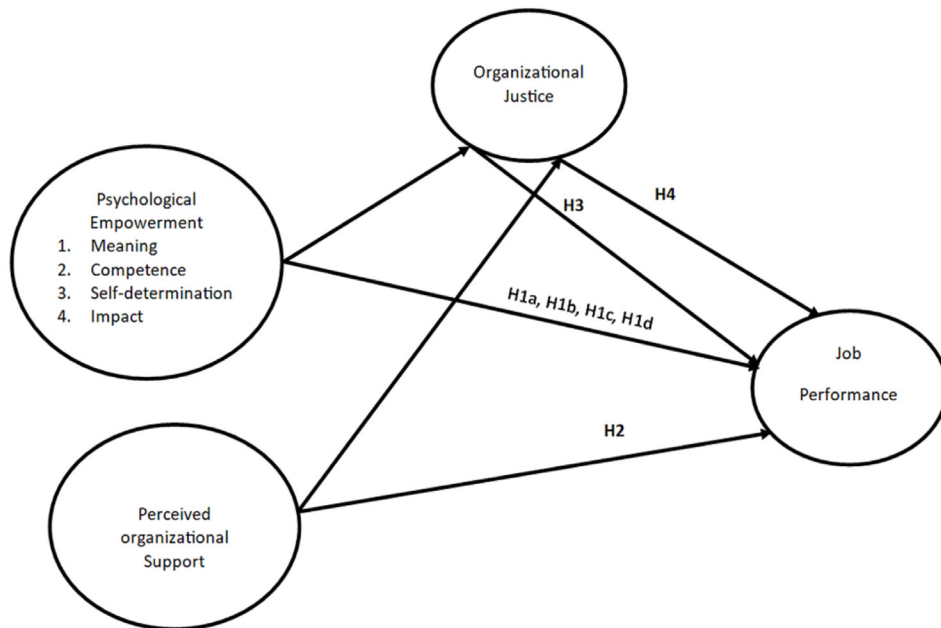


Figure 1: Hypothetical Model

(Source: Researchers own)

RESEARCH METHODS

It is evident from the given model of the study that the association among variables is validated. It also tries to understand the direction of study variables. The current study comprises of four constructs, namely, psychological empowerment (PE), perceived organizational support (POS), Organizational justice (OJ), and job performance

(JP). This study tries to explore various research objectives to validate the relationship among variable. The objectives of the study are as follows: first, to examine the relationship between various empowerment constructs (i.e., meaning, competence, self-determination, and impact) and job performance. Second, to validate the relationship between perceived organizational

support (POS) and job performance. Third, to study the effect of organizational justice (OJ) as a mediator between POS and JP and PE and JP. A well-structured questionnaire was adapted for study purpose. The questionnaire comprises of 29 statements. Perceived organisational support comprise of five statements. Organizational justice comprises of seven statements. Psychological empowerment comprises of eleven statements. And job performance comprises of six statements.

The reliability of variables was tested using these items and found that variables fulfill the reliability criteria (i.e., $\alpha=0.813$) (Nunnally, 1970). Confirmatory factor analysis was done using AMOS software version 22 and found that variables satisfy the path analysis criteria. The hypothesized model in the study was also

tested using AMOS Software. The sample of the study was collected from higher educational institutions based in the state of Chhattisgarh, India. Faculties teaching various courses such as B.Com, B.Tech and B.Sc, etc., are selected as a sample for this study. The sample for this study includes both male and female employees of different age groups. The data was collected from higher educational institutions through an online Google form (online). The questionnaire was sent to more than 953 faculties in various educational institutions. Total 398 responses were received which only 325 responses were found suitable for the purpose of this study. The response rate was 41% only. To see the mediating effect of organizational justice, the researcher has applied PROCESS macro by Andrew F. Hayes through SPSS(Hayes, 2012).

Table 1: Demographic description of respondents (N=325).

Age	Groups	Frequency	Percentage
	25-35	155	48
	36-45	90	28
	46-55	55	17
	Above 55	25	7
Gender	Male	161	49
	Female	164	51
Job categories	Assistant Professor	187	58
	Associate Professor	121	37
	Professor	17	5
Education	PG	62	19
	MPhil	53	16
	Ph.D	210	65
Experience	0-5	109	33
	05-10	142	44
	More than 10	74	23

Source: Researcher's Own

The above table comprises the data of demographic characteristics of the respondents. It is evident from the above table 1 where age of the respondents is categorized into four categories. These are 22-35, 36-45, 46-55, and above 55 years of age. These age categories are 48, 28, 17, and 7. The gender of the respondents is categorized as male and female only. Male comprises of 49 and female 51 percent respectively. Respondents are categorized into three job categories; Assistant professor, associate professor, and professor. The percentage of these categories are 58, 37, and 5, respectively. The educational background was categorized into three as PG, M.Phil. and Ph.D. This composition is 19, 16, and 65 percent, respectively. The respondents' experience was categorized into three that are 0-5 years, 05-10 years, and more than 10 years. The percentage of these categories is 33, 44, and 23, respectively.

MEASURES

Perceived organizational support. It is assessed using five items given by Rhoades et al. (2001), having a Cronbach alpha value of 0.87; CR=0.901 and AVE=0.657. All measures are found suitable

for this study. The mean, standard deviation, factor loadings, and standardized regression weight of all the statements used for this study are also mentioned in table No.2. Likert five scale has been used where "1=strongly disagree; 5= strongly agree".

Organizational Justice. It is assessed using five items given by Parker et al., (1997), having a Cronbach alpha value of 0.821; CR=0.920 and AVE=0.626. All measures are found suitable for this study. The mean, standard deviation, factor loadings, and standardized regression weight of all the statements used for this study are also mentioned in table No.2. Likert five scale has been used where "1=strongly disagree; 5= strongly agree".

Psychological Empowerment. It is assessed using 11 items given by Spreitzer (1995), having a Cronbach alpha value of 0.806; CR=0.901 and AVE=0.632. All measures are found suitable for this study. The mean, standard deviation, factor loadings, and standardized regression weight of all the statements used for this study are also mentioned in table No.2. Likert five scale has been used where "1=strongly disagree; 5= strongly agree".

Table 2: Reliability of measurement items.

Variable	Measurement Items	Mean	Std. deviation	Factor Loading	SRW	Alpha	CR	AVE
Perceived organizational support Rhoades et al. (2001)	POS1	4.11	0.645	0.716	0.716	0.877	0.901	0.657
	POS2	4.01	0.602	0.895	0.895			
	POS3	4.09	0.619	0.787	0.782			
	POS4	4.18	0.526	0.845	0.816			
	POS5	3.98	0.701	0.789	0.727			

Organizational Justice Parker et al., 1997)	OJ1	3.89	0.670	0.763	0.754	0.821	0.920	0.626
	OJ2	4.17	0.608	0.725	0.746			
	OJ3	3.51	0.628	0.851	0.893			
	OJ4	3.88	0.616	0.842	0.872			
	OJ5	3.24	0.616	0.858	0.832			
	OJ6	4.44	0.646	0.865	0.829			
	OJ1	3.89	0.670	0.763	0.754			
Psychological empowerment was adopted from Spreitzer (1995).								
Meaning	PE1	4.17	0.540	0.880	0.802	0.812	0.913	0.643
	PE2	4.02	0.504	0.748	0.780			
	PE3	4.32	0.516	0.863	0.833			
Competence	PE4	4.76	0.695	0.725	0.785	0.765	0.832	0.557
	PE5	4.05	0.650	0.849	0.802			
	PE6	4.26	0.646	0.876	0.810			
Self-determination	PE7	4.73	0.607	0.859	0.821	0.746	0.870	0.661
	PE8	4.10	0.619	0.854	0.833			
Impact	PE9	4.23	0.615	0.738	0.733	0.710	0.903	0.715
	PE10	4.26	0.642	0.765	0.736			
	PE11	4.09	0.684	0.725	0.749			
Job Performance by Ang et al. (2003) and Kim et al. (2009)	JP1	4.16	0.643	0.810	0.891	0.790	0.919	0.705
	JP2	4.29	0.653	0.748	0.767			
	JP3	4.56	0.623	0.719	0.709			
	JP4	4.26	0.696	0.740	0.703			
	JP5	4.09	0.629	0.710	0.711			
	JP6	4.38	0.670	0.891	0.831			

Source: Researcher's Own

Job Performance. It is examined using six items given by Ang et al. (2003) and Kim et al. (2009), having a Cronbach alpha value of 0.790; CR=0.919 and AVE=0.705. All measures are found suitable for this study. The mean, standard deviation, factor loadings, and standardized regression weight of all the statements used for this study are also mentioned in table No.2. Likert five scale has been used where "1=strongly disagree; 5= strongly agree".

Table 3: Correlation Analysis among the variables.

Variables	Mean	Std. Dev.	POS	OJ	PE	JP
Perceived organizational support (POS)	4.20	0.86	1			
Organizational Justice (OJ)	4.29	0.73	0.707**	1		
Psychological Empowerment (PE)	3.19	0.81	0.062	0.302*	1	
Job Performance (JP)	3.55	0.93	0.031*	0.258**	0.760**	1

Source: Researcher's Own

Correlation values of all constructs are exhibited in the above table 4. It depicted the value of r “(coefficient of correlation)” of these constructs. The results confirm the relationship between perceived organizational support and organizational justice (0.707**), psychological empowerment and job performance (0.760**), organizational justice and job performance (0.258**), perceived organizational support and job performance (0.031*).

Table 4: Model fit Indices.

CMIN/df	3.354
CFI	0.910
GFI	0.903
TLI	0.901
IF	0.896
RMS	0.068
CLOSE	0.286

Source: Researcher's Own

The CFA method primarily concludes how specific factor in the model represents the data. That can be examined with the help of model fit indices. If model fits are found to be good, the model gets validated. the SEM model was validated and have a good fit where, CMIN/df = 3.354 (Kline ,1998), GFI = 0.903, (Mac Callum & Hing,1997), CFI=0.910 (Hu and Bentler ,1999), TLI = 0.901 (Hooper et al.,2008), RMSEA = 0.068 (Stinger ,1990 and Mac Callum et al.,1996), PCLOSE= 0.286. it is evident from the result of the SEM model that all paths are found significant. Which is statistically validated. The significant value (p value) is found less than 0.05.

Table 5: Regression Analysis Table.

Construct/Variable	B	se	t	sig	Hypothesis
Meaning –Job Performance (R2=0.002)	0.029	0.031	0.615	0.066	(H1a) Not supported
Competence - Job Performance (R2=0.327)	1.024	0.024	20.248	.000	(H1b) Supported
Self-determination- Job Performance (R2=0.723)	0.916	0.015	69.479	.000	(H1c) Supported
Impact –Job Performance (R2=0.611)	0.649	0.013	53.954	.000	(H1d) Supported
Perceived organizational support- Job Performance (R2=0.526)	0.441	0.010	21.672	.000	(H2) Supported

Source: Researcher's Own

First, from the above table, it is evident that one aspect of psychological empowerment, i.e., meaning has an insignificant effect on job performance (JP). Here, b (0.029), t (0.615) and $p > 0.05$. Therefore, (H1a) is not supported. Second, the result shows that one of the psychological empowerment, i.e., competence has a significant effect on job performance (JP). Where b (1.024), t (20.2485), and $p < 0.05$. Therefore, the hypothesis (H1b) is accepted. Third, from the result of the study it is explicitly clear that one aspect of psychological empowerment, i.e., self-determination has a significant effect on job performance (JP). Where b (0.916), t (69.479), and $p < 0.05$. Therefore, the hypothesis (H1c) is accepted. Fourth, the result of the study clearly depicts that, one aspect of psychological empowerment, i.e., the impact has a significant effect on job performance (JP). Where b (0.649), t (53.954), and $p < 0.05$. Therefore, the hypothesis (H1d) is accepted. Fifth, the result of the study suggests that, perceived organizational support has a significant effect on job performance (JP). Where b (0.441), t (21.672), and $p < 0.05$. Therefore, the hypothesis (H2) is accepted.

Table 6: Results of mediation through PROCESS macro-Analysis.

					95% confidence interval	Mediation
Bootstrapping	Direct effect	Indirect	boots	LLCI	ULCI	
PE →OJ→JP	0.9328	0.2371	0.0011	0.1224	0.3685	(H3) Partial Mediation
POS →OJ→JP	0.3575	0.5179	0.0590	0.3752	0.6075	(H4) Full Mediation

Source: Research Output

Note: i) (N=325)

ii) “LLCI = lower-level confidence interval; ULCI = upper-level confidence interval”

iii) “*significant at the 0.05 level; ** significance at the 0.01 level; ***P # 0.005”.

It is evident from the mediation analysis that organizational justice has a partial mediating effect between psychological Empowerment (PE) and job performance. Moreover, the mid values are not found zero (LLCI-ULCI) as it is evident in the above table. Which clearly depicts a relationship i.e. indirect. It is evident from the data that the indirect impact is less as compared to direct one, as visible in the above table results. Therefore, it can be said that a significant direct and indirect effect is found in the current study. Here, it can be concluded that a partial mediation exists in the current study. Therefore, hypothesis three was accepted.

It is evident from the mediation analysis that organizational justice has a full mediation effect between perceived organizational support (POS) and job performance (JP). Moreover, the mid value is not found zero (LLCI-ULCI) as it is evident in the above table. Which exhibits an indirect effect. It is evident from the data that the indirect effect is more in comparison to the direct effects, as visible in the above table. Therefore, we found a significant indirect impact and an immediate impact on the study. Here we can conclude that complete mediation is there in the study. Therefore, hypothesis four was accepted.

DISCUSSION

It is evident from the study result that psychological empowerment has a significant effect on job

performance. It was found that one of the constructs of psychological empowerment, i.e., meaning has an insignificant effect on job performance. It is because the meaning for one individual is different from other individuals. People’s perceptions about organizations, values, culture and management support vary. This may be one of the reasons meaning does not have a significant effect on job performance in the study. The other construct, “competence,” significantly relates to job performance. If people in an organization are capable of doing their jobs effectively, their performance will be a great one. So here, it can be said that job performance is closely related to the competence of the employees. That is why it is essential to maintain the competence level of people in an organization. That’s what the current study suggests too. Self-determination is found very crucial for the employees. If they seem determined, their performance goes up. The result of the study suggests the same and found that employees’ self-determination is the deriving factor for improving job performance. Further, this study reveals that the construct “Impact” significantly affects job performance. Here it is to be noted that impact is beneficial for successful endeavors. If employees are concerned about their impact on organizations, performance improves significantly. And it is evident from the result of the study as well. The results of the survey are very much aligned with the previous researches (Sun, 2016; Ölçer, & Florescu, 2015; Chiang, & Hsieh, 2012; Tetik, 2016; Ahmed, & Malik, 2019; Kundu, Kumar, & Gahlawat, 2019; Arefin, Alam, Islam, & Rahaman, 2019; Malik, Sarwar, & Orr, 2021). It is essential to know the significance of perceived organizational support on job performance. In today’s time, people in

an organization are driven by various factors. These factors are greatly influencing the behavior of people. It is found that if people perceive that organizational support is given to them, their performance improves. Job performance results from various factors, but the perception of people in an organization plays a crucial role in it. The result of the study suggests the same. Here perceived organizational support has a significant effect on job performance. Many studies have found similar results. Perception changes the thought process, and it changes people's behavior, which gets reflected in the performance of the people in an organization. (Arasanmi, & Krishna, 2019; Jano, Satardien, & Mahembe, 2019; Talukder, Vickers, & Khan, 2018; Tang, Yu, Cooke, & Chen, 2017). The perceived organizational support becomes instrumental for organizational justice. If an organization practices the fundamental concept of justice, it helps in achieving great job performances. This study has explored the mediating effect of organizational justice between PE & JP and POS & JP.

Justice is the most remarkable aspect that must be practiced in every organization, irrespective of its size and brand. It is considered one of the most significant values of organizations. The study results have indicated that OJ has a partial mediating effect between PE & JP. But it has a full mediating effect between POS and JP. Various studies have highlighted the influence of OJ on job performance (Abekah-Nkrumah, & Atinga, 2013; Mahajan, & Benson, 2013; Misra, Rana, & Dixit, 2012; Topbaş, et. al., 2019; Durairatnam, Chong, & Jusoh, 2019; Khaola, & Rambe, 2020). Therefore, it can be said that psychological empowerment, perceived organizational support, and job performance is closely related. It is also

important to note that organizational justice is crucial for improving the job performance of people in an organization,

IMPLICATION

People empowerment is a pivotal aspect of an organization. It can be achieved by properly implementing HRM policies in an organization. Most organizations face various challenges to have quality people in their organizations who take up challenges and bring the organization to the desired level. HRM in organizations is using psychological empowerment as a tool to bring changes in people's behavior towards the organization. It is to be noted that an empowered individual brings many changes to the organization, which is essential for its success and sustainability. The result of the current study suggests that psychological empowerment has a significant effect on job performance. Practitioners in organizations need to focus on the empowerment of people to utilize employees' potential in an organization to the fullest. It is also evident from the study result that perceived organizational support plays an essential role in enhancing the employee's performance. If found that they have been treated fairly, people in the organization, and if stability is there, they have a positive opinion towards the organization. It is to be noted that practitioners in the organization must ensure that POS is the must to succeed in business endeavors. The POS must be provided to the people in an organization across the hierarchy. It becomes more useful if the employer ensures organizational justice. The result of the study suggests that OJ has a partial and complete mediating effect between PE & JP and POS & JP. It is recommended to the researchers and

academicians to explore this concept across various industries and verify the relationship. Therefore, it could be generalized to a great extent. This study is helpful for both researchers and practitioners. Researchers can extend this study to other areas to validate the relationship. At the same time, the practitioners can implement the concept of psychological empowerment in their HR practices and POS and ensure the OJ in the organization achieves the desired job performance.

CONCLUSION, LIMITATION, AND SCOPE FOR FUTURE RESEARCH

This research paper explores the effect of psychological empowerment and perceived organizational support on job performance. It is found that many studies have been done in organizations with this regard. But in higher educational institutions, this type of relationship is not done and verified. It is unique in nature because educationist orientation and their behavior towards such variables are entirely different from any other sector. It is believed that educationists behave more maturely than any other employee. This study is novel in knowing the faculty's responses to similar variables. It was interesting to note that psychological Empowerment and perceived organizational support have the same results as it is found in other sectors. It was also

surprising to note that organizational justice can influence the behavior of educationists similar to other sectors' employees. The conclusion which can be drawn from the study's result is that these variables are behaving similarly in the case of higher educational institutions as it behaves in other types of organizations. The influence of "meaning" a construct of psychological empowerment is less than other constructs of PE. It is found that OJ partially mediates between PE & JB, whereas it fully mediates in the case of POS and JP. This study has added new dimensions to the existing literature that the study variables are significant relations on other sectors.

Though, this paper has made a significant contribution to the existing literature. But this study has specific limitations too. The sample was taken from the academicians working in the higher education sector in India confined to the state of Chhattisgarh only. This research can be extended to other parts of the country also. Similar data can be taken from the different sectors, and results can be compared. Another important variable may mediate the relationship between POS & JP and PE & JB. The variables can be employee engagement, organizational commitment, emotional intelligence, etc. It may be possible that both quantitative and qualitative methods can be added in future research. Finally, a similar study can be done in other sectors also.

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PREDICTIVE POWER OF PARAMETERS INFLUENCING BORROWING BY MSMES

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ABSTRACT

Small businesses are the lifeline for sustaining the economy of any nation with their significant contribution in GDP and employment generation. The most comprehensive definition of small business in India has been given by the Ministry of MSMEs with effect from July, 2020 which classifies MSMEs on the basis of investment as well as turnover. While the importance of MSME sector for the economy is irrefutable, the sector is not free from problems. A major inhibition to the growth of the sector is the “access to finance”. It has been attempted to find out what are some variables that influence borrowing experience of MSME borrowers. Borrowing experience related data were collected from 750 MSMEs across different districts of Assam with the help of a schedule. Ordinal regression has been attempted to develop models to predict contribution of various demographic and non-demographic variables to difficulty faced by the MSME borrowers in obtaining loan from banks. Factors found to be significant predictors in identifying various dimensions of problems faced while borrowing from banks by MSMEs include inter alia registration status,

age of owner, type of scheme availed, location, age of the business, etc. Many newly setup start-up MSMEs can hardly produce any rosy track record as a pre-condition for institutional credit accommodation to prove their credit worthiness; to reduce the risk of lending by banks and to contain occurrence of NPAs.

Keywords: *MSME, Micro, Small and Medium Enterprises, Small Enterprises, Bank Credit, Entrepreneurial credit*

INTRODUCTION

Micro, Small and Medium Enterprises (Small industries, SMEs, etc.) have been categorised in a number of ways over the world, such as type (micro, small or medium), activity (manufacturing or service) or ownership (proprietorship, partnership or company). In India, Micro; Small and Medium Enterprises Development (MSMED) Act was passed in 2006 to define and address the sector for the first time. While the earlier prevailing definition for the sector focused on investment limit and type of industry, it was revised by the Ministry of MSMEs with effect from July, 2020 as follows:

Table 1: Composite Criteria: Investment in Plant & Machinery/equipment and Annual Turnover.

Classification	Micro	Small	Medium
Manufacturing Enterprises and Enterprises rendering Services	Investment in Plant and Machinery or Equipment: Not more than ₹1 crores and Annual Turnover; not more than ₹ 5 crores	Investment in Plant and Machinery or Equipment: Not more than ₹10 crores and Annual Turnover; not more than ₹50 crores	Investment in Plant and Machinery or Equipment: Not more than ₹50 crores and Annual Turnover; not more than ₹ 250 crores

Source: Ministry of MSME, July 2020

This classification of MSMEs is primarily applicable for manufacturing entity but a new form of categorisation is now overdue for enterprises in service sector, information technology sector and start up enterprises. This would encourage technology-based new enterprises.

While the importance of MSME sector for the economy is irrefutable, the sector is encircled with challenges. A major inhibition to the growth of the sector is the “access to finance”. Small scale entrepreneurs face many issues in availing loan from formal sources, which inter alia include documentation, time gap, guarantee requirements, collateral which force them to resort to alternate sources for credit (Singh & Singh, 2014). This was concurred by Singh and Wasdani (2016) who found that banks in India took on an average one and-a-half times longer than NBFCs in processing loan requests for existing MSMEs. Difficulty with collateral security or guarantee demanded by bank, procedural complications, lack of knowledge about available schemes are also some problems reported by the same study. Yifu et. al. (2006); Naidu and Chand (2012) observed that SMEs encountered more difficulty in providing collateral security requirements and guarantors compared to larger counterparts. Some factors identified to be major threat to small firms in getting access to finance were lack of collateral security, insecure environment, lack of experience and lack of financial assets (Reddy, 2007; Narteh, 2013). Irwin and Scott (2010) indicated in their study in Great Britain that factors like education had little role to play in prediction of difficulties faced by small entrepreneurs, rather factors like ethnicity had a greater role. However, at the same time banks in Europe were not proactively pursuing small business as potential borrowers (Prince, Rae and Cini, 2013; Goswami, 2014). This is mostly because small businesses are perceived to be greater investment risks (Taylor and Bradley, 1994). Nkundabanyanga et al. (2014) stated that most influencing factors behind access to finance by small businesses were type of business, turnover, interest rates, literacy levels, etc. Another hindering factor was the lack of operational flexibility in case of formal sources of finance (Sobia, 2014).

While at the regional level, studies conducted in various districts in the state of Assam, regarded as the gateway to North Eastern India, found that majority of small businesses faced problems while borrowing from banks, and preferred alternate sources of credit (Sharma, 2014; Bohra, 2017). The study considers the quality of predictive parameters while evaluating the borrowing experience of MSMEs at a regional level in the state of Assam.

METHODOLOGY AND QUALITY OF PREDICTIVE PARAMETERS

It has been attempted to find out what are some variables that influence borrowing experience of MSME borrowers. Borrowing experience related data were collected from 750 MSMEs across different districts of Assam in India with the help of a schedule. Sample MSMEs were selected using random sampling technique from the list of registered MSMEs provided by District Industries Centre. The difficulties experienced by MSMEs in borrowing from banks have been measured using eight categorizations, namely: Application, Documentation, Staff support, Terms and policies, Sanction process, Attitude, Support Service, and Post sanction (Reddy, 2007; IFC report, 2016; Kihimbo et al. 2012). The variables selected for measuring effect towards borrowing experience based on literature review are: Gender (Coad and Tamvada, 2011); Age of owner (Alamelu and Bhaskaran, 2009); Type of unit (Bigsten, 2003); Location of business (Yitayal, 2004); Experience of business (in years) (Alamelu and Bhaskaran, 2009); Registration status (whether registered with DIC or not) (Alamelu and Bhaskaran, 2011; Singh and Wasdani, 2016); Amount of capital invested (Coad and Tamvada, 2011); Annual Income (Beck and Kunt, 2006); Amount of loan applied (IFC report, 2016; Singh and Wasdani, 2016; Yifu

et al., 2006).; and Type of scheme availed (PMEGP, PMMY, other scheme, no scheme) (Gandhi, 2015)

Ordinal regression has been attempted to develop models to predict contribution of various demographic and non-demographic variables to difficulty faced by the MSMEs borrowers in obtaining a loan from bank. The model will give an idea of how various demographic and non-demographic variables may have an effect on the overall borrowing experience. The parameter-wise borrowing experience of each borrower has been categorised into three groups (1=Disagree, 2= Neutral and 3 = Agree). All assumptions have been tested and verified before proceeding with the analysis. To test the presence of multicollinearity, VIF values of the factors were checked and a value of less than 5 has been considered as acceptable (Hair et al, 2005, Ringle et al., 2015).

ANALYSIS OF RESULTS AND INFERENCES

The results of the ordinal logistics regression are summarised below:

Model fitting information tells whether a Final Model is an improvement over Intercept only model (p value < 0.05 indicates that final model outperforms the null). Table 2 shows the results of Model Fitting Information.

Table 2: Results of Model Fitting Information.

Parameter	Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Application	Intercept Only	1113.888			
	Final	1018.339	95.548	15	.000

Documentation	Intercept Only	1489.156			
	Final	1404.263	84.893	27	.000
Staff support	Intercept Only	1293.528			
	Final	1251.396	42.132	26	.024
Sanction process	Intercept Only	1431.982			
	Final	1365.963	66.019	21	.000
Attitude	Intercept Only	1317.461			
	Final	1273.191	44.270	22	.003
Support service	Intercept Only	1549.353			
	Final	1423.667	125.686	25	.000
Post sanction	Intercept Only	1283.657			
	Final	1244.629	39.029	26	.048
Terms and policies	Intercept Only	1022.630			
	Final	969.968	52.661	18	.000

Link function: Logit.

Source: self-computed

Goodness of fit test has been done to check model fit (p value > 0.05 indicates a good fit).

Table 3: shows the result of Goodness of fit test.

Parameter		Chi-Square	Df	Sig.
Application	Pearson Deviance	702.981	689	.348
		768.359	689	.019
Documentation	Pearson Deviance	1405.466	1363	.207
		1364.344	1363	.485
Staff support	Pearson Deviance	1366.559	1354	.400
		1210.854	1354	.998
Sanction process	Pearson Deviance	1270.888	1251	.341
		1266.538	1251	.373
Attitude	Pearson Deviance	1165.645	1182	.627
		1148.255	1182	.754

Support service	Pearson Deviance	1349.246	1321	.288
		1365.148	1321	.194
Post sanction	Pearson Deviance	1421.279	1352	.093
		1209.208	1352	.998
Terms and policies	Pearson Deviance	933.528	884	.121
		828.915	884	.907

Link function: Logit.

Source: self-computed

Nagelkerke pseudo-R square can be used to determine proportion of the total variability explained by the model. Though there is no definite cut-off but a high r-squared value is desirable for a regression prediction. However, it is often argued that r-squared is a measure of variability rather than a measure of the fit of the model. A low r-squared with significant factors may still yield results if high precision results are not possible due to nature of data. Many researchers have argued that in case of data with scope for variations, there may be many other factors (e.g., a large sample size) that may result in these pseudo-R squared values (Smith & McKenna, 2013; Moksony, 1990). This is often encountered in social science research that relies on human perception. Considering the nature of data, a pseudo r squared value of at least 10% has been considered acceptable for the results (Falk & Miller, 1992; Cohen, 1998). Table 4 shows the pseudo-R-squared value by Nagelkerke.

Table 4: Pseudo R-Squares for each parameter.

Parameter	Nagelkerke
Application	.137
Documentation	.123
Staff support	.106
Sanction process	.136
Attitude	.127
Support service	.175
Post sanction	.131
Terms and policies	.103

To test the assumption of proportional odds assumption, tests of parallel lines have been conducted (p value > 0.05 indicates that the proportional odds assumption has not been violated). The results of test of parallel lines are shown in table 5.

Table 5: Results of Test of Parallel Lines.

Parameter	Model	-2 Log Likelihood	Chi-Square	Df	Sig.	
Application	Null Hypothesis	1018.339				
	General		1004.294	14.045	15	.522
Documentation	Null Hypothesis	1404.263				
	General		1374.914b	29.349c	27	.344
Staff support	Null Hypothesis	1251.396				
	General		1225.855	25.541	26	.489
Sanction process	Null Hypothesis	1365.963				
	General		1342.952	23.012	21	.343
Attitude	Null Hypothesis	1273.191				
	General		1250.225b	22.966c	22	.404
Support service	Null Hypothesis	1423.667				
	General		1401.346	22.321	25	.617
Post sanction	Null Hypothesis	1244.629				
	General		1219.790	24.839	26	.528
Terms and policies	Null Hypothesis	969.968				
	General		959.051	10.917	18	.898

Source: self-computed

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

The parameter estimates in table 6 helps in identification of critical variables. Table 6 to table 13 shows the critical variable identification for all the eight parameters of difficulty faced while obtaining a bank loans by borrowers. Only the significant results (p -value <0.05) have been demonstrated.

Table 6: Parameter Estimates for Difficulty with Application (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Application_Difficulty = 1]	-2.040	.000	0.130029
	[Application_Difficulty = 2]	.364	.347	1.439074
Location	[Scheme_Loan= PMEGP]	-.980	.000	0.375311
	[Scheme_Loan=PMMY]	.033	.883	1.033551
	[Scheme_Loan= Other Scheme]	-.983	.000	0.374187
	[Scheme_Loan= No scheme]	0 ^a	.	1
	[Business_Term=Up to 5 years]	.224	.451	1.251071
	[Business_Term= 6-10 years]	.779	.006	2.179292
	[Business_Term=11-15 years]	.574	.030	1.775354
	[Business_Term=16-20 years]	.157	.616	1.169996
	[Business_Term=21-25 years]	.513	.069	1.670295
	[Business_Term=Above 25 years]	0 ^a	.	1
	[Capital_investment= Upto 5 lakhs]	-.537	.009	0.584499
	[Capital_investment= 5,00,001 – 15 lakhs]	-.098	.603	0.906649
	[Capital_investment= More than 15 lakhs]	0 ^a	.	1
	[Unit_type= Micro]	-.509	.008	0.601096
[Unit_type= Small & Medium]	0 ^a	.	1	

Link function: Logit.

Source: self-computed

In case of loan application process, borrowers under PMEGP and “other schemes” are 0.37 times less likely to face difficulty compared to borrowers with “no scheme”. Businesses which are 6-10 years old are 2.18 times and businesses which are 11-15 years old are 1.78 times more likely to face difficulty with application compared to businesses which are more than 25 years old. MSMEs with capital investment of up to ₹ 5 lakhs are 0.58 times less likely to face difficulties with application for loan compared to those MSMEs who have capital investments of more than ₹ 15 lakhs. Micro MSME units are 0.6 times less likely to face problems with application procedure compared to small and medium MSMEs.

Table 7: Parameter Estimates for Difficulty with Documentation (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Documentation_Difficulty = 1]	-1.861	.001	0.155517
	[Documentation_Difficulty = 2]	-.747	.190	0.473786
Location	[Age_owner = Upto 30 years]	-.764	.023	0.465799
	[Age_owner= 31-40 years]	-.745	.006	0.474734
	[Age_owner= 41-50 years]	-.720	.008	0.486752
	[Age_owner= Above 50 years]	0 ^a	.	1
	[Unit_Registration= Yes]	-.626	.000	0.534726
	[Unit_Registration=No]	0 ^a	.	1
	[Unit_location= Urban]	-.629	.011	0.533125
	[Unit_location= Semi-urban]	-.651	.046	0.521524
	[Unit_location= Rural]	0 ^a	.	1
	[Loan_Applied_Amount= Upto 5 lakhs]	-.716	.037	0.488703
	[Loan_Applied_Amount= 500001-10 lakhs]	-.452	.164	0.636354
	[Loan_Applied_Amount=1000001-15 lakhs]	-.409	.254	0.664314
	[Loan_Applied_Amount=1500001-20 lakhs]	-.586	.089	0.556549
[Loan_Applied_Amount= More than 20 lakhs]	0 ^a	.	1	

Link function: Logit.

Source: self-computed

In terms of difficulty faced with documentation, borrowers (MSME owners/represents) less than 50 years of age are on an average 0.47 times less likely to face difficulties with borrowing compared to borrowers of more than 50 years of age. MSME units which are registered are 0.53 times less likely to face difficulties with documentation. MSME units located in urban and semi-urban areas are approximately 0.52 times less like to face difficulties with documentation when compared to MSMEs units from rural areas. MSME borrowers who applied for loan amounts of up to ₹ 5 lakhs are 0.49 times less likely to face difficulties with documentation compared to borrowers who applied for loan amounts of more than ₹ 20 lakhs.

Table 8: Parameter Estimates for Difficulty with Staff support (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Staff_Difficulty = 1]	-.176	.754	0.838618
	[Staff_Difficulty = 2]	2.303	.000	10.00415
Location	[Age_owner = Upto 30 years]	-.491	.151	0.612014
	[Age_owner= 31-40 years]	-.568	.043	0.566658
	[Age_owner= 41-50 years]	-.542	.051	0.581584
	[Age_owner= Above 50 years]	0 ^a	.	1
	[Scheme_Loan= PMEGP]	.638	.209	1.892692
	[Scheme_Loan=PMMY]	.707	.002	2.027898
	[Scheme_Loan= Other Scheme]	.114	.788	1.120752
	[Scheme_Loan= No scheme]	0 ^a	.	1
	[Business_Term=Up to 5 years]	.637	.051	1.8908
	[Business_Term= 6-10 years]	.414	.167	1.512857
	[Business_Term=11-15 years]	.305	.286	1.356625
	[Business_Term=16-20 years]	.574	.082	1.775354
	[Business_Term=21-25 years]	.060	.845	1.061837
	[Business_Term=Above 25 years]	0 ^a	.	1

Link function: Logit.

Source: self-computed

For the parameter staff support, borrowers within the age group of 31-50 years are 0.57 times less likely to face difficulties compared to borrowers more than 50 years old. Borrowers who opted for PMMY scheme were 2.03 times more likely to face difficulties with staff support compared to borrowers with no scheme. Businesses which were up to 5 years old were 1.9 times more likely to face difficulty with staff support in comparison to borrowers who were more than 50 years old.

Table 9: Parameter Estimates for Difficulty with Sanction process (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Sanction_Difficulty = 1]	-1.634	.002	0.195147
	[Sanction_Difficulty = 2]	.621	.240	1.860788

Location	[Age_owner = Upto 30 years]	-1.018	.002	0.361317
	[Age_owner= 31-40 years]	-.866	.001	0.420631
	[Age_owner= 41-50 years]	-.858	.001	0.424009
	[Age_owner= Above 50 years]	0 ^a	.	1
	[Capital_investment= Upto 5 lakhs]	-.535	.037	0.585669
	[Capital_investment= 5,00,001 – 15 lakhs]	-.148	.434	0.862431
	[Capital_investment= More than 15 lakhs]	0 ^a	.	1
	[Unit_Registration= Yes]	-.551	.000	0.576373
	[Unit_Registration=No]	0 ^a	.	1
	[Yearly_Income= Upto 5 lakhs]	-.794	.026	0.452033
	[Yearly_Income=500001-10 lakhs]	-.529	.080	0.589194
	[Yearly_Income=1000001-15 lakhs]	-.784	.019	0.456576
	[Yearly_Income=1500001-20 lakhs]	-.597	.058	0.550461
	[Yearly_Income= More than 20 lakhs]	0 ^a	.	1

Source: self-computed

For the sanction process, borrowers within 50 years of age were on an average 0.4 times less likely to face difficulty compared to those borrowers who were aged above 50 years. MSMEs which invested up to ₹ 5 lakhs in capital are 0.58 times less likely to face difficulties with sanctioning of loan compared to those MSMEs with capital investments of more than ₹. 15 lakhs. Registered MSME units were 0.57 times less likely to face difficulties with sanction process. MSMEs with yearly income of up to ₹ 5 lakhs and more than ₹10 lakhs but less than ₹ 15 lakhs were 0.45 times less likely to face difficulty with sanction process compared to those MSMEs which were earning more than ₹ 20 lakhs annually.

Table 10: Parameter Estimates for Difficulty with Attitude (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Attitude_Difficulty = 1]	-2.551	.000	0.078004
	[Attitude_Difficulty = 2]	-1.161	.043	0.313173

Location	[Scheme_Loan= PMEGP]	-.346	.046	0.707512
	[Scheme_Loan=PMMY]	.122	.616	1.129754
	[Scheme_Loan= Other Scheme]	-.564	.019	0.568929
	[Scheme_Loan= No scheme]	0 ^a	.	1
	[Loan_Applied_Amount= Upto 5 lakhs]	-.675	.029	0.509156
	[Loan_Applied_Amount= 500001-10 lakhs]	-.473	.147	0.62313
	[Loan_Applied_Amount=1000001-15 lakhs]	-.214	.565	0.807348
	[Loan_Applied_Amount=1500001-20 lakhs]	-.083	.825	0.920351
	[Loan_Applied_Amount= More than 20 lakhs]	0 ^a	.	1

Source: self-computed

In terms of difficulty with attitude, borrowers under PMEGP scheme were 0.7 times, and borrowers under other schemes (any other scheme than PMEGP and PMMY) were 0.57 times, less likely to face difficulties when compared to borrowers with no schemes. MSME borrowers who applied for loan amounts of up to ₹ 5 lakhs were 0.5 times less likely to face difficulties with attitude of banks compared to borrowers who applied for loan amounts of more than ₹ 20 lakhs.

Table 11: Parameter Estimates for Difficulty with Support service (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Support_Difficulty = 1]	-1.512	.007	0.220469
	[Support_Difficulty = 2]	-.315	.576	0.729789
Location	[Age_owner = Upto 30 years]	-.691	.041	0.501075
	[Age_owner= 31-40 years]	-.038	.889	0.962713
	[Age_owner= 41-50 years]	-.167	.538	0.8462
	[Age_owner= Above 50 years]	0 ^a	.	1
	[Yearly_Income= Upto 5 lakhs]	-.800	.031	0.449329
	[Yearly_Income=500001-10 lakhs]	-.294	.350	0.745276
	[Yearly_Income=1000001-15 lakhs]	-.026	.939	0.974335
	[Yearly_Income=1500001-20 lakhs]	-.228	.473	0.796124
	[Yearly_Income= More than 20 lakhs]	0 ^a	.	1
	[Unit_Registration= Yes]	-1.124	.013	0.324977
[Unit_Registration=No]	0 ^a	.	1	

Source: self-computed

Borrowers up to 30 years of age were 0.5 times less likely to face difficulties with support services from banks when compared to borrowers above 50 years of age. MSMEs with yearly income of up to ₹ 5 lakhs were 0.45 times less likely to face difficulty with support services compared to those MSMEs which were earning more than ₹ 20 lakhs annually. Registered MSMEs faced 0.32 times less difficulty with support services.

Table 12: Parameter Estimates for Difficulty with Post sanction (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Postsanction_Difficulty = 1]	.821	.188	2.272771
	[Postsanction_Difficulty = 2]	3.043	.000	20.96805
Location	[Yearly_Income= Upto 5 lakhs]	-.809	.033	0.445303
	[Yearly_Income=500001-10 lakhs]	-.609	.052	0.543894
	[Yearly_Income=1000001-15 lakhs]	-.542	.113	0.581584
	[Yearly_Income=1500001-20 lakhs]	-.633	.049	0.530996
	[Yearly_Income= More than 20 lakhs]	0 ^a	.	1
	[Gender_owner= Male]	.609	.004	1.838592
	[Gender_owner= Female]	0 ^a	.	1

Source: self-computed

In terms of experience with post sanction issues of loans, borrowers with yearly income of up to ₹ 10 lakhs and more than ₹10 lakhs but less than ₹ 20 lakhs were on an average 0.5 times less likely to face difficulties than borrowers earning more than ₹ 20 lakhs annually. Male borrowers were 1.8 times more like to face difficulty with post sanction related issues.

Table 13: Parameter Estimates for Difficulty with Terms and policies (Reference value = Agree).

		Estimate (β)	Sig.	Exp (β)
Threshold	[Terms_Difficulty = 1]	-2.710	.000	0.066537
	[Terms_Difficulty = 2]	.757	.112	2.131871

Location	[Unit_Registration= Yes]	-.695	.000	0.499074
	[Unit_Registration=No]	0 ^a	.	1
	[Loan_Applied_Amount= Upto 5 lakhs]	-.764	.039	0.465799
	[Loan_Applied_Amount= 500001-10 lakhs]	-.618	.079	0.539021
	[Loan_Applied_Amount=1000001-15 lakhs]	-.643	.098	0.525713
	[Loan_Applied_Amount=1500001-20 lakhs]	-.107	.773	0.898526
	[Loan_Applied_Amount= More than 20 lakhs]	0 ^a	.	1

Source: self-computed

Registered units faced 0.5 times less difficulty with terms and conditions of the loan/bank. MSME borrowers who applied for loan amounts of up to ₹ 5 lakhs were 0.46 times less likely to face difficulties with terms and conditions of banks compared to borrowers who applied for loan amounts of more than ₹ 20 lakhs.

The results of the analysis of selected parameters pose interesting results on the bank borrowing experience of MSME borrowers. In respect of application processing, micro and small category of MSME borrowers with some kind of scheme; and those who are considerably older face lesser difficulty in this regard. With regard to documentation, small and micro borrowers, young entrepreneurs, registered borrowers, urban resident borrowers face lesser difficulty. MSME borrowers who opt for PMMY scheme and proposal for a new business face comparatively more difficulty from the bank officials because they are considered to be located in greater credit risk zone. While on the other, borrowers without any scheme or borrowers under PMMY scheme encounter a negative attitude from the credit institutions. In respect of borrowing process, relatively aged and unregistered borrowers encounter more difficulty in getting credit facility and other related services. Male borrowers and those borrowers with large-sized loan proposals face post-sanction related scrutiny and clarifications. Unregistered borrowers and those borrowers applying for applying for bigger sized loan face more scrutiny with regard to post sanction related parameters with additional stipulation of terms and conditions. In order to ameliorate the hardships and challenges encountered by the MSME borrowers specially during the covid-19 induced pandemic, many steps were initiated by the government, but only a fraction of the entire challenges have been addressed. Loan moratorium was announced by the RBI on the insistence of Ministry of Finance, but commercial banks, lenders refuse to honour the directives fearing mounting NPAs; and the complicity involving the sector. Finance facility and credit accommodation for new ventures creation under Atmanirbhar Bharat has not been given considerable attention.

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PSYCHOLOGICAL CAPITAL AND OPTIMISM AS A PREDICTOR OF WORKPLACE HAPPINESS IN SERVICE-BASED INDUSTRIES IN INDIA

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ABSTRACT

Working in multinational corporations (MNCs), multicultural work environments present obstacles. In today's tumultuous workplace, it's more crucial than ever for businesses to ensure that their employees are happy and productive. This is because increasing production is dependent on employee contentment. The paper attempts to elucidate three critical factors that affect an organization's corporate culture. The three factors that form the crux of the argument are Psychological Capital, optimism, and workplace happiness. The study was conducted on 101 employees from the service Industry. Both employee psychological capital and optimism are significantly related to greater work happiness within and across time. PsyCap and Optimism are strongly correlated with work place happiness. An employee who has an optimistic mindset can see, understand, and adapt things better as they can understand that the new initiative might bring something positive or modified. Conclusions and implications were

discussed for the findings, and limitations were also discussed.

Keywords: *Optimism, Psychological capital, workplace happiness, motivation*

INTRODUCTION

In today's business environment, things are very competitive, and financial stability is not the only measure to sustain and have a competitive advantage. In response to this requirement, positive psychological capital and intellectual capital play a key role in an individual's career success. Psychological capital is a concept that relates to positive organizational behavior (POB) literature. Positive organizational behavior is defined as: 'the study and application of positively oriented human resource strengths and psychological resource capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace.' (Jensen S. M., 2006). Positive organizational behavior and PsyCap are embedded in the Positive Psychology movement

(Donaldson, 2010). The Positive Psychology movement emphasizes the concepts of excellence, thriving, happiness, strengths, virtues, excellence, thriving, happiness, flourishing, resilience, flow, and optimal functioning (Donaldson, 2010). (Cavus, 2015) Psychological capital plays a vital role in the corporate world; one can say that measuring standards for psychological capital can also help in improving work happiness and increase the levels of optimism.

LITERATURE REVIEW

Psychological Capital

(Luthans F., 2006) His studies mentioned that human capital had played a significant role in building and growing the market. One of the essential characteristics businesses are trying to find in a potential workforce is commitment and optimism. Through our research, we tried identifying the relationship between psychological capital and the employee-employer relationship, which is quite prevalent.

We also came across the importance of the leader-member exchange theory that encourages engagement between employers and employees and effective workforce management through extensive research. Therefore, worker commitment is a variable among LMX, task execution, and psychological capital. Thus, we can identify the results indicating the commitment level as an interceding variable. Originality is essential in the corporate world as it ensures and helps create unique and innovative ideas and techniques. (Dirzyte, 2009).

The study helped understand the role of psychological capital through a multi-dimensional approach by linking the common practices of the human resources department

of an organization. The study further elaborates on the several ways of management using positive psychological capital and the innovative capabilities of employees. Through the various studies surrounding the concept of psychological capital, one can identify several principles and proofs that validate a link between human resource management and innovation/creativity could provide a considerable amount of knowledge about the grey areas of management.

(Arménio Rego N. R., 2010) in their study also indicates that innovation and originality go hand in hand and are linked directly to positive psychological capital. Thus, talking further about how psychological capital plays a vital role in the corporate world, one can say that measuring psychological capital standards can also help improve work happiness and increase the levels of optimism.

(Ours, 2008) Their research concluded that motivation specialists have always argued that several developments are better when they come after long hauls. Several express measures will probably be better indicators in the shorter run. (Monkevicius, 2014) his study on the factors affecting the psychological capital also enlightens us about the factors affecting human resource management directly and indirectly and tells us the result of the same in the long run. Motivation, personality traits, and creativity play a crucial role in improving the efficiency of the employees in the workplace. This study further emphasizes several critical aspects of Psychological Capital.

(Huang, 2016) another study talks about the leader-member exchange theory and recognizes the challenges business people and entrepreneurs

meet. (Avey, 2010) Their analysis helps uncover the facts connected to the relationship between the entrepreneurs' positive psychological capital and their leadership approaches and styles. This study also helps us identify the new and evolving theories of positive psychological capital and put these theories into well-established practices.

(Fred Luthans, Steven M. Norman, Bruce J. Avolio, James B. Avey, 2008) in their studies also assist the employees in perceiving, creating, and utilizing the positive psychological capital of businesses to lead their organization to success and help the shareholders bear the fruits for their trust and financial support. (Luthans F., 2006) The studies also help analyze the existing industry trends on psychological capital (PsyCap) in scientific and corporate studies. The PsyCap model was created by F. Luthans and several other colleagues and supporting staff. The research provides some evidence on how the components of PsyCap affect employees independently.

The components of the model were self-efficacy, hope, optimism, resilience. These components have enabled the possibility of analyzing the psychological capital based on the impact on performance. (Shahryar Sorooshian, 2018) The concept of Psychological capital has evolved and become a recognized one (including efficiency, optimism, and hope). These factors have been the most recurring ones, and further help analyze the worker's attitude, behavior, and performance. (Fred Luthans, Psychological Capital Development: Toward a Micro-Intervention, May 2006) The study further provides the initial evidence that PsyCap is more likely to be a positive resource that can be used to enhance and improve the employee's

psychologically motivated well-being. The study indicates that well-being tends to display common effects on various aspects such as work happiness, job satisfaction, and other behavioral factors. There is a relationship between the Psychological Capital and the well-being of a worker over time and has been proved as the worker's potential to influence the well-being to understand the same effectively.

This kind of testing is to identify the various types of psychological capital and use the inferences to develop the worker's well-being further and develop the worker mentality in the field of administration. Overall, (Shukla, 2014) study has established that the evidence that has been accumulated from previous studies show that psychological capital, which consists of resilience, efficacy, optimism, and hope, has a relatively strong positive relationship with job satisfaction, attitude, performance, and organizational citizenship behaviors among employees.

(Seligman, Martin & Csikszentmihalyi, Mihaly, 2000) Their research had inferences that showed that one's positive traits and optimistic organizational promises help to improve quality of life and prevent the negative thought process that arises when life is unproductive and worthless. The primary reason is to position the mental capital research status in India. The article likewise features the hole in the region, which causes the specialists to distinguish regions for further investigation. As a field of study, positive psychology has started developing at a snail's pace in India.

Optimism

(Donald H., 2009) Past research shows that business visionaries are commonly high in

dispositional good faith - the inclination to expect positive results notwithstanding when such desires are not soundly legitimized. Discoveries of the present investigation exhibit a negative connection between business people's positive thinking and their new pursuits' execution (income and work development). (Seligman, 2002), in his research mentioned the importance of optimism, stating that hope causes better resistance to depression when something is not working fine and leads to better performance at work, particularly in jobs that are challenging in nature, and better physical health."

But beware of two pitfalls. You want to avoid being surrounded by sycophants who think optimism means not telling you the truth. And you don't want to mistake optimism for always being friendly, specifically when evaluating performance. You will still need to hold difficult conversations about performance with subordinates, holding them accountable.

Workplace Happiness

The study on work happiness primarily surrounds the relationship between psychological capital and optimism concerning work happiness. The study also focuses on the inter-relationship between casual and permanent employment concerning psychological well-being and job satisfaction. The study further focuses on its hypothesis wherein the authors concluded women generally take up simple employment options. In contrast, men are most likely to be more comfortable with permanent employment options. The authors also believe that an organization's work environment directly impacts employee morale. (Fisher, 2010) Some drivers of workplace happiness are:

Community, Enjoyment, Enrichment, Leadership, Relationships, Work-life Balance,

Variety in work, Equity, Engagement (Zetlin, 2013) Positivity and optimism go hand in hand. The need for both in the organization is pivotal for the organization's success. Several psychologists feel that optimism and flexibility result in a forward-looking corporate culture. These factors have proved to be highly valuable in increasing productivity. This optimism will further increase the level of confidence of the employees and, in turn, will motivate them to have a positive outlook towards their work and try and ensure that the employees have a positive work environment and workplace happiness. (Arménio Rego N. R., 2010) The study on work happiness primarily surrounds the relationship between psychological capital and optimism concerning work happiness. The study also focuses on the inter-relationship between casual employment and permanent employment concerning factors such as psychological well-being and level of job satisfaction. (Margaret H. Greenberg, 2006). Their survey proved that higher levels of values promoted much higher levels of work happiness. The study demonstrates its arguments by surveying 145 questionnaires collected by a government organization. The analysis was conducted using quadratic regression tests, and the surface analysis of polynomial regression tests was collected more at a micro-level. (Sousa, 2015) The various tests performed concluded that employees' productivity is directly proportional to happiness at the workplace or organization workplace. Thus, the authors reiterate that the challenge of maintaining a healthy and effective work environment is also dependent on the employees. The author tries to identify the impact of the relationship mentioned above

on the organization's productivity and how well they can use their resources to the best of their ability. This relationship, if not optimistic, may hinder the organizational objective of profit maximization. (Lynn R. Kalnbach, 1997) (Gupta, 2014) this research aimed to emphasize the role of job satisfaction towards motivating good connections between the two parties and endorses recommendations on how the said relationship can be achieved. (Baron, 2009) At long last, there might be extra PsyCap parts that should be added to the present four as more research is collected. By and by, even though this and other research is required, the build of PsyCap and the miniaturized scale mediation portrayed here to create as it appears in any event worth 'hatching' for what's to come. (Lindström, 1994) Their article proposes a positive way to deal with hierarchical conduct (OB). Even though the significance of positive emotions has been perceived during that time in the scholastic OB and mainstream writing, both administration researchers and professionals have taken an opposing point of view now, endeavoring to fix what's up with administrators and workers and focusing on shortcomings. Constructive authoritative conduct (POB) pursues the lead of late rising formative brain research, which is driven by hypothesis and research concentrating on individuals' qualities and mental capacities.

RESEARCH METHODS

The research paper comes under descriptive research design, as we have three different variables, i.e., Psychological capital, workplace happiness, and optimism, that might affect employees' job performance. The study population was 200

professionals working in various service industries. It consists of managerial and non-managerial employees of the service industry in Bangalore. The sample for this study was initially derived by randomly selecting 70 managerial and 130 non-managerial employees employed in various service industries. We could only receive 115 responses, after omitting the incomplete questionnaire, our sample size reached 101 employees.

Variables

Dependent variable: work happiness, psychological happiness

Independent variable: optimism

Hypothesis

H1: There is a positive relationship between workplace happiness, psychological capital, and optimism.

H2: Individual optimism has an impact on workplace happiness

Data Collection Methods

Primary source: Questionnaire The quantitative study is conducted on a broad group of respondents. The same sample size answered a well-structured questionnaire. An online questionnaire selected to collect data provides easy access to all the respondents in the most cost-effective manner.

For this research, the questionnaire was administered by email. The sample was circulated with the questionnaire through their work email. Face to face or telephone questionnaires were not considered as the sample size was very varied, and the timeline was limited.

There were three sections to the questionnaire. The first section checks the factors contributing to work happiness and how much employees believe positive work happiness contributes to employee job performance. The second

section asks respondents about their views on psychological capital and if they think that positive psychological capital is some factor to be considered when checking an employee's personality. Lastly, the third section of the questionnaire consists of questions about optimism; answering these questions will give us a clear understanding of how many

respondents have an optimistic approach towards life and believe that this kind of practice has helped them improve their job performance. (Luthans F., 2002)..

The data were analyzed through (SPSS) version 20. The authors of this study checked for missing values and removed the outliers which) that do not fit the trend shown by the remaining data

DATA INTERPRETATION AND DISCUSSION

Table 1: Descriptive Statistics.

Variable	N	Minimum	Maximum	Mean	Std. Deviation	α
WPH	101	2.6	6	4.9297	0.92	0.918
PsyCap	101	2.8	6	4.9713	86000	0.964
Opt	101	1	6	4.7901	5000	0.871

*WPH=Workplace Happiness, PsyCap: Psychological Capital, Opt: Optimism

The reliability test is done to find out the consistency of the questionnaire. It depicts whether the questionnaire used for data collection has been receiving consistent responses and whether the data received is valid for testing or not. Cronbach alpha coefficients should be greater than or equal to 0.70 to be regarded as reliable and acceptable. The Cronbach alpha reliability for the total Workplace happiness was ($\alpha = 0.918$). The one-factor model representing the called psychological capital had a Cronbach alpha reliability of ($\alpha = 0.964$), and the last model optimism had Cronbach alpha reliability of ($\alpha = 0.871$). The descriptive statistics showed psychological capital having the highest mean of 4.97 and SD .86 and can be interpreted as being the most important factor amongst the three variables

Pearson's Correlation

This test is used to measure the relationship between two variables. These variables have to be continuous. They don't need to have a dependent relationship of any kind. The coefficient value that is derived is symmetric. The variables might have either a negative or a positive relationship, which can vary in a degree from high to low, and also none at all.

Table 2: Inter-correlations among measures.

Variables		Workplace Happiness	Psychological Capital	Optimism
Workplace Happiness	Correlation	1	.827**	.715**
Psychological Capital	Correlation	.827**	1	.840**
Optimism	Correlation	.715**	.840**	1

As we can see in the above table, workplace happiness, psychological capital, and optimism. This result can reject the null hypothesis and accept a relationship between workplace happiness and psychological capital and optimism.

Regression Models

Linear Regression is used to model the relationship between the dependent and independent variables. When we set out to model the relationship between one independent and one dependent variable, the statistical tool used is simple linear regression. The predictor variable, the independent variable, explains the percentage of variance in the dependent variable. An ANOVA table is representative of the results of the null hypothesis. If R-square is zero, there is no linear relationship between the variables. If the significance level of the computed F statistic in the ANOVA table is less than 0.05, then the null hypothesis thus created is rejected, and the alternate hypothesis is accepted. The coefficient table displays the standardized Beta coefficient between the independent variable and the dependent variable

Table 3: Regression between work happiness and optimism.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1.	.715a	0.512	0.507	0.6472

Table 4: ANOVA Table between work happiness and optimism

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	43.483	1	43.483	103.812	.000b
1.	Residual	41.468	99	0.419		
	Total	84.951	100			

a. dependent variable: work happiness
predictors: (constant), optimism

Table 5: Regression Coefficients.

	Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1.	(Constant)	1.937	0.301			6.439	0
	Optimism	0.625	0.061	0.715		10.189	0

Statistical Inference:

Regression is merely the square of multiple correlations listed under r in the linear Regression table 5. It depicts the proportion of variance that accounts for work happiness (dependent variable) by optimism (independent variable). The R -value here is 0.715 (which describes multiple correlation coefficients), and the value of R square here is 0.512.

The ANOVA (Analysis of Variance) section in table 4 displays the F statistic of 103.812 and the observed significance level at 0.000. It's inferred that a linear relationship exists between the dependent variable work happiness and the independent variable optimism. The coefficients section in table 5 states the Beta coefficient amongst the variables work happiness and optimism. The standardized Beta coefficient is positive, and significant at 0 level (Beta = 0.715, $t = 10.189$, $p = 0.00$). Therefore, if there is an increase in optimism, there will be a rise in the value of work happiness. Due to the existence of only one predictor variable, the multiple R coefficients and the standardized beta coefficients' value are the same.

The relationship between the above variables proves that the psychological capital must be positive about maintaining an ideal workplace behavior that involves cooperation and coordination. Workplace happiness is necessary when looking at quick labor turnover as a satisfying workplace that directly influences employees' attitudes towards every situation. Organizations should not just perform these test cross-sectionals, but to achieve such factors' natural and extensive effect on employees, they should perform such tests longitudinally. So on a larger scale, they can understand the

implication of such factors on their employees, and it can help them motivate their employees in the right way.

DISCUSSION

Psychological capital has been the core construct of various studies on Positive psychology, optimism, positive organizational culture and has contributed immensely to varied sectors of health education, sports, manufacturing, and life in general (Luthans, F & Youssef-Morgan, C.,2017). The present study throws light on how the factors like psychological capital, work happiness, and optimism affect employees' attitudes and performance. The statistical tests prove that a relationship exists between work happiness, psychological capital and optimism. Further it is established that a linear relationship exists between the dependent variable work happiness and the independent variable optimism. Optimism is essential in creating a collaborative work environment that drives decision-making, citizenship behavior, and workplace happiness. The study suggests that organizations that concentrate on long-term returns should build optimistic leadership because the impact of a promising leader can create an encouraging and collaborative work environment. Optimism is connected with a sentimental and behavioral dimension that influences trust among people. Therefore, optimism helps in developing trust among leaders and team members. Work happiness primarily surrounds the relationship between psychological capital and optimism, influencing work happiness. Over the research, we can see that psychological capital directly connects with optimism; an employee who has an

optimistic mindset can understand and adapt things better to know that the new initiative would create a futuristic workplace. When an employee is given a challenging assignment, an optimistic employee would be able to take up the responsibility with enthusiasm looking at the learning curve it would provide, which relates to work happiness.

Collaborative work environment where team leaders give their team members a lead role in tasks or making them part of the discussion process makes employees feel valued. Employees should be able to experience personal and professional growth in the organization. Organization that creates an environment where employees' individual goals are encouraged alongside company goals builds a healthy but competitive spirit. Psychological capital plays a vital role in the corporate world; one can say that measuring standards for psychological capital can also help in improving work happiness and increase the levels of optimism.

We cannot conclude if these three factors (psychological capital, work happiness, and optimism) can operate individually or not but we can conclude that each element has a significant role in the employees' minds. Organizations should frequently analyze such

factors within every employee's mind to know if they are motivating their employees in the right direction.

CONCLUSION

In recent times, with the industry gaining its pace and experts know the value of human resources, researchers are trying to understand the factors that motivate employees to perform better. After extensive research, we realized how psychological capital, work happiness, and optimism directly influence employees' attitudes. In this research, we tried to understand the inter-correlation between the aforementioned variables and their impact on employees.

Employees who operate in a creative atmosphere are more likely to have increased confidence in their abilities and optimism about their chances of achieving their objectives. As a result, employees with more resources have a better chance of succeeding. Further studies can explore

Furthermore, employees with a high PsyCap are less likely to exhibit uncivilized behavior with their coworkers and experience lesser stress and anxiety (Avey et al., 2011) and emotional weariness (Bitmiş and Ergeneli, 2015), which creates work happiness and fulfillment.

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THE IMPACT OF USER-GENERATED CONTENT ON PURCHASING INTENTION OF TRAVEL PRODUCT

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ABSTRACT

The upsurge of social media has permitted one and all to share their purchase and consuming experiences, including the usage of travel products. The study's objective is to observe if a user's attitude toward UGC and UGC impacts their purchase intention for a travel product. Questionnaires were distributed online to 233 people over 18 who had seen at least one travel product review. The data were analyzed using factor analysis and regressions. The data show that attitudes and perceived credibility impact purchase intentions, but user activities do not only influence purchase intentions for travel products. UGC often contains information and suggestions, and strategies for using travel products. Findings from this study are projected to extend the literature on UGC and give assistances to marketers and online tour operators.

Keywords: *User Generated Content (UGC); attitudes: perceived credibility: purchase intentions*

INTRODUCTION

Today, India may is regarded as one of the South Asian region's fastest-growing tourism markets. The buying process is split into many

stages, beginning with issue identification and concluding with post-purchase behaviour. Potential consumers can more readily analyze new travel items with such a plethora of information. According to (Johnson, 2004), weblogs are more trustworthy than other offline resources like newspapers, radio, and television news.

User-Generated Content (UGC), also known as electronic word-of-mouth, i.e., eWOM, works in the same way as traditional Word of Mouth but is delivered through online media platforms. Individuals who have utilized a tourism product or service can provide comments and share their experiences with others; this is referred to as word-of-mouth marketing (WOM). Electronic word-of-mouth (e-WOM) is defined as the positive and negative comments made by potential, existing, or ex-customers about a product or company available to many people over the internet (Hennig-Thurau, 2004). The travel industry includes determining, purchasing, and availing since consumers need to understand the product on the web before purchasing it (Hagander, A., & Rúnarsdóttir, M, 2016). UGC is defined as a variety of self-created material uploaded to the internet by non-media

and significantly influences one's consumption (Bahtar, 2016). Content is generally shared on social media platforms such as Facebook, YouTube, Twitter, and Instagram. Consumers use video for product demos and product assessments while making purchase decisions. It is expected that 64% of consumers would be

more likely to buy a product after watching a video about it (Milhinhos, 2015). According to Bahtar (2016) UGC can impact Instagram users to purchase products promoted and reviewed on Instagram and will content provided by unknown users impact one's decision to purchase.

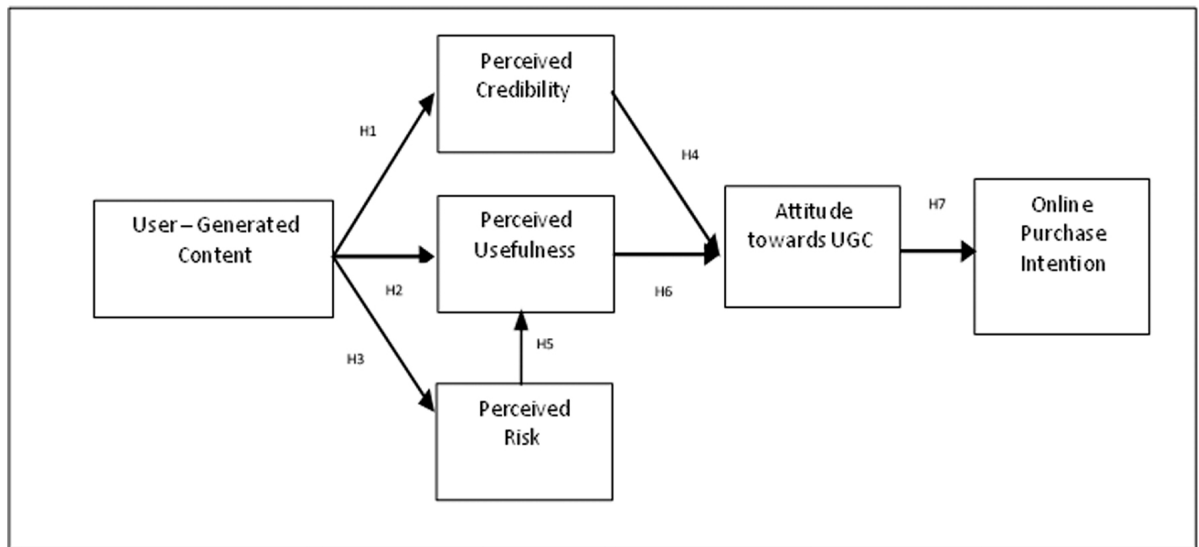


Figure 1: UGC Impact on Online Purchase Intention

Source: Bahtar, A. Z. (2016)

This research aims to determine if attitude, credibility perception, and user-generated content (UGC) impact interest in purchasing travel products. The digital travel consumer actively seeks unbiased information, thoughts, and comments on the internet, such as user reviews on review columns or videos.

RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

User Generated Content (UGC)

Consumers have more power over their purchase habits simply because they can exchange knowledge rapidly and, in most cases, globally. In today's technologically advanced world, social networking sites have become a channel through

which merchants may expand their marketing campaigns to a broader variety of clients (Paquette, 2013). The audience determines the relevance of a video it is attempting to reach and the actual quality and substance - it is not an appropriate medium for all objectives (Milhinhos, 2015). Online customer reviews, also known as electronic word-of-mouth (e-WOM), are described as "good and negative

remarks made by potential, existing, or past consumers about a product or company that are available to many people over the internet” (Hennig-Thurau, 2004)

Consumer-submitted videos are referred to as UGC, and recorded videos shared with other users are e-WOM. In the study done by (Wang C, 2015), most consumers on social media appreciate social benefits, which implies that they hope to discuss their views or aid others (WOM intention). User-Generated Content (UGC) is media content created by members of the public who have product experience and non-professionals paid by the company. It is typically distributed online (Daugherty, 2008). One can access user-created content, including marketers who can track how customers react to their products. They may assess and measure their items by viewing the opinions of vloggers (or consumers). User-generated content serves as a complementary aid for online sellers, assisting customers in identifying items that best meet their needs (Chen, 2008). ‘WOM intention’ is also considered as one of the factors that can reflect the influence of UGC, and the interestingness of UGC could attract more consumers to disseminate and discuss the information. (Hung, 2011) Non-media professionals are creators who generate UGC because conventional media may (and frequently do) utilize their knowledge and resources to create UGC as consumers whom the firm does not pay is defined by the Interactive (Christodoulides, 2012).

In contrast, Producer-Generated Content (PGC) generally incorporates the employment of celebrities to communicate the benefits of a product (Verhellen, 2013). Consumers’

perceptions of UGC have shifted, and they now regard UGC as more credible (trustworthy) than PGC. User-generated content (UGC) is information and material created and submitted by internet users. According to (Shulga, 2018), organizations should actively participate in value co-creation, especially user-generated advertising co-creation with their brand communities and committed customer base, to enhance their brand, boost brand loyalty and future behavioural intentions. In today’s world, top institutions (and their brands) are increasingly relying on User Generated Content campaigns to ensure the effectiveness of their campaigns to market their products. With the help of user-generated content, organizations are now turning towards general customers with unique ideas and sharing them with the world (Sikder, 2019)

H1: User-generated content positively affects the users’ attitudes

Purchase Intention

‘Intention’ is described as “a person’s motivation in connection to his awareness of planning to put effort to behave.” Purchase intent indicates a deliberate plan to buy a specific brand Individual and environmental variables are two significant elements that impact garment buying decisions (Wang, C, 2015). Online consumer reviews, particularly expert ones, may significantly impact the interest in one’s purchases (Yang, 2005). The travellers were shown to be influenced by user-generated content during the stages of the decision-making process. (Flahive E, 2017)

Purchase intent has frequently been used to discover niche markets and possibilities

for product innovation. Although there is no assurance that customers will act on their intentions, there are several elements that we can affect or at least have awareness about that can influence the predictive accuracy of consumer intentions (Ferraz, 2017).

H2: User Generated Content has a positive impact on purchase intention

Attitude

Attitude is an essential concept in research on advertising and marketing because it is considered stable and tends to predict consumer behaviour (Mitchell, 1981). An attitude is an expression of feeling and reflects feelings of being happy/ unhappy, likes/ dislikes, and agree/disagreeing with someone's views/ an object. Perloff (Wang, 2015) defines attitude as learning and evaluating an object/person/ place or problem that affects the thinking and action.

(Fishbein, 2013) define attitude as a combination of cognition/ trust and affection/ evaluation. In contrast, affection and cognitive components are directly concerned with feelings, beliefs, and product evaluation by a consumer. At the same time, an interest in behaviour is related to the final actions of consumers (Daugherty, 2008). Also, it is being identified that 'attitudes can shape perceptions, influence judgment and predict behaviour' (Pumpuang, 2007).

UGC is an alternative medium to display information on the product page instead of only text and product information (Milhinhos, 2015). Fox suggested that UGC positively affects optimistic attitudes toward and intention in selfie-marketing on visual content-sharing apps (Fox, 2018). Attitudes also play an essential role in predicting travel consumer behaviour. This study will discuss the attitude consumers

have regarding using UGC before it affects their brand trust perception and their intention to purchase the brand. (Wang, 2015). Consumer attitudes can change rapidly depending on the behaviour, motivation, demographics, reference group, satisfaction or dissatisfaction, purchase scenario, sales environment, product innovation, and technological progress (Bahtar, 2016).

H3: Attitudes have a positive impact on purchase intentions.

Perceived Credibility

The term credibility is used to evaluate the quality of information (Bae, 2011). Credibility is described as "the recipient of information's attitude about a source of communication" The perception of many viewers on the quality of communicators or informants is credibility (Wang, C, 2015).

Quality refers to the usefulness of the information in aiding the decision-maker and evaluating his/her actual utility associated with an alternative product (Keller, 1987). Quality consists of two dimensions: usefulness of content and completeness of the information (Yang, 2005).

Usefulness refers to the relevance and accuracy of the information's timeliness. A consumer's perceptions of the usefulness of information are strongly related to the information's quality (Keller, 1987). Meanwhile, completeness refers to the information perceived to be comprehensive and complete (Liu, 2000).

Expertise and trust are two components of credibility. According to (Ohanian, 1990), credibility is a good feature of communicators who may influence the recipient's support for specific information and are eager to offer truthful information to other users (Bahtar, 2016).

A person is more likely to accept advice from credible communicators (trustworthy) if they share their personal beliefs and views (Wang, C, 2015). According to (Hung, 2011), audience communication and engagement with other users results in solid interpersonal trust. A vlogger with a high level of credibility will become famous on YouTube.

A vlogger's popularity will induce more people to watch, post comments, rank, like,

and subscribe to the channel (Mir, 2013). Travel consumers are becoming wiser as they place a higher focus on the credibility of the content producer. This demonstrates that a messenger or advertising does not have to be renowned to be credible. The travel product advertising should be suitable for the messenger, and the messenger should be knowledgeable about the same product. **H4:** Perceived credibility has a positive effect on purchase intentions.

CONCEPTUAL MODEL

Usually, consumers would search for product information prior to purchasing from UGC, and the researchers have restructured the framework by adding variables; Attitude towards UGC, Perceived credibility, and Purchase Intention.

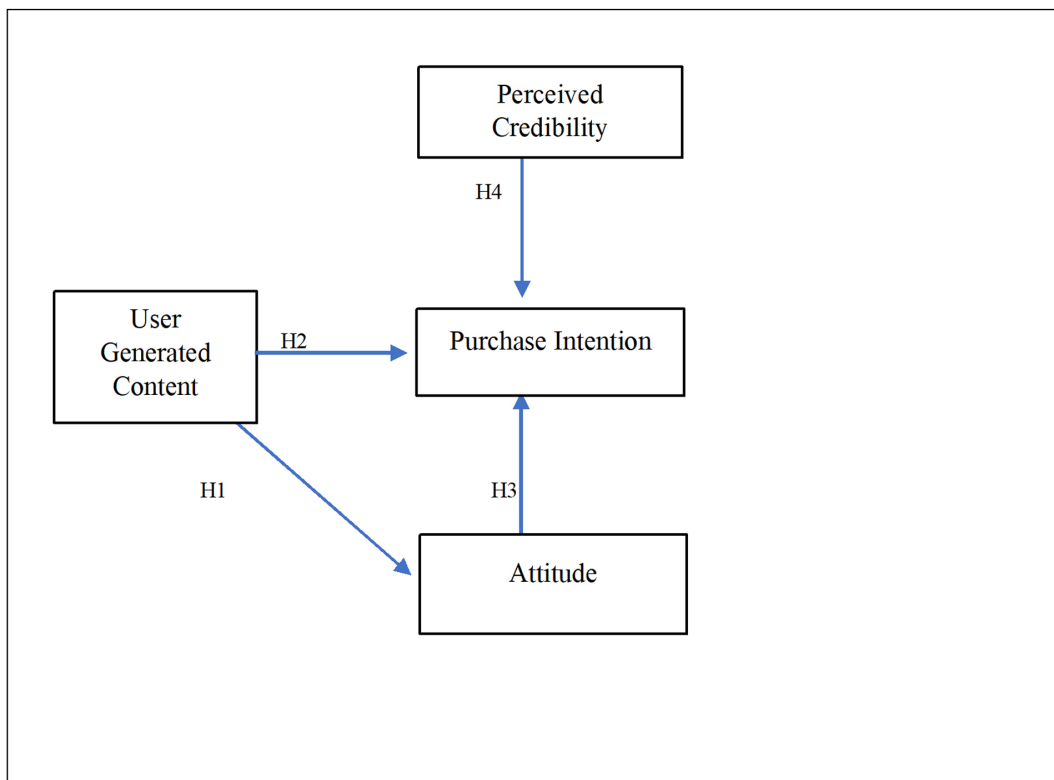


Figure 1: Conceptual Model

METHODOLOGY

The questionnaire was distributed online using a Google form. Responses from 233 samples were gathered from respondents from Delhi/NCR who were at least 18 years old and had viewed at least one travel product on social media and are also users. This study adopts the quantitative strategy because it primarily involves a deductive approach (i.e., testing of theory) and examines the connection among variables using statistical procedures to live information numerically through unbiased approaches. This research project aims to determine via quantitative techniques how consumers in the Delhi/NCR are impacted by user-generated content in their purchase intention. This study contains empirical testing of variables and their relationships. The research context is about consumers using UGC when purchasing travel products. Also, due to a lack of a list or a database to select respondents from, the researcher had to consider a probability method such as random sampling. Respondents were invited to fill out a questionnaire with statements regarding their views about UGC, perceived credibility, activity on UGC, and intention to purchase travel products. The data were analyzed using factor analysis and multiple regressions. Statements are accompanied by a multi-choice response on a Likert scale with a score ranging from 1 (strongly disagree) to 5 (strongly agree) to measure UGC, attitude, perceived credibility, and purchase intention.

RESULTS AND DISCUSSION

The questionnaires were distributed online through a Google form. The respondents' profiles are reflected in Table 1; the majorities of the respondents were female, aged between 18-30 years old, and are undergraduates. The responses to the four variables tested can be seen in the table below:

Table 1: Data Validity.

		<i>N</i>	<i>%</i>
<i>Cases</i>	<i>Valid</i>	233	100
	<i>Excluded a</i>	0	0
	<i>Total</i>	233	100.0

In Table 1: A survey of 233 respondents' were gathered through structured questions where 233 are found valid who had seen at least one travel product review.

Table 2: Respondents' Profiles.

Gender			Age (years old)				Occupation				
male	female	Total	18 to 24	25 to 34	35 to 44	Total	student	employed	unemployed	self-employed	Total

Frequency	119	114	233	88	144	1	233	66	124	34	9	233
Valid Percent	51.1	48.9	100	37.8	61.8	0.4	100	28.3	53.2	14.6	3.9	100

The respondents' profiles are reflected in Table 2; the majorities of the respondents were male with 51.1%, 61.8% are aged between 25-34 years old, and 52% are employed. Rest are depicted in the table.

Table 3: Respondents' usage of social media.

Day Basis	Frequency	Valid Percent	Hourly Basis	Frequency	Valid Percent
Not everyday	7	3	less than 30 minutes	24	10.3
Once a day	11	4.7	30-60 minutes	48	20.6
2-5 times a day	76	32.6	1-2 hours	60	25.8
5-10 times a day	56	24	2-3 hours	61	26.2
10+times a day	83	35.6	3+ hours	40	17.2
Total	233	100	Total	233	100

In Table 3: User in Delhi/NCR use social media and the largest group is the 10plus times in a day, representing 35.6%. The second largest is the 2 to 5 times in a day which is 32.6%. The least user is the not everyday user which is 3% and second goes to once a day which is 4.7%. It indicates that the largest group of the participants who spend time on social media is 2 to 3 hours and the lowest group of this table is that less than 30 minutes.

Table 4: Responses for "Perceived Credibility" Variable.

Constructs	Cronbach's alpha
User Generated Content (UGC)	0.802
Attitude	0.823
Perceived Credibility	0.879
Purchase Intentions	0.868

In table 4 all the construct is reliable as alpha coefficient ranges in value from 0 to 1 and the reliability of factors can be described. The higher the score, the greater the reliability of the scale generated .

Means and standard deviation analysis of construct

The output tables below represent the means and standard deviation analysis results. Based on the results below it can be observed that the means indicate an overall positive response to the variables of the study

Table 5: Responents towards UGC Usage.

	Mean	Std.Deviation	Mean Interpretation
I intend to buy the travel product recommended by UGC on social media	3.5021	0.94743	Agree
I will but the product recommended by UGC on social media soon	3.3777	1.04379	Neutral
It is very likely I will buy travel products reviewed by UGC on social media	3.5966	0.89558	Agree

Table 5 shows the lowest mean score is 3.37 which is how much they trigger to check the travel product on social media. And strongest mean for UGC is that people should reply on reviews or blogs to buy travel product which is 3.59. So according to the answer the respondents rely on user generated content. The second lowest mean is the 3.50 which presents user make them aware of the travel product. And they agree on the fact that the reviews and comment is helpful to decide.

Table 6: Respondent response towards Attitudes.

	Mean	Std.Deviation	Mean Interpretation
I have a positive attitude toward user-generated content	3.5064	0.93366	Agree
UGC comments or reviews can be trustworthy	3.412	0.93874	Agree
UGC comments or reviews can be reliable	3.5107	0.93362	Agree
Based on UGC shared, that travel product has a good reputaion in the industry	3.588	0.88192	Agree

In table 6 the lowest mean score, 3.412 is that the people who leave comment can be trustworthy, so it shows that the participants think people who comment always can be trustworthy; it could be fake. Respondents' attitudes show toward UGC on travel product and this is the highest mean score of attitude, 3.588.

Table 7: Respondent response towards Percieved Credibility.

	Mean	Std.Deviation	Mean Interpretation
UGC of travel product on social media is unbiased	3.4721	0.90036	Agree
UGC of travel product on social media is credible	3.3691	0.94289	Neutral

UGC of travel product on social media is reliable	3.4721	0.96505	Agree
UGC of travel product on social media tells the truth	3.5107	0.95191	Agree

In table 7 the highest mean score for Perceived Credibility is people think they should practice for purchase intention, 3.51. The lowest one is that 3.47 and they couldn't trust the credibility of UGC by the whole consideration. The respondents want to see the Perceived Credibility of the travel product and think it as dependable; the score is 3.47. And the highest mean is that the product quality of the brand is stable based on UGC and it is 3.5017.

Table 8: Respondents' Attitude on Purchase Intention.

	Mean	Std.Deviation	Mean Interpretation
UGC influences people for purchase intention.	3.4335	0.922	Agree
Others' shared UGC used to assist purchase intention	3.4893	0.85657	Agree
It is wise to use or refer to shared UGC for purchase decision	3.4335	0.89832	Agree
I have a favorable opinion to the use of UGC in purchase intention	3.3433	0.92971	Neutral

In table 8 the lowest mean score in the purchase intention, 3.4335 is that they refer review purchase intention and the second goes to to use or refer to shared UGC for purchase decision which is 3.34. The highest score is that 3.493, which is they should use UGC for purchase intention.

Table 9: Correlation between the constructs.

		UGC	Attitude	Perceived Credibility	Purchase Intention
UGC	Pearson Correlation	1	.207**	.183**	.142*
	Sig. (2-tailed)		0.001	0.005	0.03
	N	233	233	233	233
Attitude	Pearson Correlation	.207**	1	.667**	.549**
	Sig. (2-tailed)	0.001		0	0
	N	233	233	233	233

Perceived Credibility	Pearson Correlation	.183**	.667**	1	.851**
	Sig. (2-tailed)	0.005	0		0
	N	233	233	233	233
Purchase Intention	Pearson Correlation	.142**	.549**	.851**	1
	Sig. (2-tailed)	0.03	0	0	
	N	233	233	233	233

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

In table 9.: the Pearson correlation has a positive relationship between each other. The attitude and UGC r value is .207, which means it has weak positive relationship. Correlation between perceived credibility and attitude has $r=.667$. And the last one between has the strong positive between .851, perceived credibility and purchase intention.

Relationship between UGC and attitudes (Hypothesis 1)

Table 10: Model Summary of UGC and Attitudes.

					Change Statistics			
R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
.207a	0.043	0.039	0.68802	0.043	10.34	1	231	0.001

a.Predictors: (Constant), UGC

b.Dependent Variable: attitude

Based on table 5.7.1, the Correlation Coefficient (R) is equal .207, which means that there is weakly correlation among user generated content and attitudes . R- square is equal to .043 and it will only affect on attitude by 4.3%, indicates that attitudes can describe the change of User Generated Content in the travel industry with 4.3%.

Table 11: Coefficients of UGC and Attitudes.

		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	2.473	0.276		8.945	0	1.928	3.017
	UGC	0.262	0.081	0.207	3.216	0.001	0.101	0.423

As shown at above table 12, the level of significance is equal to .001, and which means that UGC influences on attitudes towards UGC. The coefficient (B) can be explained as 1 unit of User generated content increase without the influence of other variables involved attitudes towards UGC will increase by 0.262. Thus H1 is accepted

Relationship between User Generated Content and Purchase Intention (Hypothesis 2)

Table 12: Model Summary of User Generated Content and Purchase Intention.

R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
					F Change	df1	df2	Sig. F Change
.510a	0.261	0.257	0.54049	0.261	81.391	1	231	0

Predictors: (Constant), UGC

Based on the table 12. the Correlation Coefficient (R) is equal .510, which means that there is strongly positive correlation between these two variables. R square means that purchase intention will either decrease or increase by user generated content (26.1%) which indicates that UGC can describe the change of purchase intention with 26.1%.

Table 13: Coefficients of User Generated Content on Purchase Intention.

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta	t		Lower Bound	Upper Bound
1	(Constant) UGC	2.781	0.241		11.55	0	2.306	3.255
		0.155	0.071	0.142	2.187	0.03	0.015	0.295

a. Dependent Variable: Purchase Intention

As shown at above table 13, the level of significance is equal to .000, which is way below (0.005) and it means user generated content is positively influences on purchase intention. The table showed that UGC affected purchase intention (Beta=.155, Sig .030) at 0.05 level of statistical significance. The coefficient (B) can be explained as 1 unit of UGC increase without the influence of other variables involved purchase intention will increase by 0.155. This finding supported the research hypothesis which was proposed that UGC influences on purchase intention.

Relationship between attitude towards UGC and Purchase Intention (Hypothesis 3)

Table 14 : Model Summary of Attitudes and Purchase Intention.

R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
					F Change	df1	df2	Sig. F Change
.667a	0.445	0.443	0.38721	0.445	185.177	1	231	0

a. Predictors: (Constant), attitude

b. Dependent Variable: purchase Intention

Based on the table 14, the Correlation Coefficient (R) is equal .667, which means that there is positive correlation between attitudes towards UGC and Purchase intention. R-square is equal to .445 and it will affect Purchase intention being decreased or increased by attitudes towards UGC by 44.5%, indicates that attitudes can describe the change of Purchase intention with 44.5%. The research finding of this part presented the relationships between attitudes towards UGC and Purchase intention since r square of the relationship of attitudes on Purchase intention is 44.5%.

Table 15: Coefficients of User Generated Content on Purchase Intention.

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.62	0.124		13.066	0	1.376	1.864
	UGC	0.493	0.036	0.667	13.608	0	0.422	0.564

a. Dependent Variable: purchase intention

As shown at above table 15, the level of significance is equal to .000, which is way below (0.005) and it means attitudes towards UGC influences on purchase intention. The table showed that attitudes affected purchase intention (Beta=.493, Sig -.000) at 0.05 level of statistical significance. The coefficient (B) can be explained as 1 unit of attitudes towards UGC increase without the influence of other variables involved purchase intention will increase by 0.493. This finding supported the research hypothesis which was proposed that purchase intention depends on attitudes towards user generated content.

H4: Perceived credibility has a positive effect on the purchase intentions.

Table 16: Model Summary of Perceived credibility and purchase intention.

R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
					F Change	df1	df2	Sig. F Change
.851a	0.724	0.723	0.31809	0.724	605.543	1	231	0

a. Predictors: (Constant), Perceived credibility

b. Dependent Variable: purchase intention

Based on the table 16, the Correlation Coefficient (R) is equal .851, which means that there is strongly positive correlation between these two variables. This is the strongest R square in all hypothesis presented in this paper. R-square is equal to .724 and it means that purchase intention will either decrease or increase by Perceived credibility (72.4%) which indicates that Perceived credibility can describe the change of purchase intention of travel product with 72.4%. The research aims to study the impact of Perceived credibility on purchase intention. Table of multiple regression analysis showed that Perceived credibility is the most analytical predictor towards purchase intention by showing the result of R square is 85.1% of purchase intention is affected by Perceived credibility.

Table 17: Coefficients of Perceived credibility and purchase intention.

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta	t		Lower Bound	Upper Bound
1	(Constant)	0.058	0.133		0.439	0.661	-0.204	0.321
	Perceived Credibility	0.991	0.04	0.851	24.608	0	0.912	1.07

a. Dependent Variable: purchase intention

In table 17 the coefficients of brand trust increased by $\beta = 0.991$ of variable purchase intention. As shown at above table, the level of significance is equal to .000, which is way below (0.005) and it means perceived credibility influences on purchase intention. The table showed that perceived credibility affected purchase intention (Beta=.991, Sig-.000) at 0.05 level of statistical significance. . The coefficient (B) can be explained as 1 unit of brand trust without the influence of other variables involved purchase intention will increase by 0.991. This finding supported the research hypothesis which was proposed that perceived credibility strongly affects on purchase intention.

HYPOTHESIS TESTING

Hypothesis

	Hypothesis	Results
H1	User generated contents positively affects the users' attitudes	Supported
H2	User Generated Content have positive impact on purchase intention	Supported
H3	Attitudes toward UGC have a positive impact on purchase intentions	Supported
H4	Perceived credibility has a positive effect on the purchase intentions.	Supported

CONCLUSION AND DISCUSSION

User Generated Content positively affect the attitudes of user toward UGC. The reliability of UGC on consumer attitude towards UGC regarding a travel product and literature on attitude towards UGC and its effects on purchase intention. According to (Wang, C, 2015), favourable online customer evaluations combined with benefit-centric information had the most beneficial impact on consumer attitudes and purchase intentions. The regression analysis shows that attitudes toward UGC and perceived credibility impact purchase intentions, but user activities do not only influence purchase intentions for travel products. Positive view toward user-generated content (UGC) will boost user purchasing intention (Daugherty, 2008). The findings of this study are similar with the findings of numerous prior studies, namely that perceptions of credibility influence purchasing intention. Credible information influences the travellers' evaluation of a vlogger's material, which affects circulation to their conduit. (Mir, 2013) investigate the elements that impact consumer attitudes about UGC and conclude that perceptions of legitimacy have a favourable

effect on social media viewers' attitudes toward UGC. Internet users believe that information found on the internet is more reliable than that found in conventional media such as newspapers (Mir, 2013)

UGC enables users to see and read other people's thoughts (through the comments section) to reduce risks and acquire knowledge before purchasing a travel product. Other users see people who generate UGC or information on social media as "opinion leaders" (Chrisbiyanto, 2017). The final study demonstrates that user engagement on UGC affects purchase intentions. Vloggers assist travel product sellers in providing information on placing travel goods and services properly. Travel vloggers suggest which products to buy based on the customer's type, budget, and occasion.

The findings of this study demonstrate that UGC influences purchasing intentions. The trustworthiness of the informant or the producer of UGC influences purchase intentions. Their credibility grows if they can offer suggestions or tactics to help their viewers have a better experience. Future studies may investigate if UGC influences purchase decisions or whether

UGC is the primary source of information for customers before making a buy decision. As a result, future studies might include the addition of new independent variables to give a more in-depth examination of client behaviour. The research was an attempt to understand the influence of UGC on brand trust and purchase intention. Additionally, the target sample for this study was set at 233 individuals, male and female from 18 to 35 years old and above, living

in Delhi/NCR. Taking this into consideration, the results of the study might be done on a national scale. Travel marketers could monitor community discussions on social networks to learn more about the public's interest in their products. (Johnson, 2004) The most important result of this study is that companies should constantly improve the quality of their products since UGC producers' reputation is dependent on their experience with the items themselves.

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A CASE STUDY OF QUICK-O-BOOK- AN ONLINE APPOINTMENT BOOKING SYSTEM FOR PATIENTS IN NORTH-EAST INDIA

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ABSTRACT

The rising numbers of missed appointments, needless and unwarranted waste of patient's appointment time have caused an impending problem for the healthcare institutions as well as the patients. Hence it is desirable to intercede the healthcare system so as to provide smooth, uninterrupted, and sustained care for the patients. The traditional appointment booking requires hard and tedious work to get a doctor's appointment. This paper is a case study of Quick-o-Book an online system of booking doctors' appointments in North-East India. It also discusses the products and services offered by Quick-o-Book. The system was developed by Biswajit Paul, an entrepreneur from Silchar. Quick-o-Book provides the platform to facilitate the booking and management of patients' appointment bookings. It also provides the healthcare workers an easy access and approaches towards managing patients' appointments and generating relevant reports.

This case is a good example of how entrepreneurs create new ventures in an attempt to find solutions to the existing social problems.

It gives the readers an idea of the entrepreneurial competencies and skills needed to overcome existing problems. It tells the readers how problems are resolved by investigating and observing the current phenomenon. In the area of medical appointment booking systems at health centres, the case delves into the various decisive factors to be considered while developing an appointment booking system

Keywords: Entrepreneurship, Innovation, Waiting time, E-health, ICT, System architecture, etc.

INTRODUCTION

There lived a small family of the Choudurys in Silchar, a small town in the Cachar district in Assam. Wrinkles were vivid in the forehead of Mrs. Choudhury. These were wrinkles of tension. There is ample reason for her to be tense. She knows that tension is something that she needs to avoid. But it keeps on coming in one way or the other. People think otherwise- but every mother with grown-up children staying away remains stressed thinking of them. Thousands of questions would pop into her mind like- How

are they doing? Are they safe? And so on. But, this time the reason was different.

Mrs. Choudhury stays with her husband Mr. Choudhury and son, Manzoor in the outskirts of Silchar town, in a wonderfully serene setting near the river far from the 'madding crowd' in the midst of peace and tranquillity. Two of her daughters - Nosheen and Nazneen stay away. Nosheen got married and stays in Musket with her husband. Younger daughter Nazneen, is a working lady who is an Assistant Professor at a college in Kurseong, a beautiful small hill station in the district of Darjeeling, West Bengal. Manzoor is the youngest of them all and is called for counseling in Delhi as he cleared the Bachelor of Engineering entrance exam of the Delhi Engineering College. Currently, Mr. Choudhury has accompanied his son to Delhi.

The life of Mrs. Choudhury is otherwise peaceful. The only issue that disturbs her peace is her blood sugar level. Mrs. Choudhury is a diabetic for 15 years. She has passed the initial stages of changing her lifestyle, consuming Ayurvedic and Unani medicine, allopathic oral medicine and lastly resorted to injecting insulin every time before food. Yet the issues keep on coming back and she has to be in constant touch with the best endocrinologist (a doctor who specializes in the treatment of diabetic patients) in town Dr. Sabdakar.

This was the month of March, and Mrs. Choudhury could understand that her blood sugar problems have this time taken a new dimension. Suddenly, she was finding difficulty with her eyesight. Things around her were turning black, accompanied by tremendous dizziness. Mrs. Choudhury has never experienced these symptoms. She has read about this in

newspaper articles on hypoglycemia. She could understand that sugar levels have found a new way to manifest themselves in her body and she needs immediate medical attention.

Her physician, Dr. Sabdakar is a very busy person. He is a very young and energetic person. As almost all homes in the town have at least one diabetic patient so Dr. Sabdakar never falls short of professional visitors. An infinite number of patients queue before his chamber and he could attend only a countable. It is difficult to get an instant appointment from Dr. Sabdakar. In addition to this, Dr. Sabdakar is associated with District Sports Association and with several other NGOs and there also dedicates sufficient time. But, despite the busyness of the doctor, Mrs. Choudhury is lucky of having a good relationship with him. Being a patient of Dr. Sabdakar, from the initial days of his practice, she has direct access to the doctor through phone. So she at once called the doctor, to get an appointment for that day- but, the phone seemed to be switched off. Several times, she tried but nothing different resulted. She sent her servant to the chamber of Dr. Sabdakar, to get an appointment of the doctor for that day. But, within an hour the servant returned with the news that the doctor is out of the country for a conference.

Now, this was the reason why wrinkles were vivid in the forehead of Mrs. Choudhury. She is unable to understand at this hour of crisis when her husband and wards are away, whom to call and how to get an appointment with another doctor for her. She has always been in touch with Dr. Sabdakar and rarely saw any other endocrinologist in town. After taxing her brain for some time, she could recall a situation when she visited another endocrinologist, but

that doctor was a visiting physician from Apollo Hospital, Chennai. She visited for a second opinion. But the doctor certified the treatment of Dr. Sabdakar positively and after that, she had no reason to change her doctor.

This time she was running short of ideas. She knew that she needs to address her issue at the earliest but did not know any alternative doctor and how to get the appointment. Collecting names of alternative doctors is not difficult. You shall always find people around you for suggestions but collecting appointment tokens means standing in long queues in pharmacies (that turns to the doctor's chamber in the afternoon and evening).

It was time to disturb Mr. Choudhury now- she thought. Mr. Choudhury is a duty-bound person. Had Mr. Choudhury been here he would have at once arranged something. Mrs. Choudhury contacted her husband over the mobile and told her the situation. Mr. Choudhury took a few moments to understand the seriousness of the matter and with a promise to come up with a solution within half-an-hour disconnected the phone. At about 20 minutes later a young man knocked on the door of Mrs. Choudhury, he identified himself as Kelvin. He told that Mr. Choudhury asked him to visit Mrs. Choudhury and understand the issue. On getting all details from the lady, Kelvin rushed on his bike towards the town. Kelvin seems to be a very devoted person. Within the next 45 minutes he responded with appointments of two endocrinologists of the town; one for the next day and the other one for the day after. Kelvin told that all appointments of all endocrinologists he knows, for that day had exhausted. Mrs. Choudhury had no words to thank Kelvin, what

help he did when she was in so much trouble. She had no idea how Mr. Choudhury knows Kelvin, but the world is still a beautiful place to live because of wonderful people like Kelvin. She at once called and updated Mr. Choudhury on the matter.

After a few hours, Mrs. Choudhury found that the problem was getting more serious and she was getting a feeling that it is not wise to wait for the next day but she needs medical attention immediately. Mr. Choudhury has done his best and there is no point calling him again. She was thinking of the other alternatives before her and ultimately decided to call her younger daughter Nazneen who might have some doctor friends and may come in handy in this situation. Since there was no other family member present at her home then so she also needs someone to accompany her to the doctor. Probably, Nazneen can show her some light. With high hopes, she called Nazneen, who is a very outgoing, smart, and informed young lady.

Nazneen was an assistant professor of History and was in the class explaining to her students the reasons for the failure of the Mughal Emperor. But she picked up the phone at once as she could perceive that there must be some emergency at home as her mother (Mrs. Choudhury) never calls her at this hour. Her guess was right. Mrs. Choudhury explained in detail what she is going through, regarding her health and about the non-availability of doctors, her need to visit the doctor immediately, and the absence of anyone at home. Nazneen understands the seriousness of the issue and dismissed the class. She made her way to her department. She knew what she was going to do. She opened Google chrome and typed in a web address.

Half an hour after Mrs. Choudhury called Nazneen, an ambulance was at the doorstep of Mrs. Choudhury's residence. The staff of the ambulance asked Mrs. Choudhury to accompany them to the chamber of Dr. Das, another well-known endocrinologist of Silchar. Mrs. Choudhury was not feeling well and was not in her senses to suspect where she was taken to and who has arranged for this. But what she knew was that for her survival, she needs medical attention immediately and that was ready at her doorsteps. No point in thinking twice, she carried herself inside the ambulance.

Rest is the usual stuff. She was taken to the doctor and was soon admitted to a nursing home. Relatives were informed. Soon the brother of Mrs. Choudhury, who stays in a nearby town came to the hospital. Mr. Choudhury returned a day after with his son Manzoor and the same day evening Nazneen also arrived. Within a few days, Mrs. Choudhury was fit and kicking. She has returned home now. The crisis is over. By that time her regular physician Dr. Sabdakar is also available in town.

But some questions still remained unanswered.... Who arranged the ambulance?...Who got the doctor's appointment?...Who had paid the initial expenditure?

All eyes turned towards Nazneen.....Well it was "Quick-o-book" a small answer followed from Nazneen. Then she elaborated... "One of our juniors at the university, Biswajit, made this possible...he made a website...where you can get information about all the doctors of Silchar...arranged in order of their expertise... you can book appointments there...pay their fee...book ambulance and several other features. It was Quick-o-book with which I can arrange

everything for my mother sitting miles away. Say- "thanks to Quick-o-book".

And the Choudhurys shouted in unison...
"THANK YOU Quick-o-book"

This is not just a case of one family. Likewise, there are a number of families in Silchar (a small town of South Assam) who face problems with regard to doctors' appointment booking. Some of the renowned doctors in Silchar witnessed long queues in front of their chamber since early dawn. Waiting in such long queues for appointment booking becomes a very stressful experience. Even after getting the appointment at the end of such tedious hours, some doctors cancel the appointment without providing prior information to the patients.

OBJECTIVES

The broad objective of the paper is to refine and extend the understanding of the readers about when, where, and how entrepreneurs act in problem situations. It allows them to recognize the social and situational dimensions of entrepreneurship towards leveraging entrepreneurial solutions for social good.

This research paper attempts to understand the system architecture of Quick-o-Book medical appointment booking system. It also presents an overview of the innovative products and services offered by Quick-o-Book. An attempt is also made to undertake a SWOT analysis of Quick-o-Book.

METHODOLOGY

The methodology was driven by the motive to provide the readers a glimpse of the conditions that drove the entrepreneur to

build the necessary mechanisms. It reflects the particularities of the phenomenon and gives an interpretive analysis of the context.

The data has been primarily collected from Quick-o-Book through surveys and interviews. The study builds on previous work that established levels of generic use of the internet and related communication technologies considering health products.

BACKGROUND

In today's fast society driven by science and technology demands the highest efficiency from the health care sector to deliver utmost patient satisfaction. The number of missed appointments, unnecessary waste of patient's appointment time have caused an imminent problem for the healthcare institutions as well as the patients. Hence, it is desirable to intercede with the healthcare system to provide smooth and continuous care for the patients. The traditional appointment booking requires hard and tedious work to get a doctor's appointment. Uncertainty arising due to doctors' unavailability is a serious issue people often face. Traveling miles to consult the doctor and the unavailability of doctors creates difficulties for the patient in terms of time, money, and effort. Even ignoring the overall stress associated with health risks, one has to spend a lot of your time in infamously long hospital queues. According to a 2015 study by Harvard Medical School, people spend 121 minutes for every visit to the doctor (Ray, Chari, Engberg, Bertolet, & Mehrotra, 2015). There often is a mismatch of the demand and supply with regard to patients and available doctors. Also, the lack of any systematic procedure leads to complete chaos. Patients often do not have

any information regarding the availability of the doctors on the specific dates. It requires a number of physical visits to the chamber/clinic to get any type of information. The traditional appointment booking system considers the doctors' time to be more important than the patients' time. So current desi of an appointment system should consider all decisive factors concerning both the patient and doctor (Takakuwa, 2005).

The use of the internet for health purposes is increasing steadily in all parts of the world. Online communication between doctor and patient is one aspect of e-health with potentially great impact on the use of health systems, patient-doctor roles and relations, and individuals' health.

e-health is an emerging field in the intersection of medical informatics, public health, and business, referring to health services and information delivered or enhanced through the Internet and related technologies (Eysenbach, 2001).

Monitoring and understanding practices, trends, and expectations in this area are important, as they may bring invaluable knowledge to all stakeholders (Santana, et al., 2010). A well-developed e-health portal, (among other factors like regulation framework, infrastructure, maturity in internet adoption, etc.) facilitates a positive environment for eHealth services (Santana, et al., 2010).

REVIEW OF LITERATURE

Appointment Booking System

An appointment booking system lies at the junction of providing efficient and timely access to health care services. Appointment booking is

a subject of great interest to hospitals and other medical institutions (Koole, 2007). Waiting time means a period of time in which one has to wait for a specific action to occur, after that action is requested or mandated (Fernandes et al., 1994). Patients' waiting time is defined as "the length of time from when the patient entered the outpatient clinic to the time the patient actually received his or her prescription" (Jamaiah, 2003). It is defined as the total time from registration until consultation with a doctor.

Delays in the appointment schedules lead to underutilization of time (Bailey, 1954). Research on outpatient clinics shows that waiting times are patients' main dissatisfaction concerning health care services (Huang, 1994). Also, overtime and peak workloads are potential threats according to doctors and personnel because they increase stress and time pressure (Idowu, Adeosun, & Williams, 2014). Long waiting times are serious problems for patients using urban health centre's in developing countries (Bachmann, 1998).

Managing Patients' Appointment system

According to Dexter (1999), managing a patient appointment system is a computer application used to manage and reduce the patient waiting time at the health care centres. Patients have longer waiting times in the health centres which do not manage appointment systems efficiently. When patients are made to wait longer by the physicians in a health centre they feel that they are being disregarded and treated unfairly. The timely delivery of health care services at the health centres leads to a positive evaluation of the quality of services by the patients (Dexter, 1999).

Hence, developing patients' appointment process for health care centres entails the use of a sophisticated queuing model that must capture the real system's features like reducing idle time and efficacious use of resources (Rohleder, 2002). An ideal patient appointment system is supposed to manage the doctor's time, reduce the patient's waiting time, reduce the doctor's idle time, reduce nurse's idle time, and improve the overall quality of service in health care (Harper, 2003).

Appointment scheduling systems are used to manage and improve access to health care services. Some of the factors that affect the performance of appointment systems include arrival time and service time variability, patient and provider preferences, available information technology, and the experience level of the scheduling staff. Thus a proper scheduling system should deliver the highest quality services, minimize costs and align the patients' expectations with their service experience. An online scheduling system allows individuals to book their appointments conveniently and securely. Compared to the usual queuing method, the web-based appointment system significantly increases the patient's satisfaction and reduces total waiting time effectively (S & Sarda, 2014).

Existing Hospital Appointment Schemes

Chua (2010) opines that the ever-rising demand for a better healthcare system and facilities and the daunting number of missed appointments due to uncertain changes in doctors' schedules have forced the healthcare sector to recognize a way to deliver such services more efficiently with the help of information technology. An appointment booking system

should seamlessly integrate efficient delivery, dependable and timely access to health services. With the growing internet penetration, the healthcare industry is moving towards the use of communication technologies. Internet today provides a wide scope of technologies that will enable hospitals to communicate with their patients more successfully. Electronic patient-provider communications promise to improve the efficiency and effectiveness of clinical care (Wakefield, 2004).

Hospitals are continuously combating a scheduling problem that causes waste in medical experts' time and also decreases patient satisfaction and staff morale. Many scheduling systems have been developed and implemented in order to improve such operations in individual hospitals or even groups of health care facilities called health care networks. Health Care Facilities use ICTs such as internet-based applications to provide current and potential clients with the information they need on a real-time basis. The use of ICTs in health care has led to a new term called Health Telematics (III & Sankaranarayanan, 2012).

The e-hospital management system provides the benefits of streamlined operations, augments better administration & control, higher-level patient care, strict cost control and boosts profitability (Olamide, Adedayo, & Abiodun, 2015). Thus it is found using information and related technologies can aid the medical profession in improving its quality of service and hence increasing the system's preparedness and defensiveness (Balaraman & Kosalram, 2013). Thereupon it is of critical importance that the software must have the right type of modularity and openness so that

it is manageable, maintainable and upgradable. The hardware should also be reliable, available and have the necessary performance capacity. Well designed, integrated computer system can be a great tool in the hands of the hospital management in improving services, controlling cost, and ensuring optimal utilisation of facilities (Rajesh, D, & K, 2008).

Thus the long waiting times, overcrowding, multiple visits to the health centre to get doctor's appointments, unnecessary delays in appointment schedules, sudden changes in appointment schedules of the doctor, uncertainty at getting doctor's appointments, absence of congenial environment; amongst others are some of the prime reasons for the patients' dissatisfaction at concerned health centres. The health care centres are often found guilty of not managing the patients' time effectively and treating them poorly. These systemic problems leave the patients frustrated and dissatisfied. The stress for the patients and their attendants or family members is even worse in a small town with limited infrastructure and facilities.

Such potential threats are overcome by managing patient appointment systems through computer applications thus reducing the patient waiting time at the health care centres and solving other issues concerned.

QUICK-O-BOOK SYSTEM ARCHITECTURE

Pertaining to the myriad of problems faced by the patients, attendants and family members in the process of getting a doctor's appointment and receiving the related service becomes a

stressful and demanding situation. The Quick-o-Book appointment booking system streamlines the operations, provides better administration for both patients and doctors at different healthcares, thus providing a higher level of care for the patients. It helped improve the overall quality of the healthcare service.

Quick-o-Book (QOB) enables patients to bypass the long queues, overcrowding and long waiting times to get an appointment. It delivers high quality, controls cost and provides satisfaction to its customers in numerous ways.

QOB's online doctor booking system has two ways of booking a doctor's appointment:

(i) Online booking system and (ii) SMS booking system via the designated QOB Stores.

The person booking through the online system has to visit the webpage of Quick-o-Book i.e. www.Quick-o-Book.com. He/she then selects the specialist doctor and confirms the booking after making the necessary payments.

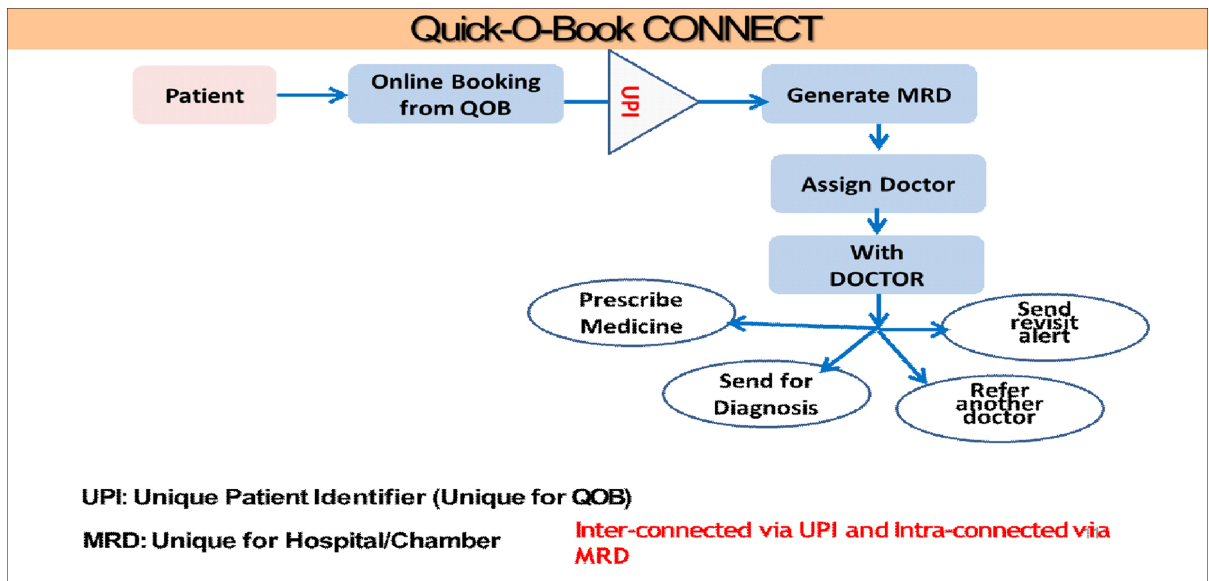


Figure 1: QOB Online Booking system architecture

The SMS booking system via the designated QOB Stores is rather more popular in remote locations where there is limited internet connectivity. A QOB manual contains the doctor's chamber's unique id and other details. A QOB wallet is maintained at the QOB stores. The appointment is booked with the help of a long code SMS service. Every time an appointment is made, the service fees against the appointment get deducted from the QOB wallet and the client gets confirmation through SMS and pays the service charge to the store. This is the most unique feature and a very innovative way of booking a doctor's appointment. Almost 45% of QOBs patients prefer this system of appointment booking over the online booking system.

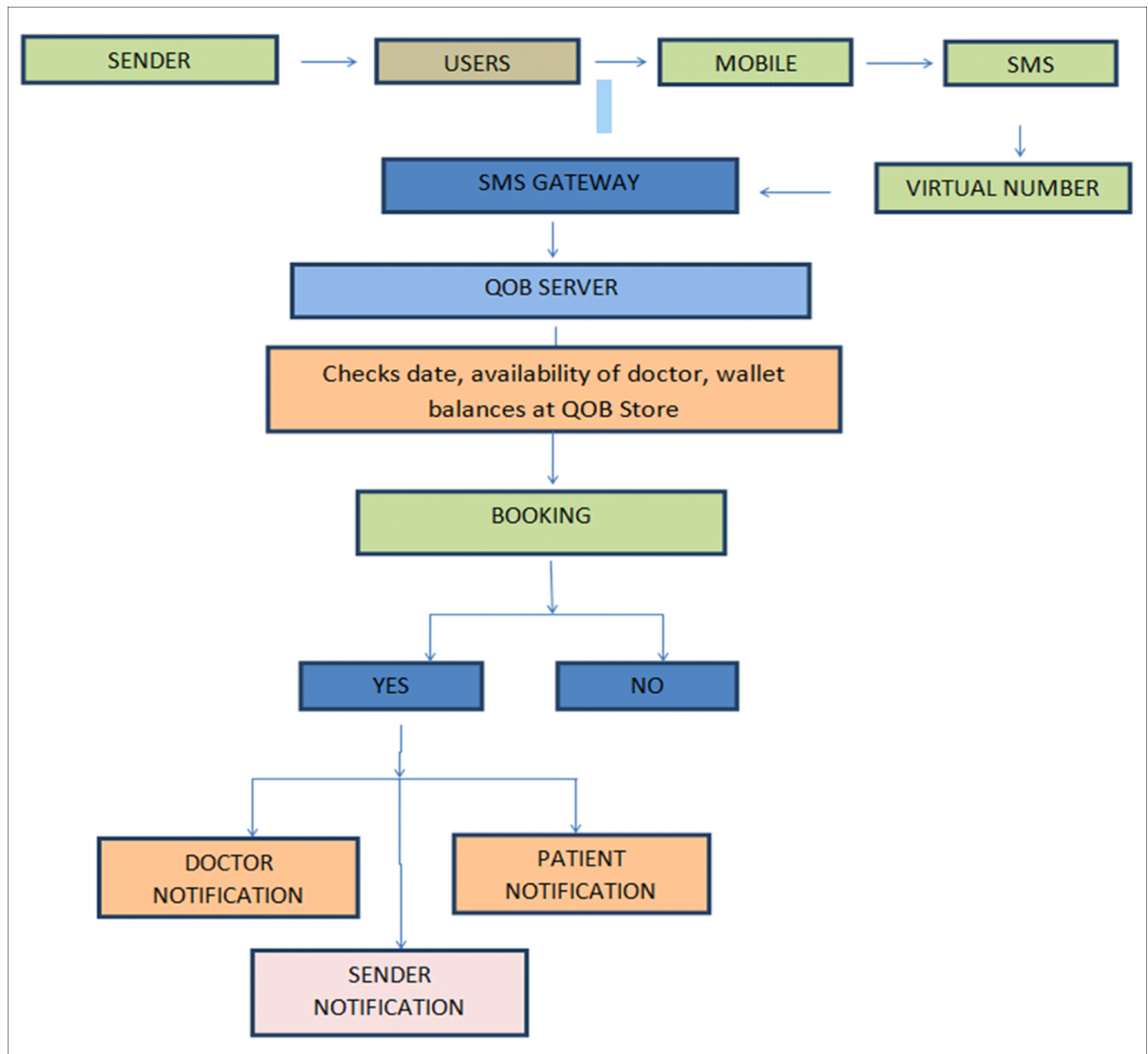


Figure 2: Quick-o-Book SMS booking system architecture

QOB Doctor Dashboards

QOB also provides individual dashboards to each doctor where a doctor can easily find his profile to store records and history of the patients' diagnosis. There also is an unavailability option against specific dates and times where doctor can set their unavailability and re-schedule dates and time as per their calendar. Once updated, the message reaches the patients instantly. The QOB dashboard provides a user panel to every doctor to maintain their records of daily activity and helps in regular follow-up for patients by sending them reminder messages through an automated system for re-visit.

QOB Clinica and QOB Connect

QOB provides a total management solution to the hospitals and clinics too. For Clinic's they have a QOB Clinica and QOB Connect for hospitals. It includes almost each and every required field starting from the patient information, patient clinical information, investigation report, prescription, drug directory, specialist referrals, online consultation reports etc. Every user shall be interconnected via a cloud server providing a systematic way of diagnosis.

When a patient arrives at the receptionist desk at the hospital, a UPI (Unique Patient Identifier) is generated for first-timers. The patient is then directed to the specialized doctor. Once the request is created, the doctor immediately receives a notification at his panel about the new appointment. Once the patient is registered at QOB the very next time he visits, an MRD (Medical Research Data) is created. The doctor then with the help of QOB prescribes medicine, sends the patient for diagnosis or may even refer him to some other specialist.

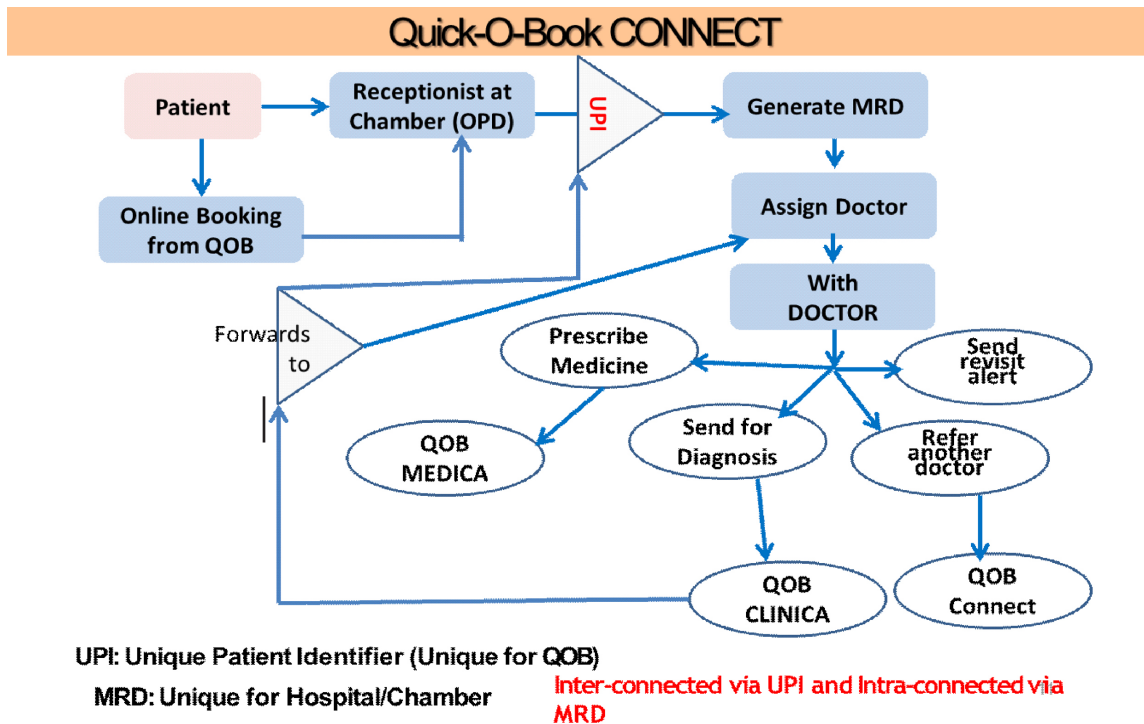


Figure 3: QOB Connect system architecture

INNOVATION AND DIVERSIFICATION

One of the major problems in convincing doctors to use the QOB dashboard, Clinica and Connect software was their reluctance towards the use of new technology. Some doctors preferred the use of a traditional pen and pad to write down the prescription. This drawback was overcome with the

help of Neo pens. Neo pen captures everything that is written on a special notebook. The bluetooth enabled pen syncs with the software and prescription that is written on the note pad automatically appears on the computer screen. QOB also caters to the online sale of medicines. Online purchases are economical and do not require a prescription. People can purchase medicines online through the same QOB website and can also upload their prescriptions. QOB provides emergency medical care to any person requiring emergency treatment with their QOB ambulance services. These facilitates can be availed through QOB emergency numbers. The QOB helplines are available to solve any possible queries raised by the clients.

SWOT ANALYSIS OF QUICK-O-BOOK

Strengths	Weaknesses
<ul style="list-style-type: none"> • More than 1500 doctors registered • 2000 QOB stores • More than 2 lakhs satisfied patients • More effective and efficient than traditional booking system • First mover advantage as an Online booking system • Patented SMS Booking system • Innovative Products and Services 	<ul style="list-style-type: none"> • Developers, employees are the core pillars as they are aware of all operational strategies. Losing the current employees to potential • competitors might cost the company • Limited funds and manpower
Opportunities	Threats
<ul style="list-style-type: none"> • North-East is still a virgin market • Venture funding by potential investors • Government is promoting digitalization 	<ul style="list-style-type: none"> • No potential entrants or competitors but might arise in future • Dissatisfaction of QOB franchisees in future • Unable to properly invest in advertising and promotion due to limited funds

Figure 4: SWOT Analysis of Quick-o-Book

Strengths and Opportunities

Quick-o-Book has several advantages over the prevailing traditional system as it involves lesser effort, saves money, time and above all it maintains transparency. Customers can seek information from a distant place through the latest updated information on the web portal and also from the nearest QOB Store. Appointment booking can be done online and also at QOB designated stores through the SMS booking system. The SMS booking caters to the need of people from remote villages that

often do not have any awareness or access to internet services. The SMS booking facility is the unique strength of QOB as no other company in North-East India is using this model. QOB has patented its SMS Booking process. The QOB dashboard provides a user panel to every doctor to maintain their records of daily activity and helps in regular follow-up for patients by sending them reminder messages through an automated system for re-visit whereas traditional system does not involve such activity. They provide total management

solutions to the Hospitals and Clinics via QOB Connect and through QOB Clinica.

More than 2000 doctors have registered been with QOB till now. 2000 chemist stores are working as franchisees for QOB. More than 25 hospitals and 100 clinics have started using QOB Connect and QOB Clinica. It has been delivering utmost satisfaction to more than 2 lakhs patients so far. QOB has marked its remarkable existence in the whole of Barak valley (southern region of Assam, mainly consisting of three administrative districts namely- Cachar, Karimganj and Hailakandi) and also in some parts of Guwahati. They have extended their arms in Tripura as well. They have more than 100 doctors registered under QOB in Tripura. The QOB Connect and Clinica have also found momentum in Tripura. Recently QOB has started operations in the state of Mizoram.

Since QOB is the first to start such an operation, they have the first-mover advantage. Many doctors, clinics and hospitals in different parts of North-East have already started using QOB software, it will be tough for new entrants to convince them to shift to other portals. They have been constantly modifying and improving their products and services to better meet the demands of the customers. Some include online/offline helpline service, ambulance services, neo pens for doctors, small-scale awareness programmes, booking from e-wallet available at shops/venues in every nook and corner of the city and also the nearby villages, franchisees for aiding booking from remote village areas etc.

The company in a short span of a few years has achieved a good response from the market with gradually increasing demand for their services. The number of patients of QOB for the years 2016, 2017, 2018, 2019 and 2020 are 7202,

28852, 79846, 98548 and 87704 respectively. The total revenue generated by QOB for the years 2016, 2017, 2018, 2019 and 2020 are Rs 2,52,070, Rs 12,98,340, Rs 75,00,000, Rs 1.1 crores and Rs 3 crores respectively.

QOB has now penetrated the whole of Barak valley and some of the nearby North-eastern states as well. QOB has been incubated under world-class entrepreneur organisation, NASSCOM. They are also going to be incubated by Assam Start Up Nest, Guwahati. The company has been valued at more than Rs 3 crores. They have begun raising investment for seed funds based on equity dilution. Potential investors have shown investment interest. North-east is still a virgin market. It offers immense opportunity for Quick-o-Book to expand and penetrate. QOB has received the recognition of Start Up Company for innovativeness under the Make in India programme by the Government of India.

Threats and Weaknesses

Initially the company started with a meager corpus of funds. Lack of sufficient funds was always a problem. However, investors have shown keen interest in venture funding in the company. The employees of the company are the core pillars. They have been fully trained as per the existing system of operations. If they leave the organization will suffer. Currently, there are no entrants or competitors in the market. The franchisees of QOB are its assets. The dissatisfaction of them might be a threat in future. They might even be lured by competitors in future for a better offer.

As a result of limited funds and manpower the company is catering to only 1-2% of the potential market. North-East is still a virgin market but due to financial constraints and lack

of funds, they are unable to properly invest in advertising and promotion and employ required manpower. The company requires aggressive advertising and promotion campaigns to

penetrate further into the north-eastern states. Moreover, the government of India is promoting digitalization hence the project has better opportunities for growth in future.

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TEACHING NOTES AND CASE ANALYSIS

Intended Course and Levels

This case can be used in the class of entrepreneurship studies at the undergraduate as well as in the post graduate level. The case can be used to make the students understand how innovative entrepreneurship helps in solving social problems. It can be used to explain the entrepreneurial competencies. The example is of a budding entrepreneur who identifies the problems that a group of consumer (patients in this case) faces in attaining a particular service (health service in this case) based on the available channels and applies electronic technology to provide a solution.

At the higher levels, advanced topics like customer appointment management system may be discussed using the case as a backdrop. The case can also be used in information technology classes or in Management Information System courses to explain students how services can be more technology driven. This is a good exercise for computer programmers to learn the concept of scheduling.

TEACHING PLANS/APPROACHES

This case can be presented in an open-ended form without any specific questions. It may also be directed with several recommended questions focusing on several issues. Classroom formats can be designed based on the problems and other critical issues pertaining to this case.

GUIDELINES FOR PREPARATION

The following guidelines may be given to the participants for preparation:

- How innovative entrepreneurship helps in solving social problems?
- Explain the role entrepreneurial competencies.
- Use of appointment management systems at hospitals and health centres

RELEVANT THEORY AND LITERATURE

- (Mitchelmore & Rowley, 2010). Entrepreneurial competencies: a literature review and development agenda. Emerald
- (Norris F. Krueger & Brazeal, 1994). Entrepreneurial Potential and Potential Entrepreneurs. Entrepreneurship Theory and Practice. Sage
- (Yeon, Lee, & Jang, 2010). Outpatients appointment scheduling with multi-doctor sharing resources, IEEE

CLASS STRATEGY

Following aspects may be explained during the class:

- Problems faced by the patients, attendants, friends and relatives in getting a doctor's appointment.
- Role of Quick-o-book in managing the appointment system
- Appointment management system or architecture of Quick-o-book
- Strategy for using different types of appointment booking system by Quick-o-book
- Advantages of Quick-o-book appointment system vis-à-vis the traditional appointment system
- Future prospects of QOB Connect and QOB Clinica
- Strengths and challenges of Quick-o-book

- Suitable solutions for further innovation in the current scenario

ANALYSIS AND NOTE TO THE INSTRUCTOR

This case is a good example of how entrepreneurs create new ventures in an attempt to find solutions to the existing social problems. It gives the readers an idea of the entrepreneurial competencies and skills needed to overcome existing problems. It tells the readers how problems are resolved by investigating and observing the current phenomenon.

In the area of medical appointment booking systems at health centres, the case delves into the various decisive factors to be considered while developing an appointment booking system. It identifies the facilitators and the barriers for patients and doctors' adoption of QOB softwares to provide a platform supporting interaction between both parties. Identified barriers here may include patients' lack of access to internet, low computer skills, lack of awareness of the service and incompatibility of the online appointment

booking system to facilitate face-to-face or phone based appointment booking. It can be explained to the students about how QOB has overcome these set of barriers. Another big issue that can be raised in the class is how the general public's acceptance for the QOB products can be improved.

The biggest motto of the case is to make the students aware of how the overall system of QOB helps in reducing manual efforts, balancing patient load, reducing uncertainty about getting the appointment, reducing overall cost, reducing waiting times, improving revenue for both the health centres and QOB, improving patients satisfaction, improving efficiency and increasing popularity of QOB

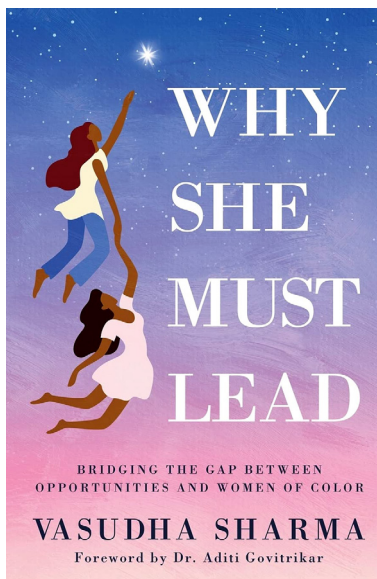
CASE FLOW

The case may follow the following pattern and be winded up in an hour (60 minutes):

- Introducing the Case: 5 minutes
- Background Review: 10 minutes
- Quick-o-book system architecture: 15 minutes
- Discussion: 20 minutes
- Summing up the Case: 10 minutes

BOOK REVIEW

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Why She Must Lead

Publisher: Morgan James Publishing
Year: 2020
Pages: 217
ISBN: 978-1-6319-5597-6

The book is written in the English language. The average time taken to read a chapter was one hour and 45 minutes.

Gender bias and color bias has always been a critical social evil in degrading humanity and equality. It has lead to social injustice and curbing of creativity and talent of masses. The creative and hardworking skilled women of color are not acknowledged and appreciated for their work which develops resentment and anger amongst themselves in many countries. Since, diversity is the soil of our mother Earth; we must stand together for an empowered future.

Why She Must Lead shares Dr Vasudha Sharma's personal story of immigrating to the United States from India fifteen years ago after her marriage, looking for healthier opportunities. She interviews many women who play a vital part in raising questions and forming solutions regarding the leadership gap.

It is a factual reflection of her evolution into the non-profit world from a serial entrepreneur. The book is an assemblage of all aspects of

resourceful thoughts that women of color require to be unbeaten in today's scenario. Vasudha has done a thorough study through her personal experience and stories from women leaders. This study can inform the readers with a broader perspective of work-life experiences of women of color. Inspired by people she has met around the world, Dr Vasudha has given solutions in her book where issues like the pay gap, broken rungs, and lack of mentorship can be filtered out methodically, and workplaces can act to raise the most underrepresented group of women. The book is flowing in two hundred and forty six pages and across all the pages, Dr Vasudha talks about fears, pain, and challenges with empathy and humility. She inspires the women of color to challenge the assumptions and myths and lead and live with a mission.

In chapter 1, Finding Your Why, author has talked about how she found feminism within herself and her journey to find her purpose. Her husband introduced her to the word and meaning of feminism.

In chapter 2, Breaking Through Your Clouds, author has shared barriers and biases that we need to understand and overcome by changing behavior.

Chapter 3, Reaching Your Sky is about identifying the contrast between recent gains in the number of women in senior leadership and how women continue to be underrepresented at every level, which can cause a low talent pool and fewer opportunities for women to benefit from advancement.

Chapter 4, Rising Above Barriers: Inclusion Matters is about steps to promote fairness and

inclusion and why it is vital to attain equity. In this chapter, author has pointed out the fact that despite women making 70 percent of the healthcare force, the leadership positions in healthcare are significantly skewed towards men and according to World's Economic Forum, 7 out of 10 global health leaders are men.

Chapter 5, Surpassing Your Limits discusses about how a step by step push is needed not just at the recruiting level but also with retention to ensure every women in the job market has the right to support to achieve her potential.

Chapter 6, Seeking Your Safety Net speaks about the existing lack of mentorship and sponsorship for woman of color and its negative impact leadership. In this chapter, the author has conveyed a strong message that establishing a mentoring or sponsoring relationship has the potential to remedy the leaky pipeline of talent.

Chapter 7, Restructuring Empowerment is about the myth around the word "empowerment" and why the message can be misleading. This essence of this chapter is that women are equal to men and not better which is a myth.

Chapter 8, Discovering and Building You Male Allies is discovering male allies and how to grow male advocacy for women in the workplace.

Chapter 9, Paying It Forward encourages every victorious woman to pay it forward and unite in supporting leadership among people at all levels. The simple steps like ignite conversations, keeping conversations transparent etc. are discussed by the author in this chapter. Every woman can take such steps

to create a village of her own and fix the broken system that don't work for them.

This book is going to be a game-changer, an inspiring force for many upcoming women leaders within our community to be the powerful agents of change for a brighter tomorrow. This is a highly recommend book to everyone to face the international world and come out as a champion.

Through this book, author has done an advocacy for the equal and more representation of women. Her devotion to equality and equity shines throughout the book, and her work in the fight for fairness is very well explained through well graded cases.

The book will be a big aid in bridging the following gaps;

- Analyze reports related to the leadership gap for minority women
- Build robust understanding regarding the causes for a leaky talent pipeline
- Build as a leader to master equity goals for yourself or your organization
- Eliminating barriers and bias
- Build strategies to minimize the leadership gap

The author has very well discussed and explained what has gone wrong with empowerment, #MeToo movement and myths that hold us back. The book is written in easy English and touches the heart on every page.

Guidelines for Submission and Review Process

IITM-JBS welcomes author submission of papers concerning any branch of the economics, management and technology and their applications in business industry and other relevant subjects.

The review process goes through following phases which can take time from tendays to two months:

a. Each manuscript will be initially evaluated by the editorial board/editor, who may make use of appropriate software to examine the originality of the contents of the manuscript.

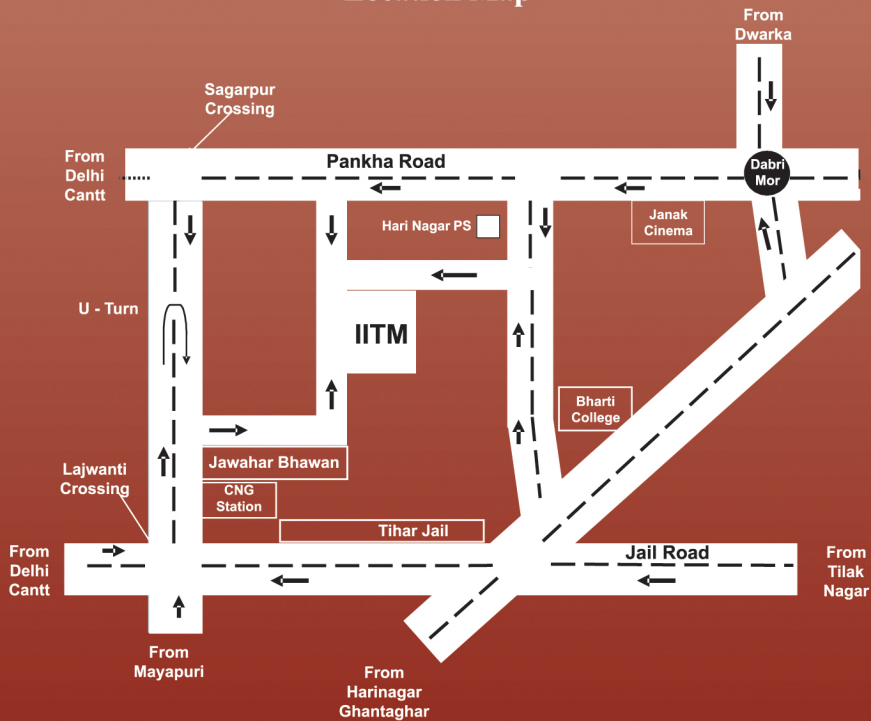
b. The manuscripts passed through screening at the above noted level will be forwarded to two referees for blind peer review, each of whom will make a recommendation to publish the article in its present form /edit/reject.

c. The reviewers recommendations determine whether a paper will be accepted/accepted subject to change/subject to resubmission with significant changes/rejected.

d. For papers which require changes the same reviewers will be used to ensure that the quality of the revised paper is acceptable.

e. All papers are refereed and the Editor -in-Chief reserves the right to refuse any typescript and also to make suggestions and /or modifications before publications.

Location Map



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