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Aegis: Charutar Vidya Mandal (Estd.1945)

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CVM UNIVERSITY

Faculty of Commerce, Management and Law (FCML)

SEMCOM
S.G.M. ENGLISH MEDIUM COLLEGE OF COMMERCE AND MANAGEMENT

A Constituent College of CVM University

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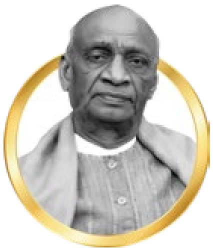

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CVM UNIVERSITY
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SEMCOM Management & Technology Review
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Editorial

On behalf of Board of Journal of SEMCOM, we are glad to present Volume 9, Issue 2 of the journal. The main objective of this journal is to encourage publications from different streams of research that helps to enrich knowledge among readers. It also focuses on how the topics have evolved in the interest of practitioners of Innovation and Technology Management.

People are benefited from globalization only when they are empowered with knowledge, skills and capabilities, needed to pursue their basic livelihoods. People need employment, income; these are the essential conditions which empowered them to participate fully as global. Globalization is creating opportunities for sharing knowledge, technology at different levels including individuals, organizations, communities, and society at large across different countries and cultures. In the times of globalization, progressive research is seen as going beyond what is already practiced. This has opened up new learning opportunities among researchers community. This issue of SMTR announces insightful takes from the areas of Marketing, Human Resource Management, Economics, Accounting, Education, Library Science, Environmental Study, and English Literature too and it also offers a quality check of many of the above enlisted elements. An interesting research has been carried out in the area of Library Science on Bibliometric study of SMRT journal by examining the topics, citations, authors and industry sectors covered. It also focuses on how the topics have evolved in the interest of practitioners of Innovation and Technology Management. The use of social media has highly increased during the pandemic times and here a study on Twitter as a ray of hope in the dark times of Covid19 pandemic, focuses on how Twitter emerged as a reliable source of help during the 2nd wave of Covid-19 pandemic. A research in the area of Marketing Management also connects to social media as it has evolved as a major tool to promote goods and services. There is also a research carried out to find the widely used social media strategies and the strategies implemented by Fast Moving Consumer Goods companies (FMCG). Media is the fourth pillar of democracy and a major means to keep people updated by the things happening around the world. The positive as well as the negative role played by the media in handling the pandemic is brought to light by the paper from 'Shiny paragon to globally despised scourge'. Media and social media both have brought together various cultures to the surface which has its impacts on Consumerism also. In tune with this is a study on cultural values, consumer attitude and global brand attributes: examining the moderating impact of ethnicity type (Indo-Aryans, Dravidians and Mongoloids). It is aimed at investigating the relationship between cultural values, consumer attitude and global brand attributes in the apparel context along with the moderating impact of ethnicity type on hypothesized relationships.

In the area of Financial Management, there is an empirical investigation of association between valuation ratios and market price of TCS's Share. The current issue also incorporates research from the domain of education. One of them is the research on the impact of service quality of online education on learners' satisfaction in the context of COVID 19 pandemic. This paper studies the job satisfaction level of teachers towards a proposed fishbone diagram model. Another paper related to education attempts to examine the quality in learning organizations with the practical application of ISO 9001:2015 standard and how it can be prolonged.

While talking about India and economy there comes the campaign of "Make in India." It had hit the world of Indian commerce and economy as turning the tables in this era of the toughest competition in global market. But due to COVID 19 the world economy faced troubled times which affected the economy at its worst. A research on the role of domestic products in growth of the economy in the context of an Indian customer's perspective analyses Indian economy after COVID 19. Moving on to environment, two different papers on Accounting and Environmental Studies seek to express their environmental concerns and views on climate change by presenting a study of selected companies in the state of Gujarat with reference to environmental accounting and evaluation of climate change with reference to CO_2 emission respectively.

Coming to the human life in general, one of the many inevitable elements of human life is 'change.' A paper on change and adaptation with special reference to human and humanity provides readers with an opportunity to ruminate their thoughts on the elements of change by presenting its types, factors and suggestions. Work-life balance is another most important factor of professionalism. A research on work-life balance practices assesses the correlation between work demand, work autonomy and bank employees' performance among bank employees located in the Central Zone regions of Tanzania. One of the papers also examined the role of trade union on labor administration on its associate's performance in TNSTC. It examines how such unions function as a chain to link various levels of communications and determine the job security, negotiations and some other game changing factors between employer and employees.

In the era of artificial intelligence Women Entrepreneurship has regained its importance, which has been recognized by many. The current issue also includes research on satisfactory level of women entrepreneurs towards institutional support. The research work on nihilism relates the theory of nihilism with other theories like existentialism and epistemology has been contributed from English literature.

The complete text including footnotes and references can be obtained through www.semcom.ac.in.

We hope that the readers may have a wonderful reading time. Keep Researching!

Best Wishes!

Team SMTR

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Cultural Values, Consumer Attitude and Global Brand Attributes: Examining the Moderating Impact of Ethnicity Type (Indo-Aryans, Dravidians and Mongoloids)

Harsandaldeep Kaur, Pranay Moktan

Abstract

The current research investigates the relationship between cultural values, consumer attitude and global brand attributes in the apparel context. The research also studies the moderating impact of ethnicity type on hypothesized relationships. Using data collected from 640 consumers, the findings reveal that power distance, collectivism, and uncertainty avoidance positively influences consumer attitude towards global brands, which in turn positively influences brand prestige and brand preference. The current study further examined the moderating impact of Indian ethnicity type (Indo-Aryans, Dravidians and Mongoloids) on the association between various cultural values and consumer attitude towards global brands. The results revealed partial moderation of ethnicity type on the association of uncertainty avoidance and collectivism with consumer attitude. The present research is a highly significant research as it centred on ethnicities, a field of research which is considered highly important in understanding consumer behaviour in India, but also remains highly unexplored.

Keywords: *consumer attitude towards global brands, cultural values, brand prestige, brand preference, ethnicity*

Introduction

Emerging markets are significant for global economic progress (Wu and Pan, 2021). Consumers in emerging economies like India are inclined towards global brands and use them to express one's personality and status (Batra et al., 2000). Indian consumers are highly brand conscious and spend substantial portion of disposable income on purchase of global branded products (Mukherjee et al., 2012). Post-liberalization of economy, India has seen an influx of many global brands (Kearney, 2009). Previous studies have reported significant influence of cultural values on consumer behaviour. Cultural values significantly shape consumer attitude towards global brands (Swodoba et al., 2012), which in turn influences perception regarding the global brand (Steenkamp et al., 2003). Gentry et al., (1988) provide support for the proposition that cultural differences result in varying consumption patterns. Indian culture is a combination of numerous cultures as a diversity of ethnicity, age, gender, race, etc. coexist (Kundu and Turan, 1999). Thus, the vastness of Indian diversity requires global brand managers to establish and implement different strategies from the ones they usually implement in other emerging economies (Chaudhuri et al., 2018). The Indian market provides opportunities to global brands to earn huge profits and the existence of diverse ethnicities and cultures, therefore provides opportunities for researchers to conduct researches in Indian market with respect to global branding (Kundu and Turan, 1999). Identifying these gaps, the present study investigates the impact of different dimensions of Indian culture on consumer attitude towards global brands. The paper also examines the influence of consumer attitude towards global brand on brand attributes. To further comprehend the role of ethnicity across various domains of consumer behaviour (Dimofte et al., 2010), we examine the moderating impact of Indian ethnicity type on the association of varied cultural values and consumer attitude towards global brands.

Theoretical Foundation

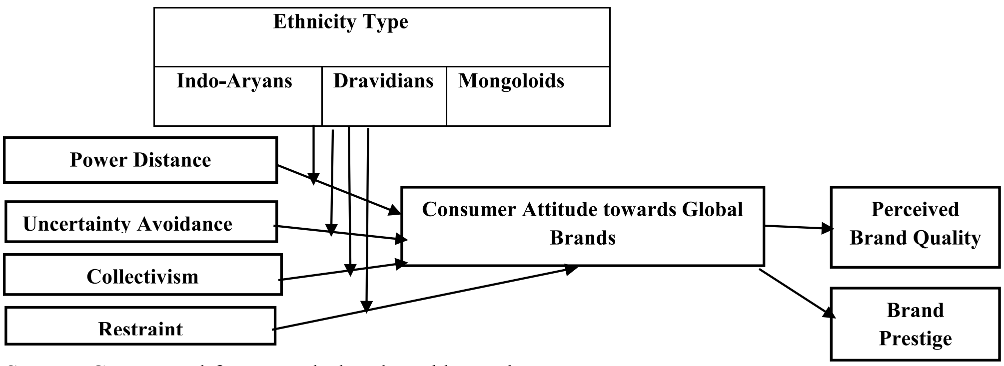
Culture refers to the shared beliefs, customs, behaviours, and attitudes characterizing a society that greatly influences individuals' choice making decisions (Luna and Gupta, 2001). The study uses Hofstede's cultural values, as its dimensional framework which has been applied to various areas of global branding. The dimensions of Hofstede cultures studied in the research with reference to the Indian context include power distance, collectivism, uncertainty avoidance, and restraint. Power distance is the degree to which less influential individuals of a community admit and anticipate that power is assigned unevenly (Mooij and Hofstede, 2011). High power distance societies prioritize status, affluence, and authority and consumers positively evaluate global brands (Hofstede, 2011). Uncertainty avoidance is the degree to which individuals feel intimidated by uncertainty and ambiguity and attempt to evade these circumstances (Mooij and Hofstede, 2011). In high uncertainty avoidance cultures, consumers are more risk averse and prefer global credible brands to reduce ambiguity (Hofstede et al., 2010). Collectivism measures the degree to which people prefer to stay in groups and value group decisions (Mooij and Hofstede, 2011). In collectivist societies the emphasis of marketers is to adhere to prestige, status, symbolism needs of the individuals and also to family or in-group benefits (Mooij and Hofstede, 2010). Restrained cultures have an inclination towards scepticism and pessimism and do not value leisure time much and regulate the satisfaction of desires. Since global brands are considered to be pricier and luxurious, restrained individuals have been found to have a negative association with global brands (Hofstede, 2011). Global brand positioning choices are successful because they generate brand prestige, trustworthiness, quality and brand preference (Dimofte et al., 2010). Shankar et al., (2008) confirmed that consumer's perception of a brand adds to the brand's market relative strength, which influences a brand's market value. Positive attitude towards global brands enhances perceived quality of global brands and leads to feelings of brand prestige and brand preference (Batra et al., 2000). It has been confirmed that global brands provide high aspirational and prestige appeal (Baek et al., 2010). Brand preference is the level to which a shopper prefers the assigned amenity provided by a brand of liking in comparison to other competing brands that provide similar services (Steenkamp et al., 2003). Global brand preference advocates the point that consumer's desirability to international exposure attracts them towards global brands (Batra et al., 2000).

A country's culture consists of distinct subcultures such as race, religion, ethnicities etc. An ethnic group/ethnicity, is a group of people who associate with one another on the basis of resemblances such as related ancestors, linguistics, civilization, culture, or country (Gentry et al., 1988). Every country's culture consists of many subcultures based on race, religion, caste and ethnic group. Sir Herbert Hope Risley – a British ethnographer and a pioneer in Indian ethnic studies had recognized three primary racial kinds in India viz. The Indo-Aryan, the Dravidian and the Mongoloid. Luna and Gupta (2001) argued that the impact of cultural value system on consumer attitude is different across varied ethnicities.

Hypotheses of the study

On the basis of the theoretical foundations, the subsequent hypotheses were framed to examine the research framework: H1a: Power Distance relates positively to consumer attitude towards global brands. H1b: Uncertainty Avoidance positively influences consumer attitude towards global brands. H1c: Collectivism positively influences consumer attitude towards global brands. H1d: Restraint negatively impacts consumer attitude towards global brands. H2a: Favourable consumer attitude towards global brands positively influences their brand prestige. H2b: Favourable consumer attitude towards global brands positively influences their brand preference. H3: Ethnicity moderates the association between cultural values [power distance (H3a); uncertainty avoidance (H3b); collectivism (H3c); and restraint (H3d)] and consumer attitude towards global brands.

Figure 1: Conceptual framework



Source: Conceptual framework developed by authors

Research Methodology

1 Sample and Survey Administration

The population for the study considered of consumers who purchased global clothing brands from four stores: Levi's, Pepe Jeans, United Colors of Benetton and ZARA. We selected apparel brands as the research context, as the apparel industry is one of India's largest industries, and is predicted to increase to US$ 190 billion by 2026 (Indian Brand Equity Foundation Report, 2019). The primary data was collected through mall intercept survey using a structured questionnaire from consumers of various ethnicities in various Indian cities – Amritsar, Bangalore, Chandigarh, Darjeeling, Hyderabad, Shillong and New Delhi. These cities were selected so as to make the sample representative of varied Indian ethnicities, i.e. Indo-Aryans, Mongoloids, and Dravidians. The process of data collection yielded 640 usable questionnaires.

2 Instrument and Measures

The questionnaire comprised of statements assessed on 7-point Likert scale (1=strongly disagree,7= strongly agree). All the statements were developed using previously validated instruments. The measurement items of power distance, uncertainty avoidance, collectivism, and restraint were adapted from works of Hofstede et al., (2010). Modified scales of Batra et al., (2000) and Bhardwaj et al., (2010) were employed as a measure of consumer attitude towards global brands. Brand preference was assessed through statements adapted from Steenkamp et al., (2003). Brand prestige is assessed by statements though a 3-item scale modified from Han and Terpstra (1988) and Baek et al., (2010).

Findings and Analysis

1 Measurement Model Analysis

A confirmatory factor analysis (CFA) using AMOS 20.0 was employed to examine the measurement model. The overall model statistics show that χ^2/df is 1.905. The model fit indices (CFI=.916, TLI=.911, IFI=.911, RMSEA=.038) are satisfactory. Table 1 displays that all latent variables had an acceptable level of reliability ranging from .824 to .974. For assessment of construct validities, both convergent and discriminant validities were computed. All the construct's composite reliability was above the threshold value of 0.70 (see Table 1); also average variance extracted (AVE) of all constructs were above the recommended limit of 0.50 (see Table 1), which provides signals for convergent validity. Further the standardized factor loadings of the items onto its respective constructs were above the threshold limit of 0.50 and were found significant at 5 percent level of significance which substantiates the convergent validity (see Table 1). Discriminant validity occurs when the values of maximum shared variance (MSV) and average shared variance (ASV) between the constructs is less than the AVE's of the specific constructs (Fornell and Larcker, 1981). Results indicate benchmark for discriminant validity to exist is met (See Table 1)

Table 1: Results of Confirmatory Factor Analysis

Construct	Item Label	Factor Loadings	Cronbach Alpha (α)	Composite Reliability	AVE	MSV	ASV
Power Distance	PD1	.905	.974	.974	.903	.060	.011
	PD2	.957					
	PD3	.984					
	PD4	.954					
Uncertainty Avoidance	UA1	.746	.907	.908	.585	.112	.035
	UA2	.778					
	UA3	.804					
	UA4	.781					
	UA5	.750					
	UA6	.735					
	UA7	.756					
Collectivism	COL1	.800	.943	.943	.703	.146	.040
	COL2	.761					
	COL3	.848					
	COL4	.869					
	COL5	.865					
	COL6	.878					
	COL7	.840					
Restraint	RES1	.623	.901	.901	.607	.100	.042
	RES2	.702					
	RES3	.892					
	RES4	.898					
	RES5	.772					
	RES6	.749					
Consumer Attitude toward Global Brands	ATGB1	.775	.882	.885	.658	.452	.121
	ATGB2	.792					
	ATGB3	.833					
	ATGB4	.843					
Brand Prestige	BP1	.867	.888	.890	.729	.533	.102
	BP2	.899					
	BP3	.792					
Brand Preference	BPR1	.686	.824	.830	.550	.496	.112
	BPR2	.800					
	BPR3	.712					
	BPR4	.764					

Source: Primary data calculated using AMOS

2 Structural Model

Overall model statistics show that the χ^2/df is 1.980. The model fit indices (CFI=.909, TLI=.904, IFI=.909, RMSEA=.039) are satisfactory. Results indicate that power distance, uncertainty avoidance, and collectivism influenced consumer attitude towards global brands which were in line with hypotheses framed. Thus H1a, H1b, and H1c were accepted. H1d was rejected as restraint was found to positively impact consumer attitude and not negatively influence it as was hypothesized. As hypothesized favourable consumer attitude enhanced brand prestige and brand preference Therefore H2a and H2b were accepted. [See Table 2]

Table 2: Summarized results of hypotheses testing

Path Relationship	Estimates (β)	S.E.	t-value	p-value	Results
Power Distance → ATGB	.065	.022	3.041	.002	Supported
Uncertainty Avoidance → ATGB	.100	.041	2.433	.017	Supported
Collectivism → ATGB	.106	.040	2.627	.008	Supported
Restraint → ATGB	.071	.035	2.037	.046	Not supported
ATGB → Brand Prestige	.576	.050	11.566	***	Supported
ATGB → Brand Preference	.508	.044	11.529	***	Supported

Source: Primary data calculated using AMOS

3 Moderation Analysis

Multi-group moderation analysis in structural equation modeling was employed to inspect ethnicity's moderating impact on the associations between cultural values (power distance, uncertainty avoidance, collectivism and restraint) and consumer attitude towards global brands. Moderating impact was examined through calculation of the z-scores centered on critical ratio tests of the multi-group framework based on the Gaskin's program (2012).

Moderation results revealed a partial moderating effect of ethnicity type on the linkage between uncertainty avoidance and consumer attitude towards global brands, and collectivism and consumer attitude towards global brands as the impact was found significant for Mongoloids – Indo-Aryans but insignificant for other ethnic pairs. Thus, H3b and H3c were partially accepted. Results further revealed that ethnicity type had no moderating impact on the association between power distance and consumer attitude, and restraint and consumer attitude. Thus, H3a and H3d were rejected. [See Table 3]

Table 3: Results of Moderation Analysis

Relationships	Indo-Aryans		Dravidians		Mongoloids		Z-Scores		
	β	p-value	β	p-value	β	p-value	Indo-Dra	Dra-Mong	Mong-Indo
PD → ATGB	.041	.166	.033	.447	.071	.015**	-.155	.724	-0.655
UA → ATGB	-.011	.848	.146	.113	.212	***	1.463	.583	-2.338**
COL → ATGB	.17	***	.043	.672	.047	.466	-1.124	.03	3.614***
RES → ATGB	.116	.017**	.075	.306	-.007	.882	-0.469	-.933	.292

Note: *p < .10, **p <.05, ***p < .01

Source: Primary data calculated using AMOS

Managerial Implications

Owing to the positive association between power distance and consumer attitude, global brand managers can thus tap on the elitist market by making their brands more upscale. Further they can elevate the brand trust so as to win over individuals who score higher on uncertainty avoidance. To attract collectivists, more brand loyalty can be enhanced by better brand dissemination of the hedonic, symbolic and utilitarian benefits of the brand (Mooij and Hofstede, 2011). The findings also provide motivations to global brand managers displaying them that emerging nations are profitable, thus motivating them to further accelerate the operations and functioning of the brands. The moderation results displayed that significant differences between

Mongoloids and Indo-Aryans existed on the association between uncertainty avoidance and global brand attitude. The association was found particularly strong for mongoloids. Global brand mangers could tap the north-east market that has immense potential as global market which still remains unexplored. Further, the moderating results of ethnicity type on the association between collectivism and consumer attitude was found significant for Mongoloids – Indo-Aryans, and the association was found stronger for Indo-Aryans. Global brand managers can therefore communicate sociable and hedonic features of the brands to the Indo-Aryan collectivists.

Limitations and scope for future research

The subject of the study was limited to consumers of seven major cities located in several parts of the country and to apparel segment. This may arouse generalizability issues. Data was collected using the mall-intercept method which is largely deemed to be a non-probability sampling technique creating a significant restriction on the generalizability of results. Future studies can be conducted across a wide range of sectors and various geographical regions of the country so as to extend the findings of the research. Future researches could inculcate other demographic variables as moderator in the hypothesized model such as language, geographical location, gender, etc. so as to provide new perspectives to the hypothesized framework

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Impact of Service Quality of Online Education on Learners' Satisfaction: A Study in the Context of COVID 19 Pandemic

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Abstract

Education sector has faced the largest disruption in history due to COVID-19 pandemic. This crisis gave birth to online classes to meet the learning gap of students during pandemic despite various infrastructural constraints. The present paper makes an attempt to study the impact of service quality dimensions on learners' satisfaction in case of online education. The sample size for the study is 132 only. Statistical tools such as mean, SD, Correlation and Multiple Regression were used. Empathy, Assurance and Tangibility dimensions have been found playing significant role in the quality of online learning affecting satisfaction of learners while Reliability and Responsiveness dimensions have been found insignificant.

Keywords: *Reliability, Responsiveness, Empathy, Assurance, Tangibility*

Introduction

The effect of COVID-19 pandemic has disrupted every sector and every country. Developed countries also faced similar disruption what a developing or underdeveloped country faced. In such a crisis situation, meeting the needs for its citizen itself had become a challenging task where measures to prevent spreading coronavirus disease and vaccine was yet to developed. Education sector was the worst hit and it was probably the largest disruption in history that not only education sector but also every sector faced. As a preventive measure, numerous establishments were closed down and the first thing that was closed down was educational institutions and probably it was the last to reopen after the disease spread was contained. Due to the sudden closure of schools, colleges, universities, students were hard hit emotionally as well as psychologically. The questions of attending class, conducting practicals, appearing for exams, acted as a stress stimulator to the students and teachers as well. Most importantly students who were at their final semesters were the hard hit. Many of them lost various job opportunities due to delay in examinations. Large number of students were seen withdrawing from classes, changing majors or delaying graduation due to decrease in study hours and academic performance (Aucejo, et al., 2020). Owing to that scenario, switching to online learning through several online platforms and video lectures was the only feasible option which could help in continuing the pace of learning (Pareek & Soni, 2020). Various General Management Learning Systems, Virtual Classrooms, e-contents available in various publicly accessible platforms like DIKSHA/e-Pathshala, were used by educational institutes to make education accessible to all in this tough scenario using several tools like video conferencing or demonstration, Quizzes, Assignments, etc. (Tadesse & Muluye, 2020). Though online education has positives and negatives of its own, but it came as a saviour to the entire education system during such a tough time (Dhawan,2020).

With the change in the teaching learning system without physical interactions, quality learning needs to be ensured by the institutions. Generating satisfaction among the students with the new learning model are to be taken care since students nowadays are more focused on quality education rather than getting a mere degree (Voss, et al., 2007). Thus, educational institutions are required to continuously improve the quality of online delivery mechanism in order to generate greater learning satisfaction among the students (Nambiar, 2020). Service quality of higher educational institutions has now a days become a decisive factor that affects the growth as well as profitability of these institutions (Quinn, et al., 2009). Quality of service rendered also builds institutional uniqueness in this era of competition. For making learning effective, the institutions need to consider students' expectations from the institution of study as well as the perception of quality of educational environment present in the institution.

The problem that every service sector in general is lack of instruments to measure quality of service. Since quality of service is not easily measurable, it poses a great problem to the universities and colleges to assure the quality of learning experience they provide to their students (Lagrosen, et al., 2004). Several scales have been developed over the years by various philosophers for measuring service quality.

One of the pertinent service quality measuring scales developed by Parasuraman, Zeithaml and Berry (1988) was among the popular and earliest researches on service quality measurement. Though this instrument was devised especially for corporate sector, it can also be used in educational institutes' service quality evaluation (Khodayari & Khodayari, 2011).

SERVQUAL instruments when applied in higher education institutions help in identifying the dimensions of service in which focus need to be shifted to generate higher satisfaction among students. It also helps them to position their quality of service in relation to the society.

Parashuraman, Zeithaml and Berry (1988) used People's expectations i.e., what they want or expect from the service rendered, as a standard with which the perception of people i.e., what they get from the service are matched and difference is found out. This difference between Peoples' expectations and their perceptions is termed as Service Quality. It can be termed as 'the extent of discrepancy between People's expectations and perceptions.' Perceived service quality influences the satisfaction among the users or customers (Fig. 1). The service quality measurement scale model developed by them have five individual components.

Reliability

This dimension relates to the delivery of service with the promised quality and accuracy. In higher education, it relates to rendering of service dependably and with adequate precision which satisfies the students' learning urge. This dimension is considered to be the most important dimension for any type of service concern which influences the satisfaction of its customers (Çerri, 2012).

Responsiveness

In higher educational institutes, where students are dealt on a regular basis, this dimension play a significant role. Students need help and support from not only their teachers but also from the non-teaching staffs. A willingness of providing prompt service to them influences their perception about the institute and also generate higher satisfaction (Berry, Zeithaml & Parasuraman, 1990).

Assurance

This dimension relates to the knowledge and politeness of the employees working in the educational institutes which inspires trust and confidence among the students (Berry, Zeithaml & Parasuraman, 1990). This dimension relates to a teacher who inspires the students to excel in their career path.

Empathy

Any organization which gives one to one support to its customers will definitely get an edge over other competitor (Yousapronpaiboon, 2014). In educational institutes, this dimension relates to caring about its students and providing individualized attention so that they can overcome and deal with problems during the course.

Tangibility

Tangibility relates to the physical facilities in an organization. It also includes the various equipment available in the organization for conducting any task (Berry, Zeithaml & Parasuraman, 1990). In higher educational institute, the structures and interiors as well as the appearance of people working around comes under this dimension. In online learning, this dimension will only include the infrastructures available in various learning platforms used by the teachers and other supporting staffs in conducting virtual classes.

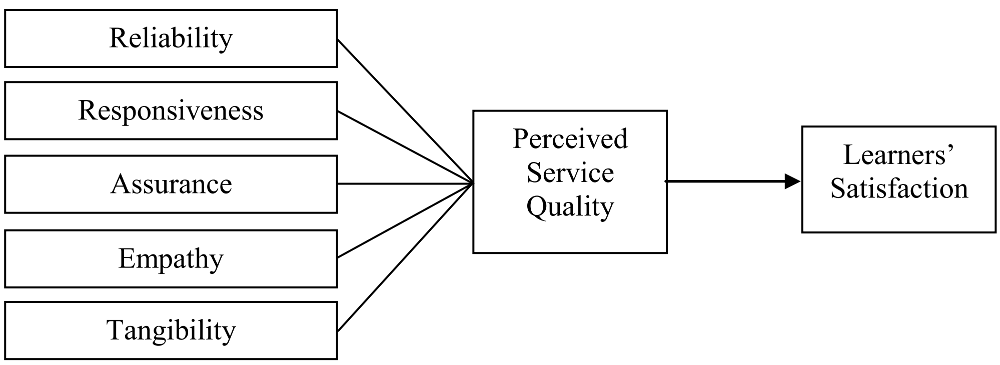

Fig 1: Service Quality dimensions of SERVQUAL Model and their relationship with Learners' Satisfaction

Review of Literature

Satisfaction of students directly relates to learning outcomes if specific learning techniques are used (Eom, et al., 2006). Bharwana, et al. (2013) found that assurance & tangibility were the most important and empathy the least important in students' satisfaction. And tangibility, responsiveness, assurance and reliability were positively related with satisfaction and empathy was negatively related. Feifei, et al. (2022) opined that physical environment cannot be considered as a factor in online learning service quality determination.

Abili, Thani , & Afarinandehbin (2012) observed that students' perception were lower than their expections and also revealed that assurance and responsiveness were most crucial dimensions of service quality. Al-Mushasha & Nassuora (2012) concluded that online class interface design, reliability and responsiveness were significant motivators of e-learning among students. Bhattacharjee & Priti (2020) commented that reliability, responsiveness, assurance & tangibility were significant determinant of service quality while empathy was insignificant determinant of service quality. Khan, Ahmed, & Nawaz (2011) found that satisfaction and motivation of students had been influenced by dimensions of service quality like assurance, responsiveness, empathy & reliability to a large extent. Ramírez-Hurtado, et al. (2021) found some influential factors like students' concentration, interaction between the students, system for reviewing online tests, usefulness of virtual systems, diversity of assessment tests, that determine the satisfaction of students in online learning and also viewd that students got opportunity for learning autonomy in online learning that further enhanced their satisfaction. Sibai, Jr., & Rosa (2021) revealed that assurance had a positive influence on satisfaction whereas Responsiveness and Tangibility had negative influence on students' satisfaction. Udo, Bagchi, & Kirs (2011) observed that assurance, responsiveness, empathy and website content play a great role in perceiving e-learning quality thus had a deeper and meaningful impact on learners' satisfaction.

Arambewala & Hall (2006) concluded that tangiblity was the most significant determinant in generating students' satisfaction though other dimensions were also found to be significant.

Martínez-Argüelles & Batalla-Busquets (2016) commented that all five dimensions considered in the study had significant effect on perceived service quality which, in turn, had a far reaching and significant effect on satisfaction of students. However, non-teaching services also had a deep bearing matter in generating loyalty and willingness among the learners. Pham, et al. (2019) revealed positive relationship between e learning service quality and students' satisfaction hence influencing the students' loyalty towards e-learning.

Although the review of literature made in a brief and summarized manner, it pointed out in crystal clear terms that the various dimensions of service quality, especially the ones coined by Parasuraman and others in their modified SERVQUAL model in the year 1988 are still relevant even after more than three decades and these are applicable to large extent even in education sector and that too under the condition of COVID 19 pandemic which probably justifies the universal applicability of the model as well as the relationship and influence of these dimensions of service quality on satisfaction of students under the new regime of online teaching learning system introduced by policymakers of education sector due to the compulsions generated by COVID 19 pandemic. Hence, the present paper considers all the five dimensions of service quality as advocated by SERVQUAL model to assess the quality of online teaching learning system during the period of lockdown linked with COVID 19 pandemic.

Objectives of the Study

- To study the relationship between dimensions of service quality of online education and learners' satisfaction.
- To analyze the influence of dimensions of service quality of online education on learners' satisfaction.

Hypotheses of the Study

- There exists no correlation between service quality dimensions and learners' satisfaction in case of online education.
- There exists no influence of dimensions of service quality dimensions on learners' satisfaction in case of online education.

Methodology of the Study

The study is descriptive in nature. Perception of students on online education and satisfaction were collected from 132 college going students from provincialized colleges of Silchar town. A structured questionnaire was prepared with questions seeking perception on the components of service quality dimensions on online education and satisfaction using a numerical scale ranging from 1 to 7. The survey was based on online mode conducted using Google form. Statistical tools like Mean, Standard Deviation, Correlation and Multiple Regression were used to arrive at the findings of the study.

Dimensions of service quality measurement model i.e., SERVQUAL model by Parasuraman, Zeithaml, & Berry (1988) were used in the study. Five dimensions of the model were used in the study i.e., Reliability, Responsiveness, Assurance, Empathy, Tangibility. The components used in the dimensions were identified from various literature and also developed by further study which are mentioned in table 1.

Table 1: Components of Dimensions used to analyze Perceived Service Quality

Variables	Components
Reliability	REL1: Teachers consistently deliver good lectures
	REL2: Lectures imparted by teachers are dependable
	REL3: Teachers maintain accurate records of attendance
	REL4: Teachers provide correct information when needed
Responsiveness	RES1: Teachers quickly responds to student needs
	RES2: Teachers are willing to go out of his or her way to help students
	RES3: Teachers always welcome students' queries
Assurance	ASS1: I can trust my educational institutions in online evaluation
	ASS2: I feel safe after submission of answer scripts via online
	ASS3: Teachers are fair and impartial in awarding marks
	ASS4: Teachers answer all the questions thoroughly
Empathy	EMP1: My educational institution is genuinely concerned about students
	EMP2: Teachers understand the individual needs of students
	EMP3: Educational institution has student's best long-term interests in mind
	EMP4: Educational institution has convenient class schedule for students
	EMP5: Teachers are also concerned about the mental health of students
Tangibility	TANG1: Audio elements of online lecture are clear
	TANG2: Video elements of online lecture are clear
	TANG3: Power-point presentations are appealing
	TANG4: Website of educational institution provides useful information
Learners' Satisfaction	LS1: I am satisfied with online classes provided by my educational institution
	LS2: I derive more satisfaction from online exam
	LS3: My experience with online learning is really enjoyable

Source: Extracted from Review of Literature

The dimensions of SERVQUAL model have been used as dependent variables in the study and learners' satisfaction has been considered to be the dependent variable.

The linear regression model developed for the study is shown as follows:

$$LS = \beta_0 + \beta_1 REL + \beta_2 RES + \beta_3 ASS + \beta_4 EMP + \beta_5 TANG + \varepsilon_i$$

Where,

LS= Learners' Satisfaction

REL= Reliability Dimension

RES= Responsive Dimension

ASS= Assurance Dimension

EMP= Empathy Dimension

TANG= Tangibility Dimension

ε_i is the error term

Scope of the Study

- The study considers perception and satisfactions of college students of Silchar town of Assam.
- The study is restricted to Five Dimensions of SERVQUAL Model only.

Limitations of the Study

- The study is subject to all the limitations that normally exists in perception based study.
- The inclusion of sampling errors cannot be completely rule out.

Results and Discussion

Table 2 depicts the mean and standard deviation of the various dimensions of SERVQUAL model and learners' satisfaction for online education. Learners' Satisfaction, dependent variable, has a low average score of 5.3864 with highest deviation in the responses with SD of 1.38868. Among the dimensions, Assurance has the highest mean 5.6364 followed by Responsiveness and Reliability with mean 5.6036 and 5.5625, which reveals that these are the most important determinants of satisfaction among learners with regards to online learning, whereas Tangibility has the lowest mean i.e., 5.3390. However, Empathy has the lowest SD of 1.22870 which reveals the consistency in responses for this dimension.

Table 2: Descriptive Statistics

Variables	Mean	SD	N
Learners' Satisfaction	5.3864	1.38868	132
Reliability	5.5625	1.28570	132
Responsiveness	5.6036	1.29601	132
Assurance	5.6364	1.25604	132
Empathy	5.5417	1.22870	132
Tangibility	5.3390	1.29043	132

Note: Results obtained by applying SPSS

Table 3 illustrates the relationship between the dependent and independent variables. Learners' satisfaction is the dependent variable on dimensions of service quality. The computed value of correlation coefficient reveals that there exists a positive and strong relationship between learners' satisfaction and all the independent variables i.e., Reliability, Responsiveness, Assurance, Empathy and Tangibility. The p-values clearly reveal that the correlation between learners' satisfaction and all independent variables is significant at 5% level of significance.

Table 3: Correlation between Select Service Quality Dimensions and Learners' Satisfaction

Service Quality Dimensions	Correlation Coefficient	P value
Reliability	0.741	.000
Responsiveness	0.772	.000
Assurance	0.766	.000
Empathy	0.782	.000
Tangibility	0.744	.000

Note: Results obtained by applying SPSS

Table 4 depicts the result of multiple regression analysis. The results indicate that learners' satisfaction is positively influenced by all the dimensions of service quality. However, significant influence can only be traced in case of Assurance, Empathy and Tangibility at 5% level of significance. Reliability and Responsiveness has insignificant influence on learners' satisfaction.

The standardized coefficient Beta value clearly indicate positive influence of all the variables on learners' satisfaction. The value of R^2 (0.696) shown in table 4 suggests that around 69.6% variation of dependent variable i.e., learners' satisfaction has been explained by five independent variables selected for the study. The adjusted R^2 value (0.684) also indicates that around 68.4% variation of dependent variable is explained by select independent variables for the study. Thus, independent variables considered in the model could explain relatively good amount of variation in satisfaction of students/learners from online education.

The overall predictability of the model is also calculated and is depicted in table 4. The p value (0.000) of F statistics (57.64) implies that the multiple regression model is highly significant which implies that the data are well suited in explaining the influence of the service quality dimensions on satisfaction of students.

Table 4: Result of Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.155	0.335		-.464	0.643
	Reliability	0.165	0.101	0.153	1.633	0.105
	Responsiveness	0.095	0.126	0.089	.752	0.454
	Assurance	0.250	0.113	0.226	2.210	0.029
	Empathy	0.243	0.123	0.215	1.982	0.049
	Tangibility	0.250	0.096	0.232	2.591	0.011
R square = 0.696; **Adjusted R square =** 0.684; **F Value = 57**.64; **p Value**= 0.000						

Note: Based on Field Survey

Table 5 Variance Inflation Factor (VIF) which ranges between 3.328 and 5.766 and thus there is absence of multicollinearity problem because the literature generally suggests the problem of multicollinearity in case the VIF is more than ten (10). The computed tolerance value ranges between 0.173 and 0. 301 which also implies that the regression model is free from the problem of multicollinearity of the explanatory variables because the literature generally suggests the problem of multicollinearity in case the tolerance value is less than 0.10.

Table 5: Collinearity Statistics

Tolerance	VIF
0.276	3.620
0.173	5.766
0.230	4.346
0.205	4.874
0.301	3.328

Note: Based on Field Survey

Conclusion

Online Education gave a great strength to the education department due to huge disruption faced during the past two years. In higher educational institute, providing quality learning in the virtual mode of education, need to be continuously monitored by the authorities. In this context, this study helps in analyzing the perception of the students regarding the online classes and their satisfaction in relation to that. The study reveals that Assurance, Empathy and Tangibility are positively shaping the perception of students as well as their satisfaction. They also have significant influence on satisfaction of students regarding the online classes. Visual aesthetics of online learning platform & website, showing genuine care and concern by the educators impact students perception of service quality and inturn generates satisfaction among them. Reliability and Responsiveness were found statistically insignificant. Thus, efficiency, accuracy, friendliness and effectiveness while communicating, willful and ready to serve nature, trustworthiness of educational institutions does not influence learners' satisfaction.

Implications of the Study

- The study will provide inputs and insights to the authorities of higher education to maintain quality of service in the service delivery process.
- The study will generate the need and utility of developing effective service quality in higher educational institutions.
- The findings can be generalized to wider geodemographic area of higher education around the globe.

Scope for further research

- This study is limited to students' point of view. Thus, studies from other Stakeholders point of view can be done, i.e., Parents, Society, etc.
- Comparative study between institutions can be conducted so that policy making guidelines can be derived or improved.

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Role of Trade Union on Labour Administration on its Associate's Performance in TNSTC, Kumbakonam Division–I

Kaushik Banerjee, Sudipta Adhikary

ABSTRACT

The existence of a recognized and strong trade union is vital for an industrial process to run smoothly. Act 651, also called the Labor Act 2003, was formed to help and act as a guide to maintain a peaceful relationship between the employees and the management. It becomes important to acknowledge the major role the Union Activities have for an organization. These roles include maintaining harmony among employers and employees of an industry; negotiating or dealing with employees; serving as a director and guide for the employees for directing their concerns; and other similar roles. Decisions taken through a process of collective negotiation and bargaining between unions and the employer are highly influential. Trade unions, along with their important roles, are also helpful in maintaining an effective communication channel between the management and the workers. However, this study revealed the purpose of Job security, to protect from economic hazards, get respect from peers, express grievances through a trade union, get economic security, restrain management from taking action, and gain more Bargaining Power is, a few reasons which compel a worker to join with the Trade Unions. The participation of all the employees in trade union activities can be motivated for the success of the trade union of the Corporation. Hence the trade union has to take serious steps and bargain with the Corporation to ensure the job security of the employees. Hence the present study was aimed at analyzing the union activities on labour management on its member's performance in Tamil Nadu State Transport Corporation Kumbakonam Division – I.

***Keywords**: Trade Union, TNSTC, Labour Management*

Introduction

The general motivation for joining with or forming a union or undertaking a collective bargain is to reduce or equalize the asymmetry of power between the employers/management and the employees. By this, Union will be able to generate equity, equality, fairness, economic and social justice, and respect for the rights of a human and a worker, not just in the workplace but also in the whole society. This is based on a recognition that employees individually are not resourceful or are too weak in their position to demand respect and equality in the workplace. A common phrase is often followed in such circumstances: *"strength lies in the unity and collectivism of workers"* (Land, 2002).

The Trade Union is a group of employees formed to get good working environments and to promote and protect their common interests with the employees through collective bargaining. Leaders of the union bargain with their employers on behalf of the employees in the organization. The main purpose is to negotiate wages, work rules, complaint procedures and safety in the workplace and other important aspects of the organization (Gopinath & Shibu, 2014 a). The union leaders represent their grievances through collective bargaining for the working population in the organization. They claim to enhance the working condition and aid the employees in attaining job security (Gopinath & Shibu, 2014 b). They settle disputes in political, social and environmental rights and bargain conditions of the employment to protect their work interests. They establish minimum wages, working hours, health conditions, safety and working conditions in the organization. Hence, it becomes vital to study the immense role of the trade union on labour management in an organization (Gopinath & Shibu, 2014 c). In this background, an attempt has been made to study the role of trade unions' impact on labor management. The research has been undertaken in the transport sector of Tamil Nadu State Transport Corporation in Kumbakonam Division-I.

Objectives of the Study:

- To identify union activities on labor-management Union involvement in labor-management of TNSTC in Kumbakonam Division- I.
- To identify the member's reasons for joining the trade union in TNSTC in Kumbakonam Division- I.

Hypothesis

H01: There is no significant difference between employee demographic variables and trade union involvement in labor-management in the TNSTC Kumbakonam Division – I.

The demographic variables of age, education, income, working hours, category of employee and year of services of the employees are tested with Union involvement in labour management of TNSTC in Kumbakonam Division- I.

The employees of 66.67 percent agree with union involvement in managing employment.

65.83 percent agree with the standard for retirement allowance and annuity, and 65.00 percent agree with managing the dismissals or mandatory retirement are highly significant factors relating to union involvement in the labor management. However, managing the reshuffling or temporary transfers (59.50) and managing the collective agreement (57.33) are the least significant factors relating to union involvement in labour management in the Corporation.

4. Significance of the Study:

This study is aimed to examine the union activities in labour management on its member's performance and consider the main role of unions in the public sector for policing the workers in an organization. The study was centered on Tamil Nadu State Transport Corporation Kumbakonam Division–I. This study helps to expose the issues concerning the trade unions as well as their effects on the performance of employees.

Statement of the Problem:

In order to keep things running smoothly in the workplace, trade unions play a critical role. It's true that unions are required by law to represent and negotiate on behalf of their members. To make sure that their direct actions like strikes do not have any negative consequences for the organizations, they also have a duty to ensure that the organizations do not suffer for insignificant reasons (Gopinath & Shibu, 2015 a). While bargaining with management, they must be able to comprehend and accept their counterpart's issues and adopt a strategy of "give and take." Trade unions are charged with ensuring that the working conditions of their members are safe, secure, and improved. In the end, trade unions exist to safeguard the interests of their members, both at work and away from it; the objective of this research was to determine the effect of union activities on workers' performance (Gopinath & Shibu, 2015 b). Problems with labor unions and the effect they have on their performance. Working conditions are affected by union actions. In other words, employers should put in place adequate structure, as this indicates. Industrial action will be minimized as a result of this. Workers will have a tough time going on strike without clear, satisfying steps.

Research Methodology:

A study is an analytical approach, and it is conducted using primary and secondary data. The researchers made use of 600 respondent data from the questionnaires centered on Tamil Nadu State Transport Corporation Kumbakonam Division–I workers in Union. The workers were analyzed out of the categories: technical workers, drivers, conductors and helpers and all the information was collected using the five-point scaling technique.

Review of Literature:

Piyali Ghosh & Shefali Nandan (2009), in their study titled "The Changing Roles of Trade Unions in India." Stated that to accomplish their aims, trade unions have established themselves as a fundamental part of the current industrial relations system in any country. Their historic position as a forum for setting terms and conditions of employment has been rebranded as a platform for protecting employees' interests and improving their quality of life as a result of changes in the social, political, and educational environment.

For the sake of this study, we will concentrate on the unions at the Unchahar plant of the National Thermal Power Corporation (NTPC), one of India's biggest and most successful public sector enterprises. Additionally, exploratory research of the several trade unions operating in the Unchahar factory will examine their ideology, aims, and structures. Plant-level unions' tasks have evolved over time, from preserving good industrial relations to actively improving the quality of life for employees, a job formerly seen as secondary.

Josephine Moeti-Lysson and Henry Ongori (2011), in their research titled "Effectiveness of Trade Unions in Promoting Employee Relations in Organisations," stated that trade unions play an important role in protecting workers against harassment and discrimination in the workplace. Employees need a pleasant working environment. Many studies have been conducted in this field, although research in underdeveloped nations, particularly Botswana, is sparse. To close this gap, our research will look at the role of trade unions in resolving labor-related issues, with a focus on working conditions, pay, and "fair treatment." Study participants' perceptions of their job and non-work lives, their faith in their labor unions, and whether or not such organizations met their expectations will also be examined. A cross-sectional survey was employed in their research.

Reasons for Participation in Trade Union:

The following are identified as the reasons for participation in a trade union: the desire to secure wage increase, job security, protection against victimization by employers, strength in unity, to solve individual grievances, get a bonus, better welfare facilities, for getting help during strike/lock-out or punishment, for help after possible retrenchment, for improving and developing personality, participation in management decision, obtaining or maintaining better working conditions, facilitating redressal of their respective grievances that might arise in the course of employment(Gopinath & Shibu, 2015 c).

Result and Discussions:

Table 1: Demographic status of the employees

1	Age of the Employees	No of Respondents	Percentage
	21 to 30 years	203	33.83
	31 to 40 years	185	30.83
	41 to 50 years	136	22.67
	Above 50 years	76	12.67
	Total	600	100.00

2	**Educational Qualification**	**No of respondents**	**Percentage**
	Upto HSC	276	46.00
	Diploma and ITI	227	37.83
	Graduate	60	10.00
	PG and Professional	37	6.17
	Total	600	100.00
3	**Cadre Wise Classification**	**No of respondents**	**Percentage**
	Administrative Staff	16	2.67
	Conductors	250	41.67
	Drivers	240	40.00
	Technical Staff	31	5.17
	Helpers	63	10.50
	Total	600	100.00
4	**Working Hours**	**No of Respondents**	**Percentage**
	8 hours	213	35.50
	9-10 hours	299	49.83
	Above 11 hours	88	14.67
	Total	600	100.00
5	**Monthly Income**	**No of Respondents**	**Percentage**
	Up to Rs. 20,000	190	31.67
	Rs.20,001-Rs. 30,000	283	47.17
	Above Rs. 30,000	127	21.17
	Total	600	100.00
6.	**Length of Service Experience**	**No of Respondents**	**Percentage**
	Up to 10 Years	173	28.83
	11 to 20 Years	251	41.83
	21 to 30 Years	113	18.83
	Above 30 Years	63	10.50
	Total	600	100.00

Source: Data from Primary Source

Important Reasons to Join the Trade Union:

Employees generally have a rational approach to joining the trade union based on cost-benefit analysis. Members in the union gain power by enabling employees to speak with an employer for success in a better deal at work. Members in the union increase job security, paternity, sickness and pension benefits by collective bargaining. Unions also provide legal advice on employment matters and represent their grievances on employment. The main concerns of Trade Unions are how they can help the employees to achieve their demands. However, this study revealed the purpose of Job security, to protect from economic hazards, to get respect from peers, to express grievances through a trade union, to get economic security, Restraining management from taking action, and Greater Bargaining Power is a few reasons which make an employee join such unions (Gopinath, 2014a). Trade Unions Hence, the researcher has made an effort to study why employees join a union, and it has been summarized in Table- 2.

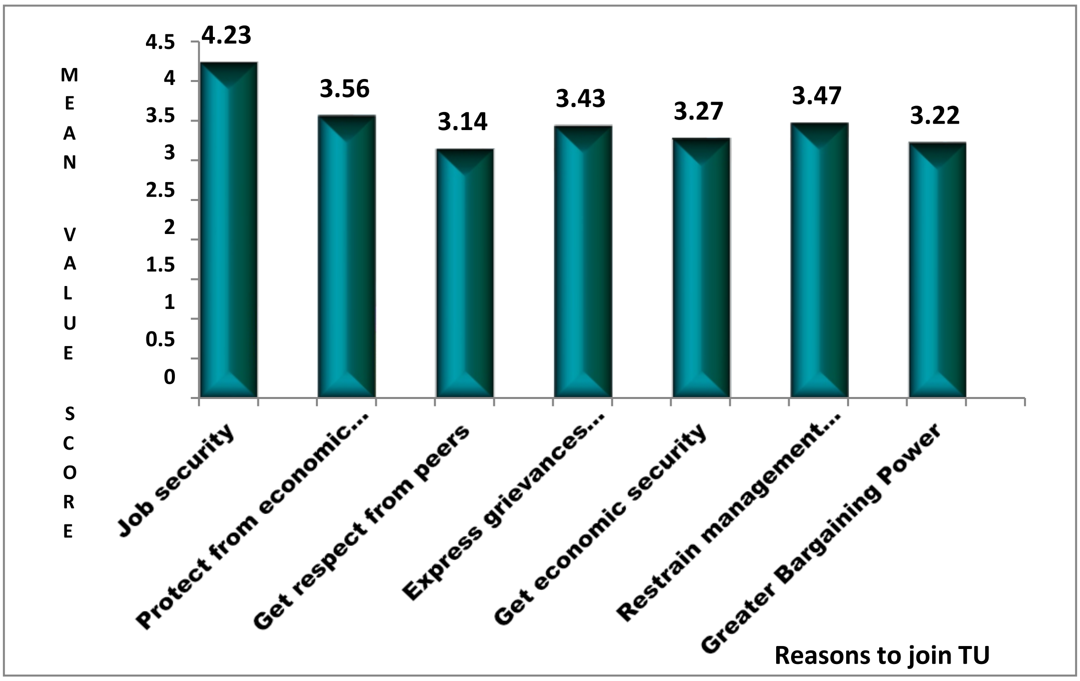
Table 2 Reasons to join the trade union (figs in %)

S. No	Variables	SA	A	N	DA	SDA	Total	Mean	Rank
1	Job security	260	261	51	14	14	600	4.23	1
		(43.33)	(43.50)	(8.50)	(2.33)	(2.33)	(100.00)		
2	To protect from economic hazards	56	315	153	63	13	600	3.56	2
		(9.33)	(52.50)	(25.50)	(10.50)	(2.17)	(100.00)		
3	To get respectfrom peers	43	133	324	62	38	600	3.14	7
		(7.17)	(22.17)	(54.00)	(10.33)	(6.33)	(100.00)		

4	To express grievances through trade union	163	155	92	154	36	600	3.43	4
		(27.17)	(25.83)	(15.33)	(25.67)	(6.00)	(100.00)		
5	To get economic security	102	190	132	117	59	600	3.27	5
		(17.00)	(31.67)	(22.00)	(19.50)	(9.83)	(100.00)		
6	To restrain managementfrom taking action	129	204	136	83	48	600	3.47	3
		(21.50)	(34.00)	(22.67)	(13.83)	(8.00)	(100.00)		
7.	Greater BargainingPower	91	172	176	100	61	600	3.22	6
		(15.17)	(28.67)	(29.33)	(16.67)	(10.17)	(100.00)		

Source: Data from Primary Source

Table-2 shows that a maximum of 86.83 percent agree with job security as the primary reason to join the Union, followed by 61.33 percent who join for a reason to protect from economic hazards, and 55.00 percent agree with the reason to restrain management from taking action. They are a highly important reason to join a trade union. About 53 percent agree with expressing their grievances through the trade union, 48.67 percent agree with getting economic security, and 43.83 percent agree with bargaining power as other significant reasons to join the trade union. However, getting respect from peer groups has less significance than joining the trade union among the members in the TNSTC Kumbakonam Division. The acceptance score also shows job security is the highest important reason to join a trade union. (Gopinath & Shibu, 2014d). It is concluded that almost all the employees have joined in safeguarding the job in the organization as the foremost reason to join in Union, in the TNSTC Kumbakonam Division I. The Reasons for joining the Trade Union the respondents are presented in Graph 1.



Graph 1 Reasons to Join the Trade Union

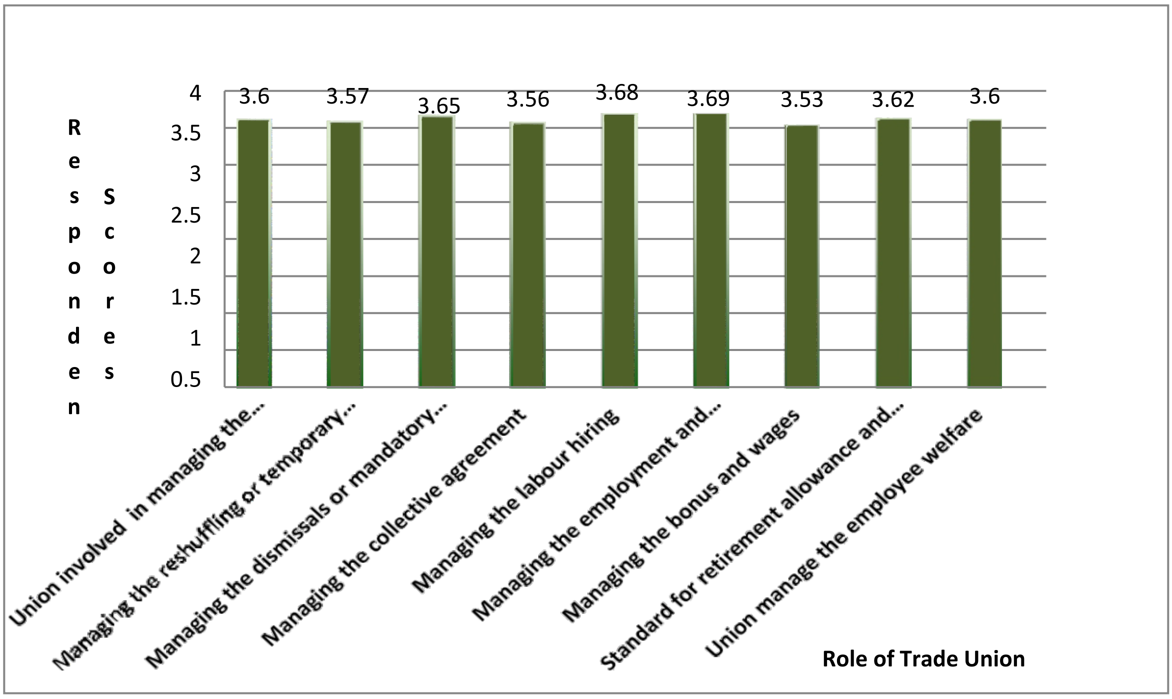
Role and Involvement of Trade union in Labour Management:

A union helps in managing a relationship between the management, and the employees, which is important for an organization to work harder for its success. The trade union manages the relationship with management through formal as well as informal means of interaction in order to establish wages, working hours and working conditions for the employees in the Corporation. Through collective bargaining, the Union manages the wages and other conditions of employment in the organization. To improve the involvement of trade unions in labour management, the scope for education and residence near the Corporation may be provided to the employees (Gopinath, 2014b). The following table 3focuses on union-management practices in the Corporation in the TNSTC Kumbakonam Division -I.

Table 3 Role and Involvement of Union in the labour management (fig. in %)

S. No	Variables	SA	A	N	DA	SDA	Total	Mean	Rank
1	The Union is involved in managing the workinghours, holidays or leaves	197 (32.83)	179 (29.83)	60 (10.00)	114 (19.00)	50 (8.33)	600 (100.00)	3.60	5
2	Managing the reshuffling or temporary transfers	164 (27.33)	193 (32.17)	94 (15.67)	120 (20.00)	29 (4.83)	600 (100.00)	3.57	6
3	Managing the dismissals or mandatory retirement	180 (30.00)	210 (35.00)	52 (8.67)	134 (22.33)	24 (4.00)	600 (100.00)	3.65	3
4	Managing the collective agreement	210 (35.00)	134 (22.33)	67 (11.17)	160 (26.67)	29 (4.83)	600 (100.00)	3.56	7
5	Managing the labourhiring	211 (35.17)	169 (28.17)	56 (9.33)	144 (24.00)	20 (3.33)	600 (100.00)	3.68	2
6	Managing the employment and staffing standards	225 (37.50)	175 (29.17)	43 (7.17)	100 (16.67)	57 (9.50)	600 (100.00)	3.69	1
7.	Managing the bonusand wages	157 (26.17)	212 (35.33)	74 (12.33)	104 (17.33)	53 (8.83)	600 (100.00)	3.53	8
8.	Standard for retirement allowance and annuity	213 (35.50)	182 (30.33)	28 (4.67)	116 (19.33)	61 (10.17)	600 (100.00)	3.62	4
9.	Union manages theemployee welfare	197 (32.83)	179 (29.83)	60 (10.00)	114 (19.00)	50 (8.33)	600 (100.00)	3.60	5

Source:Data from Primary Source



Graph 2 Role and Involvement of Unions in the labour management

According to Table 2, 66.67 percent of the respondents agree with union involvement in managing employment. 65.83 percent agree with the standard for retirement allowance and annuity, and 65.00 percent agree with managing the dismissals or mandatory retirement are highly significant factors relating to union involvement in the labour management. Managing labor hiring (63.33), managing the working hours, holidays or leave (62.67), employee welfare (62.67), and managing the bonus and wages (61.50) are also highly significant factors in the Corporation. Managing the reshuffling or temporary transfers (59.50) and managing the collective agreement (57.33) are the least significant factors relating to union involvement in labor-management in the Corporation.

Conclusion:

The research analyzed the effect of labour union activities on employee performance. There is a widespread belief that union actions have an impact on the operations of the employees. It was concluded that the trade union's primary mission is to advocate and safeguard workers' socioeconomic interests and their rights. The present study has been undertaken to identify and expose the role of unions and involvement in labour management in TNSTC Kumbakonam in Division-1. It can be said that almost all the employees have joined in safeguarding the job in the organization as the foremost reason to join in Union, in the TNSTC Kumbakonam Division I.

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Role of Domestic Products in Growth of the Economy: An Indian Customer's Perspective

Pragati Tomar

Abstract

Product produced within the country plays a very significant role in development of that country's economy. This paper mainly highlighting the economy of India. After COVID-19 struck Indian economy phased a difficult state. Due to country wide lockdown, global recession and disruption in supply chain causes long term slowdown in economy. Aatma Nirbhar Bharat means from "Made in India" to "Made by India" and leads to adoption of domestic products or called 'Swadeshi' or being indigenous. Purchase of swadeshi products by citizens of India will leads to development in disrupted economy. The purpose of the study was to identify the perception of Indian consumers towards swadeshi products. Data of Indian customers was gathered. Final Data of 101 respondents received for further analysis. Factor analysis was used to identify the factors and ANOVA statistical method was applied for analyzing the age wise perception of customers. Five factors were extracted. Age wise significant difference observed in customer perception and product accessibility and quality, product features and image and accuracy. These factors are motivating factors which force customers to buy domestic or swadeshi products.

Keywords: *Aatma Nirbhar Bharat, Citizens, Disrupted, Economy, Swadeshi.*

Introduction

Early 2020 a highly infectious virus was identified causing Coronavirus disease (COVID-19). There is a mild to moderate illness to infected person. Face mask, hand wash and negligence of close contact are the majors to protect us from this disease. This disease causes remarkable loss of human life around the world and hampered the food system and public health. Due to COVID-19 disease there is a disruption in economic and social life. Around 10 million people will be facing risk of falling below poverty line. Majority of the organizations are facing experiential threat. Nearly half of the workforce around the world are at risk of losing their job.

"Atmanirbhar Bharat" is a part of the post-pandemic economic revival. Aatma Nirbhar Bharat means from "Made in India" to "Made by India" and leads to adoption of Swadeshi or being indigenous or our country's whole cycle from raw material to finished product, with the country relying solely on its own resources. Atmanirbhar Bharat is a goal with profound roots in India's intellectual culture, not just a catchphrase. It was observed that due to increase competition from various countries and unfair import policies the around 700 MSME clusters lost their sheen. Economic development by home-grown model is called as 'Swadeshi'. Swadeshi is not about becoming isolated country by turning away from the world. 'Swadeshi' has philosophy includes take local brands and make them global. It has capability to create local enterprises and overcome disrupted economy due to pandemic. Hence it is necessary to identified that how Indian consumers perceives swadeshi products. Under "Atmanirbhar Bharat".

The call for swadeshi, boycott British products first heard in 1905. But it is seems doing come back in wake of COVID-19. By minimizing import and product made in India as a substitute of imported product will transform Indian economy and create jobs for millions of Indian citizens. If we choose swadeshi products made by carpenters, artisans and tribals the citizens of India will become changemakers and make India better place to live.

India has a huge market of around one forty crores of population. To satisfy the need of such a huge population India must import in big numbers. If these imported items are started producing in India, it will lead to growth in national income as well as satisfy the need of citizens also. Above figure shows that India has an immense scope in all the four mentioned sectors. But Industrial production within the country is only possible and successful when there are buyers also. What buyers are thinking about domestic product is important to know. If they like the products and prefer them then only sale increases, and economy also grow. The previous studies mainly analyze perception on local foods and herbal products but in this study, perception is analyzed mainly on clothing, electronic items, and appliances. The reason to choose only these products is these are the highly sold and demanding product in India. Also, India is importing these products in huge quantity. All these products have important characteristics and common too in all the mentioned product category.

Review of Literature

Feldmann, Hamm & Hempel (2014) reviewed the scientific literature based on customer perception for local foods. After doing extensive literature review one important outcome perceived is, local products are not expensive as organic products. Consumers are ready to pay extra on local foods. In majority of the studies local foods were assessed based on customers attributes and buying behavior but this is the only scientific study which is based on consumption of local foods. Naspetti & Bodinin (2008) analyzed the many customers preferred local foods due to its freshness, better quality, and good taste. Organic foods are treated as complementary or substitute of local foods. Italian customers like to purchase local products because of its freshness. Motivating factors were seasonality, locality, and territoriality.

Jaggi and Ghosh (2017) researched the perception of customers towards Patanjali Products specially in Pune city of India. Pricing, quality, and communication strategies were the factors which influence the decision of customers towards purchase of Patanjali products. Sharma (2020) identified the household perception and preference towards Patanjali products in Mathura District, India. Data of 170 households was collected and exploratory factor analysis was used for further analysis of data. Originality and quality of the product influence customers to buy Patanjali products.

Agarwal (2017) analysed the satisfaction of female respondents of Moradabad city, Uttar Pradesh with special reference to cosmetic products. It was found that swadeshi products are much better than videshi products. Females are more satisfied with swadeshi products. Saji (2020) assessed the impact of marketing mix components on Patanjali Products. Consumer's ratings and satisfaction were also analysed. Cross sections regression was used to analyse the data. High quality perception was found towards Patanjali Ayurveda. Sthapit & Joshi (2018) researched the preference of buyers towards Patanjali products in Kathmandu Valley. Questionnaire survey method was utilized to collect the data. Most influential factors were price, quality, and health. Wheatley & Chiu (1977) perceived the product quality in association with, price, quality, attributes of product such as income, occupation, education, and colour. It was found in the research that; demographic characteristics interact with each other and with marketing mix element also.

Shinde (2015) researched the perception and behaviour of people for herbal products also the marketing strategies impact used by Ayurvedic companies was also analysed. It was also found that how media tools, strategy of companies and various marketing mix affects are used in Ayurvedic marketing. Factors impacting sales of Patanjali, Dabur and Zandu were analysed. Jain (2018) found that consumers were highly satisfied with Patanjali products. It was due to satisfactory price and capability of the product to heal the problem. There is spiritual element involved in the Patanjali which make customers highly satisfied. Mirzagoli & Memarian (2015) identified the satisfaction of customers towards Mellat Bank ATM in Iran. The research was descriptive in nature. Occupation, gender, education, and residential status have a large impact on satisfaction of customers. Slaba (2020) focused on age as a significant factor in influencing consumer behaviour towards buying. To understand the impact of age one way ANOVA was used. Different factors have different impact on consumer behaviour.

Research problem

Today, consumers run Swadeshi movement, but it may run into limits. Huge number of Indians have easy availability of cheap products from various countries. These products range from phones to footwears and make life easy and better. Indians are now use to of global standards and variety. Indian domestic production should match this standard. Buying swadeshi items is appears to be not simple. It might work for a brief time. 'Buy Indian' jingle will not be enough. This movement will be successful only when it lasts for a long time. Customers should have to buy the Indian products which leads to growth in economy. So, to identify what customer is perceived about the purchase of swadeshi products is very important. This study provides various factors which affects consumers for purchase of swadeshi products. It is an attempt to understand what makes consumers to buy these products. Perception of different aging consumers were also analyzed.

Objectives

1. To identify the factors influencing the perception of customers towards use of swadeshi products.
2. To analyze the age wise perception of customers towards swadeshi products.

Research Methods

The study

This is an exploratory study which focuses on finding impact of independent variable that is age of the consumers on dependent variable that is identified factors.

The sample

Customers who are willing to purchase swadeshi products were the sample of the study. The dependent variables were identified factors namely product accessibility and quality, product feature and image, patriotism, social development, and accuracy whereas independent variable was age of the respondents.

Data was collected through both primary and secondary sources. Since the study was conducted after COVID-19 Pandemic, the mode of collecting the data is mainly online through social media, e-mailing and other e-sources. Data was collected from major cities of central India, they are Bhopal, Indore, Ujjain, and Jabalpur. Final 101 customers responded on sent questionnaire. Customers to whom data send was mainly customers of clothing, electronic items, and home appliances. 25th version of SPSS was utilized. Demographical data age, gender, occupation, was analyzed by using mean and percentage analysis. Factor analysis and ANOVA method were used to identify the factors and age wise perception of customers respectively.

Tools for data collection

For empirical study, self-structured questionnaire was prepared. The items in the questionnaire were taken from previous studies Feldmann, Hamm & Hempel (2014), Naspetti & Bodini (2008), Sharma (2020) and Jaggi & Ghosh (2017). Items included in the study were based on various general characteristics of a product which influence the customers to purchase such as price, packaging, design, quality, availability. These characteristics further linked with Indian culture and tradition as 'swadeshi' somewhere attached with emotions of citizens and with society. Final questionnaire was designed after including all variables. For pilot study questionnaire were distributed to 12 experts of various field. After some amendment's suggested by experts, 18 items in the questionnaire were finalized. Cronbach's alpha (.87) was used to measure the reliability of the scale and validity of the scale is (.82). Questions were ranked on five-point Likert scale from strongly agree to Strongly disagree. Demographic variables age, gender, income, education, occupation was also analyzed.

Results

Hypotheses are:

H_{01}: Age wise there is no significant difference found in customers perception towards product accessibility and quality.

H_{02}: Age wise there is no significant difference found in customers perception towards product feature and image.

H_{03}: Age wise there is no significant difference found in customers perception towards patriotism.

H_{04}: Age wise there is no significant difference found in customers perception towards social development.

H_{05}: Age wise there is no significant difference found in customers perception towards accuracy.

After applying factor analysis, results are:

Table 3 Total Variance Explained

	Initial Eigenvalues			*Extraction Sums of Squared Loadings*		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.495	36.082	36.082	6.495	36.082	36.082
2	1.399	7.771	43.853	1.399	7.771	43.853
3	1.197	6.651	50.504	1.197	6.651	50.504
4	1.138	6.321	56.825	1.138	6.321	56.825
5	1.019	5.664	62.488	1.019	5.664	62.488
6	.969	5.382	67.871			
7	.885	4.916	72.787			
8	.804	4.466	77.252			
9	.716	3.976	81.228			
10	.532	2.954	84.183			
11	.494	2.746	86.928			
12	.464	2.575	89.503			
13	.432	2.398	91.902			
14	.358	1.988	93.890			
15	.340	1.887	95.777			
16	.289	1.604	97.380			
17	.281	1.561	98.941			
18	.191	1.059	100.000			

Extraction Method: Principal Component Analysis.

Table 4 Rotated Component Matrix

	Component				
	1	2	3	4	5
Price	.073	.196	.818	.092	.179
Loyalty	.108	.251	.772	-.114	-.156
Indian culture	.476	.093	.630	-.074	-.053
Indian economy	.392	.270	.395	.210	-.017
Quality	.682	.328	.003	.102	.047
Change maker	.181	.626	.278	.403	-.153
Employment	.211	.346	.390	.507	-.123
Easy availability	.519	.330	.143	.301	-.245
Status and pride	.714	.228	.103	.063	-.146
Inferiority	.740	.023	.234	-.083	.001
Durability	.320	.554	.189	-.073	.042
Peer pressure	.271	.790	.129	-.197	-.106
Unavailability	.565	.180	.364	.000	-.285
Brand image	.485	.519	.080	.186	.158
Family pressure	.590	.371	.101	-.016	.316
Design	.160	.747	.324	-.094	-.058
Trust and believability	-.029	-.286	-.170	.728	.079
Authenticity	-.047	-.057	-.006	.006	.896

Five factors were identified after factor analysis. Factor 1 comprises of six variables and mainly related with easy availability, unavailability and quality hence named as 'Product accessibility and quality'. Factor 2 consist of five variables related with design, durability and brand image so named as 'Product features and image'. Factor 3 consist of six variables. Variables are associated with loyalty towards country, culture and Indian economy and hence named as 'Patriotism'. Factor 4 made of two variables related with employment generation and trust for country so named as 'Social development' and contained 6.32% of variance. Factor 5 contains only one variable which is associated with authenticity and named as 'Accuracy'. It has 5.66% of variance.

H_{01}: Age wise there is no significant difference found in customers perception for product accessibility and quality.

Table 5.1 ANOVA

		Sum of Squares	*Df*	*Mean square*	*F*	*Sig.*
Product accessibility and quality	Between Groups	44.240	37	1.196	1.702	.032
	Within Groups	43.563	62	.703		
	Total	87.803	99			

Table 5.1 demonstrated the result of one-way ANOVA, which shows that p value is .032, less than 5% level of significance hence H_{01} is rejected.

H_{02}: Age wise there is no significant difference found in customers perception for product feature and image.

Table 5.2 ANOVA

		Sum of Squares	*Df*	*Mean square*	*F*	*Sig.*
Product features and image	Between Groups	53.661	37	1.450	1.916	.012
	Within Groups	46.938	62	.757		
	Total	100.600	99			

Table 5.2 demonstrated the result of one-way ANOVA, which shows that p value is .012, less than 5% level of significance hence H_{02} is rejected.

H_{03}: Age wise there is no significant difference found in customers perception for patriotism.

Table 5.3 ANOVA

		Sum of Squares	*Df*	*Mean square*	*F*	*Sig.*
Patriotism	Between Groups	55.957	37	1.512	2.728	.000
	Within Groups	34.378	62	.554		
	Total	90.335	99			

Table 5.3 demonstrated the result of one-way ANOVA, which shows that p value is .000, less than 5% level of significance hence H_{03} is rejected.

H_{04}: Age wise there is no significant difference found in customers perception for social development.

Table 5.4 ANOVA

		Sum of Squares	*df*	*Mean square*	*F*	*Sig.*
Social Development	Between Groups	35.263	37	.953	.900	.630
	Within Groups	65.684	62	1.059		
	Total	100.947	99			

Table 5.4 demonstrated the result of one-way ANOVA, which shows that p value is .630, more than 5% level of significance hence H_{04} is accepted.

H_{05}: Age wise there is no significant difference found in customers perception for accuracy.

Table 5.5 ANOVA

		Sum of Squares	*df*	*Mean square*	*F*	*Sig.*
Accuracy	Between Groups	25.985	37	.702	1.333	.156
	Within Groups	32.655	62	.527		
	Total	58.640	99			

Table 5.5 demonstrated the result of one-way ANOVA, which shows that p value is .156, more than 5% level of significance hence H_{05} is accepted.

Discussion

The purpose of this research is to identify the factors which influences the decision of customers towards use of only Indian products. The study first identified the items that influence the decision of customers on various points. These items mainly associated with the domestic product traits. Since use of swadeshi products somewhere attached with emotions of the citizens (Agarwal, 2017) hence some of the items are also related to citizens love and loyalty towards their country. These variables are selected based on extensively literature review. Hence final statements were prepared and sent to experts for further check. Normality and reliability of the data was checked using KS test of normality and Cronbach alpha, respectively. Data was gathered using self-developed questionnaire. After applying factor analysis on collected data, five factors were explored and named based on their nature and similarity. They are product accessibility and quality, product attribute, patriotism, social development, and accuracy. The results matched with the study of Khanna (2015) in which attribute is the factor which affects the perception and satisfaction of the customers and the same result with this study also. This study also matched with Saji (2020), & Katole (2018). According to their study product quality is the prime factor which is having significant effect on customer perception. Joshi & Sthapit (2018), Sthapit & Shakya (2010) and Gurusanthosini & Gomathi (2017) studied that product quality and accessibility have a significant impact on buyers' preference and same with this study also.

Conclusion

Researchers from numerous filed have been paying expanding attention on aging effect on various components of life. Thus, this study focuses on finding the various factors which motivates customers to buy local products. Also, age wise customer perception is identified. It was researched that majority of the respondents were male, graduate and employed also. In conclusion, this study draws the significant difference between age and factors which affect the perception of customers towards use of swadeshi products. Age wise significant difference found for three factors thus customer perception is varied for product accessibility and quality, product features and image and accuracy. These factors are motivating factors which force customers to buy swadeshi products. No significant difference found among different age groups towards social development and accuracy factors. Future researcher will focus on other demographic characteristics such as marital status, education, occupation, and gender instead of age of the respondents. They will also go for customer satisfaction. To increase the sale of swadeshi products after COVID and to overcome disrupt Indian economy it is recommended to create specific strategies for aging people. The study suggests more innovation in swadeshi products with respect to different age group people. Logical designed, Product line, distribution network should also be improved to raise the sale. It will give more varieties of products in terms of quality, pricing, and satisfaction so that market share can be increases for swadeshi products.

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Work-Life Balance Practices: Job Demands and Work Autonomy as Predictors of Bank Employee Job Performance

Mwanaidi Shfii Msuya

Abstract

The aim of research is to assess the correlation between work demand, work autonomy and bank employees' performance. A survey of this study was carried out among bank employees located in the Central Zone regions of Tanzania. The study employed a quantitative approach to obtain responses from respondents. A total of questionnaires received from bank employees were two hundred and fifty-two. Data were coded using IBM SPSS and analyzed using SEM (Structural Equation Modeling). The study outcomes revealed that work demand and work autonomy correlate positive with bank employees' performance. Businesses or managers have to identify work-life strategies which will act as means to boost employees' job performance by assigning employees moderate job demands and granting work autonomy.

Keywords: *Job demands, Bank employees, Tanzania, Work autonomy, Job Performance, WLB practices.*

Introduction

Employee performance is crucial area at work in any kind of organization. It helps an organization increase and make full use of its human resource capacity. The consequence is exceptional service delivery and interaction, which has an impact on every element of the business. Thus, when it comes to determining a company's success, whether a manufacturing or service provider company, performance is crucial (Pawirosumarto, Sarjana, & Gunawan, 2017). A bank is a service-oriented business that places a high value on performance to determine success. A person's performance can be affected by a number of elements, including the amount of production, the value of output, their job attendance, the effectiveness with which job is finished, and their efficiency (Anthonia & Ukoha, 2018). To succeed, banks need to devise strategies that will promote employee performance. Employee performance is an employee's product, which they produce in exchange for tangible and non-tangible returns (Bataineh, 2019). In this case, employee performance is all about productivity. The amount of contribution that employee makes to the organization is determined by their performance, (production quantity, output quality, cooperative attitude job participation, and attendance). In the same vein, if the workplace environment is unfavorable to employees, it will negatively affect their job performance. That is, policies and practices used to promote healthy work-life (WLB) are meant to give workers with employment flexibility so that they can accommodate family and other life responsibilities. Thus, maintaining WLB for bank employees is critical to providing high-quality service to their customers.

However, despite the fact that most academics and business leaders agree that employee performance is critical to an organization's effectiveness, study on the correlation among job demand, work autonomy, and job performance are limited. We claimed that job demands and work autonomy are among work-life practices associated with increased and or decreased job performance. Autonomy refers to a person's ability to schedule work and choose the ways to complete it with a large amount of freedom, independence, and discretion (Oldham, Hackman, & Pearce, 1976). It results in a crucial emotional state in which accountability experienced on task's outcomes improves work performance and internal job motivation. That autonomy is vital in rising employee satisfaction as well a performance and lessening stress, frustration, and anxiety among employees (Johari, Tan, Iwani, & Zulkarnain, 2020). Accordingly, high job demand leads to various outcomes that can impact employees' well-being, such as sickness, injury, or behavioral and lifestyle changes (Sheppard, 2016). Employees who are faced with high job demands and at the same time are unable to manage family and work demands are emotionally suffered as a result of their efforts (Karatepe, 2013). As a result, employees invest less effort in their jobs and perform poorly on the job. According to (Haar, Sune, Russo, & Ollier-Malaterre, 2019) work demands are strain-based demands, which can produce unpleasant emotions, tension, and exhaustion among employees thus, these reactions may affect employee productivity.

Long work hours and overtime (related to job demands) negatively influence employees' ability to properly manage the work-family interface (Beham, Drobniˇ, & Prag, 2011). The amount of negative job and family interference experienced by a worker increases in direct to the amount hours one's worked, which may produce work-family conflict and, as a result, decrease employee performance. Bank employees experience long working hours and an inflexible working environment (Barat, 2017), which may be perceived as a lack of work autonomy and high job demand. It is believed that work autonomy and moderate job demands among work-life strategies are essential aspects leading to increased job performance. In general, there is few quantitative studies in the banking industry focusing on job demands, work autonomy, and job performance in Africa. Hence, this research focus on investigating the correlations among work autonomy, work demands, and job performance in banking sector.

Literature review and hypothesis development

Job/work demands and Performance

Demands may be referred as psychological or structural assertions about expectations for role, expected outcomes, and social standards (Voydanoff, 2004). Individuals are obligated to respond and adapt to these demands by exerting physical or mental effort. Demands include family demand and job demand. In this research, we examine the influence of job demand on employee performance. When it comes to job demand, they represent the overall judgments of an individual of how hard the job role obligations are (Haar et al., 2019). Thus, job demand indicates the amount of work that is expected of the employee, the level to which he or she is asked to work under time constraints, and the degree to which the individual is expected to complete competing job. High job demands may lead to a wide variety of outcomes that can impact employees' well-being, such as sickness, injury, or behavioral and lifestyle changes (Sheppard, 2016) and as a result impact performance. Findings of prior research, demonstrate that the amount of hours an employee worked in a week is adversely connected to WLB while being favourably related to work and non-work conflict (Karatepe, 2013). Study revealed demand and In-role performance are positive correlated, while Extra-role performance were negatively correlated (Bakker, Bakker, Demerouti, & Verbeke, 2004). Likewise, we argue that work extra hours severely limit the ability of worker to meet other life duties as well as promotes work interference into personal life, which is detrimental to both and may decrease performance. In that, we assume that;

H_1: Job demand has a positive association with bank Employees' Job Performance

Work Autonomy and Job Performance

Work autonomy refers to how individuals are empowered to make decisions about how they will perform their duties at their workplace (Voydanoff, 2004). According to previous research, greater job autonomy contributes to a sense of being respected and trusted and a sense of pride in achieving organizational outcomes that reflect their decision-making talents (Saragih, 2011). Job autonomy may help the employee to achieve a balanced work-life since it acts as a work resource. Workers that have a high degree of work autonomy believe that they can be trusted to accomplish the task, which leads to improved performance in the workplace. Research into work autonomy has demonstrated a positive correlation with job outcomes (Johari et al., 2020). Consequently, we claim that job autonomy and performance are favourably associated.

H_2: Work Autonomy influences bank Employees' Performance.

Methodology

The cross-sectional survey was used to test the hypothesized relationships. Structured questionnaires were used to gather data from employees of selected commercial banks in Dodoma, Manyara, and the Singida regions in Tanzania. The survey was conducted in an entirely anonymous manner to protect the privacy of those who participated. Two hundred fifty-two survey questionnaires were filled and returned from employees. The employed questionnaire was adopted from original sources and modified by researchers suit the context of the study. The study used twenty-two items to measure all variables with the point-five Likert scale. The measure of job was six items adapted from (Breaugh, 1999). Seven questions adopted (Maher, 2016) were used to gauge the job demand factor. Lastly, 10 items from (Anderson, 1991) were employed to evaluate performance.

Data analysis technique

IBM SPSS software version 26.0 and (Smart PLS) SEM were analysis tool used. SPSS was used on coding data, data entry, and data screening. While PLS-SEM was applied in assessing construct reliability and validity as well as testing study hypotheses. The measurement model was conducted to test for construct validity and reliability.

Findings

Reflective Measurement Evaluation

The validity of constructs and reliability were evaluated through measurement model. Firstly, we removed the item loadings from further analysis with below satisfactory value of 0.50 (Hair, Ringle, Hult M, 2014), (Hair, Hult, & Ringle, 2017) to improve convergent validity and composite reliability (CR). So, researchers retained item (JD 1, loading = 0.581) because CR and AVE were satisfactory.

We further evaluated reliability of constructs. The results indicates that reliability for most constructs were satisfactory above .700 (Hair et al., 2017), except for job demand which Cronbach's Alpha was less than .700 (0.695), and since composite reliability was above the threshold, we decided to carry on. The constructs' discriminant/divergent validity was determined by assessing the correlations between them with the AVE's square root (Hair, Ringle, Hult M, 2014) and all were good. HTMT, "the recently recommended measure of discriminant validity with the values that are under the threshold of.850" (Henseler, Ringle, & Sarstedt, 2015). As a result, the constructs' validity is established. (See Tables 2 & 3).

Table 1: Construct Reliability and Validity

Construct	Measurement Item	Item loading	Alpha	rho	CR	AVE
Job Demand	JD1	0.581	0.695	0.700	0.782	0.645
	JD5	0.673				
	JD7	0.742				
Job Performance	JP10	0.737	0.864	0.885	0.898	0.597
	JP3	0.716				
	JP6	0.719				
	JP7	0.735				
	JP8	0.842				
	JP9	0.870				
Work autonomy	WA1	0.734	0.727	0.730	0.830	0.551
	WA2	0.799				
	WA5	0.661				
	WA6	0.768				

Divergent Validity

Table 2: Fornell Larcker Criterion and **Table 3:** HTMT

Construct	1	2	3	1	2	3
Job performance	**0.803**					
Work Autonomy	0.216	**0.773**		0.336		
Job Demand	-0.058	0.372	**0.742**	0.231	0.448	

Structural Model Assessment

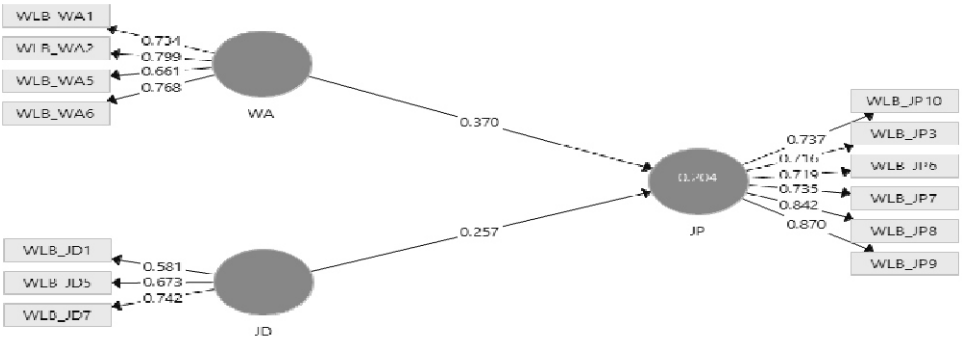
The paths proposed in this research are reflected in the structural model of the research framework. First, we tested multicollinearity between constructs under study by using Variance Inflation Factor (VIF) and found no collinearity issue. Since the values obtained were less than 3 (Hair et al., 2017) (see Table 4). The predictive power (R^2) of each structural path on the endogenous construct, determines the quality of the model, in which "R^2 value should be equal to or over 0.1" (Latif & Shaukat, 2020) (10%), (Ringle, Sarstedt, Mitchell, & Siegfried, 2018) hence, the results meet the requirements. A second step is to determine whether or not the endogenous constructs are predictively relevant. "Where the Q^2 value was above zero. Thus, model has satisfactory predictive significance" (Hair et al., 2017), (See Table 4).

The hypotheses were evaluated to determine the association's relevance among the latent variables. H1 and H2 investigate whether Job demands (JD) and Work autonomy (WA) affect Job performance (JP). The findings indicate that work demands has a strong correlation with bank employees' performance (β =.386, t =.051, p = .000). Likewise, the results revealed that WA significantly impacts JP (β = .238, t = .053, p = .000), which means hypothesis H1 and H2 was all confirmed.

Table 4: Structural Model -Testing Constructs' Direct Association

Constructs	Path Coefficient	Standard (SD)	T Value (Bootstrap)	P Values	βI [2.50%, 97.50%]	VIF	Decision
WA -> JP	0.238	0.053	4.500	0.000	[0.137, 0.343]	1.000	Supported
JD -> JP	0.386	0.051	7.554	0.000	[0.296, 0.494]	1.000	Supported
R^2 JP =	0.195						
Q^2 JP=	0.104						

Abbreviations: βI, bias-corrected confidence interval



Discussion of findings

The PLS-SEM analysis confirmed that the assumed association between work autonomy, work demand, and bank employees' job performance was favourable. The first hypothesis was sought to determine the association between job demand and employee performance. The result after running the structural model revealed that job demand influences job performance significantly and positively. The association was revealed significant at p<0.05, showing that 95% confidence level. That means perceived work demands have a positive impact on job performance. In the same vein, the research is partly supporting the work of "(Bakker et al., 2004)," who found work demand and In-role performance are direct and positive associated and with Extra-role performance are negatively correlated. This means that the employees are able to perform well at work even when job demands are high or moderate, which may be because of a conducive workplace (social support). When one's home resources are available such as support from worker's partner and supervisor support at work, they can help one perform better at work by giving means and or by increasing abilities of individual (for example, self-growth opportunities). That a person's home offers them resources such as self-esteem, emotional support, as well as flexibility, all of which can help them do better in other areas of their lives (that is, the work domain). Support from family and friends, in particular, was found to be favourably associated with the overall quality of work (performance) (Demerouti, Bakker, & Voydanoff, 2010).

The study investigated the second hypothesis to see a connection among autonomy at work and employee performance. According to the SEM findings, there is link between employee work autonomy and j performance. The link was significant at a five percent level (P < 0.05), which directs that at 95% level of confidence, we might deduce that a presence of work autonomy improves employee job performance. Thus, an absence of work autonomy has an adverse impact on job performance. This result aligns with (Johari et al., 2020) who found a positive influence employees' work autonomy on performance.

This study has significant implications for managers when it comes to work design. In particular, it has consequences for the banking industry due to current research findings. To begin, granting a high level of autonomy will increase intrinsic motivation, resulting in increased job performance. As a result, managers must provide employees authority in two aspects of their jobs; work method and work schedule autonomy. Second, this research has demonstrated the importance of job demand on job performance. As a result, the manager must discover a means to boost employees' job performance by assigning employees moderate job demands and granting work autonomy. Offering job autonomy and providing a pleasant working environment employment happiness can be improved. These findings significantly contribute to our knowledge of the interconnections between work autonomy and job demand since high demands have a detrimental influence on employee well-being at the time when the resources of individual worker (such as time and energy) are insufficient to meet the demands. On the other hand, our results demonstrate that high performance is reported when employees have moderate job demands and high-level work autonomy.

Conclusion and Limitations

The study's aim to assess the correlation among work demand, job autonomy, and performance. The research findings on the association among work demand and performance were found significant and thus, contribute to work-life balance practices (that is, job demands) literature by exploring its association with employee performance that has not been studied mostly. On the other hand, work autonomy and job performance were substantial and significant. Therefore, we assert that job demands and work autonomy are essential predictors of employees' performance in business and non-business organizations. Businesses and managers have to boost employees' job performance by assigning employees moderate job demands and granting work autonomy. Because granting a high level of autonomy will increase intrinsic motivation, resulting in increased job performance, while reasonable job demands reduce emotional exhaustion and improve employees' well-being. This study was a quantitative survey, where collected data was at the same time. Therefore, we recommend another study using the same variables, which will comprise a greater number of employees to increase the reliability of data and longitudinal survey. Also, the study used self-rating on evaluating job performance. Hence, we propose future research to assess work performance from other aspects, such as a supervisor.

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A Ray of Hope in the Dark Times of the Covid19 Pandemic: Twitter Emerges as a Source of Help to Locate Covid19 Resources

Shaili Gala

Abstract: *The social media, especially Twitter, emerged as a reliable source of help during the 2nd wave of Covid-19 during the pandemic. When the entire world including India was clueless and helpless about the pandemic and governments were struggling with the staff and resources crunch, twitter and youth played an important role in helping relatives and patients not only in with reliable information but with finding out the sources of all required resources in the 2nd wave of Covid-19. During the lockdown, when patients and relatives were wandering from hospital to hospital for one oxygen bed or Remdesivir injection or plasma, Twitter helped them in finding out the nearby reliable sources.*

Key words: *Twitter, Covid-19, Pandemic, Social Media, Volunteers*

Introduction:

Within the 140-character limit of Twitter, quite a lot is usually expressed through this social media platform; used as a marketing platform in innovative ways to reach out to the masses. In India however, the recent scenarios has led to increased spreading of hatred, communal disharmony, fake news and rumours. The youth of the country have indulged in trolling and bullying people on social media sites like Twitter, which has left no one untouched by this dirt; right from politicians to celebrities, cricketers to social activists and every other common man or woman. As a result, questions have started arising on the laws protecting users from not just cybercrime or cyber bullying but also measures against hate or fake news and the credibility of “Freedom of Speech and Expression” to the extreme extents. And to add to all of this, the misuse of police power and law enforcement to harass social activists in the name of misusing social media handles to speak against the government, while letting the real culprits and trollers take a free toll altogether worsening the situation in the country. But during the pandemic Covid-19, this Twitter app proved to be an Angel to the society. In many countries like India, youngsters, NGOs, volunteers, health care workers and governments used Twitter to provide correct information about the pandemic. Social media proved a boon to spread verified information across the masses, and Twitter took the lead in it. The company Twitter also took various measures to deal with the pandemic.

Objectives:

1) To study and analyse the use of Twitter App in the Pandemic for Covid Resources Help specially during the 2nd wave in India.
2) To examine the work of NGOs, and volunteers to help the public in the pandemic in India.

Review of literature:

Ghosh Priyanka and authors (2021) have stated in their article, 'Twitter as a powerful tool for communication between pain physicians during Covid-19 pandemic' that the use of social media and specially Twitter is steadily increases across medical experts for various purposes during pandemic. Authors were hopeful for further use of social media for the benefits of the people at large.

Lynn K, Moses N & Nathan M (2021) have written in their research paper that the objectives of their study were to examine the engagement patterns of Ugandans on Twitter and the major topics that were discussed on Twitter during the pandemic by the people. They cluttered tweets mainly into five clusters via i) Coronavirus, ii) First case iii) Presidential Address iv) Lockdown v) Truck Drivers. They found that tweets from verified accounts received more engagement than unverified accounts and Twitter became an information, communication and supportive channel. Researchers emphasized on more use of social media in the time of crisis will surely help the society at large.

Review and Analysis of Twitter App:

During the Pandemic Covid-19, Twitter initiated following measures to aid the globe during the crisis.

1. It helped people find reliable information:
   i. It created Covid-19 Tab in 'Explore' to find the latest information

on Covid-19. The tab included curated pages highlighting the latest news, information and stories from public health organisations, experts and journalists. This was started in 16 selected countries including India, US, UK & Australia.

ii. It began Covid-19 account verification.

Screenshot 1.1 Verification of Account

Source: Twitter App

2. Global expansion of the Covid-19 search prompt:

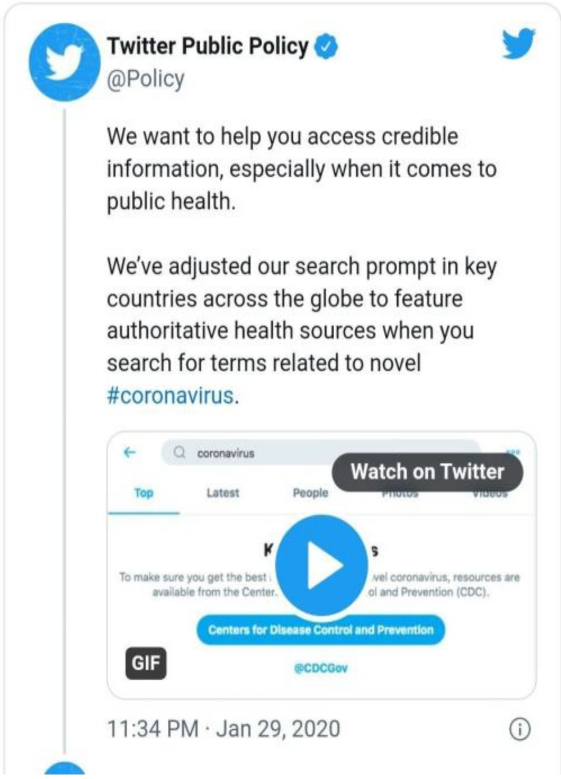
i. Six days before the official declaration of pandemic in January 2020, Twitter with the help of local partnerships in more than 70 countries launched a proactive search prompt.

ii. A dedicated Covid-19 event page: Twitter started 'Event' feature contains credible information about Covid-19 at the top of the home timeline in 30 + countries.

iii. #KnowTheFacts: With the millions of tweets about Covid-19 started flooding on Twitter, it launched a new dedicated #KnowTheFacts search prompt which was put in place for the public to find clear, credible information on immunization and vaccination health.

iv. Direct engagement with organisations working to contain threat: Twitter's Global Public Policy team started integrating the product with organisations involved in the efforts to create threat.

Screenshot 1.2 Twitter's Global Public Policy



Source: Twitter App

3. Protecting the Public Conversation:

Twitter took following steps in July 2020 to ensure spreading of reliable information:

i. Assessing the misleading information and updating the approach towards it.

ii. Broadening the guidance on unverified claims

iii. Zero tolerance approach to platform manipulation

4. Partnering with organizations and public engagement:

Resources for those battling Covid -19: With the help of other social media and Companies, Twitter compiled the data and information of resources useful during the pandemic.

5. Use of automated technology:

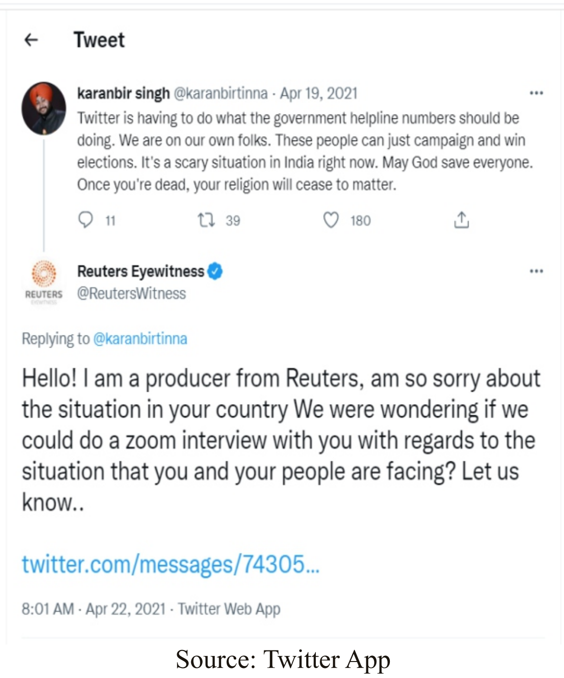
Twitter used machine learning and automation to take a wide range of actions on potentially abusive and manipulative content. The use of technology helped Twitter to rank content and challenge accounts automatically. Moreover, misleading information around Covid-19, the twitter team reviewed those reports manually. So, twitter built a system that enabled its team to enforce the rules remotely around the world.

Though Twitter had less popularity than Facebook or

WhatsApp in terms of usage, it proved to be more useful during the times of crisis as a tool of finding immediate help and useful resources, all thanks to the 'Retweet' function that was used widely in order to amplify important and useful information. People started bypassing the conventional lines of communication and turned to twitter to crowdsource help for resources like oxygen cylinders, medicines and injections and even hospital beds as the per day cases in India kept rising drastically. A large number of people came forward to form volunteer-based groups to help those in need of information by directing them to the right kind of contacts available in time. Tech-savvy youth like students from institutions like IIT, professionals working with NGOs, youth associated to political parties and so on created tools, websites and spreadsheets full of collated information relating to all sorts of needs and resources required, which was easily amplified on Twitter with easy directions to find the contact details of vendors who sold oxygen cylinders or drugs and injections along with details of various other medical facilities and even lists like home-cooked food or tiffin services, pet care-takers, etc.

The speedy, verified, reliable information that was available on Twitter made it a success story in the masses as they turned to social media to seek for help in times where the conventional sources of help from the public institutions and government had started to fail brought it to limelight to the large media houses like Aljazeera, The New York Times, The Indian Express who reached out to individuals covering their stories of providing and receiving help through Twitter.

Screenshot 1.3 #CovidEmergencyin2021



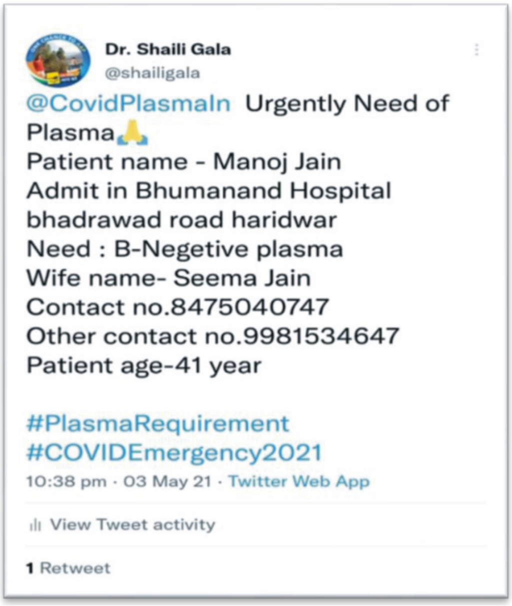
Source: Twitter App

Another incident of an Indian lawyer Jeevika Shiv was quoted in an article by Aljazeera, "After spending hours fruitlessly calling government helplines in a search for a hospital bed for a critically ill Covid-19 patient, Shiv posted an SOS request on Twitter, where she found help immediately where she later tweeted that the patient was now doing well, thanks to the help that came from volunteers online, who responded with quick reliable information."

The Indian Express covered stories of volunteers from opposition political parties who started helplines and provided help online as well as on the ground to families of critically ill Covid patients to find resources and hospital beds in time. In one such article Indian Express had written about a college graduate Ratnaab Mukherji, a volunteer, and joint secretary of Aam Aadmi Party, Reuben Mascarenhas who led a team of 80 odd volunteers, who handled the Covid Helpline Number of the Aam Aadmi Party operating in Mumbai. They would work for more than 14 hours receiving distress calls, messages or tweets and providing people with reliable covid resources using a large database from the BMC and arranging help to their best possible ways. "Most of the calls", they said, "were mainly for ventilator beds or medicines like Remdesivir along with calls for oxygen cylinders too. At times when it would not be in the reach of the volunteers to arrange for help, that was when resourceful contacts of various MLAs or MPs of those areas were approached by keeping political boundaries at bay to assure quick relief and help." The news house stated that the helpline would receive about 150 - 200 calls a day on an average and sometimes even more than 300, when the covid cases were reaching its peak in Mumbai.

The researcher also volunteered with few 'Seva' WhatsApp groups who helped patients across India for helping patients in finding out Covid beds, oxygen beds, ventilators beds, plasma and so on. These groups had youngsters from across India mainly from Tier III cities like Baroda, Rajkot, Varanasi, Zhansi, Ahemdabad, Agra and so on. Initially researcher found it difficult to find out oxygen beds across India. Researcher and the members of the groups found that patients relatives and family members were wandering for one oxygen bed from 2-3 days across their city. The situation was extremely bad in the capital city Delhi for initial 4-5 days; Injections like Remdesivir and other medicines were extremely in short supply. Family members were ready to pay the double or triple the price for just one injection but they were not able to find it anywhere in the city. Researcher came across relatives who travelled 100s of kilometres and stood whole night in queue just for one injection. But gradually researcher along with other WhatsApp group members were able to find out the 'LEADs' for beds, medicines and other resources. One of the group admins started a crowdfunding initiative for a patient from a very humble background who was infected with Covid-19 and hospitalized for the same. Researcher worked for around 2-3 months and helped patients across India during this 2nd wave of the pandemic.

Screenshot 1.4 Researcher Twitter Account



Source: Twitter App

Screenshot 1.5 Researcher Twitter Account

Source: Twitter App

Conclusion:

Social Media: A marketing platform that reaches out to the Youth widely, served an entirely varied purpose in the times of crisis proving to be effective to reach out to the common citizens easily for the sake selfless help and support. This Case Study helped give a completely new direction to the term 'Marketing using Social Media' as people marketed 'Helpful Resources' instead of 'Products or Brands'. In upcoming times of crisis Twitter could develop tools such that the privacy of patients' and family members' personal information is protected. The future lies in social media and its fruitful usage for noble purposes. For further study, other researchers can do data analysis of tweets during 2nd wave and try to study the statistical outcomes of the research during the pandemic.

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'From Shiny Paragon to Globally Despised Scourage' - The Roleof Media Duringthe Pandemic

Sunita Gupta, Satinder Kaur

Abstract

They say that knowledge is power but too little can potentially be dangerous. Information is a weapon and can be used both to create awareness and also degrade capabilities while fighting adverse situations. With Covid -19 focusing minds and dominating headlines across the world, filtering out what is true from what is not, is the key. Pandemic has been cloaked in a massive infodemic catalogue of dangerous 'myths' circulating around the virus. In this time of crisis, the role of sensible journalism is the need of the hour. Dissemination of more reliable information that is factually correct by various media platforms is, what cannot be denied. The present paper highlights the role played by the media in handling the pandemic and how it has impacted the people belonging to different occupations, to different age groups and to assess the positive and negative role played by the media.

Key words: *covid, infodemic, media, pandemic*

Introduction

"Things fall apart"; the center cannot hold;

Mere anarchy is loosed upon the world,

The blood dimmed tide is loosed, and everywhere

The ceremony of innocence is drowned…."

-------"The Second Coming" by W.B Yeats

Today we are living in unusual times, with the corona virus disease (COVID - 19) on a rampage, confining almost half of all humanity, within the four walls of their homes. These times of uncertainty, confinement, hunger and sickness will become gripping anecdotes for future generations by those who would be privileged enough to survive. But it is not only the pandemic that threatens to engulf the entire human race but also infodemic. The world health organization (WHO) Director – General TedrosAdhanomGhebreyesus said in February, "We are not just fighting an epidemic; we are fighting an infodemic ."

The overwhelming amount of information that barrages our media feed each day often without a credible source is the infodemic. The result is the spread of fake news, unproven facts and misinformation. With countries under lockdown and social distancing in practice to contain the spread of covid 19, people have taken to media platforms such as Tv news, Facebook, Whatsapp, Twitter and Youtube to stay connected and informed. There is around 50-60% spurt in digital content usage during the lockdown. Our paper delves on the' Role of media during the challenging crisis'. Whether the information provided by the media, the so called' fourth pillar of democracy' are actually the powerful force shaping how we experience the world and ourselves. Media, a potential voice, a platform and access to the means of production, affects our perception of reality because they are the only source of that reality. Therefore the media has a very important responsibility. Goal of any news outlet should be factual accuracy and avoiding unnecessary hyperbole.

Literature Review

Pazzanese in her article highlighted that the misinformation on COVID-19 has made the work of public health officials harder. Ubiquity of social media has made it easier to spread or even create COVID-19 falsehoods. During this crisis public health communicators have to be seen as credible, transparent and trustworthy and they are too falling short. She pointed out that public needs to be more sceptical about what they are reading and hearing, particularly online.

Powell in this article took a look at some of the challenges that have faced journalists during the COVID-19 outbreak and how the media can play a role in containing COVID-19 and saving lives. The disease has not only impacted health and science but also affected other areas like tourism, stock market, business, sports etc. Media spread misinformation, fake news and even stigmatized individuals. Trusted media sources should not just ignore misinformation but attempt to counter it. At the end writer concluded by saying that media has a vital obligation to responsibly report the facts as the information takers from these sources are many and it could really make a difference.

Balram in her article pointed out that social media volume saw a whopping

50x surge between January and March in India in wake of COVID-19 pandemic. The main reason behind this increase was the limited activity out of home. There was a decline in store visits and jump in online shopping due to social distancing and quarantining. COVID-19 conversations reached 22.3 million by March 24 in the country.

Panneerselvan in his article tried to answer the question "How can journalists arrive at a tone in reporting the health crisis that neither creates unwarranted panic nor underplay the gravity of the situation". Writer shared the tools that he used to evaluate reporting on the pandemic. He recommended that the journalists should avoid using sensationalist language and should avoid speculating worst case scenarios. He said the spread of rumours should be avoided and legitimate sources of information to be used.

Objective of The Study

The present study is undertaken with the following objectives in mind:

1. To examine the impact of media on the males and females.
2. To examine the impact of media on different age groups.
3. To examine the impact of media on people belonging to different occupation.
4. To conclude the positive and negative role played by media.

Research Design

An online questionnaire was developed to assess the role of media during the pandemic using Google forms. The questionnaire contained two main sections. Section one included socio demographic variables like age, gender and occupation. Section two consisted often multiple choice questions. A five point Likert scale was used for the convenience of respondents.

The primary data (500 respondents) collected have been analysed using spreadsheet software 'Microsoft Excel' and statistical analysis package 'Statistical Package for Social Sciences (SPSS)'16 version by applying simple percentage and chi square test.

Data Analysis And Interpretation

Demographic Profile of the Respondents

The demographic characteristics of 500 respondents are classified on the basis of Gender (Male and Female), Age (16-23 yrs, 24-37 yrs, 38-56 yrs, 57-64 yrs, above 64 yrs) and Occupation (Student, Unemployed, Employed, Business, Homemaker, Retired and Any Other).

Influence of Media on males and females

H_a: There is no significant difference in the influence of media on males and females

Table 1 represents 14 statements relating to the influence of media during pandemic on males and females. Chi-square values were calculated for each statement and compared with the tabulated values.

TABLE 1: Influence of Media on males and females

Description		Male	Female	Total	Chi-square	p-value
Source of pandemic update	Traditional Media	21 (19.8%)	48(12.2%)	69(13.8%)	4.432	0.109
	Social Media	14(13%)	43(11.0%)	57(11.4%)		
	Both	73(67.6%)	301(76.8%)	374(74.8%)		
	Total	108(100%)	392(100%)	500(100%)		
Increase in time spent on media usage during lockdown	Yes	81(75%)	259(66.1%)	340(68%)	3.314	0.191
	No	13(12%)	57(14.5%)	70(14%)		
	Maybe	14(14%)	76(19.4%)	90(18%)		
	Total	108(100%)	392(100%)	500(100%)		
Media played an informative role during the pandemic	Strongly agree	27(25%)	131(33.4%)	158(31.6%)	14.403	0.006
	Agree	57(52.8%)	210(53.6%)	267(53.4%)		
	Neutral	16(14.8%)	45(11.5%)	61(12.2%)		
	Disagree	7(6.5%)	4(1%)	11(2.2%)		
	Strongly Disagree	1(0.9%)	2(0.5%)	3(0.6%)		
	Total	108(100%)	392(100%)	500(100%)		
Media exaggerated the risk associated with corona virus	Strongly agree	14(13%)	57(14.5%)	71(14.2%)	11.077	0.026
	Agree	47(43.5%)	177(45.2%)	224(44.8%)		
	Neutral	29(26.9%)	117(29.8%)	146(29.2%)		
	Disagree	13(12%)	39(9.9%)	52(10.4%)		
	Strongly Disagree	5(4.6%)	2(0.5%)	7(1.4%)		
	Total	108(100%)	392(100%)	500(100%)		

Came across fake information on the virus	Yes	64(59.3%)	180(45.9%)	244(48.8%)	6.413	0.040
	No	21(19.4%)	113(28.8%)	134(26.8%)		
	Maybe	23(21.3%)	99(25.3%)	122(24.4%)		
	Total	108(%)	392	500		
Cross check fake information	Yes	87(80.6%)	315(80.4%)	402(80.4%)	0.002	0.963
	No	21(19.4%)	77(19.6%)	98(19.6%)		
	Total	108(100%)	392(100%)	500(100%)		
Information on Covid-19 leads to stress	Strongly agree	24(22.2%)	74(18.9%)	98(19.6%)	6.580	0.160
	Agree	51(47.2%)	162(41.3%)	213(42.6%)		
	Neutral	19(17.6%)	117(29.8%)	136(27.2%)		
	Disagree	13(12%)	36(9.2%)	49(9.8%)		
	Strongly Disagree	1(0.9%)	3(0.8%)	4(0.8%)		
	Total	108(100%)	392(100%)	500(100%)		
Media played a role in politicizing the information on corona virus	Strongly agree	20(18.5%)	54(13.8%)	74(14.8%)	4.988	0.288
	Agree	45(41.7%)	200(51%)	245(49%)		
	Neutral	29(26.9%)	98(25%)	127(25.4%)		
	Disagree	12(11.1%)	38(9.7%)	50(10%)		
	Strongly Disagree	2(1.9%)	2(0.5%)	4(0.8%)		
	Total	108(100%)	392(100%)	500(100%)		
News coverage on front line warriors, people posting pictures, videos and offering support to the needy has brought positivity	Strongly agree	37(34.3%)	126(32.1%)	163(32.6%)	18.852	0.401
	Agree	53(49.1%)	204(52%)	257(51.4%)		
	Neutral	16(14.8%)	49(12.5%)	65(13%)		
	Disagree	2(1.9%)	13(3.3%)	15(3%)		
	Strongly Disagree	0(0%)	0(0%)	0(%)		
	Total	108(100%)	392(100%)	500(100%)		

The chi-square value at 5% level of significance (Table 1) show that there is no significant difference in the influence of media on males and females with respect to source of pandemic update, increase in time spent on media usage, cross checking fake information, information on COVID-19 leading to stress, media played a role in politicizing the information on corona virus and news coverage on front line warriors, people posting pictures has brought positivity (p>0.05).

Influence of media on people belonging to different age groups

H_a: There is no significant difference in the influence of media on people belonging to different age groups

Table 2 represents 14 statements relating to the influence of media during pandemic on people belonging to different age groups.

Table 2:Influence of media on people belonging to different age groups

Description		16-23 yrs	24-37 yrs	38-56 yrs	57-64 yrs	Above 64 yrs	Total	Chi-square	p-value
Source of pandemic update	Traditional Media	35(12.4%)	3(3.3%)	23(20.2%)	4(57.1%)	4(66.7%)	69(13.8%)	39.074	0.000
	Social Media	31(11%)	11(12.1%)	14(12.3%)	1(14.3%)	0(0%)	57(11.4%)		
	Both	216(76.6%)	77(84.6%)	77(67.5%)	2(28.6%)	2(33.3%)	374(74.8%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Increase in time spent on media usage during lockdown	Yes	185(65.6%)	64(70.3%)	82(71.9%)	5(71.4%)	4(66.7%)	340(68%)	18.463	0.018
	No	32(11.3%)	12(13.2%)	23(20.2%)	1(14.3%)	2(33.3%)	70(14%)		
	Maybe	65(23%)	15(16.5%)	9(7.9%)	1(14.3%)	0(0%)	90(18%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		

Media played an informative role during the pandemic	Strongly agree	107(37.9%)	16(17.6%)	32(28.1%)	1(14.3%)	2(33.3%)	158(31.6%)	48.587	0.000
	Agree	153(54.3%)	51(56%)	57(50%)	3(42.9%)	3(50%)	267(53.4%)		
	Neutral	21(7.4%)	20(22%)	17(14.9%)	2(28.6%)	1(16.7%)	61(12.2%)		
	Disagree	1(0.4%)	2(2.2%)	7(6.1%)	1(14.3%)	0(0%)	11(2.2%)		
	Strongly Disagree	0(0%)	2(2.2%)	1(0.9%)	0(0%)	0(0%)	3(0.6%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Media exaggerated the risk associated with corona virus	Strongly agree	44(15.6%)	6(6.6%)	19(16.7%)	1(14.3%)	1(16.7%)	71(14.2%)	33.575	0.006
	Agree	139(49.3%)	37(40.7%)	41(36%)	4(57.1%)	3(50%)	224(44.8%)		
	Neutral	77(27.3%)	34(37.4%)	32(28.1%)	2(28.6%)	1(16.7%)	146(29.2%)		
	Disagree	20(7.1%)	13(14.3%)	19(16.7%)	0(0%)	0(0%)	52(10.4%)		
	Strongly Disagree	2(0.7%)	1(1.1%)	3(2.6%)	0(0%)	1(16.7%)	7(1.4%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Came across fake information on the virus	Yes	120(42.6%)	47(51.6%)	69(60.5%)	4(57.1%)	4(66.7%)	244(48.8%)	18.659	0.017
	No	93(33%)	21(23.1%)	17(14.9%)	1(14.3%)	2(33.3%)	134(26.8%)		
	Maybe	69(24.5%)	23(25.3%)	28(24.6%)	2(28.6%)	0(0%)	122(24.4%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Cross check fake information	Yes	231(81.9%)	67(73.6%)	95(83.3%)	4(57.1%)	5(83.3%)	402(80.4%)	6.118	0.190
	No	51(18.1%)	24(26.4%)	19(16.7%)	3(42.9%)	1(16.7%)	98(19.6%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Information on Covid-19 leads to stress	Strongly agree	48(17%)	12(13.2%)	32(28.1%)	3(42.9%)	3(50%)	98(19.6%)	28.101	0.031
	Agree	107(37.9%)	47(51.6%)	54(47.4%)	3(42.9%)	2(33.3%)	213(42.6%)		
	Neutral	90(31.9%)	24(26.4%)	20(17.5%)	1(14.3%)	1(16.7%)	136(27.2%)		
	Disagree	34(12.1%)	8(8.8%)	7(6.1%)	0(0%)	0(0%)	49(9.8%)		
	Strongly Disagree	3(1.1%)	0(0%)	1(0.9%)	0(0%)	0(0%)	4(0.8%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
Media played a role in politicizing the information on corona virus	Strongly agree	36(12.8%)	12(13.2%)	22(19.3%)	1(14.3%)	3(50%)	74(14.8%)	19.072	0.265
	Agree	146(51.8%)	48(52.7%)	48(42.1%)	1(14.3%)	2(33.3%)	245(49%)		
	Neutral	73(25.9%)	21(23.1%)	30(26.3%)	3(42.9%)	0(0%)	127(25.4%)		
	Disagree	26(9.2%)	9(9.9%)	12(10.5%)	2(28.6%)	1(16.7%)	50(10%)		
	Strongly Disagree	1(0.4%)	1(1.1%)	2(1.8%)	0(0%)	0(0%)	4(0.8%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		
News coverage on front line warriors, people posting pictures, videos and offering support to the needy has brought positivity	Strongly agree	97(34.4%)	25(27.5%)	34(29.8%)	3(42.9%)	4(66.7%)	163(32.6%)	6.681	0.878
	Agree	141(50%)	50(54.9%)	61(53.5%)	3(42.9%)	2(33.3%)	257(51.4%)		
	Neutral	37(13.1%)	12(13.2%)	15(13.2%)	1(14.3%)	0(0%)	65(13%)		
	Disagree	7(2.5%)	4(4%)	4(3.5%)	0(0%)	0(0%)	15(3%)		
	Strongly Disagree	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)		
	Total	282(100%)	91(100%)	114(100%)	7(100%)	6(100%)	500(%)		

The chi-square value at 5% level of significance showed that there is no significant difference in the influence of media on people belonging to different age groupswith respect to time spent on reading/watching the news update, cross checking fake information,media played a role in politicizing the information on corona virus and news coverage on front line warriors, people posting pictures has brought positivity (p>0.05).

Influence of media on people belonging to different occupations

H_a: There is no significant difference in the influence of media on people belonging to different occupations

Table 3 represents 14 statements relating to the influence of media during pandemic on people belonging to different occupations.

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Table 3:Influence of media on people belonging to different occupations

Description		Student	Unemployed	Employed	Business	Homemaker	Retired	Any other	Total	Chi-sq	p-value
Source of pandemic update	Traditional Media	33(10.7%)	1(25%)	21(17.4%)	3(10.3%)	5(20.8%)	5(71.4%)	1(12.5%)	69(13.8%)	28.220	0.005
	Social Media	36(11.7%)	0(0%)	13(10.7%)	3(10.3%)	4(16.7%)	1(14.3%)	0(0%)	57(11.4%)		
	Both	238(77.5%)	3(75%)	87(71.9%)	23(79.3%)	15(62.5%)	1(14.3%)	7(87.5%)	374(74.8%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Increase in time spent on media usage during lockdown	Yes	202(65.8%)	4(100%)	87(71.9%)	23(79.3%)	14(58.3%)	4(57.1%)	6(75%)	340(68%)	31.399	0.002
	No	33(10.7%)	0(0%)	20(16.5%)	4(13.8%)	9(37.5%)	2(28.6%)	2(25%)	70(14%)		
	Maybe	72(23.5%)	0(0%)	14(11.6%)	2(6.9%)	1(4.2%)	1(4.2%)	0(0%)	90(18%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Media played an informative role during the pandemic	Strongly agree	116(37.8%)	0(0%)	33(27.3%)	5(17.2%)	1(4.2%)	1(14.3%)	2(25%)	158(31.6%)	56.513	0.000
	Agree	160(52.1%)	2(50%)	63(52.1%)	16(55.2%)	17(70.8%)	5(71.4%)	4(50%)	267(53.4%)		
	Neutral	28(9.1%)	2(50%)	18(14.9%)	4(13.8%)	6(25%)	1(14.3%)	2(25%)	61(12.2%)		
	Disagree	1(0.3%)	0(0%)	6(5%)	4(13.8%)	0(0%)	0(0%)	0(0%)	11(2.2%)		
	Strongly Disagree	2(0.7%)	0(0%)	1(0.8%)	0(0%)	0(0%)	0(0%)	0(0%)	3(0.6%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Media exaggerated the risk associated with corona virus	Strongly agree	45(14.7%)	0(0%)	17(14%)	4(13.8%)	3(12.5%)	1(14.3%)	1(12.5%)	71(14.2%)	35.168	0.066
	Agree	151(49.2%)	1(25%)	47(38.8%)	9(31%)	10(41.7%)	5(71.4%)	1(12.5%)	224(44.8%)		
	Neutral	89(29%)	2(50%)	34(28.1%)	8(27.6%)	7(29.2%)	1(14.3%)	5(62.5%)	146(29.2%)		
	Disagree	20(6.5%)	1(25%)	20(16.5%)	6(20.7%)	4(16.7%)	0(0%)	1(12.5%)	52(10.4%)		
	Strongly Disagree	2(0.7%)	0(%)	3(2.5%)	2(6.9%)	0(0%)	0(0%)	0(0%)	7(1.4%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Came across fake information on the virus	Yes	130(42.3%)	2(50%)	67(55.4%)	23(79.3%)	13(54.2%)	4(57.1%)	5(62.5%)	244(48.8%)	34.561	0.001
	No	102(33.2%)	2(50%)	19(15.7%)	4(13.8%)	4(16.7%)	3(42.9%)	0(0%)	134(26.8%)		
	Maybe	75(24.4%)	0(0%)	35(28.9%)	2(6.9%)	7(29.2%)	0(0%)	3(37.5%)	122(24.4%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Cross check fake information	Yes	250(81.4%)	3(75%)	93(76.9%)	25(86.2%)	19(79.2%)	5(71.4%)	7(87.5%)	402(80.4%)	2.502	0.868
	No	57(18.6%)	1(25%)	28(23.1%)	4(13.8%)	5(20.8%)	2(28.6%)	1(12.5%)	98(19.6%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Information on Covid-19 leads to stress	Strongly agree	49(16%)	1(25%)	25(20.7%)	10(34.5%)	8(33.3%)	2(28.6%)	3(37.5%)	98(19.6%)	34.287	0.080
	Agree	120(39.1%)	2(50%)	66(54.5%)	11(37.9%)	10(41.7%)	3(42.9%)	1(12.5%)	213(42.6%)		
	Neutral	99(32.2%)	1(25%)	18(14.9%)	6(20.7%)	6(25%)	2(28.6%)	4(50%)	136(27.2%)		
	Disagree	36(11.7%)	0(0%)	11(9.1%)	2(6.9%)	0(0%)	0(0%)	0(0%)	49(9.8%)		
	Strongly Disagree	3(1%)	0(0%)	1(0.8%)	0(0%)	0(0%)	0(0%)	0(0%)	4(0.8%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
Media played a role in politicizing the information on corona virus	Strongly agree	39(12.7%)	1(25%)	23(19%)	4(13.8%)	5(20.8%)	2(28.6%)	0(0%)	74(14.8%)	23.809	0.473
	Agree	160(52.1%)	2(50%)	54(44.6%)	13(44.8%)	12(50%)	1(14.3%)	3(37.5%)	245(49%)		
	Neutral	81(26.4%)	0(0%)	29(24%)	9(31%)	2(8.3%)	2(28.6%)	4(50%)	127(25.4%)		
	Disagree	25(8.1%)	1(25%)	13(10.7%)	3(10.3%)	5(20.8%)	2(28.6%)	1(12.5%)	50(10%)		
	Strongly Disagree	2(0.7%)	0(0%)	2(1.7%)	0(0%)	0(0%)	0(0%)	0(0%)	4(0.8%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		
News coverage on front line warriors, people posting pictures, videos and offering support to the needy has brought positivity	Strongly agree	103(33.6%)	0(0%)	35(28.9%)	12(41.4%)	8(33.3%)	4(57.1%)	1(12.5%)	163(32.6%)	18.852	0.401
	Agree	153(49.8%)	3(75%)	66(54.5%)	12(41.4%)	14(58.3%)	3(42.9%)	6(75%)	257(51.4%)		
	Neutral	44(14.3%)	0(0%)	15(12.4%)	4(13.8%)	1(4.2%)	0(0%)	1(12.5%)	65(13%)		
	Disagree	7(2.3%)	1(25%)	5(4.1%)	1(3.4%)	1(4.2%)	0(0%)	0(0%)	15(3%)		
	Strongly Disagree	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)		
	Total	307(100%)	4(100%)	121(100%)	29(100%)	24(100%)	7(100%)	8(100%)	500(100%)		

The chi-square value at 5% level of significance showed that there is no significant difference in the influence of media on people belonging to different occupations with respect totime spent on reading/watching the news update, media exaggerated the risk associated with corona, cross checking fake information, information on Covid-19 leads to stress, media played a role in politicizing the information on corona virus, and news coverage on front line warriors, people posting pictures has brought positivity ($p>0.05$).

Conclusion

COVID-19 has become one of the main highlights of 2020, spreading to numerous countries in almost every continent. Public authorities are taking all the possible measures to prevent the spread of this disease. During this period of pandemic- induced social isolation, it's no surprise that people are consuming vast amount of media. 68% of respondents said that there has been an increase in the time spent on watching and listening to the news. Around 80% watch news about 2 hours per day. Increased media consumption makes the role of media all the more important to responsibly report the facts. A remarkable degree of consensus has been found among people regarding informative role played by the media during the pandemic. 85% of respondents acceded to the informative role of media. Undoubtedly media is entirely playing its role of educating and apprising people about the symptoms and precautions to be taken. Another best thing that has happened across a variety of media platforms is the news coverage on frontline workers, celebrities' posting videos and pictures to keep people informed and motivated. 85% of the respondents acknowledged the media coverage on this aspect and the positivity which it infused into their lives.

Unfortunately, media can do just as much bad as it can do good. Around 50% respondents consider media to be a source of fake news. Although respondents do not blindly rely on this misinformation and 80% of them cross check the news spread by media. Further, 60% of respondents agreed to the fact that media exaggerated the risk associated with COVID-19, which led to unwarranted panic and stress among people. 60% of respondents hold media responsible for politicising and communalising the information.

To conclude, mass media reports on the pandemic provide information to the public and in turn induce positive healthy behaviour practices. Whereas adulterated media reports can lead to unnecessary problems and give wrong ideas to people. Thus, on one hand media is informative and educative and on the other it exaggerates information and is responsible for stress and panic.

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Social Media Strategies and Campaigns – What Works for FMCG Companies? – An Analysis

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Abstract

Social media marketing is growing quite a lot and is a very powerful and highly cost effective medium than the traditional marketing that was used earlier. The purpose of this study was to find out, which are the social media strategies that are more popular and whether the strategies used were different for Fast moving consumer goods companies. It also wanted to note some of the successful social media campaigns used by the FMCG companies. Non probability sampling was used and a structured questionnaire was used for the survey. Advertising and Content strategy were the most popular strategies. Then came Influencer Management, Discounts and contest, prizes sweepstakes etc, User generated content, Using Social issues, Regional content and Promotion through celebrities were popular strategies in that order. These strategies were also used more by fast moving consumer goods companies. 60% companies said that they were getting the return on investments as per their expectations after using social media strategies for the brands.

Keywords: *Social Media, Social media marketing, strategies, campaigns, Fast moving consumer goods.*

Introduction

Since many years companies have been using traditional marketing. Traditional marketing means using the traditional channels for marketing like television, magazines, newspapers, posters, banners, radio and hoardings, any offline mode of reaching the customer.

Traditional marketing has certain advantages like it can easily connect with the audience, once an advertisement is placed in the newspaper, everyone in the geographical area is reached. Hard copies of the ads can be saved, people are familiar with ads in the newspapers and it registers in their mind easily. It has a huge reach, and it reaches old people too. Older people spend twice the time reading the newspaper and watching TV as compared to younger people.

Now, digital marketing and social media marketing have come in and have become quite popular.

Digital marketing and social media marketing is that marketing which uses the internet. It focuses on building and maintaining relationships with customers using the electronic channels and getting new customers.

Digital marketing and social media marketing is a very powerful tool as it is highly cost effective. It gives a level playing field to multinationals and start-ups. It can connect with customers with powerful content, it can give higher revenue generation, when customer engagement and conversion is higher it will yield big profits. Companies can expand nationally and globally. It creates brand awareness and achieves higher ROI and can use story-telling. Story telling makes the brand 22 times more memorable, because the story resonates with the brand's audience.

Most of the social media platforms, Facebook, Twitter, Youtube, and LinkedIn are used by more than 90% of Fortune 500 companies.

Companies have been using various strategies to get in touch with their customers and potential customers, on social media. They use advertising, content strategy, influencer marketing, give discounts, sweepstakes, contest, prizes and promotions, user generated content, using social issues, regional languages and using celebrities.

The various strategies used by companies can be seen below in the literature review. There are many campaigns, used by well-known brands which have been successful using these strategies they are also referred below.

Literature Review

Advertising

“FMCG and Social Media” retrieved on 1st April 2020, noted that Iodex the product of Glaxo Smithkline Becham had an advertisement of the pain reliever where Saina Nehwal was using it. It went digital first on Youtube and Facebook. Many mass FMCG brands have their consumers in media dark areas where TV and Internet are not easily available. The mobile medium is scalable in such areas. Hindustan Lever and Reckitt Benckiser use it successfully.

Content Strategy

Using interesting content is also a very effective strategy. Talkwalker

(March 31, 2016) in the article, "How FMCG Brands Win at Social Media – 6 Best Practices that Actually Work", noted in their paper that humorous and original creative & offbeat content works, it has a high sharing potential.

Influencer Management

In the social media realm, influencers play a very important role. They can impress upon the users and consumers quite successfully. Rea (August 8, 2018), advised that, "Collaborate with powerful influencers", it helps brands build credibility, widen their consumer base and even drive sales. A study by Nielsen found that 92% of consumers trust earned media (such as recommendations from influencers) over brand communications.

Discount / Contests/ Prizes/ Gifts/ Sweepstakes/ Coupons / Promotions

Many consumers get tempted to buy products because of discounts or sweepstakes or coupons, this is an easy strategy to incorporate. Ismail Ahmed Rageh et al. (2018) stated that in today's economy everyone is a value shopper. Forrester Research noted that price was becoming an important driver in a consumer's purchase decision (Dunnhumby, 2014). It is also proved that Twitter followers and Facebook fans are deal seekers.

User Generated Content

People rely more on friend's recommendations as is seen from the references below. Bruno, S. & Dabrowski, D. (2015), observed that the content created by firms on social media is not taken as credible. Consumers value user generated content as they rely on friends and acquaintances which confirms the findings of Bruhn and colleagues (2012), as it is reliable and unbiased (Christodoulides 2012).

Social Issues and Charitable work

Many times people are impressed and happy with companies that care for social issues and charitable work and take some corporate socially responsible measures. Rea (August 8, 2018), recommended that companies should take a stand on current issues, social issues and environmental issues. Young people, are more likely to have a good opinion of a brand if it takes a stand on important social issues.

Regional Content

When studying about regional content, Rea (2018) indicated that companies can tap into the potential of regional content. Consumers of tier 2 and tier 3 cities like regional content. It was found that almost 90% rural users are more likely to respond to digital ads that are in their regional language, said the Google and KPMG report. Patanjali's use of regional content may be the reason for its dominance in the Indian FMCG market.

Promotion through Celebrities

Tong, X. & Hawley, J.M. (2009), emphasised celebrity / star endorsements or sports events sponsorship are potentially effective marketing strategies to build a strong brand image and brand loyalty (Aaker, 1991; Fan and Pfitzenmaier, 2002; Cobb-Walgren et al., 1995).

This was also agreed upon by Yoo et al. (2000) and Keller (2002).

Below are given Successful campaigns using the above mentioned strategies particularly in the FMCG industry.

1) Influencers Management

   Surico Kimberly (April 21, 2020) noted that Proctor and Gamble found a very popular influencer on TikTok followed by 48.9 million followers and over 1000 videos, unofficial TikTok queen, 15 year old Charli D'Amelio and told her to create a video to inform people to maintain social distancing. She told people through her dance video to "Stay home and do the #distancedance. They had 187.3 million views.

2) Prizes / Gifts/ Contests/ Discounts/ Sweepstakes/ Promotions/Coupons

   One other popular strategy is having contests, prizes, gifts, discounts, sweepstakes, and promotions. Dabur India, one of the leading FMCG company came up with daburhoneydiet, using social media campaigns. Users were to follow DaburHoneyDiet twitter handle and answer 10 questions correctly. The lucky winners would get exciting prizes. Users were supposed to tag a friend and tell why they were tagging him. This could win a smartphone as a prize (FloTape Post, 2015).

3) User Generated Content

   User generated content, brings in involvement of customers. ITC came up with a campaign 'Din Khatam Fantasy Shuru'. They wanted consumers to fill in the blank, about their fantasy. They had a cryptic tweet '_____ Khatam Fantasy Shuru'. Whenever the day ended on a not so happy note, cookie Sunfest Dark Fantasy could give comfort and be the person's partner (Adgully Bureau, 2021).

4) Social Causes, Charitable work and

Corporate Social Responsibility measures

Many companies have campaigns based on social issues or corporate social responsibility measures, through which they show that they are responsible company. Nestle, the Swiss multinational food conglomerate, uses this channel to talk about their corporate social responsibility measures. They have come up with a #PlantBased alternative for daily cooking, #PlantBased shrimp and egg alternatives that deliver great taste, texture and nutrition (Stanciu Theodora, 2021).

5) Regional Languages

Whenever companies use regional content, people of that region appreciate it and there is more engagement and possible purchases. Britannia has a large amount of sale, 67% coming from east of India. So they decided to use the regional language Bengali with a Bengali actor Abir as a Chef in the ad. Due to the pandemic people were not going out and wanted to eat healthy snacks. So they had a contest where one had to use crackers not as a biscuit but as a base ingredient for recipes, and win prizes (Nagar Akanksha, 2021).

6) Promotion through Celebrities

Whenever companies promote through celebrities, it gets quite some attention. American Tourister a well-known suitcase brand came up with a campaign. They asked a question, 'How many sixes will Virat Kohli hit today?' The campaign's goal was to engage the audience and the winner would get a grand prize (All Stars Digital, 2019).

Research Methodology

Objectives

- To understand which strategies used by companies to attract customers / fans on their social media brand pages are popular and
- Whether strategies used by fast moving consumer goods companies are different than other company's strategies.

It is a quantitative primary research, done in Mumbai, with a structured online questionnaire. The sample size was 185. The questionnaire was filled up by companies which are using social media and social media agencies who develop social media pages for companies. This questionnaire also used non probability sampling and snow ball sampling.

To check the sample adequacy Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test was done. It gave the value KMO = .680, KMO should be >= .6 and Bartlett's test of Sphericity = 0.000 must be significant at $\alpha < .05$ for sample adequacy, which is significant. Hair, J. F., Black, W. C., & Babin, B. J. (2010), has said that KMO >= .6 can be accepted. Both these figures indicate that sample adequacy is there.

Cronbach's alpha is .778, any value > .7 is acceptable (Hulin, Netemeyer, and Cudeck, 2001), Cronbach's alpha tests the validity of the instrument.

Data Analysis

There was a question "Is the company getting return on investment as per expectations?"

59.5% companies said yes they were getting ROI as per expectations, 34.6% were neutral and 5.9% said they were not getting ROI. That is nearly 60% companies said they were getting ROI which is a good percentage.

A hypothesis is also being tested as below:

Hypothesis

Ho : There is no significant difference between respondents saying they agree with using the various strategies or they are neutral to it.

H1: There is a significant difference between respondents saying they agree with using the various strategies or they are neutral to it.

The next question to the companies is "Which are the Strategies companies use to attract customers, potential customers / fans to their social media pages?"

This question was asked to the respondents as a general question for any type of company and another question was asked specifically for strategies of Fast Moving Consumer Goods (FMCG) companies.

The responses received are interesting. The most important strategy for any kind of company with the highest percentage was Advertising with 93.5%, and an even higher percentage for FMCG companies with 95.1%. In both the types of companies, the second highest percentage went to Content strategy, with all type of companies getting 93% and FMCG companies getting 88.6%. Thus it is correctly said that "Content is King".

There are certain strategies which have come out to be more important for FMCG companies. The strategies which have got higher percentage for FMCG companies are "Influencer Management", "Provide Sweepstakes, Discounts, Coupons, and promotions, contests etcetera", "User Generated Content", "Post on Social Issues and Charitable work", "Regional Content" and "Promotion through celebrities" as can be seen from Table 1 below.

Difference between Strategies used by companies and FMCG companies

Strategy	Strongly Agree Or Agree (for all companies)	FMCG Strategy Percent (strongly agree or Agree)	Difference between the two
Through Advertising	93.5	95.1	-1.62
Content Strategy	93.0	88.6	4.32
Influencer Management	64.9	81.1	-16.22
Provide Sweepstakes, Discounts, Coupons, promotions, contests etcetera	64.9	75.1	-10.27
User Generated Content	68.1	77.3	-9.19
Post on Social issues and share Charitable work	49.2	62.2	-12.97
Regional Content	66.5	77.3	-10.81
Promotion through Celebrities	53.5	73.5	-20.00
Nothing in particular, just organic growth	37.8	37.3	0.54

Table 1: Strategies used by companies and FMCG companies in percentages

When the one sample t test is done, it is seen that for all the strategies for all companies and for Fast Moving Consumer Goods companies, the p value is .000 which indicates that it is significant. Only for the strategy "Just through organic growth" the p value is .433 for all companies and .731 for FMCG companies. Thus is can be said that all the strategies are significantly different than a neutral response except for using the strategy "Just organic growth". Thus the alternative hypothesis is accepted for all the strategies and the null hypothesis is accepted for the strategy "Just through organic growth".

Discussion

As is seen from the results of the various analysis given above, the percentages of companies agreeing to using the various strategies is in the range of approximately 50% to 90% which shows that all the strategies are quite popular. There is only one strategy "Just through organic growth" which has a percentage of 37%. Thus it shows that most of the companies are not using this strategy. It is also seen that certain strategies are chosen more by the Fast moving consumer goods companies than by other companies, as we see from Table 1 above where the percentage of FMCG companies is more. They are Influencer Management, Provide Sweepstakes, Discounts, Coupons, promotions, and contests etcetera, User Generated Content, using Social Issues, Regional Content and Promotion through celebrities. Successful campaigns using these strategies are also noted in the Literature review.

It is also seen that the one sample t test shows that all the strategies are significantly different than a neutral response except the strategy "Just through Organic growth".

Further, about 60% companies are getting ROI as per their expectations after using the above mentioned social media strategies. Only 6% companies are saying they are not getting the expected ROI.

Managerial Implications

After studying the above results, it can be said, that the above mentioned strategies are popular and a large percentage of companies are using it as they are giving results to them and a good ROI. Fast moving consumer goods companies should use those strategies which are used more by FMCG companies as seen above, the strategies are Influencer Management, Provide Sweepstakes, Discounts, Coupons, promotions, and contests etcetera, User Generated Content, using Social Issues, Regional Content and Promotion through celebrities. Powerful social media campaigns also remain in the memory of users as is noted in the Literature review.

Limitation and scope for further research

The sample was taken from Mumbai. It represents responses from the companies and social media agencies from Mumbai. The next study can take companies from smaller cities to see if the results change. It can also be done for specific industries to see if the social media strategies vary based on the industry type. It can also be seen if international companies and Indian companies use different types of Social Media strategies.

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A Study Showing Organizational Culture of White House Public School, Bhuj, Kachchh

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Abstract:

The researcher carried out the research with the motive to find out the Organizational culture of White House Public School, one of the highly reputed and CBSE affiliated school in Bhuj, Kachchh. The primary data for the purpose of the study was collected from 70 respondents, consisting the entire teaching staff of the school. OCTAPACE profile, instrument containing 40 items to check the organizational values and ethos, developed by Dr. Udai Pareek was used to collect the primary data. The researcher has formulated null and alternative hypothesis to measure and compare the mean score of all the eight dimensions of OCTAPACE profile. Cronbach alpha scoring 0.7246 (acceptable range) was used to check the internal consistency. Hypotheses were tested using t scores and p values. Based on the t critical value (1.6672), the hypotheses with regard to Openness, Trust, Autonomy and Experimentation were accepted, indicating that these dimensions are valued less when compared to the standard value. On the other hand the hypotheses with regard to Confrontation, Authenticity, Proaction and Experimentation were rejected, indicating that these dimensions are valued greater than the standard values. The research ends with few suggestions to improve some of the dimensions which do not meet the standard criteria.

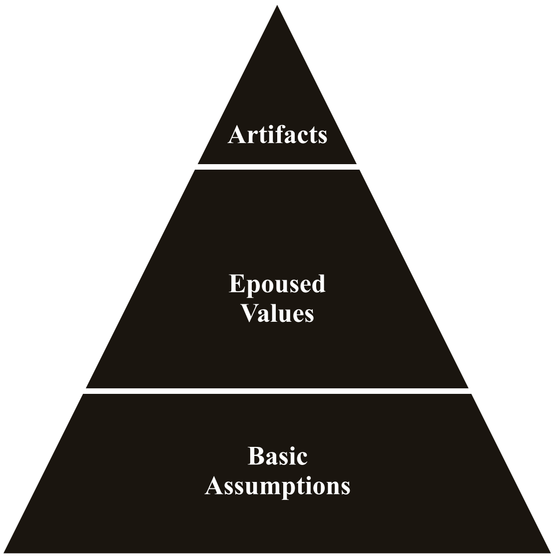
Introduction:

Concept of organizational Culture:

The world in which we live is dynamic and full of uncertainties. It often becomes a matter of investigation for the academicians and researchers as to how various organizations deal with these uncertainties and survive in this competitive era when some of the other organizations are getting winded up. The researchers often try to distinguish the successful firms with that of the unsuccessful firms. They try to find out the reason behind their success and growth. Most of the research ends up stating that organizational culture is the most significant factor that gives competitive strength and leads the firm towards the path of success.

The term culture is derived from 'cultura', a Latin word meaning worship or cult. In its widest sense culture means something which is the result of human interaction. Various anthropologists, authors, sociologists etc perceive culture in different ways. It is often perceived as our habits, attitude beliefs, way of life, ideas etc that are transmitted from one generation to another. The word culture is an extremely comprehensive term including all the things around us that influence our thought process as well as behavior. Thus any organization, be it a manufacturing unit, a service unit, or an educational unit cannot overlook the culture and its significance in today's competitive world to survive in the market.

Edgar Henry Schein has given a remarkable concept of organizational culture. According to him, organizational culture exists at 3 different layers which take the shape of a pyramid representing the shallow factors and the deep factors of culture.



- Artifacts represent the tangible signs of any organization's organizational culture. They include visible items like office layout dress code furniture logos symbols etc.
- Espoused Values other values which indicate the way of working of the organizations. Values include matters like the vision and mission of the organization, characters of the employees, company's news letters etc.
- Shared Basic Assumptions depicts the way the organizations

really work. It includes the assumptions held by tea staff on how to work with each other and how the same will lead to success or failure of the firm.

OCTAPACE Profile To Study Organizational Culture- The concept of organizational culture is very significant from the viewpoint of management as well as the employees. The staff spends at least eight hours out of twenty-four in the firm, thus the culture of the firm not only affects their work life but also bears an impact on their personal life as well. Hence it becomes very important for the organizations to provide a better organizational culture to the employees. When the matter comes to measuring the soundness of the organizational culture, OCTAPACE Profile developed by Dr. Udai Pareek is the most trusted tool since ages. OCTAPACE is an acronym made up of eight words, believed to be the eight pillars of any organization's culture. A brief note on these eight words is as stated below-

- Openness dimension deals with how free the employees feel to freely interact and share their ideas in the organization.
- Confrontation dimension deals with how is the attitude of employees to face any problem, whether the faces boldly or shy away or avoid facing it.
- Trust dimension deals with how the employees of different departments put trust in each other. It determines whether there is congruency between what they say and what they do or not.
- Authenticity dimension deals with how a person acknowledges his or her own feeling and accepts that of others as well without any kind of pressure or fear.
- Pro-Action dimension deals with how the employees work on pre planning of the events, how they will take initiative and how they are prepared for preventive actions.
- Autonomy dimension deals with how the employees make use of their own powers and how they let others also use it. It is about freedom in one's own area of work.
- Collaboration dimension deals with how employees corporate and work with each other jointly to achieve the common object of the organization. It signifies teamwork.
- Experimentation dimension deals with how the firm values innovativeness and allows employees to try new and innovative ways and ideas to get a work done.

Role Of Organizational Culture In Educational Institutes- The researchers generally conduct the research on manufacturing and service units often neglecting sound research on educational institutions. The fact that educational institutions play a vital role in the development of any other institution, as educational institutions shape the young minds, who in turn will be the future of the nation. It becomes very vital for educational institutions to provide a sound organizational culture to its employees so that they can get the best of their services. The present research focus is on studying the organizational culture of White House Public School, Bhuj, Kachchh. It is a CBSE affiliated school established in 1999. It is a co education school carrying the strength of almost 1500 plus students, having the qualified staff of seventy teachers.

Review of Related Literature:

(Subramanian, 2012) concluded the research conducted on the staff of IT firms of Chennai with the remark that different IT firms vary from each other with regard to different dimensions of OCTAPACE Profile and suggested the firms to develop culture with OCTAPACE values.

(Anitha & Singh, 2012) concluded the research conducted on public and private sector banks of Vadodara stating that the culture of both the sector banks vary from each other and that the culture of nationalized banks is more sustainable as compared to others.

(Mughees, Siddiqui, Nusrat, & Homnath, 2013) winded up their research undertaken on public and private sector hospitals of Lucknow stating that there prevails differences in cultures of public and private sector hospitals and private sector hospitals operates better as regard to OCTAPACE values when compared with the public sector ones.

(Ajay, 2013) studied the insurance firms belonging to public as well as private sectors. Results revealed that the culture varies significantly as regard to OCTAPACE dimensions in various firms.

(Sehgal, 2014) conducted research on a private sector unit of Chandigarh revealed that the gender, hierarchical status and working experience plays a role among the employees in perceiving the culture and its values.

(Vijyalaxmi, 2014) studied the IT firms of Bangalore and concluded that some of the dimensions of OCTAPACE Profile like Authenticity and Experimentation are highly valued in these firms as compared to others.

(Tianya, 2015)conducted the study on a law based Chinese firm and came out with the result that the employees behavior bears a significant holding on the culture of the firm.

(Fukofuka & Loke, 2015) studied the correlation among the various dimensions of OCTAPACE culture and came out with the result that some of the dimensions are highly correlated with each other whereas some others have moderate degree of correlation.

(Chaudhary & Jain, 2015) conducted the study to find out the differences in perception of organizational culture among the top and Middle level staff of universities situated in Rajasthan. The result of the study indicated that the dimensions of OCTAPACE profile varied between the top and Middle level staff.

(Anozie & Nizam, 2016) studied the organizational culture of the employees of the Telecommunication sector in Singapore. The research was winded up with the result showing there is a great impact of organizational culture as far as employees' performance is concerned.

(Jain, 2017) carried out qualitative research to find out the way OCTAPACE culture and its impact on various firms. The study ended with the remark that organizational culture holds a strong bearing on employees performance in any organization.

(Apurva, 2017) studied OCTAPACE culture prevailing in Rajiv Gandhi Cancer Institute and Research Center and came out with the findings that Authenticity bags the lowest and Proaction the highest score on OCTAPACE Profile.

(Sadaf, 2017) studied the organizational culture of Heinz (I) Pvt.Ltd. using OCTAPACE Profile. The remarks of the study suggested a sound organizational culture prevails in the firm.

(Qurrat, 2018) conducted the research to study the organizational culture in the hospital using octopus profile. The study concluded that there prevails a sound level of OCTAPACE culture among the sample hospitals.

(Tamizharasil & Meena, 2019) conducted a descriptive research collecting the data from the employees working in the IT industry of Bangalore. The research concluded that there is a high degree of correlation between organizational culture and job satisfaction.

(Anupama, 2020) carried out the research using Octopus profile on the employees of automobile sector of Ranchi. The result shows that the factor of flexibility with regard to OCTAPACE culture prevails in the employees of the automobile sector. It also shows that more than half of the employees are satisfied with the culture prevailing in your organizations.

(SAurabh & Sheetal, 2020) conducted research on Higher Learning institutions of Madhya Pradesh using OCTAPACE profile. The study concluded with the remark that there is a strong bearing of octopus culture in the matter of employees' performance and job satisfaction. The study also pointed out out that a firm can create a healthy working environment with the help of OCTAPACE culture.

Research Gap-

A lot of research work has been done by the researchers to study the organizational culture of various organizations using OCTAPACE profile, out of which very less amount of researches are done on educational institutions, the ones which are believed to be the base of other sectors. There was no such research done so far in any of the schools of Bhuj, Kachchh. The current study was undertaken after identifying this research gap.

Research Methodology:

Problem Statement: A study showing organizational culture of White House Public School, Bhuj, Kachchh

Objectives:

- To develop the conceptual framework of organizational culture.
- To study the organizational culture of White House Public School with the help of OCTAPACE profile.

Hypothesis:

H^{01}: The mean score of the dimension of Openness in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile.

H^{a1}: The mean score of the dimension of Openness in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{02}: The mean score of the dimension Confrontation of in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a2}: The mean score of the dimension of Confrontation in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{03}: The mean score of the dimension of Trust in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a3}: The mean score of the dimension of Trust in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{04}: The mean score of the dimension of Authenticity in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a4}: The mean score of the dimension of Authenticity in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

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H^{05}: The mean score of the dimension of Proaction in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a5}: The mean score of the dimension of Proaction in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{06}: The mean score of the dimension of Autonomy in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile.

H^{a6}: The mean score of the dimension of Autonomy in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{07}: The mean score of the dimension of Collaboration in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a7}: The mean score of the dimension of Collaboration in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H^{08}: The mean score of the dimension of Experimentation in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H^{a8}: The mean score of the dimension of Experimentation in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

Data Collection:

For the purpose of study the primary data is intended to collect from the entire staff of White House Public School, Bhuj with the help of a standardized questionnaire- OCTAPACE Profile.

Sampling Technique:

Convenient sampling technique under the non probability sampling is intended to be used for the purpose of study.

POPULATION:

The teaching staff of all the CBSE affiliated schools of Bhuj.

Sample Size:

A total of 70 responses consisting of the entire staff of White House Public School, Bhuj is taken as the sample for the purpose of study on hand.

Instrument of Study :

OCTAPACE Profile, a standard instrument containing 40 items coined by Dr. Udai Pareek is used as a tool to collect the data. The respondents are to rate their responses against these 40 items on a 4 rating scale, 4 being highly valued and one being the least valued score. The rates are to be reversed for the negative statements present in the instrument. The instrument is bifurcated into two parts, the first part containing 24 items, 3 items on each dimension, measuring organizational values and the second part containing 16 items, 2 on each of the dimensions, measuring organizational beliefs. As such there are five statements on each of the dimension of OCTAPACE as shown here under-

O -1,9,17,25*,33

C -2,10,18,26*,34

T - 3,11,19,27,35*

A -4,12*.20,28*.36

P -5,13,21,29,37

A -6,14*,22*,30*.38

C -7,15,23*,31*,39

E -8,16,24,32,40*

(* denotes negative statements, the rates are to be reversed, i.e., 4 to be rated as 1, 3 as 2, 2 as 3 and 1 as 4)

Limitations:

- The study is limited to only one CBSE affiliated school of Bhuj.
- The data is collected only from the teaching staff of White House Public School, Bhuj.
- Study contains the obvious limitations of the primary data.

DATA ANALYSIS - To test the reliability of the items, Cronbach alpha was calculated by the researcher, the score of 0.7246 indicates that there is acceptable amount of internal consistency found.

Table 1
Gender wise distribution of staff members of
White House Public School

Gender	In Number	In Percentage
Males	07	10
Females	63	90
Total	70	100

Table 2
Age wise distribution staff members of
White House Public School

Age	In Number	In Percentage
21 - 30 years	16	22.86
31 - 40 years	32	45.71
41 - 50 years	20	28.57
above 50 years	02	2.86
Total	70	100

Table 3
Income wise distribution staff members of
White House Public School

Income	In number	In Percentage
Rs. 10,000 - Rs. 20,000	33	47.14
Rs. 20,001- Rs. 30,000	26	37.14
Rs. 30,001 - Rs. 40000	08	11.43
Rs. 40,001 - Rs. 50,000	02	2.86
above Rs. 50,000	01	1.43
Total	70	100

Table 4
Standard Mean Score and Actual Mean Score and
Standard Deviation

Dimensions	Standard Values			Actual Values			SD
	Min	Max	Mean	Min	Max	Mean	
Openness	13	17	15.00	9	19	15.13	2.365
Confrontation	13	17	15.00	8	20	5.97	2.461
Trust	13	17	15.00	9	20	15.24	2.210
Authenticity	10	14	12.00	9	17	13.50	2.165
Proaction	13	17	15.00	8	20	17.04	2.505
Autonomy	11	16	13.50	8	17	12.16	2.096
Collaboration	13	17	15.00	11	19	14.83	1.523
Experimentation	11	16	13.50	11	19	15.13	2.085

Table 5
Showing the t statistics and p values

Dimensions	t Statistics	t critical	p value	alpha
Openness	0.4549	1.6672	0.325306	0.05
Confrontation	3.3023	1.6672	0.000761	0.05
Trust	0.9196	1.6672	0.180496	0.05
Authenticity	5.796	1.6672	0.000000	0.05
Proaction	6.8239	1.6672	0.000000	0.05
Autonomy	-5.3591	1.6672	0.000001	0.05
Collaboration	-0.9421	1.6672	0.174727	0.05
Experimentation	6.5363	1.6672	0.000000	0.05

Hypothesis Testing

H_{01}: The mean score of the dimension of Openness in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

H_{a1}: The mean score of the dimension Confrontation of in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is accepted as t stat. is less than t critical, i.e. 0.4549 <1.6672

- p value (0.05)

  Null hypothesis is accepted as p value greater than alpha (0.05), i.e. 0.32531 > 0.05

H_{02}: The mean score of the dimension Confrontation of in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a2} The mean score of the dimension of Confrontation in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is rejected as t stat. is greater than t critical, i.e. 3.3023 > 1.6672

- p value (0.05)

  Null hypothesis is rejected as p value greater than alpha (0.05), i.e. 0.000761 < 0.05

H_{03}: The mean score of the dimension of Trust in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a3} The mean score of the dimension of Trust in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is accepted as t stat. is less than t critical, i.e. 0.9196 < 1.6672

- p value (0.05)

  Null hypothesis is accepted as p value greater than alpha (0.05), i.e. 0.1805 > 0.05

H_{04}: The mean score of the dimension of Authenticity in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a4} The mean score of the dimension of Authenticity in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is rejected as t stat. is greater than t critical, i.e. 5.7960 > 1.6672

- p value (0.05)

  Null hypothesis is rejected as p value greater than alpha (0.05), i.e. 0.000000 < 0.05

H_{05}: The mean score of the dimension of Proaction in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a5} The mean score of the dimension of Proaction in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is rejected as t stat. is greater than t critical, i.e. 6.8239 > 1.6672

- p value (0.05)

  Null hypothesis is rejected as p value greater than alpha (0.05), i.e. 0.000000 < 0.05

H_{06}: The mean score of the dimension of Autonomy in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile.

H_{a6} The mean score of the dimension of Autonomy in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is accepted as t stat. is less than t critical, i.e. -5.3591 < 1.6672

- p value (0.05)

  Null hypothesis is rejected as p value greater than alpha (0.05), i.e. 0.000000 < 0.05. Rejection of the null hypothesis as per the p value, doesn't necessarily mean that alternative hypothesis stands true.

H_{07}: The mean score of the dimension of Collaboration in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a7} The mean score of the dimension of Collaboration in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is accepted as t stat. is less than t critical, i.e. -0.9421 < 1.6672

- p value (0.05)

  Null hypothesis is accepted as p value greater than alpha (0.05), i.e. 0.1747 > 0.05

H_{08}: The mean score of the dimension of Experimentation in White House Public School is less than or equal to the mean score as per the standard OCTAPACE Profile

H_{a8} The mean score of the dimension of Experimentation in White House Public School is more than the mean score as per the standard OCTAPACE Profile.

- t statistics

  Null hypothesis is rejected as t stat. is greater than t critical, i.e. 6.5363 > 1.6672

- p value (0.05)

  Null hypothesis is rejected as p value greater than alpha (0.05), i.e. 0.000000 < 0.05

Concusion and Suggestions

From the above analysis of the collected data, it can be stated that the t-scores of Openness dimension (0.4549), Trust dimension (0.9196), Autonomy dimension (-5.3591) and of Collaboration dimension (-0.9421) are less when compared to t critical one tail (1.6672) and the t-scores of Confrontation dimension (3.3023), Authenticity dimension (5.7960), Proaction dimension (6.8239) and Experimentation dimension (6.5363) are greater than t critical one tail (1.6672).

Based on the above statistical data of White House Public School, Bhuj it can be concluded that the staff members of the do not freely interact and share their views with each other indicates lack of Openness dimension. Staff members do not trust each other well and lacks the congruence between what they say and do indicating the lack of Trust dimension. Staff members do not get much freedom to do work which indicates the lack of Autonomy dimension. Staff members do not value the team work as well indicating the lack of Collaboration dimension also. On the other hand school is good when it comes to facing the problems, indicating strength of Confrontation dimension. Staff members are good enough to accept their feelings and respect that of others as well, indicating the strength of Authenticity dimension. The results also indicates the strength of Proaction dimension as staff members work on the basis of pre planning and are ready to take the initiative as well as the preventive actions. Staff members are allowed to try out new ways and idea to get the work done, indicating the strength of Experimentation dimension.

No school management is expected to be completely perfect, but there always is a chance of improvement, which should be sincerely looked upon for the betterment. Thus the researcher would like to give few suggestions based on the study and observed analysis.

- The school can arrange for some unofficial get together or picnics once a while, so that the staff members get chance to interact freely with each other.
- Some activities should be jointly given to the staff members of each section, i.e., pre primary, primary, secondary and higher secondary sections, so that they come in contact with each other and thus start trusting each other.
- Staff members should be given some power at least in their area of work, so that they stop feeling that everything is being imposed on them. Sometimes freedom can make one more responsible and disciplined.
- The management should try inculcate in the mind of staff members the importance of team work and should make each and every one feel their role is equally important, and the results of the school is because of everyone's joint efforts and not just the few.

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A Study of Facets of Job Satisfaction of Teachers in Higher Education: Towards a Proposed Fishbone Diagram Model

Rajendra Solanki, Mayuri Farmer

Abstract

Teachers as an important human resource in nation-building activities. There is a shortage of teachers in higher education institutions across India; teachers' job satisfaction should be valued in such a critical situation. It should be the concern of all the citizens because education is the only path to national development. To make this article informative to researchers and academicians, the authors looked into every possibility by studying and summarising articles from various kinds of literature on job satisfaction, surveys of teachers' job satisfaction, and published data online. This article describes how different researchers have thought about various criteria for employee job satisfaction, what insights have been employed, how information is gathered, and the impact of such research on teacher job satisfaction in higher education institutions. Teachers' job satisfaction in higher education institutions is multidimensional, as this review study examines and reveals. This study will form a basis for future research that will support policymakers in implementing better policies and encouraging better practices in higher education institutions to improve teacher job satisfaction.

Keywords: *Job Satisfaction, Motivation Factors, Hygiene Factors, University, Higher Education Institutes*

Introduction

Dr. R.A.Mashelkar, National Professor and President of Global Research Alliance National Chemical Laboratory, said at the second convocation of Charotar University of Science and Technology (CHARUSAT), Changa, that education is important for the development of any country and society, both directly and indirectly. The most powerful equation in the world is "Education is equal to Future"; (E= F).

According to the Ministry of Education of the Government of India, India's most valuable resource has always been its population and our nation of a billion people needs basic education to nurture them. Which helps to improve their living standards. In India, the Department of School Education and Literacy cares for improving school education, while the Department of Higher Studies is in charge of the world's largest higher education frameworks, next only to the United States and China.

The Department of Higher Studies focuses on opening doors for research and higher education in the nation. Nowadays, the Indian Government has promoted the Public-Private Partnership (PPP) Model for basic infrastructure facilities in the higher education system. As per details on University Grants Commission, Universities, which are the top learning institutions, are driving the sector's exponential rise in higher education. Teachers of Higher Education are the backbone of the whole education system. Teachers play a key role in establishing our higher education system relevant to current and future economic and cultural needs and expectations. Teachers can only play a strategic role if they are satisfied with their work.

The Objective of the Study

The majority of the research on job satisfaction has been conducted by industry professionals. Education was not considered as highly as it should have been. However, there are now more studies and research projects on job satisfaction in higher education institutions than ever before. Horizontally and vertically, education is growing. The academician's job happiness is critical to the success of this education plan creation.

(1) The present article reviews the job satisfaction of teachers of higher education, which derive the various facets of Job Satisfaction and its impact throw the proposed fishbone diagram model.

Teachers of Higher Education have the job responsibility of disseminating knowledge, research, extension activities, and academic administration. This responsibility can only be delivered in proper rhythm if teachers are satisfied in performing the said tasks. As a result, a study of teacher work satisfaction in higher education institutions is unavoidable for the following reasons:

To begin, it is vital to examine all of the aspects of teachers' work happiness.

(A) Are these facets needed to enhance teacher job satisfaction?

(B) Whether these facets have an impact on the teachers' personal and societal well-being at work.

(2) This research will help the identification of aspects of teachers' job satisfaction, who will be able to produce high-quality students, and all of this will benefit society in the long run.

Review of Literature

Eyupoglu and Saner (2009) conducted a study on job satisfaction in North Cyprus, providing empirical evidence on academics' job satisfaction levels and determining whether academic rank is a good indicator of job happiness. A short-form Minnesota Satisfaction Questionnaire (MSQ) was employees for data and survey of 412 academicians of North Cyrus. Computing descriptive statistics and one-way analysis of variance were used to analyse the data (ANOVA). The researcher reported academicians to have only a reasonable level of overall job happiness. Work features like progression, remuneration, colleagues and assortment were viewed as measurably critical with an academic position. This also gave an idea that a teacher's position influences the job satisfaction related to 4 out of the 20 aspects of the academic job.

Khalid Gulfam Kham, Mehboob Syed Ali Abdulla (2009) had undertaken the study to determine the job satisfaction factors from a performance appraisal system in the Universities operating in Islamabad/Rawalpindi. The processes and methodology employed by Mount K (1984) were partially utilized in this study, as well as questionnaire responses were collected. As dependent variables, overall experience and the quality of the assessment conversation were regressed and associated with a variety of predictor variables. Each factor's mean and standard deviation are determined. All of the analyzed factors' correlation coefficients were determined in conjunction with one another, and each dependent variable was subjected to regression analysis. The findings revealed that while predictor variables explained the dependent variables collectively, they were not significant individually.

The study was undertaken by Ahmadi & Keshavarzi (2012) to investigate the beneficial elements in work satisfaction for teaching staff at Islamic Azad University. The information in this study was gathered using the standard scale of Hertzberg. The scale's reliability, material analysis, and Cronbach's alpha method, as well as the t-test, Analysis of Variance (ANOVA), were used to analyse the data. The study's findings revealed that teachers were happy with their work due to the knowledge they have, but Salary is the least satisfying aspect. Furthermore, there was a significant difference exhibit in male and female academics level of job happiness. There was no visible difference in job happiness among different cadres of faculty members.

Khan et al. (2012) explored the relation between job satisfaction and HR procedures for University Teachers from Pakistan. The questionnaire in this study is based on Teseema and Soerers (2006) questionnaire. Compensation, promotion, empowerment, performance review techniques, and demographic characteristics all played a role in employee work satisfaction. The data collection was applying Mean and Co-relation. Male university teachers have reported greater job satisfaction than their female counterparts, while female university teachers have reported being more satisfied with university practices for their human assets, according to the findings. Furthermore, university professors in the public sector were happy, with a strong association among experience and job happiness. Job enjoyment is positively correlated with HR practices. (1985, Mottaz).

In their work Identifying Academics' Job Satisfaction, Ariffin et al. (2013) looked at the differences between teachers with various levels of experience in context to their job satisfaction. They also identified a link between the number of years spent teaching and job satisfaction. The major tool used to assess job happiness among teachers at a private school in Selangor's Gombak region was Lester's (1982) Teacher Job Satisfaction Questionnaire (TJSQ). The descriptive analysis, mean, and inferential statistics utilizing t-test through One-way Analysis of Variance (ANOVA) data were analysed. Research outcome revealed that teachers in the private school were by and large happy with their work. Notwithstanding, this examination can't be summed up to different schools because of the small number of samples and data. As a result, the recommendation for future research is to obtain more subjects, allowing for a larger scope of investigation. Future research could also look into work satisfaction in both public and private schools.

Durga Wati Kushwaha (2013) did a study to look at the elements that influence non-teaching professionals at Banaras Hindu University's job satisfaction. Herzberg's Motivational Theory and Hygiene Factors explain the factors. The data was collected using a stratified sampling technique. The data was analysed using Mean and Pearson correlation coefficients. Correlation is a statistical method for examining the relationship between multiple demographic variables. The study's findings revealed that non-teaching personnel at Banaras Hindu University are influenced by motivational and hygiene elements. The two factors proposed by Herzberg have a high correlation. There was a strong link between satisfaction, age group, and experience.

Platsidou (2014) in their study investigated the job satisfaction among faculty of Greek universities. Teachers' perceptions of higher education and its performance, university administration, political party involvement, a large number of students, assessment, funding, resource distribution, government control, and syndicalism were all investigated as part of this study. The study employed and made use of purposive sampling. A total of 155 teachers from four different universities in North Greece took part in the research. The Job Satisfaction Inventory was used to gauge teachers' satisfaction. The teacher attitudes concerning higher education difficulties were investigated using the problem of higher education inventory. The mean, standard deviation, and regression analysis were used to examine the information. The study revealed that teachers are motivated by internal motives like autonomy, Intellectual challenges, showing initiative (Bellamy, Moreley and Watty; 2003), Academics are dissatisfied with their salaries, promotions, and tenure (lack of meritocracy, incomplete and unclear evaluation norms). Academics are satisfied with motivational and job-related aspects; however, the demographic, organisational, and individual aspects that have an impact on job fulfilment remain unknown. This study was limited to exploring the attitude toward the specific conditions of the job (i.e., environmental conditions) which leads to job dis (satisfaction).

In this review, Manish & Rastogi (2017) outlined all of the research on teachers' job satisfaction that has been done in higher education institutions in India by diverse experts. According to the review paper, job happiness is a crucial factor. Its severity and elements influencing it range from person to person and location to location. As a result, nothing can be standardized with absolute certainty. Researchers have also discovered that job happiness is connected to job performance, job dedication, motivation, turnover, and a variety of other factors.

Szydłowski et al., (2017), in their examination of job happiness, burnout, and work engagement in higher education, focus specifically on higher education teachers. The results of a comparison of research-based approaches and strategies to assess job satisfaction, burnout, and work engagement were compiled. The study's key finding was that positive psychology has had a significant impact on organisational psychology research and work-related attitudes research.

Khan (2017) investigated the job satisfaction of Kashmir University teachers in rural and urban settings, comparing various variables of work happiness. Using the Job Satisfaction Scale established by T R Sharma and Amar Singh (2006) they looked at the job happiness of 60 rural and 60 urban teachers. The descriptive method of research was used in this research. Urban Area Teachers are more satisfied than Rural Area Teachers. The data were analysed through Mean, Standard Deviation and t-test. The research revealed that University Teachers who are happy with their jobs believe that their positions and the jobs have a good impact on their social status in terms of financial benefits such as salary, allowances, and increments. Also, job-satisfied teachers derive pleasure from their job and are satisfied with working conditions; Job Satisfied teachers do their duty with a professional spirit and believe that work is worship.

In the Philippines, Kadtong (2018) investigated the strong association between job performance and job satisfaction. Teachers in elementary public schools were given a survey form to fill out. A descriptive correlational design was used to investigate the relations between the various factors of the study. The study's findings demonstrated that satisfaction and motivation are two distinct concepts. "Job satisfaction is more an attitude, an internal state. It could, for example, be associated with a personal feeling of achievement, either quantitative or qualitative." Age, highest educational attainments, and length of service were found to be major factors in job satisfaction, however, gender and social position had little bearing on job satisfaction.

Adeniji et al. (2018) used survey data to examine the relations between organizational environment and job happiness among teachers of a few private colleges in Southwest Nigeria. The data was collected using a survey questionnaire distributed to academic staff. Data was collected from 5 colleges out of a total of 18 using the judgmental sampling method. Relevant statistics utilised to analyse the data, including a multiple regression with a measurement model (Confirmatory Factor Analysis). According to the research, the performance of these colleges is dependent on their ability to influence the inspiration and job happiness of teachers by providing a broad range of benefits to advance maintenance and reduce work jumping.

Mallillin (2021) identified education as the noblest profession in terms of appreciation and acknowledgement of work, relationships with superiors and colleagues, learning, career advancement, remunerations, other benefits, and interest in the work in their study on Job Satisfaction and Favourable Findings on Teachers' Work Performance. They used purposeful sampling, and the weighted mean was generated and interpreted accordingly. A T-test was used to examine the significant link between work satisfaction and favourable effects on teachers' job performance. Results of the study revealed that respondents liked their bosses since they were capable in their work, and there was a restricted opportunity for advancement because of numerous prerequisites. Similarly, the replies demonstrated that the benefits they got were beneficial to the organisation. However, it reveals that there are numerous norms and procedures that are inconvenient for responders and that rules and techniques are not always satisfactory.

Inayat and Jahanzeb Khan (2021) investigated job satisfaction and its consequence on employee work performance in the private sector in Peshawar, Pakistan. In this research, the researcher hypothesized, that satisfied employees perform better in the workplace than unsatisfied employees and that the type of occupation has an impact on employee satisfaction. They gathered data from three different types of organisations: banks, hospitals, and universities, using a random sampling method. Weiss et al. (1967) designed Minnesota Satisfaction Questionnaire (MSQ-short form) was used to measure intrinsic and extrinsic job aspects of employees, and a self-constructed Performance Evaluation Form (PRF) was utilised as an instrument for this research study. The reliability statistics of both the instruments were calculated to know the significance of the scales. The result of the study revealed that the type of occupation had been shown to have a significant correlation with job satisfaction. Similarly, the positive relationship between job satisfaction and the performance of employees was also established. Based on that, it was concluded that satisfied employees were better in performance as compared to dissatisfied employees, thus contributing a significant role in the development of the organization. The results of the present study also confirmed that satisfied employees do not compromise on work quality, and they are comparatively competitive, more productive and spend their personal resources in a more effective and constructive manner.

Theoretical Lens

Thiagaraj & Thangaswamy (2017) in their study of theoretical concepts of job satisfaction have discussed the term 'job' which was defined by Vroom (1964). Accordingly, 'job' refers to workers' immediate work task and work role in a particular work organization. The term satisfaction is defined as it is pursued when one gets what he/she wants, needs, expects, and desires as per his/her merits. Hoppock (1935) says that "*Job satisfaction* is any combination of psychological, physiological and environmental circumstances that cause a person truthfully say I am satisfied with my job". Vroom (1964) observes that job satisfaction is "the positive orientation of an individual towards all aspects of the work situation". Locke (1969) defines *job satisfaction* as a "pleasurable or positive emotional state resulting from the appraisal of one's or job experiences". The theory which is aligned in this research article with the findings of past researchers in their study are reviewed as under:

Frederick Herzberg's Two Factor Theory (1959)

This theory is also known as the two-factor theory or Hygiene theory. He stated that certain factors satisfy employees and certain factors that create dissatisfaction in the mind of employees at the workplace. Internal and Occupation factors that give employees satisfaction are intrinsic factors, while extrinsic job satisfaction factors depend upon environmental conditions. These factors are not always in the control of employees, so sometimes, which gives satisfaction and sometimes it creates dissatisfaction in the mind of employees. Frederick Herzberg developed this theory on the question: "What do people want from their jobs?" He asked people to describe such situations when they felt exceptionally good or bad. From the responses, he concluded that the opposite of satisfaction is not dissatisfaction. Removing dissatisfying characteristics from a job does not necessarily make the job satisfying. He states that certain factors in the organization are natural, and the presence of the same does not lead to satisfaction. However, their nonresponse leads to dissatisfaction. Similarly, there are certain factors, the absence of which causes no dissatisfaction, but their presence has a motivational impact.

2 Equity Theory (J.Stacy Admas) (1963)

The equity theory determines if resource allocation is fair to both partners in a relationship. The ratio of each person's contributions (or costs)/ (output) and benefits (or rewards)/(inputs) is used to calculate equity. Equity theory was first developed in the 1960s by J. Stacy Adams, a workplace and behavioral psychologist, in relation to one of the justice theories. Employees aim to maintain parity between their efforts and the results they produce vs the perceived efforts and results (Adams, 1963).

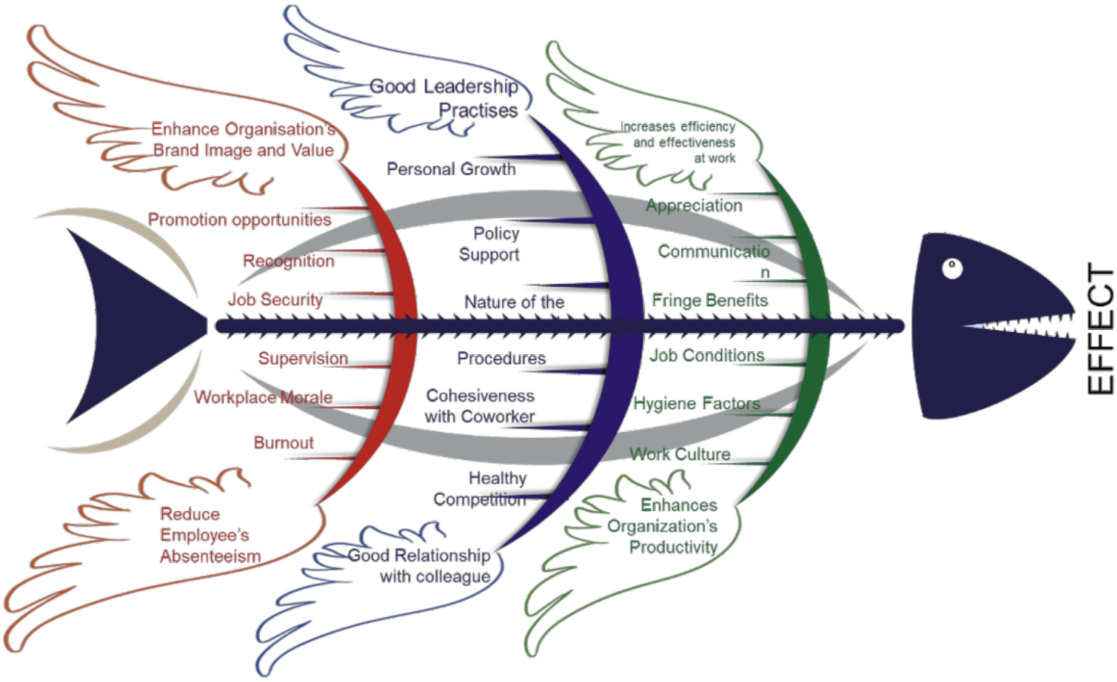
According to Equity Theory, developing a system in which every individual in the organization receives an equal quantity of resources is essential to deliver maximum rewards to each individual. Fair treatment is shown to inspire people to keep relationships with their coworkers.

3. Discrepancy theory by Locke (1969)

Many scholars and social scientists have sought to explain why people feel the way they do about their jobs. The theory known as discrepancy theory was devised by Locke. According to this view, a person's job satisfaction is determined by what they consider to be more important than meeting or not meeting their needs. The "how much" of something desired is determined by a person's importance evaluation of a variable.

Research Contribution

The review is developed based on the Motivation-Hygiene Theory of Herzberg to determine many aspects of teachers' job satisfaction of higher education institutes. The following model is constructed based on the literature analysis:



Fishbone Diagram Model: Facets of Teachers' Job Satisfaction in Higher Education

Conclusion

Based on the findings of the previous study, it is clear that considerable research has been done on the job satisfaction of teachers of higher education institutes, but it is impossible to pinpoint which elements and characteristics have the most impact on job satisfaction. It is influenced by psychological, situational, or environmental factors, resulting in a wide range of job satisfaction perceptions from employee to employee and organisation to organisation. As a result, it has always been and will continue to be a matter of contention. Various aspects have been added to the list as a result of ongoing research on the subject, and more facets will continue to be added. Furthermore, teachers play a vital role in the nation-building process. Given the importance of teachers in society, it is necessary to place a greater emphasis on their job satisfaction. This is what this research paper focuses on. Although much study has been done on teacher job satisfaction in higher education institutions, there is still much more work to be done in this area. This article will open up new research avenues and will be extremely beneficial to social scientists and scholars.

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A Study on Quality Management in Education with Reference to ISO 9001: 2015

Mayur Rao, Lata Ved, Ajayraj Vyas

Abstract

Quality is something we always expect from anyone who is delivering goods or services. It is an attribute of the goods or services always perceived by individual in different ways. It is normal notion of rational customer that, the quality exists if higher price is paid, while it is missing in the cheaper goods, although it may be wrong too, for e.g. we may not check the quality in case of matchsticks. Quality always assumes paramount importance in case of service provider, may it be hotel, parlour, logistics, or education institute. Education institute should focus on quality education. The Present paper describes about ISO 9001: 2015 execution in education institutes and its scope. ISO implementation in learning organization aids in quality management in education. It includes the delivery of qualitative lectures in combination of theoretical and practical real time market knowledge sharing, preplanned sessions and training methods Efficiency in terms of results, effectiveness in terms of feedback of students and many more. The paper is giving a subjective approach with practical application of ISO 9001: 2015 standard in any learning organization. Ultimately, it covers all the aspects wherein quality is required and how it can be sustained.

Key words: *ISO, effectiveness, efficiency*

Quality Management In Education

Total Quality Management (TQM) is procedure that facilities adapting to today's changing external environment. For the success of TQM, it is necessary that every member viz students, teachers, non-teaching staff, even principal should develop the approach of dedication towards the quality. The prime step is to develop vision for quality covering the fulfillment of student needs, continuous improvement towards excellence in educational services.

For manufacturing segment, customers are the buyer of goods, while for the educational institutes, the customers are students, who are ultimate beneficiary of the services provided by educational institutes. It can be either the students in schools, UG students or PG students studying in college.

Quality can be measured in varied terms, may it be result achieved by them or feedbacks given by them in context of teaching.

International Organization for Standardization: ISO

ISO is an independent, non- governmental organization. It develops the international standards and eases world trade by giving them the uniform standards between nations. More than 20,000 standards have been set comprising the manufacturing products, food safety, agriculture and health care.

Standards are created so that it helps to judge the safety, reliability and quality of goods. Even they help to reduce the wastage or errors. They would help to create the products in such uniform standards that they stand in global market, beat the competitors. Even the customers get more satisfied and relaxed by witnessing the certified products, which ensures the fulfillment of minimum standards set globally.

Objectives of The Study

To study the scope and aspect covered under ISO 9001:2015 standard for Education Institutes.

Research Methodology

The paper is divided into two parts i.e. conceptual explanation using secondary data Following is the Research Methodology.

5.1 Problem Statement:

"A study on quality management in education with reference to ISO 9001: 2015"

5.2 Universe of the Study

Education Segment

5.3 Data Collection:

Secondary data related to ISO and QMS was studied

ISO 9001: 2015 For Education Institutes

Quality Management System

ISO certifications is the symbol for the development of schools, colleges and educational Institutes. This certification helps institutes to prepare their systems and process more streamlined and systematic.

The Quality Management system (QMS) is a collection of processes, records, policies, procedures as per the type of institute. It comprises of such kind of documentation which discusses the internal norms that will monitor, the way institute generates and deliver the services to customers. It can be tailored as per the need of Institute, while the ISO 9001 certification provides a set of norms and directions on which QMS applies to be strong.

ISO 9001: 2015 for Learning Organizations

ISO 9001: 2015 streamlines the documentation and provide the document number on each document or file or format.

Following are the levels divided for the implementation of the standard. The documentation should be as per the levels mentioned below.

Level	Documents and Files
Level – I	Quality Manual
Level – II	Procedure Manual
Level – III	Job Description, Policies, Procedures, and Work Instructions
Level – IV	Forms, Formats and Records

Level I and II gives an overview of the planning and the implementation to be done. Under these level, areas where Quality is to be assured is listed and what course of action will be taken, is to be framed.

Framing of Vision, Mission, Quality Policy, and Objectives is to be done, where they all should be mapped to each other and their reflection is expected to be visible in various activities of the college.

Level III

1. **Framing of Job Description as per the designation and staff**

   Job Descriptions includes the duties and responsibilities of Director, HOD, Teaching Staff, Librarian, Lab Technician and Administrative Clerks. The minute role of each of them is clearly defined.

2. **Policies to be drafted in various areas/ activities of the college**

   Policies describes about the aspects covered under the particular head below are the key policies to be prepared:

   Academic Policy *covers subject allocation, semester planner, committees' formation, leaves, dress codes, disciplinary actions, examination etc.*

   HR Policy *covers board structure, recruitment norms of teaching and non-teaching staff, staff dress codes, staff leaves etc.*

   Internal Exam Policy *covers preparation of midsem planning & stationery requirements, supervision duties, leaves during exams, evaluation pattern etc.*

   Admin Policy *covers the details of filling up portals of affiliation, KYC, AISHE, AICTE etc.,, biometric maintenance, dead stock registers, equipment services and purchases, hospitality of guests etc.*

   Placement Policy *covers placement norms, criteria of companies, evaluation of placement count.*

   Library Policy *covers the norms of issue-return of books, online journals usage, register of magazines, national, International journals etc.*

   Computer Lab Policy *covers the operating systems, usage norms, timings, disciplinary things attached to lab etc.*

3. **Procedures to be established in various areas/ activities of the college**

   Procedure answers the how of particular matter/ event. Below are some of the key procedures:

   Academic Tour Procedure *covers how the tour will be organized, who will accompany the tour, no. of students capacity, materials disallowed, parental declaration etc.*

   Safety Procedure *covers the usage of fire extinguishers, way to operate, evacuation plan, exit routes etc.*

   Trainers Feedback Procedure *covers the parameters on which the feedback of the faculties will be taken like command, methodology, skill sets, competencies etc*

4. **Code of Conduct of the institute**

   It covers the basic norms in the institute that students are expected to obey for e.g. Anti-Ragging norms, 75% attendance norms etc.

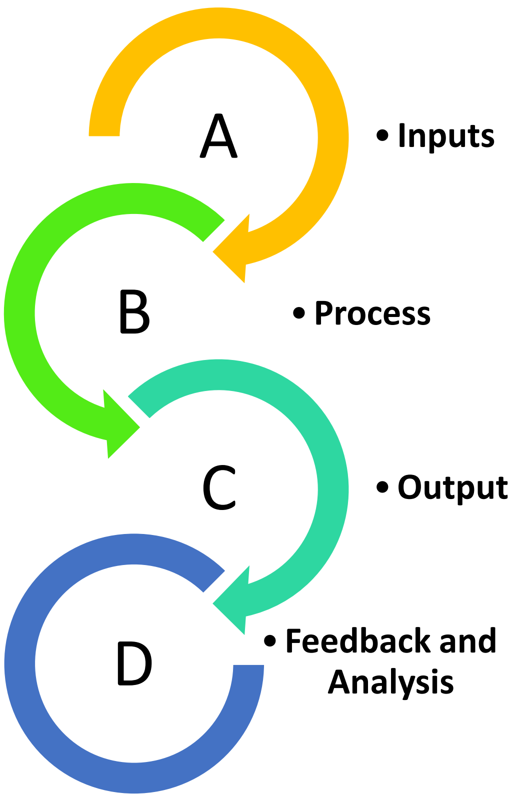
Level IV

Main departments is to be designed and should be made active for college. Following is the exhaustive list depending upon the institute:

Sr. No.	Departments	Aspects Covered
1.	Academic	Session Plans, Internal Evaluation, Effectiveness measurement in terms of Feedback received, Efficiency in terms of Result Analysis
2.	Admin	Inward Register, Outward Resister, Peon Book
3.	HR	Training Calendar, Training Record, Training Codes, Training Evaluation and Effectiveness
4.	Library	Books count as per the subjects, Shelf Management, Computer Record
5.	Maintenance	Preventive Maintenance Plan, Monthly Check List
6.	Marketing	New Admission Enquiries Record, Customers (Internal and External) Feedback form & Analysis, Job Satisfaction Feedback form for placed students
7.	Purchase	Vendor evaluation form(Quality, Cost, Delivery), Vendor selection criteria, Purchase Requisition , Price Comparison Statements, Purchase Order

(Source: Author)

Main Crux of Quality Management System



(Source: Author)

Above Diagram describes that any task done under QMS should have expected favourable outcome. All of the steps are important, even minute things under planning should be considered to make the input strong, later the process should be monitored, then only, you may get the output. Last but not the least is feedback & analysis of the customers, so that what made them more satisfied or dissatisfied, loophole under the QMS steps can be identified and can be improved.

Below is the e.g. of student feedback form for assessing quality teaching:

Standard Feedback form should cover the below parameters, under which the likert scale statements can be framed and can be rated on five point scale. The parameter can be change as per the type of Feedback:

Parameters	1	2	3	4	5
Expertise in Subject					
Teaching Approach					
Required Skills					
Qualities of Lecture Delivery					
Personal Level Qualities & Competencies					

Conclusion

Quality Management system in Learning Organization should not be rare thing. When we expect, a quality food, quality amenities, comforts, luxuries, why not it is applicable in education field. Quality of lectures can be improved by using the benchmark technologies like projectors, webinars, real time case studies etc. Main crux is that it should be grasped by students and their feedback matters a lot to end the approach of the quality on effective basis. ISO 9001: 2015 for learning organization calls for lots of documentation and utmost work for its maintenance. It can be concluded "If the process is right product has to be right" and ultimately in education institute customers are students and companies, under which students will be placed.

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An Empirical Investigation of Association between Valuation Ratios and Market Price of TCS's Share

Naziya S. Mansuri

Abstract:

The market price of shares are being affected by many factors, out of these factors some are possible to quantify while some other factors are beyond control so one cannot count for those factors. The study is an attempt to investigate what association the valuation ratios are having with share price of TCS. There are many valuation multiples being used by various analysts and investors. The study has considered Price Earning, Price to book value, Price/sales, price to Cash flow and EV/EBITDA valuation ratio for determining the impact of various valuation ratios on Market price per share. The author has run Regression Analysis, F test & ANOVA test to investigate the influence of various valuation ratios on the market price per share of TCS during the period of 2007-08 to 2020-21. The study concluded that various the valuation ratios have some influence on the Market price per Share of TATA Consultancy Limited. However, the impact of price to cash flow ratio, followed by EV/EBITDA is remarkable and strongest. Author has also converted this relationship between two powerful valuation ratio & MPS in to Regression equation.

Key words: *Valuation Multiples, Influence, MPS, TCS, Regression Equation*

Introduction

Traditionally, People were saving out of but nowadays, people are more concerned about thoughtful investments. Investment in equity shares of a company is an important investment alternative for financially literate investors. However, the investment in equity share of a company is a though full activity. It is always necessary to know whether you are spending correct money for buying the particular stock because the price is something that you pay and value is what you receive so one must make sure that he or she is paying correct price. People carry out valuation of share to know the justified price or true value of share. There are various tools which can help an investor in knowing the correct value of stock and financial statement analysis is one of the tools. Financial statement analysis has always been priority for financial manager for understanding company's stock performance. The use of ratio, for understanding the performance of company, has its roots in early 19s. Ratio analysis is many a times being used by many investors to know about the short term and long term solvency, liquidity and profitability. Nowadays the most popularly used ratios are valuation ratios because these ratios help the investors to identify correct shares for the investment purpose. Further, the various valuation ratios help in investigating if the stock is correctly valued or not and the valuation ratios are also believed to have a great impact on the price of the securities. So, the present study makes an attempt to investigate association between valuation ratios and the market price of the TATA Consultancy Ltd. using regression analysis. the period of study is 14 years i.e from 2007-08 to 2020-21.

Literature Review

As per Random walk theory of efficient market hypothesis, the stock prices incorporate all the publicly available information therefore it is nearly impossible to earn abnormal stock return with help of past information or publically available information. However, many studies have recognized that the information available in financial statements have the ability to predict stock prices. Before the systematic development of financial statement analysis, various agencies were furnishing the qualitative information for getting idea about company's position (Altman, 1968).

Although there are various ratios being used by investor for knowing about company's long term & short term solvency, profitability and efficiency the valuation ratios have got wide acceptance nowadays. However, the valuation ratios have its root in the old history. The most popular valuation ratio i.e. PE ratio represents the investor's readiness to spend for the stock as compared to every rupee earned by the company (Wisniewski, 2009). The security with low P/E ratio outperforms the securities with higher P/E multiple (Basu, 1977). Jordan R. Tilley (2015) reproduced the work of Basu using data of 1989 to 2014 for testing impact of P/E ratio on market price and observed that the lowest PE ratio assets yields the highest unexplained returns over the period examined for low and mid-priced stocks but it does not work at high price levels (Tilley, 2015). The P/E ratio responds positively to future ROE while responds negatively to present ROE. And, the P/B ratio is concerned about future ROE (Penman, 1996). Dhatt, Kim, & Mukherji approved that book-to market ratio has the highest explanatory power for explaining stock returns. Further, book-to market ratio is able to generate abnormal returns for value stocks (Dhatt, Kim, &

Mukherji, 1999). Yuenan Wang and Amalia Di Iorio (2007) observed that size and book-to-market ratio has the most momentous effect in picking up the variations in stock returns along with having significant impact on predicted price (Wang & Iorio, 2007). Gerry Immanuel Tanius & Rosita Widjojo (2018) found that there is a momentous influence of PE ratio, Price to Book value Ratio and Price to sales on Net Asset Value and these ratios can guide investors' decisions for investing in mutual funds (Tanius & Widjojo, 2018). Yilmaz & Aras (2008) carried out study to check the predictability of stock returns in the 12 emerging stock markets by with the help of the PE ratio, dividend yield, and market-to-book ratio and The results revealed that the investors in emerging market countries could forecast the potential market stock returns mainly using Market to Book Value ratio and partially using dividend yield while P/E ratio had a minor role in predicting stock returns (Aras & Yilmaz, 2008). Barr Rosenberg, Kenneth Reid and Ronald Lanstein (1985) recommended to buy stocks at their high Book to Market Value Ratio and selling stocks at their low Book To Market Value for earning extra ordinary return (Rosenberg, Reid, & Lanstein, 1985). Anita and Pavitra Yadav(2014) also endorsed concluded that price is significantly affected price to book value and dividend yield (Yadav, Anita, & Pavitra, 2014). However, Abdul Haque and Suleman Sarwar (2013) found that Book to market value had a significant negative effect on equity returns in case of Pakistan during the period 1998- 2009 (Sarwar, Haque, & Suleman, 2013).

Studies based on Cash-flow are forming its base from the free cash flow hypothesis (Jensen, 1986) and (Lang & Litzenberger, 1989). Stephen C. Vo and Joseph D. V (2000) found that free cash flow and managerial decisions over the use of such free cash flow have important impacts on shareholder value over long run (Stephen & Joseph, 2000). Tahir Akhtar (2020) investigated influence of various market multiples such as price/book, price/cash flow, price/dividend, and price/sales on stock returns between emerging and developed financial markets. He noted that Price/earnings and dividend growth had negative impact on stock returns in emerging financial markets. On the other hand, price/earnings had insignificant while dividend growth had positive impact on stock returns in European markets (Akhtar, 2020).

Yuksel Iltas, Halil Arslan, and Temur Kayha(2017) investigated relationship of PE ratio and EV/EBITDA ratio with stock return. Yuksel Iltas et al. observed that the fall in P/E and EV/EBITDA increases returns of the stock (Iltas, Arslan, & Kaynah, 2017).

Research Methodology

The valuation is a tedious but important process to be carried out while investing in the shares of company. Many tools, techniques and methods are available for doing valuation of shares. The present study is carried out with the purpose of investigating the influence of various valuation multiple on the Market Price per Share of TATA Consultancy limited.

Objective:

1. Calculate various valuation multiple such as Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA of TATA Consultancy limited for the period of 14 years i.e from 2007-08 to 2020-21.
2. Run regression analysis considering Market Price per share as dependent variable and the above listed valuation multiple as independent variable.
3. Frame a regression equation from the results of regression analysis.

Hypothesis:

H_0 = Linear regression model of MPS to Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA is **not significant** for TCS Ltd

H_1 = Linear regression model of MPS to Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA is **significant** for TCS Ltd

Methods of Research: To achieve the aforesaid objective of the research endeavor case study method of the research is used. This study uses financial data of TATA Consultancy Ltd for the period from 2007-08 to 2020-21.

Period of the study: This study covers the period of 14 years i.e. from 2007-08 to 2020-21.

Methods of Analysis: The present study is carried out with the purpose of investigating the influence of various valuation multiple on the Market Price per Share of TATA Consultancy limited for this purpose study uses the Financial Tools as well as Statistical Tools.

Financial Tools: The study uses 5 financial multiple ratio namely,

- Price earnings ratio is most popularly used valuation multiple being used by market participants. It considers the Earning per shares where earnings refer to Profit after tax minus preference dividend. It measures the confidence of the investors in per share earnings available to equity share holders. Price to earnings ratio cannot be calculated for loss making firms.

- Price to book value considers the book value of firm. Here, the book value per share is calculated by deducting the book value of all debt from book value of All Assets. Practically, it is book value of owner's funds i.e net worth plus preference share capital.
- Price to sales ratio considers the revenue of the company. The logic for taking revenue in consideration is that the various companies' earnings are results of not only the operating capacity but the financial costs also. The earnings are derived after considering non operating items, interest expenses, non cash charges, interest expense, taxes and preference dividend. On the other hand, the revenues are the representative of the operating performance of the companies.
- Price to cash flow ratios consider cash flow and not profit so it is possible to overcome the impact of different depreciation and amortization policy if the price to cash flow ratio is considered. Further, it is possible to calculate the price to cash flow ratio of loss making companies with positive net cash flow also.
- Enterprise Value (EV) to Earnings before Interest Taxes Depreciation and Amortization (EBITDA). Here, EBITDA means the operating profit only. Further, the EBITDA is compared with enterprise value and not market Price. Here, firm's EV is equal to its Market Capitalization plus its debt minus any cash. Thus, Enterprise Value indicates company's total value and not only equity value while MPS is representative of Equity only. EV incorporates all claims from both debt and equity and can be taken as the effective cost of buying a company (CFI).

Statistical Tools: The study uses various statistical tools such as, Regression Analysis, ANOVA test and F Test to determine the influence of valuation ratio on Market price per share.

IV. Case Study: Impact of Valuation Multiple on The Price Of TCS

Name of the Company: TATA Consultancy Limited (TCS)

Data & Sources of Data: Secondary data used. Data obtained from Company's Annual reports, Bombay Stock exchange, and various online documents and websites.

Dependent Variable: Market price per share of TATA Consultancy Limited

Independent variable: valuation multiples namely, Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA.

Model 1: Regression analysis taking Price to Earning, Price to book value, Price to sales, and price to Cash flow and EV to EBITDA as independent variable

Table 1 ; MPS & various Valuation Multiples from 2007-08 to 2020-21

Year	Market Price Per Share	Price Earnings Ratio	Price to Bv Ratio	Price to Sales	Price to Cash Flow	EV to EBITDA
2007-08	810.90	17.60	7.21	4.28	14.53	14.44
2008-09	540.00	11.25	3.93	2.36	9.51	9.23
2009-10	780.80	27.20	10.11	6.63	22.34	21.84
2010-11	1182.50	30.63	11.82	7.91	25.05	24.68
2011-12	1167.85	20.87	9.20	5.88	19.60	16.03
2012-13	1571.80	24.10	9.45	6.35	22.64	18.37
2013-14	2128.25	22.60	9.46	6.45	21.32	16.41
2014-15	2547.05	25.91	10.98	6.78	24.16	18.93
2015-16	2516.05	147.05	7.63	5.77	20.21	15.94
2016-17	2431.10	20.25	6.14	5.17	18.99	15.09
2017-18	2849.30	21.73	7.19	5.60	20.29	16.10
2018-19	2000.40	25.21	9.51	6.09	23.62	17.40
2019-20	1823.05	20.57	9.20	5.21	19.02	14.94
2020-21	3177.60	38.39	15.72	8.65	34.56	25.65

Regression analysis on above factors being run at 5% confidence level in Excel sheet and following output is being received.

Table 2 Summary Output of Regression Analysis run in excel

Regression Statistics	
Multiple R	0.911847
R Square	0.831465
Adjusted R Square	0.726131
Standard Error	436.5543
Observations	14

Summary output demonstrates that the Multiple R is 0.911847 which is very high and in addition to this, R square and Adjusted R are also very high. R square of 0.831465 shows that around 83% of the movement in market price of the shares of TCS is explained by above listed valuation multiples namely, Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA. Further, the standard error in price is 436.55 which are not too high.

Table 3 ANOVA Results

	df	*SS*	*MS*	*F*	*Significance F*
Regression	5	7521774	1504355	7.893577	0.005860708
Residual	8	1524637	190579.6		
Total	13	9046411			

Here, 'significance of F' indicates the overall P value of model as a whole. The model is tested at 5% confidence interval. The significance F is 0.005860708 which reveal that there are only 0.50% chances that the results of above model are random. So, the suggested model is significant. Here the calculated value of F is 7.893577while table value of F, at the degree of freedom of 5 & 8 at the confidence level of 5%, is 3.6875. Computed value is greater than calculated (table) value. So present Model is significant and there is no proper ground for accepting Null hypothesis. As a result, the null hypothesis is rejected and the alternate hypothesis is accepted. So it is accepted that valuation multiples namely, Price to Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA have significant influence on the Market Price Per share of the TCS.

Table 4 ; coefficients, standard error, t statistics & P- value

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	292.9086	545.5079982	0.536947	0.605911
PE ratio	2.327929	3.880849074	0.59985	0.565205
Price to BV	-266.504	141.590719	-1.88221	0.096577
Price to sales	176.4494	367.7797719	0.479769	0.644234
Price to cash flow	326.9615	83.66374165	3.908043	0.004493
EV to EBITDA	-232.723	92.46386895	-2.51691	0.035982

The above table shows the P value of all the independent factors which shows significance of various independent factors on dependent factor. The above table shows that out of all the independent factors i.e valuation multiple Price to Cash flow ratio has the most significant impact on Market Price per share of TCS, followed by EV to EBITDA because P value for these multiples are less than 0.05.

Framing of Regression equation:

Referring to the P values of various valuation multiples in table 4 above, we observed that the P value of Price to Cash flow ratio and EV to EBITDA Ratio is less than 0.05. it indicates that out of all valuation multiples the predictive power of Price to Cash flow ratio and EV to EBITDA Ratio is very strong while predicting the value of Market Price Per Share of TCS. So , we are running the another regression test by taking only two independent variables i.e Price to Cash flow ratio and EV to EBITDA Ratio

Model 2: Regression analysis taking price to Cash flow and EV to EBITDA as independent variable

Table 5 considering price to cash flow and EV to EBITDA two dependent variable for Regression Analysis

YEAR	MPS	Price to Cash Flow	EV to EBITDA
2007-08	810.90	14.53	14.44
2008-09	540.00	9.51	9.23
2009-10	780.80	22.34	21.84
2010-11	1182.50	25.05	24.68
2011-12	1167.85	19.60	16.03
2012-13	1571.80	22.64	18.37
2013-14	2128.25	21.32	16.41
2014-15	2547.05	24.16	18.93
2015-16	2516.05	20.21	15.94
2016-17	2431.10	18.99	15.09
2017-18	2849.30	20.29	16.10
2018-19	2000.40	23.62	17.40
2019-20	1823.05	19.02	14.94
2020-21	3177.60	34.56	25.65

Table 6 Summary output of second regression analysis

Regression Statistics	
Multiple R	0.84932
R Square	0.72135
Adjusted R Square	0.67068
Standard Error	478.71
Observations	14

Summary output of second model demonstrates that the Multiple R is 0.84932 which is still very high even after removing 3 valuation ratios from the regression analysis and in addition to Multiple R, R square and Adjusted R are also very high.

R square of 0.72135 shows that around 72% of the movement in market price of the shares of TCS is explained by Price to Cash flow ratio and EV to EBITDA Ratio.

Table 7 ANOVA test for model 2

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	6525612	3262806	14.2379	0.00089
Residual	11	2520799	229164		
Total	13	9046411			

The ANOVA results indicate the overall P value of model as a whole which is denoted by 'significance of F'. The second model is also tested at 5% confidence interval. The significance F is 0.00089which reveal that there are only 0.089% chances that the results of above model are random. So, the suggested model is even more significant. Further, the calculated value of F is 14.2379while table value of F, at the degree of freedom of 2 & 11 at the confidence level of 5%, is 3.9823. Here, Computed value is greater than calculated (table) value. So, the second Model is also significant.

Table 8 coefficients & P value of model 2

	Coefficients	Standard Error	t Stat	P-value
Intercept	720.299	559.268	1.28793	0.2242
Price to Cash Flow	274.985	54.6308	5.03352	0.00038
EV to EBITDA	-268.94	71.4689	-3.763	0.00314

The table 8 indicates the P value of Price/ cash flow ratio & EV/EBITDA Ratio is much lower than 0.05.

So, theses two ratio are having much predictive ability for the Market Price Per share of TATA Consultancy Limited. So, it will be appropriate to form effective regression equation using these two ratios. $Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + e$

Where, 'a' is intercepts and it is constant and 'e' denotes Estimated Error; X_1 = Price to Cash flow; β_1 = beta of Price to Cash flow; X_2 = EV to EBITDA Ratio; β_2 = beta ofEV to EBITDA Ratio. Now, replacing the value of β_1 and β2 derived from regression analysis. Here, β_1 and β2 are coefficients in the table no. 8. We get $Y = 720.299 + 274.99X_1 - 268.94X_2 + e$. Ultimately, replacing X_1 and X2, with Price to Cash flow and EV to EBITDA Ratio

MPS = 720.299 + 274.99 Price to Cash flow -268.94 EV to EBITDA Ratio+ e

Conclusion:

The study made an attempt to investigate association between various valuation ratios & Market prices per share of TCS. The Study identified Price Earning, Price to book value, Price to sales, price to Cash flow and EV to EBITDA ratios and measured impact on MPS of TCS. The regression result confirmed the influence of various valuation ratios on Market price of TCS. The study concluded that out of all the chosen valuation ratios Price to Cash flow and EV/EBITDA are two most influential valuation ratios affecting Market price of TCS for the chosen period.

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A Study of Selected Companies in the State of Gujarat with Reference to Environmental Accounting

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Abstract

Due to environmental pollution, ecological balance has been affected and it becomes a serious issue all over the world. The role of accounting towards environmental management become very important looking at business responsibility towards environmental conservation and protection. Environmental accounting has been considered as a distinct form of accounting. Now all organizations have been increasingly being encouraged and disclosing their environmental cost and social costs by disclosing their progress towards sustainability to their stakeholders. In line with this, the Business Responsibility Report (BRR) has been laid down by National Voluntary Guidelines (NVGs) as formulated by the Ministry of Corporate Affairs (MCA) emphasis on sustainability disclosures. This paper analyses the environmental parameters disclosed by selected fifteen companies in the state of Gujarat. Gujarat is India's one of the most industrialized and urbanized state. The study has covered mostly polluting and hazardous waste generating sectors i.e., Textile, Cement, Pharmaceuticals, Fertilizers and Chemicals. Previous research focused on economic and social views, cost analysis, employee wellbeing, safety etc. Hence, this study bridges the gap by analysing the impact of BRR on disclosure of environmental parameters of the selected companies in the annual report.

Keywords: *Business Responsibility Reports, Environmental Accounting, Environmental Disclosures, Environmental Parameters. Global Reporting Initiative (GRI)*

Introduction

There is a reciprocal relationship between industrialization and economic development. Industrialization is a prominent way for economic development. For the upliftment of the country's economy, industrialization becomes inevitable. But without sustainability of natural resources, it may become worthless. So, without destructing natural resources and providing the benefits of these resources to next-generation, proper and effective utilization of natural wealth is vital for sustainable development. In the context of environmental protection to save mother earth (Planet) and protect natural resources for next generation is a burning issue worldwide. Looking at this issue one new branch of accounting that has emerged is called environmental accounting.

Environmental Accounting

Environmental accounting is a new branch of accounting. It provides information about the environment and its well-being. It discloses information about damages caused to the environment by manufacturing sectors. It conveys the information to the stakeholder by disclosing information. It helps to study the social, economic and environmental impact of corporate sectors.

Regulatory Framework of Environmental Accounting in India

The Government of India made the first public declaration about environmental accounting in 1991. Former Environment Minister Jairam Ramesh advocated for greening India's national accounts by 2015. The Ministry of Environment and Forests suggested that each company should briefly disclose the details of the steps taken or proposed to be taken to prevent pollution, minimize waste, recycle and use waste, etc. In 2011, the Securities and Exchange Board of India mandated listed companies to disclose environmental, social, and governance (ESG) initiatives carried out in compliance with the core principles stated in the NVGs (National Voluntary Guidelines). The company's Act, 2013 places a strong focus on corporate social responsibility (CSR), with the goal of making it mandatory for businesses to invest in social welfare initiatives. 'Companies having a net worth of more than Rs 500 crore, a revenue of more than Rs 1000 crore, or a profit before tax is more than Rs 5 crores are obliged to implement a CSR policy.' The Union Ministry of Environment and Forests and the corresponding State Government department of environment have issued various guidelines for preparing environmental statements and it is mandatory in the country to obtain environmental clearance for all new projects. SEBI mandated in 2012 that the top 100 listed companies by market capitalisation publish BRR as part of their annual report. .

Business Responsibility Report (BRR)

The BR Reporting Framework was established and implemented for the first time in India in 2011. The BRR is a report on the implementation of responsible business practises by firms listed on a recognised stock exchange that discloses the adoption of responsible business practices to its stakeholders on a regular basis which is a prescribed format for reporting the steps undertaken by the company towards the adoption of responsible business practices helping the Indian companies in sustainability initiatives as well as provide transparent report to its stakeholders.

Literature Review

Sahore & Verma, (2017) conducted a study to understand the environmental concerns of firms and to check whether the ECR and size of firm differs. The results of the study indicate that the regulations drive the firms towards CTEIs more compared to size of firm. **Nithesh, Roopa, & Aruna, 2018** their study analyse the volume of disclosure made by the companies. The results of the study found that companies have provided only qualitative information regarding environmental disclosure and the location of disclosure of variables were varies from one company to another. **Neetu, 2016** in her research she examine the various parameters adopted by corporate sectors and common mode of environmental reporting in annual report. According to the findings, Indian companies only revealed environmental information in annual reports on a voluntary and positive basis. **Goswami, 2014** studied existing environmental accounting practices followed by Indian corporates. The findings revealed that there is diversity in the location of reporting information in the annual report. **Bhat & R, 2018** they carried out research on environmental accounting disclosure practices adopted by the corporates in India. Nineteen (19) companies have been selected from the list of nifty 50. According to the study's findings, seventeen (17) of the chosen nineteen (19) firms prepare BRR, while the remaining two (02) companies generate reports in accordance with GRI criteria.

Research Gap

Environmental degradation is a burning issue worldwide. To analyse the performance of corporate sectors in environment protection, various studies has been undertaken by the researchers on disclosure of environmental parameters. Prior studies on BRR were conducted when government has introduced NVGs and SEBI has mandated top 100 listed (500 in 2015 w.e.f., 1 April 2016) companies, now it has been extended to 1000 listed companies through fifth Amendment in SEBI LODR Regulations, 2015. Previous studies were conducted on sustainability report, GRI, Triple Bottom Line (TBT) and its impact on environmental accounting. But impact of BRR on disclosure of environmental parameters is yet to be attempted. This study bridges the gap by analysing the impact of BRR on the disclosure of environmental parameters of the selected companies in Gujarat. The researcher has selected sixteen (16) parameters from the earlier reviews in the study.

Research Methodology

Problem Statement

The world is facing with biggest challenges like climate change, environmental risks and global warming. Various initiatives have been undertaken by Indian companies to mitigate the environmental risk in a sustainable manner. Number of laws has been implemented by regulatory body at national level and state level for environment protection. But only positive information are presented in annual report. Commitment towards environment protection and society were not found in satisfactory manner. Therefore it is necessary to make the stakeholders and society aware about the environmental disclosure practices followed by companies. The research question for the study has been framed as follows:

"A Study of Selected Companies in the State of Gujarat with reference to Environmental Accounting."

Objectives of the Study

1. To make a brief review of India's regulatory framework for Environmental Accounting in India.
2. To evaluate the environmental accounting practices of selected enterprises in the state of Gujarat.
3. To analyse the level of compliance followed by the companies in the preparation of the Business Responsibility Report.

Hypothesis

1. Ho: There is no significant difference in the number of environmental parameters disclosed by selected companies in the state of Gujarat.

Statistical Tool: One-way ANOVA has been used for the data analysis.

Research Design & Sampling Technique

This study is based on secondary data which are collected from annual reports and Business Responsibility Reports of the companies. A total of 15 companies of Gujarat are selected from different sectors i.e., Pharmaceuticals (03), Textiles (05), Cement (03), Fertilizers & Chemicals (04) which are creating pollution in the environment due to nature of their business. The medium and large scale companies have been selected for the study on the basis of market capitalisation are given in table 2. Non probability convenient sampling technique has been used for the study.

Table 2 Name of the company

Sr. No.	Name of the Company	Industries Types	Company Code
1	Arvind Limited	Textiles	A
2	Ashima Limited	Textiles	B
3	Garden Silk Mills Limited	Textiles	C
4	Welspun India Limited	Textiles	D
5	Sumeet Industries Limited	Textiles	E
6	Atul Limited	Chemicals	F
7	GHCL Limited.	Chemicals	G
8	GNFC Limited	Fertilizers & Chemicals	H
9	GSFC Limited	Fertilizers & Chemicals	I
10	Saurashtra Cement Limited	Cement	J
11	Shree Digvijay Cement Company Limited	Cement	K
12	Gujarat Sidhee Cement Limited	Cement	L
13	Sun Pharmaceutical Industries Limited	Pharmaceuticals	M
14	Alembic Pharmaceuticals Limited	Pharmaceuticals	N
15	Torrent Pharmaceuticals Limited	Pharmaceuticals	O

For this research study sixteen environmental parameters has been selected. This is shown in table 3 below

Table 3 Environmental Parameters

Sr. No.	Environmental Parameters
1	Conservation of Energy
2	Utilizing Alternate Sources of Energy
3	Hazardous Waste Management
4-	Water Management
5	Quality, Environmental, Health and Safety Policy
6	Strategies for Global Environmental Initiative
7	Environmental Risks
8	Clean Development Mechanism
9	Other Initiatives on clean technology, energy efficiency, renewable energy
10	Waste generated within limits given by CPCB / SPCB
11	Awards and Accolades
12	Research and Development
13	Conservation of natural resources
14	ISO 14001
15	Carbon Emission Management System
16	Tree Plantation

(Source: From Annual Reports)

Table 4 presents the rank secured by the sample companies from 2015-16 to 2019-20. The environmental parameters is labelled as excellent, if the score range is between 14 to16. If it falls between the 8 to 13 is considered as an average and if it fall between 1 to7 is considered as poor.

Table 4 Score secured by the Companies

Score Range	Rank
14-16	Excellent
8-13	Average
1-7	Poor

DISCLOSURE OF ENVIRONMENTAL PARAMETERS BY THE COMPANIES DURING THE YEAR 2015-16 TO 2020-21

Table 5 Disclosure of Environmental Parameters

Environmental Parameters	Years	Companies														
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Conservation of Energy	2016	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	2017	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	2018	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	2019	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	2020	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Utilizing Alternate Sources of Energy	2016		√	√	√			√	√	√	√	√	√		√	√
	2017		√	√	√				√	√	√	√	√	√	√	√
	2018		√	√	√				√	√	√	√	√	√	√	√
	2019	√	√	√	√				√	√	√	√	√	√	√	√
	2020	√	√	√	√				√	√	√	√	√	√	√	√
Hazardous Waste Management	2016	√		√	√	√		√	√	√	√		√	√		√
	2017	√		√	√	√				√	√	√	√	√		√
	2018	√		√	√	√				√	√	√	√	√		√
	2019	√			√	√		√		√	√	√	√	√		√
	2020	√		√	√	√	√	√		√	√	√	√	√		√
Water Management	2016	√			√			√	√	√		√	√	√		√
	2017	√			√	√				√		√	√	√		√
	2018	√			√					√	√	√	√	√	√	√
	2019	√		√	√	√		√		√	√	√	√	√		√
	2020	√			√		√	√		√	√	√	√	√		√
Quality, Environmental, Health and Safety Policy	2016	√	√	√	√	√	√	√		√	√	√	√	√		√
	2017	√	√	√	√	√	√	√		√	√		√	√	√	√
	2018	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	2019	√	√	√	√	√	√	√	√	√	√	√	√	√		√
	2020	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Strategies for Global Environmental Initiative	2016															√
	2017	√					√	√		√						√
	2018	√			√		√	√	√	√						√
	2019	√			√		√	√	√	√						√
	2020	√			√		√		√	√						√
Environmental Risks	2016															√
	2017	√					√	√					√			√
	2018	√			√		√	√	√				√		√	√
	2019	√			√		√	√	√						√	√
	2020	√			√		√		√		√	√			√	√
Clean Development Mechanism	2016												√			√
	2017							√					√			√
	2018	√			√			√	√	√			√		√	√
	2019				√		√	√	√	√			√		√	√
	2020				√		√		√	√			√	√	√	√
Other Initiatives on clean technology, energy efficiency, renewable energy	2016												√			√
	2017	√					√	√		√						√
	2018	√			√		√	√	√	√					√	√
	2019	√			√		√	√	√	√					√	√
	2020	√			√		√		√	√		√			√	√
Waste generated within the limits given by CPCB / SPCB	2016															√
	2017	√					√	√		√						√
	2018	√			√		√	√	√	√					√	√
	2019	√			√		√	√	√	√					√	√
	2020	√			√		√		√	√		√			√	√
Awards and Accolades	2016															√
	2017	√						√	√		√					√
	2018							√			√					√
	2019							√				√	√			

	2020	√						√	√			√	√			
Research and Development	2016						√		√	√						√
	2017	√				√	√		√	√				√		√
	2018				√	√	√	√	√	√				√		√
	2019	√			√	√	√	√	√	√				√		√
	2020					√	√	√	√	√	√				√	√
Conservation of natural resources	2016												√			√
	2017							√					√			√
	2018				√				√			√	√		√	√
	2019			√	√								√	√		√
	2020			√	√		√	√					√	√		√
ISO 14001	2016															√
	2017	√								√			√			√
	2018				√		√	√	√	√			√			√
	2019	√			√		√	√		√			√			√
	2020	√		√	√		√		√	√			√	√		√
Carbon Emission Management System	2016												√			
	2017							√					√			√
	2018				√					√		√	√			√
	2019	√			√					√		√	√			√
	2020	√					√	√		√		√	√			
Tree Plantation	2016	√											√	√		√
	2017							√		√	√		√	√		√
	2018				√			√		√	√		√	√		√
	2019				√			√		√	√		√	√		√
	2020	√			√			√		√	√	√	√	√		√

Above table 5 shows various environmental parameters have been disclosed by the companies from 2015-16 to 2019-20. Following table 6 shows total number of environmental parameters has been disclosed by the companies from 2015-16 to 2019-20.

Table 6 Number of Parameters Disclosure by Companies

Sr. No.	Name of the Company	2016	2017	2018	2019	2020
1	Arvind Limited	05	11	09	12	13
2	Ashima Limited	03	03	03	03	03
3	Garden Silk Mills Limited	04	04	04	05	06
4	Welspun India Limited	07	09	15	15	12
5	Sumeet Industries Limited	03	05	04	05	04
6	Atul Limited	03	07	08	09	13
7	GHCL Limited.	05	11	12	13	09
8	GNFC Limited	05	04	11	09	11
9	GSFC Limited	06	13	13	13	13
10	Saurashtra Cement Limited	04	06	07	06	08
11	Shree Digvijay Cement Company Limited	04	04	07	07	11
12	Gujarat Sidhee Cement Limited	10	11	11	11	11
13	Sun Pharmaceutical Industries Limited	05	07	07	08	09
14	Alembic Pharmaceuticals Limited	02	03	09	06	08
15	Torrent Pharmaceuticals Limited	10	16	16	15	14
	Total	**76**	**124**	**136**	**138**	**145**

(Sources: Compiled from Annual Report of sample companies.)

The above table 6 shows company-wise disclosure of environmental parameters during the year 2015-16 to 2019-20. In the study, the researcher has selected 15 companies from different sectors i.e., Pharmaceuticals, Textiles, Cement, Fertilizers & Chemicals which are mostly pollution prone. It shows that the overall performance of pharmaceutical industries ranked highest in disclosure of environmental parameters. From this group, Torrent Pharmaceuticals Limited has disclosed all parameters i.e., 16 (100%) whereas the overall performance of Textile industries has shown poor disclosure during the study period. From this group, Ashima Limited observed very poor disclosure i.e., 03 (18.75%).

However, Fertilizers & Chemicals and Cement industries have been observed average in discloser of environmental parameters. Among them, Gujarat State Fertilizers & Chemicals Limited has disclosed a maximum of 13 parameters and Gujarat Sidhee Cement Limited has shown 11 parameters i.e., 81.25% and 68.75% respectively. From the study, it is found that no similarity has been maintained because of the unavailability of the proper format.

Compliance of Business Responsibility Report (BRR) Followed By The Sample Companies

Table 7 Compliance of BRR by the companies and its impact on Disclosure of Environmental Parameters

Year	Sample Selection	Compliance of BRR by the Companies	Total Parameters
2015-16	From top 100 Listed Companies: 2 companies	01	75
2016-17	From top 500 Listed Companies: 9 companies	07	124
2017-18	From top 500 Listed Companies: 8 companies	06	136
2018-19	From top 1000 Listed Companies: 9 companies	08	138
2019-20	From top 1000 Listed Companies: 10 companies	10	145

The above table-7 shows the compliance of the Business Responsibility Report (BRR) by selected sample companies and the total number of environmental parameters disclosed by the companies during the study period. During 2015-16, total 75 environmental parameters are disclosed by the sample companies. It is observed that from the 15 selected companies, only two (02) sample companies are in the list of the first 100 listed companies. From these two companies only one company have presented BRR in annual report is shown in table 8.

Table 8 Compliance of BR Reports by sample Companies from first 100 listed Companies During 2015-2016

Sr. No.	Name of the Company	BRR Presented by Companies
1	Sun Pharmaceutical Industries Limited	Yes
2	Torrent Pharmaceuticals Limited	No

In the year 2016-17, total of 124 environmental parameters are disclosed by the sample companies. During this year, from the selected fifteen companies, only nine (09) companies are in the list of the first 500 listed companies. From these nine (09) companies seven (07) companies have presented BRR in annual report is shown in table 9.

Table 9 Compliance of BR Reports by sample Companies from first 500 listed Companies During 2016-2017

Sr.No.	Name of the Company	BRR Presented by Companies
1	Alembic Pharmaceuticals Limited	Yes
2	Arvind Limited	Yes
3	Atul Limited	Yes
4	GHCL Limited.	Yes
5	GNFC Limited	No
6	GSFC Limited	Yes
7	Sun Pharmaceutical Industries Limited	Yes
8	Torrent Pharmaceuticals Limited	Yes
9	Welspun India Limited	No

In the year 2017-18 total 136 environmental parameters have been disclosed by selected companies. From selected fifteen companies, only eight (08) sample are in the list of the first 500 listed companies. From these eight (08) companies, six (06) have presented BRR in annual report is shown in table 10.

Table 10 Compliance of BR Reports by sample Companies from first 500 listed Companies During 2017-2018

Sr.No.	Name of the Company	BRR Presented by Companies
1	Alembic Pharmaceuticals Limited	Yes
2	Arvind Limited	Yes
3	Atul Limited	Yes
4	GNFC Limited	No
5	GSFC Limited	Yes
6	Sun Pharmaceutical Industries Limited	Yes
7	Torrent Pharmaceuticals Limited	Yes
8	Welspun India Limited	No

During the year 2018-19 total of 138 environmental parameters are disclosed the companies. From the selected fifteen companies, only nine (09) sample companies are in the list of the first 1000 listed companies. From these nine (09) companies, eight (08) companies have presented BRR in annual report is shown in table 11.

Table 11 Compliance of BR Reports by sample Companies from first 1000 listed Companies During 2018-2019

Sr. No.	Name of the Company	BRR Presented by Companies
1	Alembic Pharmaceuticals Limited	Yes
2	Arvind Limited	Yes
3	Atul Limited	Yes
4	GHCL Limited	Yes
5	GNFC Limited	Yes
6	GSFC Limited	Yes
7	Sun Pharmaceutical Industries Limited	Yes
8	Torrent Pharmaceuticals Limited	Yes
9	Welspun India Limited	No

During the year 2019-20 total of 145 environmental parameters are disclosed by selected companies. From the selected fifteen companies, only ten (10) companies are in the list of first 1000 listed companies. During this year all the companies have presented BRR in annual report is shown in the table 12.

Table 12 Compliance of BR Reports by sample Companies from first 1000 listed Companies During 2019-2020

Sr. No.	Name of the Company	BRR Presented by Companies
1	Alembic Pharmaceuticals Limited	Yes
2	Arvind Limited	Yes
3	Atul Limited	Yes
4	GHCL Limited	Yes
5	GNFC Limited	Yes
6	GSFC Limited	Yes
7	Shree Digvijay Cement Company Limited	Yes
8	Sun Pharmaceutical Industries Limited	Yes
9	Torrent Pharmaceuticals Limited	Yes
10	Welspun India Limited	Yes

From the above table 12, it is analysed that the companies have presented the BRR in annual report voluntary basis and it shows improvements in disclosure practices of selected companies during the period of studies.

Testing of Hypothesis

H_{01}: There is no significant difference between the percentages of environmental reporting for various parameters.

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Table 13 Number of Parameters Disclosed by Companies

Descriptive Summary								
Parameter	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Alembic Pharmaceuticals Limited	5	5.60	3.050	1.364	1.81	9.39	2	9
Arvind Limited	5	10.00	3.162	1.414	6.07	13.93	5	13
Ashima Limited	5	3.00	.000	.000	3.00	3.00	3	3
Atul Limited	5	8.00	3.606	1.612	3.52	12.48	3	13
Garden Silk Mills Limited	5	4.60	.894	.400	3.49	5.71	4	6
GHCL Limited.	5	10.00	3.162	1.414	6.07	13.93	5	13
GNFC Limited	5	8.00	3.317	1.483	3.88	12.12	4	11
GSFC Limited	5	11.60	3.130	1.400	7.71	15.49	6	13
Gujarat Sidhee Cement Limited	5	10.80	.447	.200	10.24	11.36	10	11
Saurashtra Cement Limited	5	6.20	1.483	.663	4.36	8.04	4	8
Shree Digvijay Cement Company Limited	5	6.60	2.881	1.288	3.02	10.18	4	11
Sumeet Industries Limited	5	4.20	.837	.374	3.16	5.24	3	5
Sun PharmaceuticaIndustries Limited	5	7.20	31.483	.663	5.36	9.04	5	9
Torrent Pharmaceuticals Limited	5	14.20	2.490	1.114	11.11	17.29	10	16
Welspun India Limited	5	11.60	3.578	1.600	7.16	16.04	7	15
Total	**76**	**8.09**	**3.830**	**.439**	**7.22**	**8.97**	**2**	**16**

Table 14

ANOVA					
Parameter					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	714.355	15	47.624	7.403	.000
Within Groups	386.000	60	6.433		
Total	1100.355	75			

The above table 14 shows One Way ANOVA where the disclosure of environmental parameters of selected companies has been analysed. Here, the hypothesis is tested at 5% significance level. Here, calculated value is marginally higher than tabulated value so, the null hypothesis gets rejected. So, it can be concluded that there is significant difference between the percentages of environmental reporting for various parameters during the study period.

Major Findings

1. Pharmaceutical industry has disclosed all the parameters i.e., sixteen (16) parameters
2. The study has found that textile industries creates more pollution even though environmental parameters disclosed by them are very less in number.
3. Overall performance of disclosure of environmental parameters observed in increasing trend during the study period 2015-16 to 2019-20.
4. The companies which have presented BRR in the annual report their disclosure are found more in number and the companies which have not presented BRR they have disclosed fewer parameters in the annual report.
5. No uniformity has been maintained by sample companies because BRR presented in the annual report are found voluntarily.

Recommendations

1. Due to poor performance of textile industry in disclosure of environmental parameters, it is suggested to follow rules and regulations framed by Government authorities.
2. To make industries more sustainable in this competitive age, it is proposed that they install new technology, environmentally friendly plants,

and generate energy from solar systems.

3. Uniformity should be maintained at all the level of business sectors. So, stakeholders can take decisive steps to invest in the company.
4. Smaller unlisted enterprises must voluntarily adopt a smaller version of the format.

Limitations of the Study

1. The study is restricted to Gujarat state only and it is limited to only 15 companies from selected five sectors i.e., Textile, Chemical, Chemicals and Fertilizers, Cement and Pharmaceuticals.
2. The study is limited for five years from 2015-16 to 2019-20 and used only sixteen environmental parameters.
3. Information related environmental accounting are not easily available in the annual reports. So environmental cost and environmental benefits are not easily measurable.
4. Compliance of the environmental regulation in Indian companies is low. So researcher has utilised content analysis for collecting environmental information from the company's annual reports.

Scope for Further Study

1. Only sixteen environmental parameters have been tasted in the study, for future research can be carried out by considering adding more parameters
2. Further research can be extended to India level by including large sample size such as service sectors and other manufacturing sectors.
3. Study can be extended by adding further reporting periods.

Similar type of study can be conducted by adding more environmental parameters that would be more effective and efficient.

Conclusion

The present study addresses the environmental disclosure practices of selected companies in the state of Gujarat which is categorised into four sectors, i.e., Textile, Fertilisers and Chemicals, Cement and Pharmaceuticals. The study has observed that the companies which adhere to the BRR has disclosed more environmental parameters. It shows increasing trend in the disclosure of environmental parameters of the companies. So, it is suggested that BRR should be mandatory at all the level in the business sectors.

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Bibliometric study of SEMCOM Management and Technology Review (SMTR) during 2013-2020

Hemangini Patel, Nimesh Oza

Abstract:

A bibliometric study of SEMCOM Management and Technology Review (SMTR), conducted for the Seven year period 2013-2020, examined citations, authors, industry sectors, and topics for 217 articles published during the period to identify relevant trends. Along with providing guidance to prospective SMTR authors and reviewers regarding the journal's area of focus, the study also provides an indication of the evolution in the topics most relevant to innovation and technology management practitioners. This study's finding shows that there is higher number of collaborations by multiple authors as compared to single authors and degree of collaboration is 0.52. The analysis suggests most prolific authors and also suggests that scholars and practitioners look to SMTR primarily for thought leadership about knowledge and portfolio management and new product development.

Keywords: *Bibliometrics, Industry research, Degree of collaboration, SMTR*

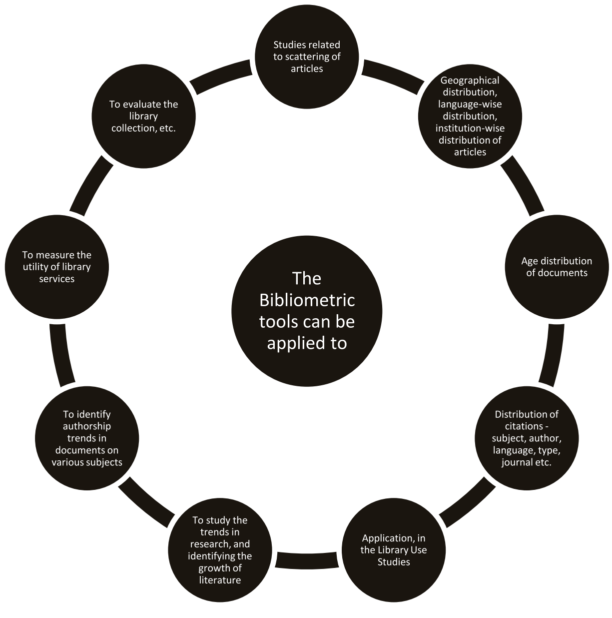
Introduction:

SEMCOM Management & Technology Review (SMTR) is a leading peer-reviewed journal in the area of management and technology. SMTR is run by CVM's SEMCOM, V. V. Nagar, Gujarat. This can include research papers, research articles, book reviews, case studies, and prevalent business and management practises. SMTR is a combination of prevalent terms in the world of commercial, managerial, technological, educational, and electronic commerce. Its principal objective is to give researchers a space where fresh ideas can develop and the distance between aspirations and actuality can be bridged. Management techniques that are essential for an organization's success and for self-management, the effects of HR procedures on employee productivity, and staff professional stress provide useful inputs in the field of HRM, particularly in the era of e-commerce. The journal aims to publish original and comprehensive research in the following fields: economy, finance, human resources, IT, IPR, market research, operations research, investors and investments, and also applied management science, organisational theory, inventive teaching methods, auditing, and accountability. A group of techniques known as bibliometrics are used to analyse and quantify texts and information. Commonly used bibliometric techniques include citation evaluation and content evaluation. The bibliometric term was coined for the first time by Alan Pritchard (1969) and is considered the founding father of this term. The word was used by him to allude to all "research that attempts to quantify the process of textual communication." He defined the term as "the application of mathematical and statistical methods to books and other media of communication". Another definition mentioned by Wilson (cited in Andres, 2009) was that it was the application of mathematical and statistical methods to another medium of communication.

Because of this, there is a lot of content that readers and authors must filter through in order to find topic trends and determine the journal's shifting focus. To fill these gaps, the authors presented the results of a bibliometric study of SMTR's published articles over the last eight years (2013–2020). This study also serves as a useful entry point for potential SMTR authors looking for details on the kinds of publications that journals publish. More crucially, chances for fruitful study can be found by taking a systematic, succinct look back at the technology and innovation area. It is necessary to look through a bibliometric analysis of the values examined by very different disciplines in the literature. Because the bibliometric analysis findings will give an overview of the literature. The analysis questions that are to be addressed in the study are also described below.

1. What is the distribution of publication years?
2. What is the distribution of category-wise classification of papers?
3. What is the distribution of subject-wise distribution of articles?
4. What is the distribution of authorship patterns of articles?
5. What is the distribution of year-wise citations?
6. What is the distribution of the length of the articles?
7. Who are the major contributors and pattern of article distribution?

Applying bibliometric tools can be;



(Figure 1 The Bibliometric tools can be applied)

Review of literature:

Citation analysis research has a long and storied history. Numerous bibliometric studies have already been carried out in a variety of subject areas. For occurrence, **Liberatore, Solana and Guimarães (2007)** analyzed 3298 registered databases during the period 2000-2004, in "'Ciência da Informação', with highest visibility in the librarianship and information science field in brazil. Researchers observed that all 3298 databases out of that 177 are source article and 3121 corresponds to references and total 2952 authors out of them core 33 authors' represents 12% of the total. **Taufiq,M.(2014)**collaborated in digital literacy from 1997 to 2013: a bibliometric study.843 document published in variety of languages out of total 661 written in English language from 1997 to 2013.199 articles written by two authors whereas 214 more than two authors and 248 single authored, found that degree of author collaboration was 0.623, specifies 62.3% of total articles were multi authored.**Adithya Kumari. H, Madhusudhan, C. M. and Hydar Ali (2015)** bibliometric study of world research output on information literacy in the field of library science during 1999-2013 examined total 1278 articles on information literacy,640 (50.12%) multiple authored articles. Julien Heidi is most prolific author with 21(1.64%) articles and University of Illinois contributed the highest number of research publications 26(2.03%). United States of America tops with 579 (45.31%) publications. **Hydar Ali, Mahadevamurthy M and Jagadeesha B M (2015)** in their paper examined total 1835 articles are from 1999 to 2014, USA published highest 1498 (80.84%) publication and India 8 paper published in Academic Librarianship journal and degree of collaboration is 0.27.**Ridzuan, R. N., Fauzi, N., Amat, R. A., & Ghazali, N. Z. M. (2019).** A bibliometric study towards the application of herbs in an academic environment found research and scientific works on herbs through books, journal - magazines, thesis, dissertation, and others. The lowest in master dissertation by 1.5% and micrographs by 0.75% **Țurcan, Coșuleanu, Grecu and Cujba (2019)** studied the article published on Computer Science research output produced by academia from the Republic of Moldova during the 2013-2018 years, founded 1,524,151document in WoS database of computer science. 5.05% publications (out of total no.) and 169 (0.011%) authors belong from the Republic of Moldova; they published 3,345 documents in WoS and 169 researches in computer science.

Scope of the Study:

The scope of the study is limited to the 217 articles contributed in 14 issues of 7 volumes of SEMCOM Management and Technology Review (SMTR) during 2013-2020.

Objectives of the Study:

There is still a lack of published literature in Management and Technology aids in India. In order to close the gap, the current study examines SMTR papers from 2013 to 2020. The objectives which are to be addressed in the study also are given under as below:

- To analyze articles published during the period 2013-2020

- To analyze authorship pattern with number of contributions
- To analyze designation wise authorship pattern with
- To find subject wise distribution of articles
- To find length of article
- To find reference distribution pattern

Methodology

The methodology followed a simple-to-complex set of operations and was developed to categorise and parse pertinent content. Starting with the most objective metrics from the list of metrics the authors aimed to collect, which were already labelled and quantified by existing sources, the authors moved on to more subjective metrics requiring closer interaction with the pertinent articles, like topic classification, which has been a manual process organized by authors.

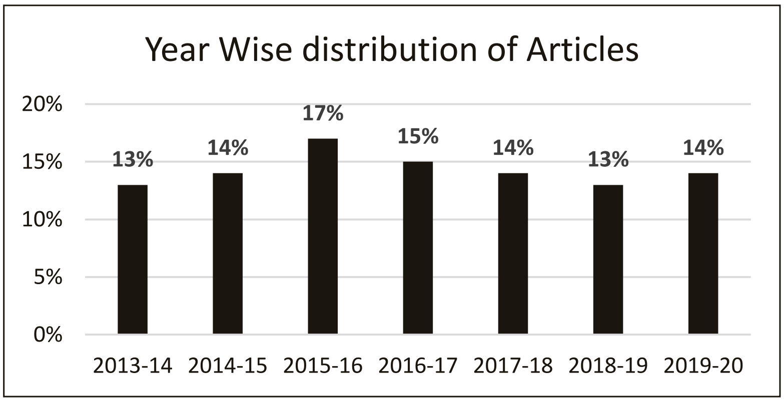
In the present study, data collection process began with a review of all articles published in the 14 issues of SMTR issued from the home page of journal, available at http://www.semcom.ac.in/smtr/archive.php.Articles published during 2013-2020 were saved. The relevant data was evaluate based on parameters including author, institutions, document type, subject, length of article and major contribution and analyzed. IN all 217 articles were saved from 7 volumes of the journal during 2013-2020.

Data Analysis and Interpretation:

In the **Table 1** of the study, shown year wise distribution of articles

Table 1 Year Wise Distributions of Articles:

Year	Vol No.	Issue 1	Issue 2	No. of articles	%
2013-14	1	13	16	29	13
2014-15	2	15	15	30	14
2015-16	3	19	18	37	17
2016-17	4	15	17	32	15
2017-18	5	13	17	30	14
2018-19	6	15	14	29	13
2019-20	7	15	15	30	14
Total		**105**	**112**	**217**	**100**

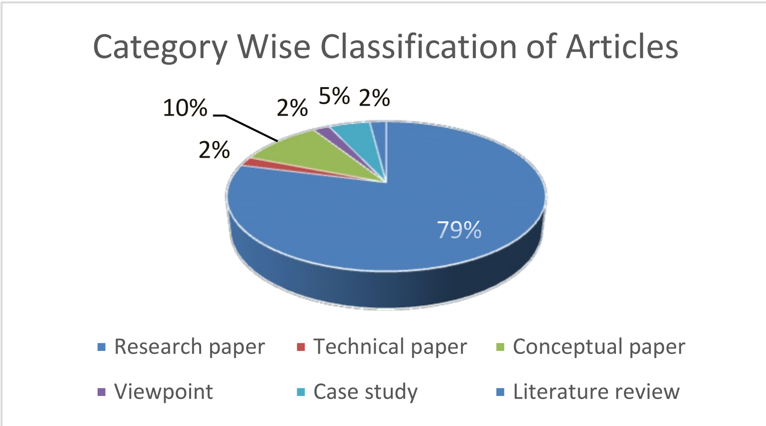


(Chart 1 Year Wise distributions of Articles)

A total number of 217 journal articles were published during the year 2013 to 2020 in the SMTR journal. There are several indicators used to examine the research development in Management and Technology published in SMTR Journal. These indicators are such as degree of collaboration, authorship pattern, most prolific authors etc. The trends in management and technology in SMTR publications from 2013 to 2020 are clearly displayed in Table 1 and Chart 1. The rate of publications increased during the study period. Furthermore, out of 217 articles, 37 (17%) were published in the 2015–2016 academic year.

In the **Table 2** of the study, the most used category of articles was identified.

Table 2 Category Wise classification of Articles									
	Year								
Category	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**No. of Articles**	**%**
Research paper	24	21	30	23	24	22	28	172	79
Technical paper	2	--	2	--	--	--	--	4	2
Conceptual paper	2	6	3	2	4	4	1	22	10
Viewpoint	1	--	1	2	--	--	--	4	2
Case study	--	3	1	4	2	1	--	11	5
Literature review	--	--	--	1	--	2	1	4	2
Total	**29**	**30**	**37**	**32**	**30**	**29**	**30**	**217**	**100**

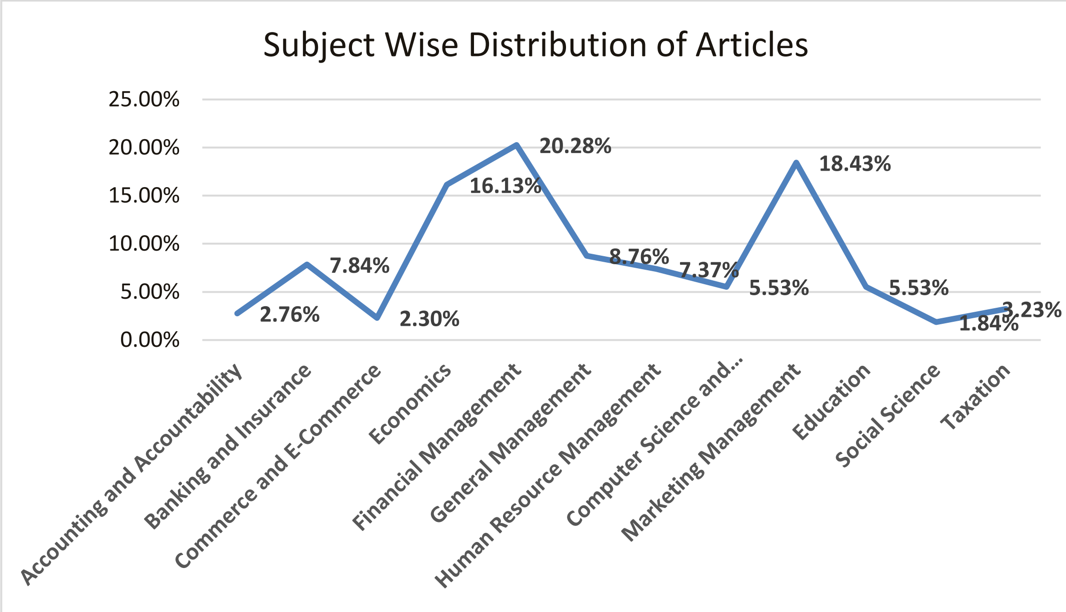


(Chart 2 Category wise classification of papers)

Table 2 and Chart 2 represent the Category Wise distribution of papers. A total number 217 papers published in the SMTR in the during the year 2013 to 2020. There are many categories of published papers; i.e., Research Paper, Technical Paper, Conceptual Paper, Viewpoint, Case study, Literature Review. Out of 217 (100%) of articles, 172 (79%) research papers were published in the SMTR journal during the year of 2013 to 2020 and rest of 45 (21%) articles which technical papers, conceptual papers, viewpoint, case study and literature review published in SMTR in the during the year 2013 to 2020.

In the **Table 3** of the study, it's tabulated Subject Wise distribution of Articles.

Table 3 Subject Wise distribution of articles									
	Year								
Subjects	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**No. of Articles**	**%**
Accounting and Accountability	--	--	3	1	1	--	1	6	2.76
Banking and Insurance	3		2	--	2	3	7	17	7.84
Commerce and E-Commerce	1	1	2	--	1	--	--	5	2.30
Economics	1	9	1	3	7	4	10	35	16.13
Financial Management	2	5	5	13	10	4	5	44	20.28
General Management	1	6	2	5	--	1	4	19	8.76
Human Resource Management	1	--	1	6	3	4	1	16	7.37
Computer Science and Information Technology	1	2	2	2	--	4	1	12	5.53
Marketing Management	2	4	10	5	6	5	8	40	18.43
Education	1	4	1	1	--	1	4	12	5.53
Social Science	--	--	2	--	--	1	1	4	1.84
Taxation	--	--	--	--	--	5	2	7	3.23
Total	**13**	**31**	**31**	**36**	**30**	**32**	**44**	**217**	**100**



(Chart 3 Subject Wise distribution of articles)

Table 3 and Chart 3 is shown that Subject Wise distribution of articles. Out of 217 (100%) articles, Majority of publications 44 (20.28%) articles published in Financial Management, then after, 40 (18.43%) articles published in Marketing Management, 35 (16.13%) in Economics. Rest of the articles in the various subjects were published below 10%, viz., Accounting and Accountability 2.76%, Banking and Insurance 7.84%, Commerce and E-Commerce 2.30%, General Management 8.76%, Human Resource Management 7.37%, Computer Science and Information Technology 5.53%, Education 5.53%, Social Science 1.84% and Taxation 3.23%.

In the **Table 4** of the study, it shows that authorship pattern of Articles.

Table 4 Authorship Pattern of Articles

	Year									
Authorship	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**No. of Articles**	**%**	**Total Authors**
Single Author	15	12	20	15	14	17	12	105	48.39	105
2 Authors	10	15	15	15	16	12	16	99	45.62	198
3 Authors	3	3	2	2	--	--	2	12	5.53	36
More than 3 Authors	1	--	--	--	--	--	--	1	0.46	4
Total articles	29	30	37	32	30	29	30	217	100	343
Total authors	48	51	56	51	46	41	50	--	--	343
Average authors per article	1.66	1.7	1.51	1.59	1.53	1.41	1.67	--	--	--
Single %	52	40	54	47	47	59	40	--	--	--
Joint %	48	60	46	53	53	41	60	--	--	--

Degree of collaboration

The formula proposed by Subramanyam (1983) is utilized in Table 4 to calculate the ratio of the total number of collaboration publications to the total number of articles in a given time. (Subramanyam, 1983)

C=nm/nm+ns

NM = Number of multi authored papers

NS = Number of single authored papers

C=112/112+105

C=112/217

C=0.52

The table shows that the value of DC was highest in the year 2014–2015 with 1.7 and lowest in the year 2018–2019 with 1.41, demonstrating that 0.52 is the total DC for the five-year period.

The distribution of authorship patterns was shown in Table 4. Four groups were created out of the authors (i.e., 1 author, 2 authors, 3 authors and more than 3 authors). It was observed from the Table 4 that, out of 217 articles, vast majority 105 (48.39%) of the publications were published by one author, and also nearby two authors 99 (45.62%), three authors publications 12 (5.53%). Further, it was noted that more than three authors contributed a few only 1 (0.46%) publication. It is clearly shows that authors were interested in collaborative work.

In the **Table 5** shows in this study, it shown to distribution of Year Wise Citation

Table 5 Distribution of Year Wise Citation

Citation Range	Years							No. of Total Articles	Percentage
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20		
0 to 10	15	17	16	13	10	14	16	101	46.08
11 to 20	12	10	12	14	14	9	8	79	36.41
21 to 30	0	1	7	3	2	4	4	21	9.68
31 to 40	2	1	2	1	4	0	1	11	5.07
41 to 50	0	1	0	0	0	1	1	3	1.38
51 to 60	0	0	0	1	0	1	0	2	0.92
61 to 70	0	0	0	0	0	0	0	0	0
71 to 80	0	0	0	0	0	0	1	1	0.46
Total	**29**	**30**	**37**	**32**	**30**	**29**	**30**	**217**	**100**

Table 5 indicated that the maximum 100 (46.08%) included published articles is in the citation range 0 to 10, followed by 79 (36.41%) included published articles is 11 to 20. Below 10% published articles fall down under the 21 to 30 (9.68%), 31 to 40 (5.07%), 41 to 50 (1.38%). And few articles fall down under the 51 to 60 (0.92%) and 0.46% articles are in the 71 to 80.

In the **Table 6** represent in this study, it has shown Length of the Articles.

Table 6 Length of the Articles

No of Pages	Year							Total	%
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20		
1 to 5	9	5	18	7	10	5	11	65	29.95
6 to10	15	19	18	22	15	17	13	119	54.84
11 to 15	4	5	1	3	3	5	6	27	12.44
16 to 20	1	1	--	--	2	1	--	5	2.31
21 to 25	--	--	--	--	--	1	--	1	0.46
Total								217	100

Table 6 represented that the length of papers, out of 217 (100%) of the papers, 119 (54.84%) published articles length is 6 to 10, followed by 65 (29.95%) published articles length is 1 to 5, 27 (12.44%) published articles length is 11 to 15, and 5 (2.31%) published articles length is 11 to 15. And few articles fall down under the length of papers 16 to 20 (0.46%).

Table 7 indicated that the major contributors and pattern of article distribution.

Table 7 Major Contributors and pattern of article distribution

Rank	Major contributors	No. of Authors				Total contribution	%
		1	2	3	>3		
1	Author 1	3	10	1	0	14	4.08
2	Author 2	0	8	0	0	8	2.34
3	Author 3	0	6	1	0	7	2.04
4	Author 4	6	0	0	0	6	1.75
4	Author 5	3	2	1	0	6	1.75
4	Author 6	0	4	2	0	6	1.75
4	Author 7	0	5	1	0	6	1.75
4	Author 8	0	6	0	0	6	1.75
5	Author 9	4	1	0	0	5	1.46
5	Author 10	1	2	2	0	5	1.46
5	Author 11	0	5	0	0	5	1.46
5	Author 12	0	4	1	0	5	1.46
6	Author 13	3	1	0	0	4	1.17
6	Author 14	2	2	0	0	4	1.17
6	Author 15	2	2	0	0	4	1.17
6	Author 16	2	2	0	0	4	1.17
6	Author 17	1	1	2	0	4	1.17
6	Author 18	1	3	0	0	4	1.17
6	Author 19	0	4	0	0	4	1.17
7	Author 20	0	4	0	0	4	1.17
7	Author 21	3	0	0	0	3	0.87
7	Author 22	3	0	0	0	3	0.87
7	Author 23	3	0	0	0	3	0.87
7	Author 24	2	1	0	0	3	0.87
7	Author 25	2	1	0	0	3	0.87
7	Author 26	1	2	0	0	3	0.87
7	Author 27	1	2	0	0	3	0.87
7	Author 28	0	3	0	0	3	0.87
7	Author 29	0	3	0	0	3	0.87
7	Author 30	0	2	1	0	3	0.87
7	Author 31	0	3	0	0	3	0.87
7	Author 32	0	3	0	0	3	0.87
	2 papers(25 Authors)	19	28	3	0	50	14.58
	1 paper(146 Authors)	43	78	21	4	146	42.57
	Total	**105**	**198**	**36**	**4**	**343**	**100**

Table 7 presented the major contributors and pattern of article distribution with their number of documents contributed by the authors. As shown Table 7, that Author 1, with 14 (4.08%) articles, followed by Author 2 contributed 8 (2.34%) articles and Author 3 contributed 7 (2.04%) and ranked as first, second and third ranks, respectively.

Table 8 indicated that designation wise contributors of article distribution

Table 8 Designation wise contributors of article distribution		
Designation	**No of Articles**	**%**
Vice Chancellor	2	0.58
Director	8	2.33
Dean	5	1.46
I/c. Principal & HOD	9	2.62
Professor & Head	22	6.41
Head & Association Professor	6	1.75
Faculty Members	234	68.22
Research Scholars	46	13.41
Others	11	3.21
Total	**343**	**100**

Table 8 demonstrated the major designation wise contributors and pattern of article distribution with their number of documents contributed by the authors. As shown Table 8, that Faculty Member, with 234 (68.22%) articles, followed by Research Scholars contributed 46 (13.41%) articles, BOB Officer, Partner Corporator, Planning Officer, Secretarial Assistant (UGC-SAP), Supervisor Instructor are contributed 11 (3.21%), I/c Principal and HOD 9 (2.62%), Director 8 (2.33%), Head and Associate Professor 6 (1.75%), Dean 5 (1.46%), and Vice Chancellor contributed 2 (0.58%)

Table 9 show that the reference distribution pattern.

Table 9 Reference distribution pattern						
Year	**Vol.**	**No of Articles**	**No. of references**		**Total reference**	**Avg.Ref/Article**
			Issue 1	**Issue 2**		
2013-14	1	29	151	190	341(11.62)	11.76
2014-15	2	30	201	164	365(12.42)	12.17
2015-16	3	37	259	245	504(17.15)	13.62
2016-17	4	32	233	198	431(14.67)	13.47
2017-18	5	30	220	236	456(15.52)	15.2
2018-19	6	29	216	183	399(13.58)	13.76
2019-20	7	30	211	231	442(15.04)	14.73
Total		**217**	**1491(50.75)**	**1447(49.25)**	**2938(100)**	**13.54**

Table 9 represents the yearly distribution of the reference pattern. It was observed from Table 9 that, out of 2938 (100%) references, vast majority 456 (15.52%) and average references 15.2 of the references were used in the year 2017-2018. Further, it was not that 442 (15.04%) and average references 14.73 of the references were used in the year 2019-2020. Overall, year wise 217 articles published during the year 2013-2014 to 2019-2020 and its distribution of reference pattern averages were 13.54.

Findings of the Study:

- The highest number of journal article i.e., 37 (17%) has been published in the year 2015-2016.
- 172 (79%) research papers were published in the SMTR journal during the year pf 2013 to 2020.
- Majority of publications 44 (20.28%) articles published in Financial Management Subject.
- It is also found from the study that highest majority 105 (48.39%) of the articles were published by one author, followed by two authors 99 (45.62%). It is clearly shows that authors were interested in collaborative work.
- The maximum 100 (46.08%) included published articles is in the citation range 0 to 10.
- Maximum 119 (54.84%) published articles length is 6 to 10.
- The most prolific author is 'Author 1' with 14 (4.08%) articles and 'Author 2' with 8 (2.34%).
- The Faculty members are the most prolific

author with 68.22% articles and Research Scholars 13.41%.

- Vast majority 456 (15.52%) and average reference 15.2 of the references were used in the year 2017-2018.

Conclusion:

SMTR is a longstanding, practitioner-focused publication that has contributed to the management and technology literature. This study analyzed contribution of SEMCOM Management and Technology Review (SMTR) during 2013-2020. This study showed a general trend in the growth of research publications between 2013 and 2020. There were a total 217 numbers of papers published by authors. The majority of the contributions published in the year 2015-2016 with total number of 37 (17%) of an article published by authors. Maximum numbers of articles 172 (79%) were published as a research paper. Furthermore, majority of articles 44 (20.28%) published in the Financial Management subject. The data revealed that one author 105 (48.39%), two authors published 99 (45.62%), three authors published 12 (5.53%), and more than three authors published 1 (0.46%) paper during the study period. It means researchers are more interested in doing collaborative research work as well as independently. The maximum 100 (46.08%) included published articles is in the citation range 0 to 10. Maximum 119 (54.84%) published articles length is 6 to 10. Author 1 was identified as the most productive author with 14 publications. The results of the study can help prospective authors to understand trends in authorship and content and map the network of expertise that supports the journal. The SMTR editorial team, including editors and reviewers, may consider the result of the study in decisions about the direction, scope and themes of the journal. Finally, the study provides an efficient synopsis for readers, especially practitioners which may be as they consider the future of innovation management.

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Evaluation of Climate Change With Reference To CO2 Emission

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Rina Dave, Preethi Luhana

***Abstract**:*

The world is confronting a new and ever increasing challenge of climate change and build on sizable pressure on various countries environment. This paper focuses on an overview of concept of climate change and its various correlated terms alone with various associated reasons and irreversible consequences on human health and measures to combat to reduce the long term cost of climate change to the world. While addressing climate change issues we require maximum level of coordination among all countries of the world including government, private sector and society at large. It is to be noted that society as whole and government should know the role of agriculture in climate mitigation including economic and technical feasibility along with food supply and pattern of land-use.

***Keywords:** Climate change, GHG, CO2, Climate-actions.*

Introduction

The world is confronting a new and ever increasing challenge of climate change and build on sizable pressure on various countries environment. It not only includes rising sea levels every year but also changing weather patterns which is responsible for shifting pattern of food production, rising risk of flooding and storms to unprecedented scale(North 2014). It is noteworthy that agriculture also contributes a lot to human induced overheating of planet earth. Near earth surface the changes in climate change is due to many climate pollutants which includes CH4, N2O and CO2, the biggest contributors to global warming (Lynch et al. 2021). Agriculture output is directly or indirectly associated with these three gases. Agriculture and related activities creates about half of all human induced climate change, out of these three gasses it is difficult to measure CO2 emissions because its comes from various processes like a small amount CO2 emission occurs from agriculture production, urea and lime, various fertilizers. Half of the methane emissions caused by agriculture activities and three-fourth comes from N2O. It is to note that society as a whole and government should know the role of agriculture in climate mitigation including economic and technical feasibility along with food supply and pattern of land-use. Agriculture land use has changed and increasing agriculture production magnification have encouraged the rising production of fibre, food and feed (IPCC, 2018). The total production of food particularly cereal crops have increased by 240 percent until 2017 (IPCC, 2018) because of land area expansion and rising yields. The climate zone has changed in many region in the world due to global warming including contraction of polar climate zones and extension of arid climate zones which all the species in the worlds are experiencing in their daily lives such as changes in rainfall intensity, flooding, droughts frequency and their severity, stress of heat, dry spells, wind, rise in the level of sea and wave action. Global warming has already affected third goal of SDG (Sustainable Development Goal) of good health and Well-being, It has also affected. Crop production like maize and wheat has negatively affected by observed climate changes in lower latitude regions whereas it has been positively affected in higher latitude regions.

The city areas are warmer because of both urbanization and human induced over heating of planet. This has caused extreme rainfall events over the city. Global warming creates additional stresses on earth, livelihoods, ecosystem, infrastructure, and over-all-health of human beings. The impact on multiple systems and sectors may vary across regions. Climate change also induces environmental based migration both at domestic level and international level, this leads to unsustainable land management which in turn give negative economic impacts. Climate change information is ever expanding these days including impact on natural resources and related ecosphere and land use pattern among human communities are playing an important role in effective policy formulation. These policies will help to address climate change issues of ecosphere, ecosystem services, landscapes and local administration. Policy implementation will be aided by better informed system and society as whole. Forest ecosystems can transfer carbon from atmosphere as part of GHG (Green House Gas) complex and take it into plants tissues by the process of photosynthesis during the growth of the trees. This will have significant potential to mitigate climate change(J. Alavalapati et al. 2011). The UNFCCC (The United Nations Framework Convention on Climate Change and protocols were accepted in 1997 which have been remained the grounding frameworks for developing the awareness and policies to countervail impacts of climate change.

Literature Review:

There are many drivers which drives the overall environmental changes this include land use patter, pollution, forest fires, changes in nitrogen gas cycle and nuisance or non-native species, weeds and ozone pollution in many parts of the earth (Backlund et al. 2008). We need a strong strategic knowledge system in the area of water, agriculture, health and energy to build institutional capacity and effective policy instrument, in order to support this government of India has come with the NMSKCC (The National Mission on Strategic Knowledge for Climate Change)(Backlund and Janetos, 2008). With ever changing global environment it is also important to build the adaptive capacity of human to get adjusted to the climate change in order to avoid the moderate potential damages and to cope with the resultant outcomes of climate change(Figueroa 2016). To address these issues, it's important to recognize and understand all the berries or challenges for viable adaptation options (Rizvi and Riel 2020). SDG (Sustainable Development Goal) goal 1 of No Poverty and goal 13 of Climate Action are closely related. As climate shocks particularly floods or droughts or other natural disasters makes direct influence on human health such as diseases like malaria, and diarrhea and loss of labor income, loss of crop, rise in food price etc. disproportionately affected poor people not only because they are vulnerable to climate but also because they have fewer resources or have less financial support mitigate these effects. Thus climate change will contribute to poverty and it will be difficult to eradicate poverty in a sustainable manner. With the help of technology and government policy if we can have climate informed development mechanism which can minimize the impact of consequences of climate change on poverty(World Bank 2013).

Climate can be defined as systematic pattern of weather conditions of specific place on the earth(Climate Change Report 2021; Scott 1990). These conditions can be classified into high temperature, mild or wet, depending upon seasons and locations(Council 2009). However evidences shows a drift from the normal pattern of weather conditions to harmful and adverse and unpredictable negative effect on the environment and these effects are directly on ecosystem, animals and humans. Our planet earth is surrounded by atmosphere consist of NO_2, O_2,Methane, water vapor and CO_2, which are popularly called as greenhouse gases (GHG)(Climate Change Report 2021; Mushobozi 2011). The GHG contributes most to the warming of the planet earth surface. GHG increases with the rise in different sorts of pollutions. GHGs though comprises a very tiny part of planet earth atmosphere but they are critical for keeping the earth warm to hold up life on earth(Guhathakurta et al. 2020; UN Water 2019)..

Research Methodology:

The current study refers to secondary data and calculus by respective statistical tools and techniques, including descriptive statistics, independent sample test, and multiple linear regressions. It does apply scientific tools for in-depth analysis of the available database. The quantitative approach is used to compile and evaluate available statistics from various sources of publications. Then the inferential approach is used to review different kinds of literatures on climate change world-wide.

Objectives:

1. To evaluate the overall climate change in the world.
2. To forecast the total CO_2 emission for upcoming years.

Data Analysis and Data Interpretation:

1. Descriptive Statistics – Mean Value: The mean statistics of China is highest 6.72 for carbon emission, US is second largest CO_2 emission country with the mean statistics of 5.45. The mean statistics of Russia, Japan, Germany, Ukraine, India, UK, Canada, Italy, South Korea, Iran and Saudi-Arabia is 1.79, 1.22, 0.85, 0.37, 1.44, 0.53, 0.57, 0.52, 0.53, 0.41, and 0.38 respectively. The value of mean variation is statistically significant or not required to measure by either a parametric or a non-parametric test.

Table 1: Descriptive Statistics – Mean Value

Statistics

		US	China	Russia	Japan	Germany	Ukraine	India	UK	Canada	Italy	InternaionalShipping	SouthKorea	Iran	SoudiArabia
N	Valid	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		5.4484	6.7161	1.7935	1.2290	.8484	.3742	1.4387	.5323	.5645	.4161	.5677	.5290	.4065	.3839
Minimum		4.50	2.40	1.60	1.10	.60	.20	.60	.30	.50	.30	.40	.30	.20	.20
Maximum		6.00	11.70	2.40	1.30	1.00	.70	2.60	.60	.60	.50	.80	.80	.70	.60

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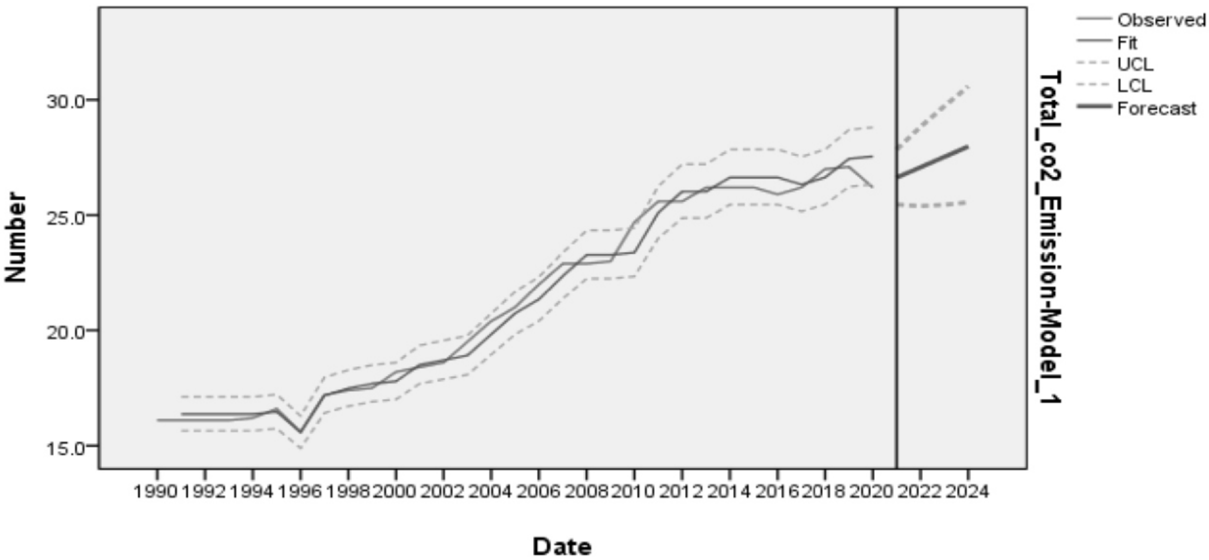
2 Testing of Normality: In order to apply parametric and non-parametric hypothesis testing procedures; testing normality, Shapiro-Wilk test applied because sample size is less than 100. Following are the results of the Shapiro-Wilk test in table 2.

Table 2: Test of Normality

Tests of Normality	Shapiro-Wilk		
	Statistic	df	Sig.
US	.918	31	.020
China	.858	31	.001
Russia	.666	31	.000
Japan	.747	31	.000
Germany	.833	31	.000
Ukraine	.862	31	.001
India	.900	31	.007
UK	.735	31	.000
Canada	.607	31	.000
Italy	.803	31	.000
InternaionalShipping	.904	31	.009
SouthKorea	.929	31	.040
Iran	.842	31	.000
SoudiArabia	.841	31	.000
TotalCO2Emission	.869	31	.001

The results of the Shapiro-Wilk test shows that in the above variables, the significance level is greater than 0.5 than data is normally distributed, however in above case the level of significance is less than 0.5 at 99 percent significance level therefore the data is not normally distributed, henceforth we can use non—parametric test for testing the hypothesis.

3. Forecasting Model: The results obtained for forecasting the CO2 emission for the year 2022, 2023 and 2024, we come to the conclusion that total carbon-dioxide emission is going to increase.



Forecast [CO2 measured in Gt]

Model		2021	2022	2023	2024
Total_co2_Emission-Model_1	Forecast	26.6	27.1	27.5	28.0
	UCL	27.9	28.8	29.7	30.6
	LCL	25.5	25.4	25.5	25.6

The average CO2 emission for the year 2022, 2023 and 2024 will be 27.1 Gt, 27.5 Gt, and 28 Gt respectively.

Suggestions/Recommendations for Future Actions

Achieving zero CO2 emissions is not only a slogan to the reduction of carbon emission but it is also necessary condition to discourage the case of global warming. The cumulative carbon budget is allocated to CO2 only. We must globally restrict the overall global warming to 1.5 degree Celsius (IPCC, 2018). The IPCC's special report on Global warming states that maximum temperatures are dependent on total CO2 emissions and non-CO2 radiative forces. Based on above analysis following are some suggestions:

- Increased agro-forestry
- Improved cropland and livestock management
- Managing agricultural diversification
- Improve the grazing land management system
- Improve integrated water management system within agriculture
- Reduce deforestation and forest degradation
- Reduce soil salinization and soil compaction
- Forest fire management
- Reduce landslides and natural hazards
- Reduce all types of pollution including acidification
- Restoration and reduced conversion of coastal wetlands
- Reduce post-harvest losses and food waste
- Increase sustainable sourcing of natural resources.

Conclusion: : To overcome challenges government has taken several actions related to land to contribute to climate change adaptation, sustainable development, land quality improvement, sustainable food security, soil organic carbon management, ecosystem conservation, save water, save earth, waste management, reforestation and mitigation(Figueroa 2016; Mandal 2019). The success or failure of any response largely depends upon socio-economic conditions and their local environment. Ensuring, developing and promoting access of clean or green energy sources and technologies can help in mitigating climate change to some extent. This will give health benefits with positive socioeconomic changes especially for women and children for example solar and wind energy. The sustainable development includes land management, forest management to reduce land degradation and maintaining land productivity. Mitigating climate change is a complex challenges therefore a mix policies rather than single policy approach can give better results. The policy mix can include weather and health insurance, financial support, and universal access to early warning systems. The policy which has wider scope to incorporate food system, waste management, sustainable land use methods, increase agro-forestry.

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Change and Adaptation With Special Reference to Human and Humanity

Avdhesh Jha, Parinita Ratnaparkhi

Abstract

Change is a continuous and gradual process and whatsoever is the situation, the two goes side by side. People may come across change but it's up to them whether to select or not. The fish and the birds migrating without any ship or flight connote their adaptation to travel such long distances. While people come across change, it is necessary to ascertain the existence of human, humanity and the balance of ecosystem and when it is about human it should necessarily ensure at least his health, happiness and peace (HHP). The need to collaborate at global and local level for HHP is the need. This article with a focus on change, types of change, factors affecting change, adaptation, requisites of adaptation and suggestions for change and adaptation is an initiative to let the readers ponder upon the change and adaptation. The international bodies, UN 2030 Goals for Sustainable Developments (SDGs) and OECD Education 2030 collaborated and contribute to ensure sustainability of planet, people, and peace across the Globe.

Key words: *change, adaptation, human, humanity, adjustment*

Background

With respect to change, Change is a continuous and gradual process. Our so called progress is the result of this change and our existence today is the result of the successful adaptation to our environment. Adaptation in its simplest sense is the process of adjustment towards the modification. Here it remains to check if we are really happy with our progress. Also it turns important to understand adjustment and adaptation. Whereas both tend to be a psychological term, adaptation is also a term related to science especially biology. Whereas adjustment seems to be impermanent or temporal, adaptation with its impact on a part or a whole remains permanent. Again, adjustment is not always full with ease and comfort but adaptation certainly adds to ease and comfort especially mentally. The examples of the fish and the birds travelling long distances without any ship or flight connote their adaptation to travel such long distances. Here we need to question if human adapts? Of course, they do. Amidst all the odds and problems, their optimistic outlook and hope for success leads them to adaptation and ensures their survival. But again, it remains to ensure if the adaptations by the Human society is for the overall welfare of the globe?

What is change?

Because of modernization and fast life full of leisure and luxury, and with the advent, access and reachability of technology in this 21st century, we find several changes in our environment which has silently penetrated into us and become an integral part of our life. We have changed ourselves from real and emotional gathering to virtual gathering, the result of which is the powerful existence of the social networking sites (SNSs) like face book, twitter, ZOOM and many more. At the same there is a debate between two schools of thoughts, one with premise 'technology in school leading to creativity' and another premise 'rush to excessive use of technology hinders authentic human creativity'. Many a times it seems so much that we find that we are ruled by the same and especially in the case of technology in most cases it is difficult to define who rules whom?

From the above discussion, it is vivid that the change maybe social, cultural, ethical, value based, emotional, climatic etc. Every day and moment comes with a change which affects the society and the human. E.g. change in people's life-style, change in their behaviour, attitude, way of living life, in their culture, tradition, values, set norms etc. The ratchet effect mentions that Human beings are biologically adapted for culture in many different ways in comparison to other primates. The other primates not adapt as humans. The empirical evidences clearly suggest the fact that none but the human cultural customs and traditions accumulate modifications over the historical time. Thus it turns inevitable to understand change and its impact with respect to the system and individual. If we think over of this change on the system, we observe that the system has also come up with change viz. relationship among people, interactions, roles of individuals, social structures and institutions, functions of different groups and institutions and the value and norms.

Types of change

When we talk of change, change can be social change, climate change, work place change, organizational change, cultural change, etc. These changes lead to paradigm shifts in long run of time in different disciplines.

Whereas cultural change refers to the food habits, dressing, speaking a new language, interacting in social settings, and understanding various other cultural norms and hence the cultural assimilation; the change in work place refers to the values, working environment, work culture, timelines etc. and assimilating with it; and similarly does the organisational change and others. Change and adaptability are the two common, inevitable attributes and inspirational indicators for individual in order to live a sound life. Talking about change, there have been so many changes in religion, culture, education, politics and economics which has either created a history or turned them a history.

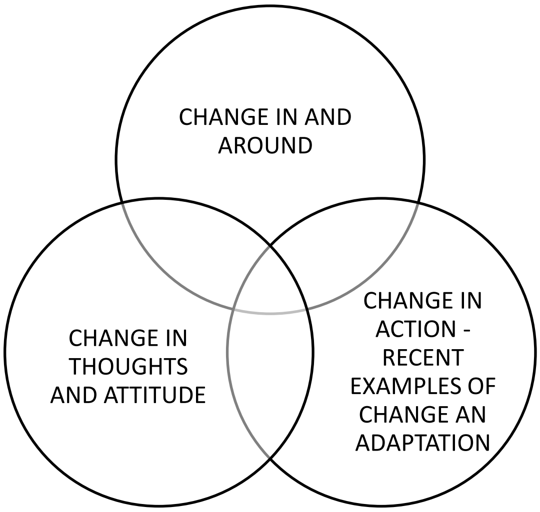

***Figure 1*: Types of Changes and their Interrelationships**

Change in and around

Every country has its own history. It is this history that serves us with the legacy of the past on which we take pride even today. The history of the human race also is special. Not involving ourselves with the idea of the debatable topic of the origin of human, if we see the past, we find it as a history of change and adaptation. In a way, any history connotes change and adaptation as well. The universally accepted science reveals the tale of unicellular organism and its slow and gradual multiplication leading to the multi-cellular organisms. No doubt wherever we start from, whatever we talk will depict the idea of change and adaptability. The stone-age, pre-man, the origin of fire and wheel, green revolution, white revolution, technology revolution and mobile phone revolution is full of change and adaptation. Each epic of the country is story of its change and adaptation viz the Bible, Quran and Geeta. Thus change and adaptation is not new. Rather it has continued right with the existence of this earth. The tale of dinosaurs -its existence and its extinction is related with change and adaptation. It is a clear case of change and adaptation. With change, we have simply either to adapt or turn extinct. The chameleon, grass hopper are another good examples of adaptation. Every day the deer and lion wake up. The deer knows it has to run faster than the lion and the lion has the understanding to run faster than the deer. The one who fail to adapt to the situation looses the race, pays with life and perishes. Thus this idea of survival is also related with change and adaptation.

Overall, this change and adaptation has started, continued and shall remain to continue till the existence of the living species on this beautiful earth and the best part is that most of the living species adapts to the change. Noteworthy are some recent examples of change and adaptability which is observed clearly and accepted scientifically without any citation.

Change in thoughts and attitude

Just 20 years back it was difficult to communicate with people across the globe. The telecommunication and other advancement in technology made the things changed at 360 degree. Now within seconds it is possible to get in contact with the person and people sitting at another corner of the globe. The means of communication with global and local has changed up to a great extent. Not only has this, but the topics of chat, discussion changed a lot. This shows a shift also at our level of thinking and perceptions related to things. For example, talk about untouchables, caste, creed, black and white people, LGBT, menstruation, relationship, euthanasia, suicide and other societal taboos were considered as confidential. But the change in attitude and thoughts has changed each individual to think upon these areas and take appropriate decisions related to things. Even the researches carried out in the areas have changed the ways we were taking them as initially. Dewey (1938) suggested education for the social transformation. The classical and contemporary approaches to attitude change mentioned by Cacioppo, Petty, & Crites, (1994) are seven. They are as follows (i) Conditioning and Modelling approach (ii) Verbal Learning Approach (iii) Judgemental Approach (iv) Motivational Approach (v) Attribution Approach (vi) Combinatory Approach (vii) Self-persuasion Approach

The change is must and education helped us to deal it positively and luckily people found themselves to get adapted to the same. While giving birth to a child, or for any operation, it was a terror and fear. With medical up gradation and its awareness, now people are adapted to it and are ready for the same on their own. Earlier people used to live in joint family then came many forms such as semi joint family, nuclear family, live in relationship, contractual family etc. With technology, people have developed advanced hard skills and soft skills in order to meet with the change. For written communication, people in past used to write manually through the ink and leaf then came ball pen and paper, and then computer and now voice type software.

Change in Action - Recent examples of change and adaptation

Touraine (1981) states that the new social movements will have effect on shaping the future societies. The tiniest corona with its great impact is the live example to which we have adapted ourselves. Whereas expressing love, love marriage was considered odd, now we all see the same together as a family in the movies and have adapted ourselves with the same. Not restricting the change in the education system presented us with the change of its locus from teacher centric to student centric education and now its movement towards techno-centric education, hereby all the prospects whether the student, teacher, parents or society they all have accepted, adjusted and gradually adapted to this change.

How does the change impact the system and individual?

Since the system/society and the individual are complementary to each other this process of change involves change in the individuals especially with respect to their experience, attitude, thoughts, thought pattern, interaction, idea of social structure and relation whether inter personal or intra personal."The basic fact of today is a tremendous phase of change in human life" (Pandit Jawaharlal Nehru) "Change in the social structure is social change" (Maciver)

Factors responsible for change

Change is caused by several factors including war, flood, earthquake, population explosion, education, environment etc.

Social–ecological resilience (SER) with reference to people and nature are as interdependent and co-supporting systems. Local communities and their surrounding ecosystems is all about SER. In the present era the hastening human activities on earth is now making it an issue at global scales (Steffen et al. 2007). The factors influencing change involves atleast demographics, politics, economics, industry, scientific technological inventions and discoveries, society and culture, technology, environment, psychology etc. [4]According to Edgar Schein's Model of corporate culture, the model suggest for change in cultural artefacts (observable data of an organisation which includes 'what to do' and 'how to behave'). According to the model, any change in culture needs well defined actions and behaviours that are desired, followed by the different processes which will be necessary to reinforce that set behaviours. Thus if we want to bring change education remains pivotal along with the media which keeps influencing the individuals. Education as an instrument of change helps us to change attitude, create desire, analyse change, develop acceptance for change, remove resistance and add to the flexibility, develop democratic values, transmit culture, as well to add to leadership, innovations, eternal values, economic development, national integration and national development.

Requisites for adaptation

For any change acceptance is must which leads to adaptation. Aristotle, rightly said 'Nature does nothing uselessly.' Adaptation refers to the ability to quickly and successfully embrace change and adapt effectively in response. It's about handling change in the workplace in a way that leads to continued success rather than fearing and resisting it. Hereby it is necessary to know the adaptability skill as well viz. communication, interpersonal relations, problem-solving, creative and strategic thinking, teamwork and organizational skills.

Suggestions for adaptation

Apart of these one should have the capacity to understand things from more than just our own perspective. This necessarily includes accepting others perspective too which may lead us to have broader appreciation for different ways of seeing the same thing and can help us to learn, grow, and adapt. We should not underestimate the importance of taking on others' perspectives and being less defensive of your own. Being adaptable and non-defensive is an appealing quality that is highly valued. Further, its simple, if you don't like something, change it. If you can't change it, change your attitude. (Maya Angelou)

Rigidity or inflexibility is the cause of maladjustment and mal-adaptation. We should thus question our flexibility as such how flexible is our thinking? Listing some of our inflexible thoughts/beliefs should be followed by the questions viz. how these fixed thoughts/beliefs assist you? What is the output? How do they restrict or refrain you?

Further, to improve the ability to adapt, people need to keep open to change and practice the flexibility whether cognitive (use different thinking strategies), emotional (deal with emotions), and dispositional (remain optimistic and realistic).

Conclusion

Whatsoever is the situation, change and adaptation goes side by side. We may come across change but it's up to us whether to select or not. Here I would like to quote Montapert "*Nobody ever did, or ever will, escape the consequences of his choices*." Blindly adapting the things maybe more serious and graver for creativity and humanity and thus hereby it is necessary to ascertain the existence of human, and humanity and the balance of ecosystem and when it is about human it should necessarily ensure at least his health, happiness and peace. Anything that is less than this may not be compromised for adaptation. Note worthy that this adaptation should not be forcible rather only a choice because if it is forcible it may endanger mankind. The adaptations taking place should be in light of welfare and progress for the next generation as well as those who are living now. The societies and individual should opt for wise decisions that lead the planet to a better form.

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A Study on Satisfaction Level of Women Entrepreneurs Towards Institutional Support

Joe Marry George

Abstract :

The history of women entrepreneurship shows that women entered the business due to PUSH factor rather than PULL factor. Today motivating women for entrepreneurship is a common phenomenon. Lots of efforts are be put by different bodies such as Government, financial institutions, non-financial institutions, corporate houses, etc. to encourage and motivate women for being entrepreneurs. For the sustainable development of any country it is necessary that the women population which comprises more than 50% of the total population should also contribute economically. And to motivate any women for enterprising the institutional support plays an important role. This research paper titled 'A study on Satisfaction level of Women Entrepreneurs Towards Institutional Support' will focus on the institutions engaged for supporting women entrepreneurs, the awareness about it among women, and their satisfaction towards these institutions.The research is based on primary data and secondary data. Percentile method, Chi-Square Test and ANNOVA Test are used for the analysis and interpretation of the data.

Keywords: *Women Entrepreneurs, Sustainable Development, Awareness, Institutional Support and Satisfaction*

Introduction to Women Entrepreneurship

Women entrepreneurs are that who think of an economic activity, initiate it, combine the factors of production, ready for risks and manages the uncertainties with an objective of earning profit in the future.

Women Entrepreneurs may be defined as the women or a group of women, who initiates, organizes and operates a business enterprise.

The Government of India has defined women entrepreneurs based on women participation in equity and employment of a business enterprise. Accordingly, the Government of India has defined women entrepreneur as "an enterprise owned and controlled by a women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women."

In terms of Schumpeterian concept of innovative entrepreneurs, women who innovate, imitate or adopt a business activity are called "women entrepreneurs".

Entry of women into business is a recent origin. The study about the history of women entrepreneurs reveals that before 21st century the PUSH factors were governing the women to become women entrepreneurs. The women started with economic activities due to several reasons like to support the family financially, to earn the bread and butter for self and due to other dire needs. The entry of women into business in this 21st century is because of the PULL factors. Today women select business as their profession due to several reasons like choice, become independent in life, gets inspired by role models, serve the society, awareness of leadership qualities, motivation from family and friends, etc.

Today when we talk about the women population, it is half of the total population be it at the world level or state level or district or village level. And if for the economic development of the country only the male counterpart contributes or they have the entire burden for the growth and development of the country then it won't be effective. Therefore it is necessary that the female also contributes and this will be effectively possible when they are motivated internally and externally.

Today there are numerous support systems motivating women to take up entrepreneurial activities. Todaywomen are now associated with 4Es i.e., today women are engaged in the various fields of Engineering, Electricity, Electronics and Energy. Women are heading in corporate, industries, politics, science, medicines, service sectors, information technology, aerospace, beauty, cosmetics, music, tours and travels, etc.

Literature Review

According to R.Kanchana, in the article 'Institutional Support To Women Entrepreneurs' has brought forth the major problems faced by women entrepreneurs as financial and technical knowhow. The article has highlighted in detail the various institutional supports at district level and state level in the form of finance as well as technical knowhow.

According to Parab B Laxmi, & Hyderabad R. L., in their paper titled 'State and Institutional Support for Women Entrepreneurship Development: A study of Dharwad District in Karnataka State' observed the support for women entrepreneurs from state level and institutional level using a sample of 136 women entrepreneurs from Dharwad district of Karnataka by administering interview method. The study concluded that there is poor awareness among women entrepreneurs on availability of various schemes of state level. Only 85 per cent of the women entrepreneurs were aware and availed the benefits of the supports and programmes.

According to Tomoyo Kazumi & Norifumi Kawai in their research paper titled, 'Institutional support and women's entrepreneurial self-efficacy' they had discovered that how the local institutions affects women entrepreneurial business performance.

According to M. V. Raghavalu in the research paper 'Institutional Support for Women Entrepreneurship in India' has commented that the socio-economic conditions would improve if the schemes, programmes and policies are implemented strictly by central and state governments.

In the research paper titled 'Institutional Support System and Networks of Women Entrepreneurs – A Study about the Perceived Effectiveness' by R. A. Ravi, reveals that the involvement of women into entrepreneurs is less even though there are number of institutions actively promoting Entrepreneurial Development Programmes across the country under various schemes.

Research Methodology

Objectives of the Research

1. To study the various institutions supporting women entrepreneurs.
2. To know the awareness among women entrepreneurs about the institutional support for women entrepreneurship.
3. To know the satisfaction level of women entrepreneurs towards institutional support facilities.

Significance of the Study

The study will help to know the various institutions that supports women entrepreneurs, understand the awareness level among women entrepreneurs about existence of institutional initiatives. This research will further help to take steps in generating the awareness among the women entrepreneurs who are not aware about institutional initiates. It will help to know the satisfaction level of women entrepreneurs towards institutional support facilities.

Hypothesis

1. There is no significant relationship between the satisfaction level of women entrepreneurs and institutional supportas per Age.
2. There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Marital Status of respondents.
3. There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Type of Family of respondents.

Statement of the Problem

Women population comprises of more than half of the total population and when we talk about the economic contributions of women it is still very low. But for the sustainable growth and development of the country it is essential that women also contribute to the fullest. This will be only possible when the institutional supports are open to all women entrepreneurs and also they are fully aware about the same. This encourages the researcher to take the study on 'Satisfaction Level of Women Entrepreneurs towards Institutional Support'.

Research Design: This is an exploratory research.

Sampling Design: Convenient Sampling

Sample Size: The sample consists of 300 respondents, and all the respondents are female women entrepreneurs.

Sample Area: Selected districts of Gujarat State.

Method of Data Collection: The data is collected from primary source using questionnaire. Secondary data is also collected. Secondary sources includes books, magazine and research articles on women entrepreneurship..

Research Design Tools: Percentile method, Chi-Square Test and ANNOVA Test are used for the analysis and interpretation of the data.

Limitations of the Study

The limitation of the study is that only few women entrepreneurs are selected for the study purpose. The time limit were also the constraints of the study.

Future scope of the study

Further research can be conducted covering all the women entrepreneurs engaged in all the sectors as per their investment in business in plant and machinery across the state.

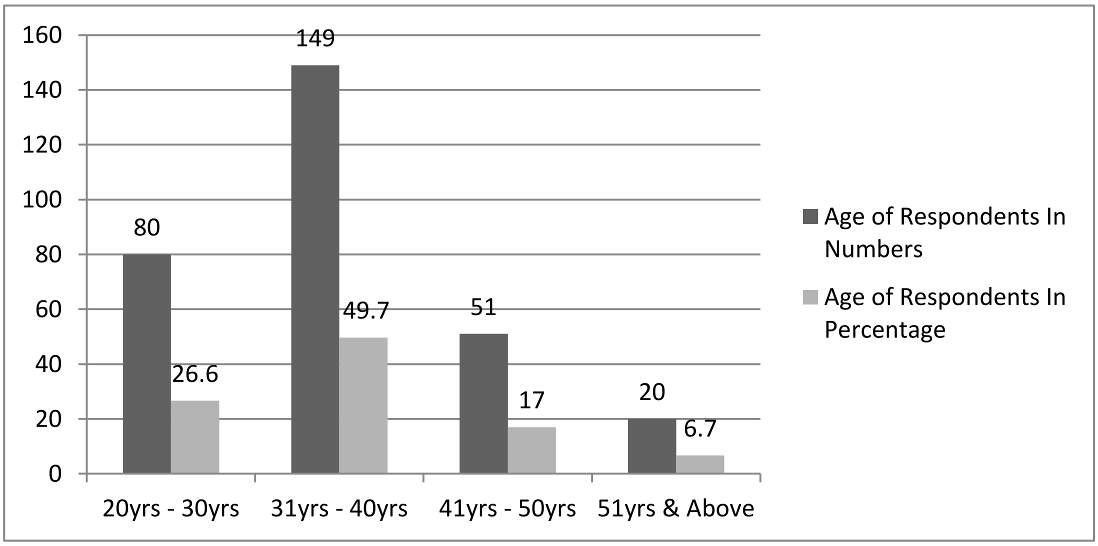
Data Analysis and Interpretations

The researcher has conducted a study on 300 women entrepreneurs from selected districts of Gujarat. The data was collected using questionnaire. The data collected are analyzed using different statistical methods and the interpretations are as under.

Table No. 1 Age of Respondents

Age Group	Frequency	Percentage
20yrs - 30yrs	80	26.6
31yrs - 40yrs	149	49.7
41yrs - 50yrs	51	17
51yrs & Above	20	6.7
Total	300	100

Chart No. 1 Age of Respondents

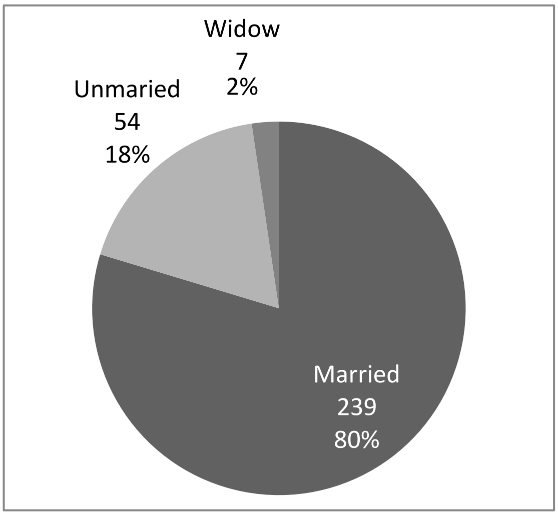


Interpretation: The data analysis shows that a majority of the respondents are of the age bracket of 31 – 40 years, which is almost 50% of the respondents. It can be concluded that the respondents of this age group takes up entrepreneurial activity more as they are highly motivated.

Table No. 2 Marital Status of Respondents

Marital Status	Frequency	Percentage
Married	239	79.7
Unmaried	54	18.0
Widow	7	2.3
Total	300	100.0

Chart No. 2 Marital Status of Respondents

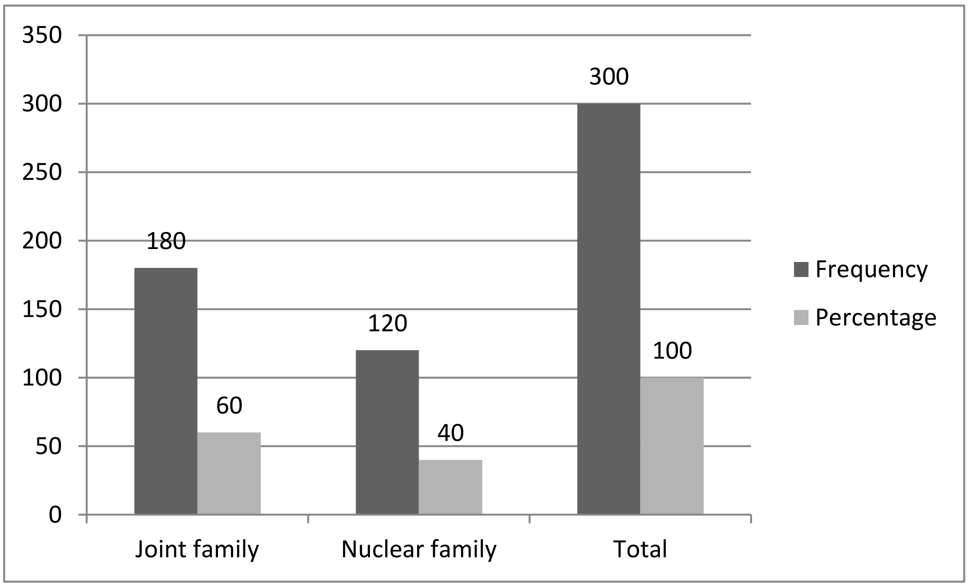


Interpretation: The above chart shows that 80% of the respondents are married, 18% are unmarried and 7% of the respondents are widow. The majority of the respondents are married which shows are married women take up entrepreneurial activities more compared to unmarried.

Table No. 3 Respondents Type of Family

Type of Respondents	Frequency	Percentage
Joint family	180	60
Nuclear family	120	40
Total	300	100

Chart No.3 Respondents Type of Family



Interpretation: It is found the 60% of the respondents are having joint family and 40% of the respondents are having nuclear family.

Table No. 4 Respondents Awareness about the Existence of Institutional Support

Source of Entrepreneurship Support Facilities	Response on Awareness in Frequency		Response on Awareness in Percentage	
	Yes	No	Yes	No
Institutional Support	67	233	22.33	77.67

Interpretation: It is concluded from the above table that 22.33% of the respondents are aware and 77.67% of the respondents are not aware about the institutional support for women entrepreneurship.

Table No. 5 Support Facilities Availed by Respondents from the Institutions

Sr. No.	Support facilities	Frequency	Percentage
1	Idea Generation	67	100
2	Project Preparation/Screening of Idea	40	59.70
3	Implementation of the Project	15	22.39
4	Seed Money	47	70.15
5	Financial support for Infrastructure	19	28.36
6	Financial support for Raw Materials	28	41.79
7	Financial support for Promotion/Advertising the Products	0	0
8	Workshops/Seminars/Training & Development, etc	67	100
9	Information for running/managing the business	67	100
10	Awareness Programmes about the Government Schemes	0	0

Interpretation: The above chart gives the description of 67 respondents who availed the various facilities from the institution that supports women entrepreneurs.

Thus 100% of the respondents availed the institutional support in terms of idea generation facility, workshop, seminar, training & development facility and information for running the business. Out of 67 respondent 47 (70.15%) of respondents received the seed money facility from the institution. 40% (59.70%) of respondents out of 67 availed the support of project preparation. 41.79% of the respondents out of 67 received the financial support for raw material. 28.36% of the respondents out of 67 availed the financial support for infrastructure. 22.39% of the respondents out of 67 respondents received the support in terms implementation of the project. It is found that out of 67 respondents no respondents availed the financial support for the promotion of the product and awareness programme from the institutions supporting women entrepreneurs.

Table No. 6 Degree of Satisfaction of the Support Facilities Availed by Respondents from the Institutions in Percentage

Sr. No.	Support facilities	Highly Unsatisfied	Unsatisfied	Neutral	Satisfied	Highly Satisfied
1	Idea Generation	7.46	4.48	8.96	37.31	41.79
2	Project Preparation/Screening of Idea	7.50	2.50	5.00	30.00	55.00
3	Implementation of the Project	0.00	6.67	6.67	20.00	66.67
4	Seed Money	4.26	6.38	4.26	44.68	40.43
5	Financial support for Infrastructure	10.53	15.79	15.79	31.58	26.32
6	Financial support for Raw Materials	3.57	10.71	0.00	3.57	82.14
7	Financial support for Promotion/Advertising the Products	0.00	0.00	0.00	0.00	0.00
8	Workshops/Seminars/Training & Development, etc	5.97	4.48	7.46	8.96	73.13
9	Information for running/managing the business	14.93	13.43	5.97	16.42	49.25
10	Awareness Programmes about the Government Schemes	0.00	0.00	0.00	0.00	0.00

Interpretation: From the above table it can be concluded that 37.31% & 41.79%, (total of both 79.1%) of the respondent are satisfied and highly satisfied respectively for the idea generation support facilities availed by them. 30% & 55% (total of both 85%) of the respondents are satisfied in project preparation or screening of idea facility availed from the institution. 20% & 66.67% (total of both 86.67%) of the respondents are having positive opinion about the institutional support facilities in terms of implementation of project. 44.68% & 40.43% (total of both 85.11%) of the respondents availed the support of seed money from the institution and are having satisfactory opinion about the same. 31.58% & 26.32% (total of both 57.9%) of the respondents are having satisfactory opinion about the financial support received for infrastructure from the institution. 3.57% & 82.14% (total of both 85.71%) of respondents have positive opinion about the financial support for raw materials received from the institution. 8.96% & 73.13% (total of both 82.09%) of the respondents are positive about the institutional support in terms of workshops, seminars and training and development. 16.42% & 49.25% (total of both 65.67%) of the respondents are having positive opinion for the institution's help in terms of information received for running the business. It can be concluded that no respondents availed the facilities such as financial support for promotion of the product and awareness programmes from the institution and therefore the degree of satisfaction can be known.

Findings and Conclusion

Findings

H0 1: There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Age of respondents..

Sr. No.	Support facilities	Pearson Chi-Square		
		Value	df	Asymp. Sig. (2-sided)
1	Idea Generation	3.446	3	.328
2	Project Preparation/Screening of Idea	3.878	3	.275
3	Implementation of the Project	2.478	3	.479
4	Seed Money	3.300	6	.770
5	Financial support for Infrastructure	3.027	6	.805
6	Financial support for Raw Materials	3.612	6	.729
7	Financial support for Promotion/Advertising the Products	4.267	6	.641
8	Workshops/Seminars/Training & Development, etc	7.487	3	.058
9	Information for running/managing the business	7.487	3	.058
10	Awareness Programmes about the Government Schemes	7.236	3	.065

From the above table we can conclude that the P value is greater than 0.05 for the support facilities of institution like idea generation, project preparation, implementation of the project, seed money, financial support for infrastructure, raw materials and for promotion, workshops/seminars/training & development, information for running the business & awareness programmes about government schemes.

Hence we accept the H0. Therefore it can be said that there is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per age of respondents.

H0 2: There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Marital Status of respondents.

Sr. No.	Support facilities	Pearson Chi-Square		
		Value	df	Asymp. Sig. (2-sided)
1	Idea Generation	10.126	2	.006
2	Project Preparation/Screening of Idea	9.634	2	.008
3	Implementation of the Project	6.179	2	.046
4	Seed Money	5.324	4	.256
5	Financial support for Infrastructure	4.264	4	.371
6	Financial support for Raw Materials	3.076	4	.545
7	Financial support for Promotion/Advertising the Products	.787	4	.940
8	Workshops/Seminars/Training & Development, etc	.318	2	.853
9	Information for running/managing the business	.318	2	.853
10	Awareness Programmes about the Government Schemes	.305	2	.859

It can be concluded from the above table that the P value is less than 0.05 for the institutional support facilities like idea generation, project preparation, implementation of the project, seed money, financial support for infrastructure, raw materials and for promotion, workshops/seminars/training & development, information for running the business & awareness programmes about government schemes.

Hence we accept the H0. Therefore it can be said that there is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per marital status of the respondents.

H0 3:There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Type of Family of respondents.

Sr. No.	Support facilities	Pearson Chi-Square		
		Value	df	Asymp. Sig. (2-sided)
1	Idea Generation	1.151	1	.283
2	Project Preparation/Screening of Idea	1.239	1	.266
3	Implementation of the Project	1.889	1	.169
4	Seed Money	.434	2	.805
5	Financial support for Infrastructure	5.843	2	.054
6	Financial support for Raw Materials	2.099	2	.350
7	Financial support for Promotion/Advertising the Products	1.563	2	.458
8	Workshops/Seminars/Training & Development, etc	.567	1	.452
9	Information for running/managing the business	.567	1	.452
10	Awareness Programmes about the Government Schemes	.556	1	.456

From the above table we can conclude that the P value is greater than 0.05 for the support facilities of institution like idea generation, project preparation, implementation of the project, seed money, financial support for infrastructure, raw materials and for promotion, workshops/seminars/training & development, information for running the business & awareness programmes about government schemes.
Thus we accept the H0. Therefore it can be said that there is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per type of the respondents.

ANNOVA TEST

1. **There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Age of respondents.**

Particular	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.094	3	.031	.239	.869
Within Groups	8.293	63	.132		
Total	8.387	66			

From the above table it is known that P value is .869, which is greater than 0.05. So we accept the H0 that there is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Age of respondents.

2. **There is no significant difference in the level of satisfaction of women entrepreneurs towards institutional support facilities as per Marital status of respondents.**

Particular	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.269	2	.135	1.062	.352
Within Groups	8.118	64	.127		
Total	8.387	66			

From the above table it is known that P value is .352, which is less than 0.05. So we reject the H0 that there is no significant difference in the level of satisfaction of women entrepreneurstowards institutional support facilities as per Marital status of respondents.

Independent Samples t-test according to type of family
Average of respondents satisfaction of the support facilities availed from the institution

Group Statistics

Type of family	N	Mean	Std. Deviation	Std. Error Mean
Joint family	43	4.6986	.37403	.05704
Nuclear family	24	4.6471	.32774	.06690

Independent Sample Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Equal variances assumed	1.654	.203	.564	65	.575	.05148	.09130	-.13086	.23383

- **Conclusion for Levene's Test for Equality of Variances**

  Ho: Variances are equal for both groups

  H1: Variances are not equal for both groups

  From the above table, p-value for the Levene's test is 0.203 which is greater than 0.05. So, we accept null hypothesis i.e. Variances are equal for both groups at 5% level of significance.

  Conclusion for t-test

  Ho: Average responses are same for both the types of family

  H1: Average responses are not same for both the types of family

  From the above table, p-value for the t-test is 0.575 which is greater than 0.05. So, we accept null hypothesis i.e. Average responses are same for both the types of family at 5% level of significance.

Conclusion

Out of 300 women entrepreneurs only 67 (22.33%) women entrepreneurs are aware about the existence of institutional support for women entrepreneurs. Therefore there is an urgent need to generate awareness among the women about the existence of institutional support. Also the researcher has observed that out of all institutional facilities only a very few facilities are fully availed by the women entrepreneurs like idea generation, workshop/seminar/training & development, etc and information for running or managing the business. And the degree of satisfaction is not much appreciable accept for workshop/ seminars/training & development which is 73.13%. Thus women entrepreneurship needs to be supported by the institutions more and more. There is a need to generate awareness by these institutions about the support facilities provided by them. The institutions needs to come up with more awareness programmes, schemes for women entrepreneurs, financial support, support in establishing the business, support in promoting their products, etc to encourage the growth of women entrepreneurship. The institutions should also find the reasons for their dissatisfaction for the availed facilities.

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Nihilism's Ontology and its God

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Abstract

The Present paper connects the examination of the theory of Nihilism with certain various theories and thoughts. Incredulity the term and later got advanced as a hypothesis, in like manner, an aura among Russian occupants play colossal, yet a fundamental occupation in working up the sensations of individuals and the impact can be found in their development. The force of new school existentialism is in the power of language to create smoke to cover their will to control in the word round of ethics with its fundamental nature of mercilessness diminishing the individual soul to a social creature. To any freethinker who has accepted a jump toward doubt as huge quality, such refusal is an unsuitable reasonable inconsistency to the pragmatics critical for favoring that ethical quality battling with the universe. For the person who rejects implosion, carefulness can go most likely as an ethical quality to battle against the grand animals and even a theodicy for the idiocy of life and unequivocally for the silliness of Technological Society constrained by social specialists and their magnificent animals. To state, that it is impartially obvious that there is no objective truth is a shortcoming clashing with the cynic's leap to significant quality. Subsequently, distrust must game plan with epistemology, reasoning, and their God.

Keywords: *Nihilism, Turgenev, Nihilism's Ontology and its God*

Introduction

All the scholars and followers of rationalism get along in life by aphorisms, recursive definitions, redundancies, and relative round reasoning and use the methodology of assumption of any irregularities to make their explanations of life. This cycle is an all-encompassing method of thinking particularly from enlistment and derivation; it is the thing that the scholar C.S. Puncture called 'snatching'. There is no motivation to avoid our existential skeptic aphorisms from this snatching cycle particularly given that we concede our sayings to be manifestations of language and restricted by language: we concede we are attempting to talk about that of which we ought to be quiet. This genuineness isn't found in the adversaries of agnosticism. God plays dice with the universe yet we are the singular theorists betting on the roll. He even uses stacked dice as He is qualified to do in light of the fact that He is God. Indeed, even with stacked dice, you can sort out the probabilities and play in a like manner. Losing or winning doesn't have an effect; it is playing the game that is important.

Discussion

This skeptical nature for truth and information is a risk to the old-fashioned logical attitude of looking for illustrative truth and information on reality as an end in itself and as a method for sanely discovering God. The principal thought process is babble and, the best case scenario is self-fancy. The single object of the point that is an end in itself is power: command over oneself, over the other, and over this present reality. The last manner of thinking of searching for God is so far still steady just as has been satisfied. God has been revealed to be the God skepticism understands that he will by and large be. She isn't a God made in our image anyway it turns out we are made in God's image with the capacity to attach God by Rule Following to endeavor to make up for how we are not actually divine creatures yet an image of One. God is Power. The individuals who look for power are attempting to resemble God, there isn't anything amiss with that. It turns out badly just when the looking for of ability to resemble God deceives one into accepting they really are God — astonishing duplicity that can be truly held considering its power despite its being false. Looking for clarification is the defeatist's approach to God since it hallucinates trying to tie God to one's Rule Following. The differentiation between authentic knowledge and man-made thinking is our ability to see the world exhaustively as opposed to by Rule Following. PCs can do Rule Following however; PCs can't be agnostics. It is here that we can battle against the brain desensitizing and soul murdering force of the morals that need to control power in Technological Society as an end in itself rather than as a way to find, investigate, and overcome the universe.

1 The Axioms Applied: Ontology

All morals by need have an important quality of savagery, thusly morals can't be the way to a peaceful universe of quiet concurrence — fellowship, sisterhood, or whatever. Ethics require a couple to condemn constantly the many: it is finished by the partnership on violence it calls the law. Its shortcoming is that its viciousness can handle the other yet not reality. Rule Following is its fundamental strategy for making an explaining word game that ties even reality to its vibe — that ties even God. Rule Following and ethics don't join anyway separate and detach into incredible and wicked, authentic and unlawful, the people who agree and the people who disregard, and more divisions made in language and constrained upon this present reality. Skepticism joins by making importance through shared activity — as is done in the casting rod model. Similarly, as sharing the experience of fishing would make a shared word round of fishing, the agnostic acknowledgment of reality for what it's worth as opposed to implementing how it should be to uphold a will to control makes a shared reality and a shared significance for that reality.

Skepticism doesn't have an important characteristic of savagery — it could have it if the individual profound quality of the agnostic has it yet it's anything but a vital trait for what it's worth for morals. Since existential aphorisms go before language, it is beyond the realm of imagination to expect to utilize them as reasonable systems for clarifying reality — which isn't an issue; their entire substance is that there is no such clarification to be given in any case. They can't be utilized to change from principle observing to Rule Following. Their utilization and handiness in language, accordingly their importance, are in the significance they provide for singular activity: defiance to the morals of Technological Society and its social designing forces to make a world in the image — if the insane individual requirements to contradict them. On the off chance that the individual doesn't need much resistance, they have no utilization or convenience for the sayings other than for feels. Similarly, as with everything in skepticism, the defiance and its fights are closed in themselves existing similarly to God exists.

The sayings "I'm", "I'm as such I might suspect", and "I need something past allowance" applied to the things involving me, and what isn't I make a skeptical theory where its epistemology has truth and data that are simply functional. In proper rationale, these adages would exist similarly to numbers exist with their sentence structure and semantics equivalent. The existential presence of the 'Other' is known through a battle with the 'Other', not by sympathy or any sort of blend with the 'Other' besides by the compassion that recognizes the 'Other' is in a similar battle with me and with the real world. We evade solipsism and realize we are in good company in the universe due to the absence of a private language and the powerlessness to make our profound quality the importance of the universe — there is consistently another ethical quality to battle against. The equivalent is valid for the Other's information on us.

We discover that we are isolated creatures on the planet, unmistakable based on what is other than ourselves, by facing deterrents to the satisfaction of our expectations – that is, by running into resistance to the usage of our will. At the point when certain parts of our experience neglect to submit to our desires, when they are on the opposite enduring and even antagonistic to our inclinations, it at that point turns out to be obvious to us that they are not pieces of ourselves. We perceive that they are not under our immediate and prompt control; all things considered, it becomes evident that they are autonomous of us. That is the birthplace of our idea of the real world, which is basically an idea of what restricts us, of what we can't adjust or control by the simple development of our will. To the degree that we learn in more prominent detail how we are restricted, and what the constraints of our limits are, we come subsequently to depict our own limits and consequently to recognize our own shape. We realize what we should or shouldn't do, and such exertion we should make to achieve what is really feasible for us. We get familiar with our forces and our weaknesses. This not simply gives us a significantly sincerer sensation of our separateness. It characterizes for us the particular kind of being that we are.

Accordingly, our acknowledgment and comprehension of our own character emerges out of, and relies essentially upon, our enthusiasm for a reality that is conclusively autonomous of us. All in all, it emerges out of and relies upon our acknowledgment that there are realities and certainties over which we can't expect to practice immediate or quick control. If there were no such real factors or assurances, if the world continually and transparently transformed into whatever we may like or need it to be, we would be not ready to isolate ourselves dependent on what is other than ourselves and we would have no sense of what explicitly we ourselves are. It is just through our acknowledgment of a universe of tenaciously autonomous reality, certainty, and truth that we come both to perceive ourselves as creatures particular from others and to explain the particular idea of our own personalities. Exactly when Technological Society is using its ethics to make an epistemology and theory to eliminate importance from one's life through Rule Following word games, these existential sayings will distort those ethics and return your significance to your life and will reestablish truth and data to the pragmatics of rule-following instead of the ruler of Rule Following. The force of Rule Following and of the brutality of morals are all over the place, they are so prevailing and the ludicrous individual is so bustling attempting to manage and endure them that the existential aphorisms and the individual soul of the crazy are handily failed to remember — even by existentialism as I thought about in the "Ascent and Fall of Existentialism" in Meta-Ethics. In the long run, all clarification prompts Rule Following attempting to attach God and reality to the in vogue indications of reason circling back to a will to control, even clarification censuring reason as happens all through flow social value speculation and related determined systems moving from such factions as mind research; hypothesis of mind, language, and science; basically the sum of the humanities busy with envisioning post-present day social value thinking of language; and all behaviorism that covers itself as fake mental science or practically identical cons.

Any ridiculing of the possibility of an existential soul that exists before language and whose importance is the wellspring of language should rapidly be suspect by any doubter who has accepted a hop toward rationalism as a moral quality. The heads of their own Rule Following reality needn't mess with this present reality. Doubters who have taken a hop toward significant quality that negates ethics use the existential aphorisms in a prudent and dynamic fight against Technological Society.

2. The Nihilist God

One of the existential theories of the existential adages is that Man is the extent of all that God made. God plays dice with the universe anyway we are the solitary card sharks betting on the roll. He even uses stacked dice as He is qualified to do in light of the fact that He is God. Pay and play the game. Indeed, even with stacked dice, you can sort out the probabilities and play in a like manner. Losing or winning doesn't make a difference; it is playing the game that matters. At any rate, by playing with God at his irregular and discretionary games, you are at any rate playing with God not with a lot of frauds playing made-up Rule Following games whose language He has learned by coming to earth as Christ and in this manner could beat us any time He needed. Play Him at His game. Free you up to the generous lack of concern of the universe as Camus composed prior to going quitter on us. Let lose yourself to the clarity of scorn similarly to the narcotic of worship. Will to enable your individual soul to beat the individuals who will to the ability to be a divine being over you. Truth and information are in the arrangement and probabilities of playing with God at His game not in the word rounds of morals or of the elucidating language created to help morals. Before the force of irregular and subjective activity and its numbers language of karma, destiny, and likelihood, both slave and expert are equivalent which isn't valid for some other word game. Morals need viciousness. The energy of friendship needs the clarity of hate to exist. The divine beings need to make a world in their picture. The Good necessities the Bad. Social development of social equity needs pioneers, supporters, victors, failures, the generous, the excused, and the unforgiving. Prior to skepticism, we are for the most part equivalent to the Ugly.

Conclusion

Before the power of sporadic and self-self-assured action and its numbers language of karma, fate, and probability, both slave and ace are identical which isn't substantial for some other word game. Ethics need fierceness. The energy of adoration needs the lucidity of hate to exist. The glorious animals need to make a world in their picture. The Good necessitates the Bad. Social advancement of social value needs pioneers, allies, champs, wastes of time, the liberal, the pardoned, and the unforgiving. Preceding skepticism, we are all in all comparable as the Ugly. Truth and information are in the arrangement and probabilities of playing with God at His game not in the word rounds of morals or of the distinct language manufactured to help morals. Try not to lose your spirit in the hallucination of style as did Camus and as the Powers of new school existentialism advocate with the goal that you can lose your spirit to their force. Keep in mind, eventually, to all who look for equity and truth, you are only an inauthentic server who they need to follow up on through brutality to frame in their picture. The style will consistently be constrained by the lords of Rule Following. Know the excellence of the irregular and self-assertive universe and its generous apathy to all similarly.

We needn't waste time with an explanation or an insightful goal to discover, examine, and vanquish the universe. Such divulgence, examination, and vanquishing as a self-emphatic and unpredictable goal are shut in themselves also as God's essence and his fundamental nature are an end-in-itself for God. Unfortunate keeping an essential separation from the wager such is a reality to lose oneself in the exact and controlled death of Rule Following and its will-to-control explanations will make one's own special chief condemnation; by then, through hostility upon the 'Other', ethics will give you the employees you need for your norm. In case it is more astute to control in the inferno as a weakling than to serve in heaven, Rule Following and ethics are the fundamental devices for your will to control. Nevertheless, if one wouldn't prefer to take he's out by accusing the paltry of life in order to viciously act through ethics upon the other, suspicion gives another other option. In the event that one has the mental boldness to bet in the round of life by wagering on one's existential soul and coexist with the 'Other' in the "obliging apathy of the universe" similarly as God does and should, it is keener to be alive as a laborer in paradise than as a dead ruler in judgment.

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