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Postgraduate Department of Business Management

**SARDAR PATEL UNIVERSITY**

NAAC Re-accredited with Grade 'A' (CGPA:3.25) (23-1-2017 to 22-1-2022)

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GUJARAT, INDIA

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## **Editorial**

We are delighted to bring you Volume 23, No 1 and 2 of our journal, showcasing a wealth of research on management topics spanning the period from January to December 2021.

In this edition, you will find an engaging exploration of various facets of management theory and practice. From unraveling the complexities of customer satisfaction in the telecom sector to examining the evolving landscape of corporate social responsibility, each paper offers valuable insights into contemporary business dynamics.

Furthermore, our authors delve into intriguing topics such as the impact of retro advertisement on brand perception, the evaluation of financial performance in diverse banking environments, and the challenges and opportunities surrounding employee engagement amidst the Covid-19 pandemic.

Additionally, we explore the transformative potential of innovation in healthcare and conduct a comparative analysis of family business versus non-family business performance, shedding light on the unique dynamics at play in each organizational structure.

We extend our sincere gratitude to all the authors for their scholarly contributions, which enrich our understanding of management principles and practices. We invite readers to delve into the thought-provoking content presented in this volume and to share their feedback and insights.

**(Dr. Darshana R. Dave)**

Director

## **Foreword**

The Post Graduate Department of Business Management, constituting the MBA Programme at Sardar Patel University (NAAC Accredited Grade A with 3.11 CGPA), has been at the forefront of management education since its inception in 1989. Renowned as one of the premier management institutes in Gujarat state, our department has consistently strived for excellence in academia and research.

Recognizing the department's commitment to quality research, the University Grants Commission, New Delhi, elevated its status for the award of special assistance under DRS - II for "Consumer Research in Rural Areas", successfully completed in March 2016. Subsequently, the department was granted SAP DRS III (2016 to 2021) for its research on the "Transformation of Rural Economy" for a duration of five years. Additionally, the department has undertaken a project on "Knowledge, Attitude, and Perception of Voters in Gujarat" from the Election Commission of India. These endeavors underscore our dedication to impactful research and community engagement.

Throughout our journey of imparting management education, we have maintained an exemplary record of providing quality education and facilitating successful placements for our students. Our faculty members are actively involved in research publications, with all ten recognized as Ph.D. guides. To further promote research in management, we organize a national-level seminar annually, focusing on diverse topics relevant to the current business landscape.

This research journal, "Synergy", serves as a platform for fostering regular interaction and the exchange of views, opinions, and research findings among peer groups. I am confident that this issue of "Synergy", Journal of Management, Sardar Patel University, will facilitate substantial information sharing among teachers and research scholars within the discipline.

I extend my heartfelt congratulations to the editors for yet another successful volume of "Synergy" and commend them for their tireless efforts in advancing scholarly discourse.

Date : 26<sup>th</sup> March, 2024  
Sardar Patel University  
Vallabh Vidyanagar

Dr. Niranjambhai Patel  
**Vice-Chancellor**

## Contents

Editorial	
Foreword	
1. Unveiling the Multidimensional Landscape of Customer Satisfaction in the Telecom Sector: An In-depth Investigation of Key Determinants in Gujarat State - Ajay Trivedi and Darshana Dave	1-11
2. Advancing Corporate Social Responsibility in the Caribbean - Comprehensive Study of Development and Impact - Yogesh C. Joshi and Sarah E. Mohabir	12-21
3. The influence of Retro Advertisement of the brand on attitude towards current storytelling and brand image - Mitesh Jayswal and Vibhu Teraiya	22-39
4. Assessment and Evaluation of CAMEL Rating System and its Implementation in SAARC Region Banks - Ashish C Mehta and Wafiullah Noorzai	40-52
5. Employee Engagement and Job Satisfaction in View of Corona Virus Pandemic (A Case of Select Indian Companies) - Shafaque Rahmat and Harish Kumar	53-67
6. Deciphering investors preferences for mutual funds investment in Anand district - Jenitaben P. Patel, Sanjay Ajmeri and Brijesh M. Patel	68-80
7. Perception and Attitude of Patients' Towards Ayurveda in Views of Government Ayurvedic Practitioners - Poonam Amrutia and Darshana Dave	81-92

# Unveiling the Multidimensional Landscape of Customer Satisfaction in the Telecom Sector: An In-depth Investigation of Key Determinants in Gujarat State

Ajay Trivedi<sup>1</sup>

Darshana Dave<sup>2</sup>

## Abstract:

The Indian telecom sector is dynamic and have a huge customer base. It is important for the telecom companies to meet their expectation to sustain in the market. This research study aims to shed light on the intricate and multifaceted nature of customer satisfaction within the dynamic telecom sector. Specifically, the investigation focuses on the Gujarat State in India, seeking to uncover the key determinants that significantly influence customer satisfaction levels. The research employs a mixed-methods approach, combining quantitative surveys and qualitative interviews, to capture a comprehensive understanding of the customer satisfaction landscape. The study examines a range of factors that potentially impact customer satisfaction, including service quality, network coverage, pricing, customer support, reliability, and technological advancements. Data have been analysed using principal component analysis to identify the most influential determinants and their interrelationships. The findings of this research are expected to contribute significantly to the body of knowledge in telecom customer satisfaction by uncovering the multidimensional nature of customer perceptions and preferences. The results will enable telecom service providers to formulate targeted strategies and interventions to enhance customer satisfaction, retention, and loyalty.

**Keywords:** *Indian Telecom sector, Customer Satisfaction, Service Quality*

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## 1. Introduction

The telecom sector in India has experienced remarkable growth in recent years, positioning the country as the world's second-largest telecommunications market. With a subscriber base of 1,170.38 million as of December 2022, India has witnessed significant expansion and development in its mobile economy, contributing substantially to the nation's Gross Domestic Product (GDP). Notably, a report compiled by the GSM Association (GSMA) in collaboration with the Boston Consulting Group (BCG) predicts continued growth and economic impact (GSMA and BCG, 2023). This rapid growth can be attributed to a combination of factors, including the progressive and reformist policies implemented by the Government of India and the

strong consumer demand in the market. The government has played a crucial role in facilitating easy market access for telecom equipment and establishing a fair and proactive regulatory framework. These measures have ensured the availability of telecom services to consumers at affordable prices. Furthermore, the deregulation of Foreign Direct Investment (FDI) norms has played a significant role in fostering the growth of the sector. This deregulation has made the telecom industry one of the fastest-growing sectors in the country and a key contributor to employment generation, ranking among the top five industries in terms of job opportunities. As the telecom sector continues to evolve and expand, it becomes increasingly important to understand the factors that contribute to customer satisfaction. This research aims to delve

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into the multidimensional landscape of customer satisfaction in the telecom sector, focusing specifically on the Gujarat State in India. By investigating the key determinants that influence satisfaction levels, this study aims to provide valuable insights to telecom service providers, enabling them to enhance their strategies and improve overall customer experiences.

## 2. Literature Review

Several studies have examined various aspects of customer satisfaction in the cellular service industry. Bulumulle et al. (2022) found that physical environmental quality and network quality had a negative impact on brand switching behavior, while interaction and outcome quality positively influenced switching behavior. Khan et al. (2020) identified competitive pricing, trustworthiness, and network coverage as key drivers of customer satisfaction. Dahal (2019) highlighted factors such as price and service quality, brand loyalty, corporate social responsibility, network coverage, and customer care and innovation as responsible for customer satisfaction in the Nepalese cellular network industry. Pahari et al. (2017) emphasized call tariff and network quality as important factors influencing customer selection and highlighted network congestion as a major problematic dimension. Chakraborty et al. (2014) identified generic requirements, flexibility, and price as determinants of customer satisfaction. Bassam et al. (2020) emphasized network availability, coverage, and call quality as crucial drivers of network satisfaction. Paulrajan and Harish (2011) highlighted communication quality and price as influential factors in selecting a mobile service provider. These studies contribute to our understanding of the factors influencing customer satisfaction in the cellular service industry. Ta Thi, Dao, and Yang (2018) found that both interactive and supportive service innovations significantly influence customer satisfaction and retention in the telecommunication services context. Telecom managers should focus on investing in supportive service innovations to differentiate themselves in the highly replicable interactive service sector. Hafez

and Akther (2017) identified customer satisfaction, service quality, perceived value, and trust as significant factors affecting customer loyalty in the mobile telecommunication industry in Bangladesh. Satisfied customers who perceive high service quality, value, and trust are more likely to exhibit loyalty to their mobile telecommunication provider. Kumar (2017) found that gender has a significant impact on customer satisfaction towards telecom services in Haryana, India. The study also highlighted the increasing trend of using electronic banking services and the potential impact of demonetization on the adoption of e-services. Majeed and Munir (2017) investigated the impact of 3G and 4G telecommunication services performance on customer satisfaction in Faisalabad, Pakistan. The study focused on customer satisfaction with 3G and 4G mobile services and highlighted the importance of video call quality in enhancing customer satisfaction. Mehbub and Shehnaz (2017) explored the factors influencing customer loyalty in the mobile telecommunication industry of Bangladesh. The study identified service quality, price, network coverage, customer satisfaction, and brand image as crucial factors influencing customer loyalty. Pahari, Guleria, and Singh (2017) investigated the factors influencing customer satisfaction with mobile service providers in Pokhara, Nepal. The study emphasized the importance of service quality, network coverage, pricing, and customer support in influencing customer satisfaction. Adebiyi (2016) examined the determinants of customer preference and satisfaction in the Nigerian mobile telecommunication services. The study found that service quality, promotional activities, price/billing, and customer care service significantly impacted customer satisfaction and preference. Adekiya and Adekiya (2016) found a positive and highly significant relationship between customer satisfaction and subscriber loyalty in the Nigerian mobile telecommunication industry. Meeting customer expectations, delivering quality products and services, and exceeding customer expectations were key factors in customer loyalty. Rahman (2016) investigated the factors influencing customer satisfaction in the mobile telecommunication



industry of Bangladesh. The study identified service quality, network coverage, price, customer service, and brand image as significant factors contributing to customer satisfaction. Saha, Islam, and Hoque (2016) explored customer satisfaction and its influencing factors in the mobile telecommunication industry in Bangladesh. The study revealed a significant and positive correlation between factors such as price, network quality, product diversity, and subscriber facilities with overall customer satisfaction. Agrebi and Jallais (2015) proposed an extended Technology Acceptance Model (TAM) to understand consumers' intention to use smartphones for mobile shopping. The study identified factors such as perceived usefulness, perceived ease of use, trust, perceived control, familiarity with smartphones, previous experience, and perceived risk that influenced consumers' intention.

### 3. Research Gap

Despite the extensive research on customer satisfaction in the telecom sector, there remains a research gap in understanding the specific determinants of customer satisfaction in the context of the Gujarat state in India. While existing literature has examined various factors such as network quality, pricing, service innovation, and trust in other geographical locations, there is limited research that investigates these factors comprehensively within the unique socio-economic and cultural landscape of Gujarat. Moreover, there is a lack of studies that delve into the interplay between these determinants and their combined effect on customer satisfaction in this particular region. Therefore, this study aims to fill this research gap by conducting an in-depth investigation into the multidimensional landscape of customer satisfaction, specifically focusing on key determinants relevant to the telecom industry in Gujarat state, thereby revealing important suggestions for telecom managers and policymakers in the region.

### 4. Methodologies

The research methodology for this study involves a descriptive research design, targeting cellular

service users in the Gujarat state population. The sample comprises 800 participants selected through convenient sampling methodology. The variables under investigation include service quality, pricing, value-added services, competitive advantage, responsiveness, perceived value, and customer satisfaction. Descriptive research aims to observe and describe the characteristics and behaviors of the population, providing insights into the relationships and perceptions regarding the identified variables. By analysing the data collected from the sample, the study seeks to understand the level of service quality, pricing strategies, value-added services offered, competitive advantage, responsiveness to customer needs, perceived value by customers, and overall customer satisfaction in the cellular service sector in Gujarat State. The study used principal component analysis to identify the most influential factors that are responsible for customer satisfaction.

### Sampling Adequacy

**Table 2 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	20507.359
	df	253
	Sig.	.000

*Source: SPSS output*

The KMO measure and Bartlett's test of sphericity, the data appears to be suitable for conducting factor analysis. The KMO value of 0.907 indicates that the sample size is adequate, and Bartlett's test suggests that there are significant correlations among the variables, supporting the presence of underlying factors.

### 5. Results & Discussion

The study aimed to explore the determinants of customer satisfaction in the telecom sector. The researchers conducted a factor analysis using principal component analysis as the extraction method and varimax rotation with Kaiser normalization as the rotation method to uncover the underlying dimensions or factors that explain the

variation in variables related to customer satisfaction. The results of factor analysis is as under;

**Table 3: Communalities**

	<b>Initial</b>	<b>Extraction</b>
SQ_1 Your cellular service provider has strong and wide network.	1	0.825
SQ_2 The call quality of your service provider is always good.	1	0.763
SQ_3 The internet speed provided by your operator is satisfactory.	1	0.797
SQ_4 The quality of value-added service provided by your service provider is satisfactory.	1	0.775
PR_1 The rates charged by your service provider for calling services are fair and reasonable.	1	0.864
PR_2 The rates charged by your service provider for internet services are fair and reasonable.	1	0.852
PR_3 The rates charged for add-on services by your service provided are fair and reasonable.	1	0.841
PR_4 The prices charged for extra vouchers for SMS, internet, calling etc. are reasonable.	1	0.81
VAS_1 Your cellular services provider offers all useful value-added services.	1	0.789
VAS_2 It provides always innovative services to you.	1	0.763
VAS_3 The accessibility of value-added services is easy.	1	0.74
CA_1 Your service provider offers services at more competitive prices than other service providers in the market.	1	0.843
CA_2 Your Service provider have wider range of products and services than the other service providers in the market.	1	0.769
CA_3 The quality of services provided by your company is better than the other service providers in the market.	1	0.78
CA_4 Your service provider more promotional offers than other service providers in the market.	1	0.656
RESP_1 The billing/recharge methods are easy and easily accessible.	1	0.658
RESP_2 Service centers of your cellular service provider is easily accessible.	1	0.789

RESP_3 Customer care of your service provider is easily accessible for help.	1	0.784
RESP_4 Customer complaints, criticisms, suggestions, or just asking for help are responded quickly by your service provider	1	0.769
RESP_5 Customer executives of your service providers are always willing to help.	1	0.798
PV_1 The overall service quality of your service provider is consistent and high for you.	1	0.741
PV_2 Compare to what you pay the charges for services, your service provider provides you better value.	1	0.648
PV_3 Your service provider charges reasonable rates on all types of services.	1	0.685
Extraction Method: Principal Component Analysis.		

**Source: SPSS Output**

Table 3 provides information on the communalities for each variable before and after the extraction phase of the factor analysis. Communalities represent the proportion of variance in each variable that is accounted for by the extracted components. Higher communalities indicate that a larger portion

of the variance in the variable is explained by the extracted components. In the table, the initial communalities for all variables are given as 1, indicating that each variable accounted for all its own variance before the factor extraction. The extraction communalities show the revised values after the factor analysis.

**Table 4: Component Matrix**

	Component			
	1	2	3	4
VAS_1 Your cellular services provider offers all useful value-added services.	.832	-.159	.125	.235
CA_2 Your Service provider have wider range of products and services than the other service providers in the market.	.820	-.045	-.119	-.284
CA_1 Your service provider offers services at more competitive prices than other service providers in the market.	.817	-.313	-.101	-.260
SQ_4 The quality of value-added service provided by your service provider is satisfactory.	.809	-.101	-.267	.200
VAS_2 It provides always innovative services to you.	.805	-.244	-.198	-.131

RESP_5 Customer executives of your service providers are always willing to help.	.792	.346	-.213	-.077
PV_2 Compare to what you pay the charges for services, your service provider provides you better value.	.785	.030	-.113	-.134
PV_1 The overall service quality of your service provider is consistent and high for you.	.783	.297	-.186	-.074
CA_3 The quality of services provided by your company is better than the other service providers in the market.	.781	.196	.241	.273
RESP_4 Customer complaints, criticisms, suggestions, or just asking for help are responded quickly by your service provider	.769	.422	-.025	.006
RESP_1 The billing/recharge methods are easy and easily accessible.	.767	.130	-.227	-.034
CA_4 Your service provider more promotional offers than other service providers in the market.	.767	.042	.251	.060
VAS_3 The accessibility of value-added services is easy.	.757	.063	-.237	-.326
PR_2 The rates charged by your service provider for internet services are fair and reasonable.	.751	-.452	.285	-.039
PR_3 The rates charged for add-on services by your service provided are fair and reasonable.	.751	-.326	-.008	-.414
SQ_1 Your cellular service provider has strong and wide network.	.743	-.295	-.213	.374
PR_4 The prices charged for extra vouchers for SMS, internet, calling etc. are reasonable.	.729	-.212	.480	-.055
PR_1 The rates charged by your service provider for calling services are fair and reasonable.	.710	-.305	.516	-.023

SQ_2 The call quality of your service provider is always good.	.704	-.301	-.345	.238
PV_3 Your service provider charges reasonable rates on all types of services.	.700	.331	.274	-.099
RESP_2 Service centers of your cellular service provider is easily accessible.	.684	.528	.158	.135
SQ_3 The internet speed provided by your operator is satisfactory.	.678	-.096	-.095	.565
RESP_3 Customer care of your service provider is easily accessible for help.	.674	.558	.130	-.042

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

The table 4 represents the results of a Principal Component Analysis (PCA) conducted on a set of variables related to customer perceptions of their cellular service provider. The table shows the component matrix, which indicates the correlation coefficients between each variable and the four extracted components. These components represent underlying dimensions or factors that explain the variance in the data. The extraction method used was Principal Component Analysis, and a total of four components were extracted from the data.

**Table 5: Rotated Component Matrix**

	Component			
	1	2	3	4
RESP_3 Customer care of your service provider is easily accessible for help.	0.846			
RESP_2 Service centres of your cellular service provider is easily accessible.	0.839			
RESP_4 Customer complaints, criticisms, suggestions, or just asking for help are responded quickly by your service provider	0.767			
RESP_5 Customer executives of your service providers are always willing to help.	0.687			
RESP_1 The billing/recharge methods are easy and easily accessible.	0.496			
PV_3 Your service provider charges reasonable rates on all types of services.		0.691		
PV_1 The overall service quality of your service provider is consistent and high for you.		0.646		
PV_2 Compare to what you pay the charges for services, your service provider provides you better value.	0.435	0.554		

CA_1 Your service provider offers services at more competitive prices than other service providers in the market.			0.73	
CA_3 The quality of services provided by your company is better than the other service providers in the market.			0.639	0.44
CA_2 Your Service provider have wider range of products and services than the other service providers in the market.			0.692	
CA_4 Your service provider more promotional offers than other service providers in the market.	0.496		0.517	
SQ_3 The internet speed provided by your operator is satisfactory.				
SQ_1 Your cellular service provider has strong and wide network.				
SQ_2 The call quality of your service provider is always good.		0.453		
SQ_4 The quality of value-added service provided by your service provider is satisfactory.		0.449		
PR_1 The rates charged by your service provider for calling services are fair and reasonable.				0.852
PR_4 The prices charged for extra vouchers for SMS, internet, calling etc. are reasonable.				0.795
PR_2 The rates charged by your service provider for internet services are fair and reasonable.		0.401		0.754
PR_3 The rates charged for add-on services by your service provided are fair and reasonable.		0.756		0.485
VAS_3 The accessibility of value-added services is easy.	0.421	0.716		
VAS_2 It provides always innovative services to you.		0.667	0.419	
VAS_1 Your cellular services provider offers all useful value-added services.			0.558	0.527

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 8 iterations.

The results of the factor analysis revealed the loadings of each variable on the extracted components. Component 1, labelled as customer care and accessibility of the service provider, included variables RESP\_3, RESP\_2, RESP\_4, and RESP\_5, which exhibited high loadings on this component. This indicates that these variables significantly contribute to measuring customer care

and accessibility. It suggests that customers perceive easy accessibility to service centres, responsive handling of complaints and inquiries, and helpful customer executives as important aspects of customer care. Component 2 represented the perceived value of the service provider. Variables PV\_3, PV\_1, and PV\_2 showed strong associations with this component. This suggests that customers' perception of reasonable pricing, consistent service quality, and better value compared to the charges are

important factors influencing their perceived value. Customers value service providers that offer high-quality services at competitive prices and provide better value for the charges incurred. Competitive advantage was captured in Component 3. Variables CA\_1, CA\_3, and CA\_2 were associated with this component, indicating that customers perceive their service provider to have competitive pricing, better service quality, and a wider range of products and services compared to other providers. These factors contribute to customers' perception of their service provider's competitive advantage in the market. Component 4 was related to service quality and pricing. Variables PR\_1, PR\_4, PR\_2, and PR\_3 had high loadings on this component, suggesting that they contribute to customers' perception of fair and reasonable rates for calling, internet, and add-on services. Customers value service providers that offer transparent and affordable pricing for various services. The factor analysis helped identify the underlying dimensions or factors that explain the variation in variables related to customer satisfaction and perceptions of cellular service providers. By understanding these dimensions, telecom companies in Gujarat can focus on improving customer care and accessibility, enhancing perceived value, leveraging competitive advantages, and delivering high service quality and fair pricing. By addressing these key determinants, telecom companies can strive to enhance overall customer satisfaction, loyalty, and market competitiveness.

## **6. Conclusion**

The findings of the study provide valuable insights into the multidimensional landscape of customer satisfaction in the telecom sector in Gujarat. The factor analysis conducted in the study revealed distinct dimensions that significantly contribute to customers' perceptions and satisfaction with cellular service providers. One of the identified dimensions is customer care, which encompasses variables such as the accessibility of service centers and the responsiveness of service providers to customer complaints and inquiries. This dimension highlights the importance of having easily accessible customer support channels and prompt resolution of customer issues in enhancing customer satisfaction. Another

significant dimension is perceived value, which reflects customers' perceptions of the overall service quality, pricing, and value for money offered by the service providers. Variables such as reasonable rates, consistent service quality, and better value compared to the charges are strongly associated with this dimension. This suggests that customers place great importance on receiving services that are priced reasonably, consistently reliable, and offer good value in terms of features and benefits. Competitive advantage emerged as another important dimension influencing customer satisfaction. This dimension encompasses variables such as competitive pricing, superior service quality compared to other providers, and a wider range of products and services. Customers perceive service providers with these attributes to have a competitive edge over their counterparts, leading to higher satisfaction levels. The dimension of service quality and pricing reflects customers' perceptions of fair and reasonable rates for calling, internet, and add-on services. Variables related to pricing fairness and transparency, as well as the quality of service offerings, are associated with this dimension. Customers' perceptions of reasonable pricing and reliable service quality are important factors in determining their overall satisfaction. Overall, the factor analysis helps to identify the underlying dimensions or factors that explain the variation in variables related to customer satisfaction and perceptions of cellular service providers. By understanding these dimensions, telecom companies operating in Gujarat can gain insights into the specific aspects of their services that have the greatest impact on customer satisfaction. This knowledge can guide companies in developing targeted strategies to meet customer expectations, improve service quality, refine pricing strategies, enhance customer care, and emphasize competitive advantages. Implementing measures to address the identified dimensions can result in improved customer experiences, increased customer loyalty, and a stronger competitive position in the telecom market. By focusing on these key factors, cellular service providers can better align their offerings with customer preferences, enhance overall

customer satisfaction, and foster long-term relationships with their customer base.

## References:

- Adekiya, Adewale & Adekiya, (2016). Customer Loyalty in the Nigerian Telecommunication Industry: The Antecedence of Customer Satisfaction. 3. 22-45. 10.20448/800.3.1.22.45.
- Aydin, Serkan & Özer, Gökhan. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *European Journal of Marketing*. 39. 910-925. 10.1108/03090560510601833.
- BC Asiegbu, & *et. al.* (2015) Assessment of Factors Affecting Quality of Service of Cellular Mobile Network Operators in Nigeria for the Period 2010 to 2014, *International Journal of Engineering and Modern Technology*, Vol. 1 (2), 1-11.
- Bulumulle, S. P. & *et. al.* (2022) Impact of service quality and network quality on brand switching behaviour: With reference to internet service providers,
- Chakraborty, S. & *et. al.* (2014) Structural equation modelling of determinants of customer satisfaction of mobile network providers: Case of Kolkata, India, *IIMB Management Review*, Vol. 26 (4). Pp. 234 – 248. DOI: 10.1016/j.iimb.2014.10.005
- Chong, Siong-Choy & Teoh, Wendy & Qi, Ye. (2015). Comparing customer satisfaction with China mobile and China telecom services: An empirical study. *The Journal of Developing Areas*. 49. 247-262. 10.1353/jda.2015.0098.
- Cronin, J., & Taylor, A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, Vol. 56(7): 55-68
- Edward, M. & Sahadev, S. (2011). “Role of Switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage”. *Asia Pacific Journal of Marketing and Logistics*, 23(3), pp.327-45.
- Hafez & Akther. (2017). Determinants of Customer Loyalty in Mobile Telecommunication Industry in Bangladesh. *Global Journal of Management and Business Research*, 17(1), 140-148.
- Ibojo, B. O. (2015). Impact of Customer Satisfaction on Customer Retention: A Case Study of a Reputable Bank in Oyo, Oyo State, Nigeria. *International Journal of Managerial Studies and Research (IJMSR)*, 3(2), 42-53.
- Khan, S. & *et. al.* (2020) Drivers of Customer Satisfaction for Mobile Service Provider in Maharashtra, *The Journal of Research on the Lepidoptera*, Vol. 51 (1), pp. 708-720.
- Kumar, K. (2017). Factors Affecting Customers' Satisfaction Towards Services Provided by Telecom Sector: A Study of Haryana. *International Journal of Engineering Research & Technology (IJERT)*, Vol. 5(11), 1-4.
- Majeed, Muhammad & Munir, Sahar. (2017). 3G & 4G TECHNOLOGY PERFORMANCE ON CUSTOMER SATISFACTION; A CASE STUDY AT FAISALABAD CITY OF PAKISTAN. 10.13140/RG.2.2.19256.37120.
- McDougall, G., & Levesque, T. (1994). A revised review of service quality dimension: An empirical investigation. *Journal of professional service marketing*, Vol. 11(1): 189-210.
- Nurysh, N., Naghavi, N., Chan, B., & Fah, Y. (2019). Study on Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Malaysia. In *International Journal of Recent Technology and Engineering*.
- Pahari, P. & *et. al.* (2017) Customer Satisfaction towards Mobile Service Provider: An Empirical Study in Pokhara, Nepal. *Asian J. Management*;



Vol. 8(4), pp.1103-1110. DOI: 10.5958/2321-5763.2017.00168.8

Paulrajan & Harish (2011) Service Quality and Customers preference of Cellular Mobile Service Providers, Journal of Technology Management & Innovation, Volume 6, Issue I p.38-45. DOI: <http://dx.doi.org/10.4067/S0718-27242011000100004>

Prakash Pahari, Deepa Guleria, Ranbir Singh (2017) Customer Satisfaction towards Mobile Service Provider: An Empirical Study in Pokhara, Nepal. Asian J. Management; 8(4):1103-1110. DOI: 10.5958/2321-5763.2017.00168.8

Rahman, M. S. (2012). Service Quality, Corporate Image and Customer' S Satisfaction Towards Customers Perception: An Exploratory Study on Telecom Customers in Bangladesh. Vol. 5(1), pp. 56–63.

Saha, Netai & Islam, Md & Hoque, Asif. (2016). Factors Affecting Customers' Satisfaction of Mobile Phone Subscribers: An Empirical Study on Mobile Telecommunication Industry in Bangladesh. International Journal of Business and Management. 11. 252. 10.5539/ijbm.v11n6p252.

Saha, S., & Joshi, Y. C. (2019). Measuring Mobile Service Satisfaction: Factor Analysis Based Study on Mobile Users of Gujarat. International Journal of Basic Sciences and Applied Computing, Vol. 2(8), pp. 10–16.

Shava, Herring. (2021). Service Quality and Customer Satisfaction Experience Among South African Mobile Telecommunications Consumers. Eurasian Journal of Business and Management, 9, 217-232. <https://doi.org/10.15604/ejbm.2021.09.03.004>.

Ta Thi, Dao & Yang, Chia-Han. (2018). EXPLORING THE IMPACTS OF SERVICE INNOVATION ON CUSTOMER SATISFACTION IN THE TELECOM INDUSTRY: A PERSPECTIVE FROM INTERACTIVE AND SUPPORTIVE SERVICE INNOVATIONS. International Journal of Innovation Management. 22. 1850053. 10.1142/S1363919618500536.

Zhou, R., & *et. al.* (2019). Measuring e-service quality and its importance to customer satisfaction and loyalty: an empirical study in a telecom setting. Electronic Commerce Research, Vol. 19(3), pp. 477–499.

# **Advancing Corporate Social Responsibility in the Caribbean- A Comprehensive Study of Development and Impact**

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**Sarah E. Mohabir<sup>2</sup>**

## **ABSTRACT**

Guyana is one of the fastest developing nations in the world, with its production of crude oil causing its economic growth to catapult from 5.53 percent in 2019 to 43.48 percent in 2020, a year in which the average economy per nation in the world was -4.86 percent. That was the highest reported leap of growth in any nation's economy for that specific year worldwide according to TheGlobalEconomy.com (2020). This leap was due to major investments in oil in the country at the time in collaboration with Oil MNC's as indicated from reported FDI's in year 2018 to 2019 (US Department of States, 2020). The Government of Guyana reported that there was an increase of FDI in 2018- \$ \$1.18B USD and FDI in 2019 \$1.7B USD, furthermore, in the year 2018 there was a reported leap to FDI 260.6 percent from the year 2017 (Macrotrends, n.d). Due to the enhancement of the oil and gas sector since the continuous and aggressive offshore drilling of oil has commenced in the year 2015, it has become even more imperative that this research be conducted to study the effect of the MNCs as it relates to the province they operate in, and their contribution. Therefore, focus has been placed on the development of Corporate Social Responsibility (CSR) policies of Guyana granted the fact that CSR is one of the mediums in which businesses themselves can give back to the economies which they heavily impact and depend on.

**Key Words:** *Caribbean, Corporate Social Responsibility, Development, Economy, Guyana*

## **INTRODUCTION**

Guyana is the only English-speaking country located in South America. Based on the history of the country, and its shared culture with the

Caribbean, Guyana is also considered a Caribbean nation. It has been an independent nation since the year 1966. The population itself is 73 percent rural, thereby leading to the rural population being 575,871

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people as per World Bank in the year 2020. Based on the rural population indicator, Guyana is the 22<sup>nd</sup> highest rural ranking country in the world (theglobaleconomy.com).

In 2010, it was estimated that the rural areas in Guyana were 207,343.42 sq km, and the Urban area was measured at 626.76 sq km (CEIC, n.d.) thereby meaning that Guyana's Urban area is 4.8 percent of the entirety of the country's area. This is primarily because the government and systems were generally centralized in Region 4, where the Capital, Georgetown is located.

Due to new findings of first oil, Guyana was elevated to being one of the wealthier and more stable economies in the Western Hemisphere for the foreseeable future as per the US Department of State (2020). The growth rate was -1.49 and it increased to 3.14 in the year 2015. After, there was a continuous increase over the five-year period and by the year 2020, economic growth catapult from 5.53 in 2019 to 43.48 in 2020, a year in which the average economy per nation in the world was -4.86 and Guyana would have ranked highest in the world with regard to growth in GDP. The question is why?

To answer the question, in one word, Oil. The petroleum oil itself, is not being extracted and manufactured by local governments due to the heavy investments of capital, but largely by Oil and Gas MNCs. Additionally, the regulations regarding the Caribbean and oil production, especially with regard

CSR are in deficit (United Nations, 2008). It has been argued that only companies with enough revenue or capital resources can engage in CSR (Khanna, 2001; Dasgupta et al, 2000)

## **LITERATURE REVIEW**

Arya and Bassi (2011) defined CSR as the choice that corporations make to do the right thing both internally and externally. Corporate Social Responsibility has been a concept that has been in development for centuries. Over the years, the choice that businesses make to give back to a society, carries with it a great deal of influence and impact (Beddewela and Herzig, 2013).

Notably, there are external pressures brought on to the Caribbean Region, Guyana included, to incorporate CSR into their company's culture and policies in order to compete globally (SME Study). This then means that Caribbean companies that are interested in competing on the global market must comply to avoid any barriers of entry (Shah, 2007) and that policymakers should also facilitate same.

In their study, Victor et al. (2021) revealed that though Oil and Gas MNCs do execute CSR, governmental policy regulating their actual execution is still lacking. Through the incorporation of policy, the government can autonomously take charge (Hussain and Moriarty, 2018). Policy facilitates the inclusion of the CSR agenda, whilst simultaneously enhancing development as emphasized by Barkemeyer (2009)

It is based on the revision of the literature, that there appears to be a deficit in studies of CSR in this region. To identify how Guyana is going about incorporating CSR and to add to the body of knowledge in this region, the below placed objectives were posited.

### **Research Statement:**

To study whether there is improvement of CSR in Guyana.

Objectives:

- To study business' policy in Guyana as it relates to CSR
- To study the development of CSR in Guyana
- To study feasibility of CSR best practices that can be implemented in Guyana

Information regarding CSR in the Caribbean region specifically is limited. Even more so, there have not been many studies specifically regarding CSR and the O&G sector in this province. In addition, there is a deficit in knowledge regarding CSR as it relates to businesses of a much larger scale, and how they are being regulated. This paper will attempt to address these issues and author will attempt to provide solutions for same.

### **RESEARCH METHODOLOGY**

Secondary sources were used and analyzed in this study with recommendations being made thenceforth; sources such as google engine were utilized through entering key CSR terminologies and

phrases that include CSR and Guyana. These items will then be studied to identify salient articles as it relates to the topic.

Emphasis has been placed on studying the CSR policies, programs, initiatives that are currently in place in Guyana. Research will be done based on Guyana's Company Law and Guyana's Corporate Society's Act through utilizing content analyses methods.

As such, key CSR terms (as per table 1) have been used to determine the presence and consideration that is given by the government for CSR (Thorisdottir, Thorey S; Johannsdottir, Lara, 2020). These terms were adapted and the documents were then screened to identify whether these terms were present or not in previously mentioned policy documents, in addition to whether these terms had any actual impact CSR wise. See appendix A for correspondent occurrence of adapted key words (Table 1 &2).

### **RESULTS**

In the year 1996 Guyana was one of the first nations in the Caribbean to sign on to the Environmental Protection Act (EPA) which encouraged production without emission of harmful gases (EPA, n.d). Adherence to the EPA's mandates were not always met. Various infractions have been publicized regarding oil spills and refusal to pay fines (Jailall, 2020), poor disposal of waste materials (Stabroek News, 2022), a lack there of interest from the country's government to enact/engage EPA and

additional empowering regional agreements (West Orland News, 2008), without full transparency regarding the reasoning behind this act. Guyana would later sign on to the agreement post its then perceived acts of hesitation. In their study, Mohabir & Joshi (2022) concluded that priority should be given to the environment in the Caribbean due to the region’s natural disaster-prone location.

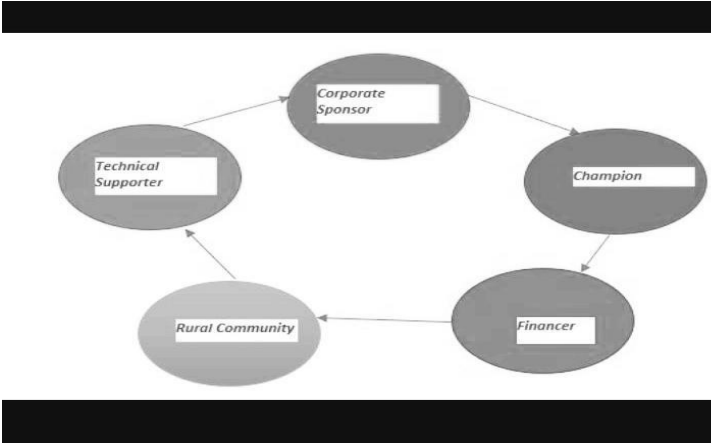
A Caribbean study was executed by United Nations Publications (2008) to study CSR. It was found that majority of the SMEs did not actually have any identifiable CSR policies and more than two thirds of those businesses did not report any CSR Related activities.

Corporations however, indicated that there was some form of CSR imbued in the policy, and advised the

researchers that at least 1 percent to 5 percent of earnings per annum were budgeted towards CSR. However, when requested to discuss how these funds were expended, they were unable to identify same.

In the year 2014, Erwin Edwards, ventured into a study of CSR and implementation of electrification of the Rural regions within Guyana. In said study, it was suggested that focus should be made on creating dual relationships between the stakeholder and the Corporation, based on proximity, in order to form an alliance for the betterment of society. This type of relationship was termed as one that was collaborative, and on this basis, they developed a model termed ‘Collaborative CSR Model’ as can be seen below.

**Figure 1 Guyana’s CSR Collaborative Model**



Note: This model was produced by Erwin Edwards in 2014, summarizing six elements that influence the formation of a CSR Collaborative CSR Model for Guyana. From “Guyana CSR Model, For Implementation of Corporate Social Responsibility in Rural Energy Systems in Isolated Areas in Guyana” by E. Edwards, 2014, For Latin American Energy Association (OLADE), p.23.

In another study, (Skill for green jobs in Guyana, 2018), due to the fact that Exxon Mobile is such a driving force in the economy, it was emphasized that Exxon mobile and the indigenous community. This

can be facilitated through the utmost rural inhabitants’ representatives forming an alliance for CSR. This alliance would purportedly then benefit society at large, in addition to all the mentioned

parties, further emboldening the previously mentioned point and contributing directly to the growth of the rural community.

Additionally, there was an article published based on the Director of CGX, an oil company in Guyana, where the proposal was made that the Guyanese residents come forward and voice how they believe that major oil companies should use the funds allocated towards CSR in their budgets (Kaietuer News, 2020). He emphasized that granted the changes brought about by climate change, citizens should demand acts regarding same given that CSR is in fact executed for the benefit of the society as a whole. Therefore, we may also conclude that uniting and voicing a common and strategically beneficial cause is one method which can be implemented by these stakeholders so that both the entities and members in society can benefit.

In a study promoting research of Small and Medium Enterprises in the Caribbean, (United Nations, 2008), it was found that Guyana was a sports-oriented country, as such, a great deal of influence and therefore CSR budgets was actually dedicated to sports activities. Additionally, a great deal of CSR was markedly dedicated towards social services thusly, activities that involved renovations to community centers, roads etc. These acts essentially created a corporate presence, and established great external CSR since the corporations were able to connect with the society on a more personal level

and engage them socially, whilst simultaneously creating great reputational value in that community. Companies in Guyana were notably acknowledged for 31 percent of them having anticorruption policies within their organizations. Furthermore, the study indicated that most companies' managers believed that emphasis for CSR should be placed on natural disasters, implementation of efficiency, ensuring water quality and reliable supply, in that specific order of importance.

This is contrary to the previously discussed study that would have placed a great deal of emphasis on preventative methods for climate change and shifting assistance towards the aboriginal communities in addition to communities that are directly in proximity of the company themselves.

Additionally, the UN's study also engaged the use of the term corporate environmental responsibility. It emphasized that different industries also have different environmental responsibilities. Given that the oil and gas sector is one that very often is a producer of greenhouse gases, then their Corporate environmental responsibility should be geared towards reducing the global warming and air pollution. It was found that 50 percent of companies did not keep records of the works completed as it relates to Corporate Environmental Responsibility. In addition, there were only 27 percent of stakeholders that would be able to gain access of records if available in the energy sector. The energy

companies indicated that their CSR closely engaged those in communities that were in close proximity of them.

In the year 2019, the Government of Guyana implemented the Natural Resource Funds (NRF) act based on the increase of income from the oil and gas industry for the people of the nation. In the year 2021, a revised version of the NRF was implemented due to transparency and accountability issues to mitigate associated risks.

According to the Department of Public information (2017 & 2021), various initiatives were launched by both governmental agencies, and corporations with programs aimed towards apprenticeship and the development of the youth were reported. This exhibits knowledge and execution of CSR in Guyana.

Upon review of the company laws and regulations along with the company's act of Guyana, there was no clear or decisive indicator that there was a presence of CSR. The review included the utility of key words used to define CSR (Kindly see appendix A and B for frequency of keywords). A great number of references were made utilizing the a few of the key terminology, however words such as 'stakeholders' or 'employee' were not mentioned in the laws and acts. We note also, that although some keywords were indeed found, they were not used in the CSR context. There were also no mandates requesting that the companies report any form of

CSR, in addition to there being no requirements that same be displayed in a public forum, or on an E-platform

As per ISO requirements, companies are required to publish their CSR works, however the requirement to publish using E- forms is abstract. Additionally, different companies are engaging with different forms/levels of standards, as such some MNCs may not be held at the same standard as others. Perusal of the company's law, also did not indicate that there was any form of requirement as it relates to CSR. There is an additional and separate mandate referred to as the Corporate Society's Act. Same was perused, and once again searched for key CSR terminology (Kindly see Appendix B for frequency of terms). Same did not exhibit any form of CSR although key words were matched. Context was not within that of CSR.

## **CONCLUSION & RECOMMENDATION**

It was found that there is perpetually budding presence of CSR in improvement from the year 1966 to the year 2020. There was an increase of this presence as time passed, and there was an evolution, answering the research question as originally posited regarding the improvement of CSR within Guyana. There was also a pervasiveness of CSR. Growth of CSR though, is limited. There are no explicit corporate laws in place for Guyana's CSR. In the case of Guyana, more preference was placed

on other types of CSR activities by the populous. Emphasis was placed on the voice of the people within the population and what they demand from their corporation as it relates to CSR.

It is suggested that a practical implementation of CSR through utility of the Collaborative CSR model by focusing on all the stakeholders involved in the flow of CSR. Focus should also be placed on matters such as climate change, sports and increased assistance and support for the indigenous Community. There should be more stringent governmental CSR reporting policies for corporations. Inclusive of a CSR Reports database, for the ease of transparency and accountability. It

## REFERENCES

(Anon.) AFC urges EPA to reconsider waiving of assessment for radioactive materials warehouse, (2022, March 15) Stabroek News. Retrieved from AFC urges EPA to reconsider waiving of assessment for radioactive materials warehouse - Stabroek News

Amba-Rao, S. C. (1993). Multinational corporate social responsibility, ethics, interactions and third world governments: An agenda for the 1990s. *Journal of Business Ethics*, 12(7), 553-572.

Arsenault, C. (2021), Amazon deforestation is rising. Guyana offers a rare bright spot. November 29, Aljazeera.

Arya, B., & Bassi, B. (2011). Corporate social responsibility and broad-based black economic empowerment legislation in South Africa: Codes of good practice. *Business & Society*, 50(4), 674-695.

Barkemeyer, R. (2009) 'Beyond compliance –

should be mandated that organizations explicitly report CSR expenditure in addition to measures policy for CSR non-compliance as is currently being practiced in Europe. Furthermore, entities should be made aware of what CSR is, along with the benefits of having CSR strategies and practices enacted to incentivize participation.

There is a limited amount of information regarding CSR in Guyana and the Caribbean. Recommendation is made that more research should be done utilizing primary data. Post implementation of CSR policy, studies should also be conducted to measure effectiveness of policy.

below expectations? CSR in the context of international development',

Beddewela, E. and Herzig, C. (2013) 'Corporate social reporting by MNCs' subsidiaries in Sri Lanka', in *Accounting Forum*. Elsevier, pp. 135–149.

*Business Ethics: A European Review*, 18(3), pp. 273–289. Available at: <https://doi.org/10.1111/j.1467-8608.2009.01563.x>.

DPI Guyana (2017), BCA Guyana commended for its CSR initiatives <https://dpi.gov.gy/tag/corporate-social-responsibility/>

DPI Guyana (2021), GPL makes donation to assist autistic children, <https://dpi.gov.gy/tag/corporate-social-responsibility/>

DPI Guyana (2017), Ministry of Natural Resources launches apprenticeship programme, <https://dpi.gov.gy/tag/corporate-social-responsibility/>



Economic Growth- Country Rankings (2020), TheGlobalEconomy.com,

[https://www.theglobaleconomy.com/rankings/Economic\\_growth/](https://www.theglobaleconomy.com/rankings/Economic_growth/)

Edwards, E. (2014), Guyana CSR model for Implementation of Corporate Social Responsibility in Rural Energy Systems in Isolated Areas in Guyana, OLADE. <https://www.olade.org/wp-content/uploads/2021/03/CSR-Enterprise-v4.pdf>

Environmental Protection Agency EPA ( n.d ), Who we are, Environmental Protection Agency Guyana ([epa.gov.gy](http://epa.gov.gy))

GDP PER CAPITA - GUYANA (2020) , The World Bank, [https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=GYc\\_growth/](https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=GYc_growth/). Retrieved 4/27/2020. Copyright 2022

Guyana Fails to Sign on to the EPA Agreement, (2008, October 16. Retrieved from Guyana Fails to Sign on to the EPA - West Orlando News

Guyana – Foreign Direct Investment 1960- 2022 (n.d), Macrotrends, Trading Economics, <https://tradingeconomics.com/guyana/rural-population>

Guyana GY: Rural Population Living in Areas Where Elevation is Below 5 Meters: % of Total Population Data regarding sq km of rural area (2010), CEIC, <https://www.ceicdata.com/en/guyana/land-use-protected-areas-and-national-wealth/gy-rural-population-living-in-areas-where-elevation-is-below-5-meters--of-total-population>

Guyana Rural Population 1960-2022, (n.d), Macrotrends, <https://www.macrotrends.net/countries/GUY/guyana/rural-population#:~:text=Guyana%20rural%20population%20for%202020,a%200.37%25%20increase%20from%202018.>

Guyana Rural Population 1960-2022, (n.d), Macrotrends,

<https://www.macrotrends.net/countries/GUY/guyana/foreign-direct-investment>

Holtbriigge D. (2004). How Multinational Corporations Deal with their Socio-political Stakeholders: An Empirical Study in Asia, Europe, and the US. [https://link.springer.com > article > palgrave.abm.9200096](https://link.springer.com/article/10.1007/s10551-016-3027-8)

Hussain, W. and Moriarty, J. (2018) ‘Accountable to Whom? Rethinking the Role of Corporations in Political CSR’, Journal of Business Ethics, 149(3), pp. 519–534. Available at: <https://doi.org/10.1007/s10551-016-3027-8>.

Intergovernmental Panel on Climate Change (IPCC), 2007. IPCC fourth assessment report: climate change 2007. IPCC, Geneva.

Ismail, M. (2009). Corporate social responsibility and its role in community development: An international perspective. Journal of International social research, 2(9).

Jailall, J. (2020, August 21). EPA’s frustration is sure sign that Exxon deal must be renegotiated, Stabroek News. Retrieved from Guyana Fails to Sign on to the EPA, Retrieved from <https://www.stabroeknews.com/2020/08/21/opinion/letters/epas-frustration-is-sure-sign-that-exxon-deal-must-be-renegotiated/?msclkid=cee2124fa5f611ecb57f902ef3c78039>

Kaieteur News (Jul 29, 2020), Guyanese must call on oil companies to dedicate portion of CSR budget towards climate change efforts – CGX Head, <https://www.kaieteurnewsonline.com/2020/07/29/guyanese-must-call-on-oil-companies-to-dedicate-portion-of-csr-budget-towards-climate-change-efforts-cgx-head/>

Khanna, Madhu and David Zilberman (2001), “Adoption of energy efficient technologies and carbon abatement: The electricity sector in India.”, *Energy Economics*, vol. 23, No. 6, Elsevier, November

Laws of Guyana, Companies Act (1998), Retrieved from [http://www.sice.oas.org/investment/NatLeg/GUY/Companies\\_95\\_e.pdf](http://www.sice.oas.org/investment/NatLeg/GUY/Companies_95_e.pdf)

Laws of Guyana: Corporate Society’s Act, (2012). Retrieved from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/32494/95841/F-1287418332/GUY32494%202012.pdf>

Middelbeek, L., Kolle, K., & Verrest, H. (2014). Built to last? Local climate change adaptation and governance in the Caribbean–The case of an informal urban settlement in Trinidad and Tobago. *Urban Climate*, 8, 138-154.

Mohabir, S & Joshi, Y. (2022, June 27) ‘ESG as it relates to the Caribbean Region’ (Paper Presentation). The Era of ESG (Environment, Social and Governance). Vallabh Vidyanagar, Gujarat, India.

Ramlogan, Rajendra and Natalie Persadie (2004), *Developing environmental law and policy in Trinidad and Tobago*, Port of Spain, Lexicon

Rural Population Guyana- World bank –

<https://data.worldbank.org/indicator/SP.RUR.TOTL?locations=GY>

Shah, Kalim U (2007), ‘Strategic and Organizational Determinants of Corporate Environmental Governance in Emerging Economies- Evidence from Caribbean Oil, Gas and Chemical Industries’, doctoral thesis, Fairfax, Virginia, George Mason University.

Skills for Green Jobs in Guyana (2018), International Labor Organization, [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ifp\\_skills/documents/publication/wcms\\_706943.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_706943.pdf)

United Nations Publications (2008) Promoting corporate social responsibility in small and medium enterprises in the Caribbean: survey results, [https://repositorio.cepal.org/bitstream/handle/11362/5067/S0800534\\_en.pdf;sequence=1](https://repositorio.cepal.org/bitstream/handle/11362/5067/S0800534_en.pdf;sequence=1).

US Department of States (2020), 2020 Investment Climate Statements: Guyana,

<https://www.state.gov/reports/2020-investment-climate-statements/guyana/>

Victor, A. et al. (2021) ‘International Journal of Real Estate Studies INTREST Assessing Perception and Practice of Corporate Social Responsibility ( CSR ) by Energy Sector Firms in Ghana’, 2, pp. 83–94.

## APPENDIX A

**Table 1: Most frequently used keywords for CSR (Extracted from Guyana’s Company Law)**

Keywords	Frequency	Percentage	Keywords	Frequency	Percentage
CSR	0	0	Culture	0	0
Industry	0	0	Corporation	101	27.15
Environment	0	0	Management	42	11.29

Country/Countries	26	6.98	Economic	1	0
Labor	0	0	Theories	0	0
Organizations	0	0	Sustainable	0	0
Ethics	0	0	Drivers & Barriers	0	0
Social Factors	0	0	Human Rights	0	0
Business	91	24.46	Policy, Strategic	3, 0	0.81, 0
Communication	2	0.54	Values	100	26.88
Supply Chain	0	0	Institution, institutional	5, 1	1.34, 0.27
Consumers	0	0	Activism	0	0
Stakeholders	0	0			
Total Frequency of Key Words				372	100%

**Table 2: Most frequently used keywords for CSR (Extracted from Guyana's Corporate Society's Act)**

Keywords	Frequency		Keywords	Frequency	Percentage
CSR	0	0	Culture	1	2.27
Industry	1	2.27	Corporation	0	0
Environment	0	0	Management	6	13.64
Country/Countries	0	0	Economic	1	2.27
Labor	1	2.27	Theories	0	0
Organizations	0	0	Sustainable	0	0
Ethics	0	0	Drivers & Barriers	0	0
Social Factors	0	0	Human Rights	0	0
Business	19	43.18	Policy, Strategic	0	0
Communication/Communication	5	11.36	Values	9	20.45
Supply, Supply Chain	1	2.27	Institution, institutional	0	0
Consumers	0	0	Activism	0	0
Stakeholders	0	0			
Total Frequency of Key Words				44	100%

# **The influence of Retro Advertisement of the brand on attitude towards current storytelling and brand image**

**Mitesh Jayswal<sup>1</sup>**

**Vibhu Teraiya<sup>2</sup>**

## **Abstract**

Brand narratives are increasingly being used as part of businesses' marketing and communications strategies due to the substantial influence they have been shown to have on customers' behavior in previous research. In this analysis, we examine how consumers' perceptions of a brand today are influenced by their memories of the brand's olden days. It's the first study of its kind, attempting to examine the relationship between consumer responses and historical narratives. A narrative for a Cadbury or Bajaj product was shown to 233 participants in a survey. The primary results show that brand attitude and storytelling attitude mediate the connection between the brand's image and the emotional response to the retro advertisements. In this study, brand attitude was found to impact brand image positively. There is a connection between brand attitude and the effects of retro advertisements on brand image. As can be seen from the results, Retro advertisements have a positive and direct impact on brand perception. Mediating the connection between retro advertisements and brand image is a person's attitude toward storytelling and the brand.

**Keywords:** *Storytelling, Retro Advertising, Consumer Behaviour, Brand Image, Advertising Attitude.*

## **1. INTRODUCTION**

Storytelling is considered one of the most effective modes of communication because stories are more straightforward to remember compared to statistics and facts (Lee & Han, 2002). From the moment of birth, people are inundated with stories. It is impossible to envision a period of history or a phase of human existence without stories (Figallo, 1998; Zeng, 2021). Considering that human memory is story-based (Woodside, 2010), marketers use stories

and vivid imagery to captivate customers and convince them to pay attention to the message (Woodside et al., 2008).

Communication through narratives has different characteristics in the business environment than communication based on arguments or persuasion (Atkins, 2020). This distinction is critical because it influences the effectiveness of the communication (An & Mendiola-Smith, 2018). The concept known as narrative transportation states that when people

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become involved in a story or tale, they are transported to a fantasy world (Green & Brock, 2002). In particular, the narrative transportation theory emphasizes how communication messages appeal to consumers' fantasies in a way that enhances their opinion of the brand (Carpenter & Green, 2012).

Using a causal connection, narratives link the elements of people's life experiences. For instance, they may help with goal clarification, goal estimation, and outcome interpretation (Pennington and Hastie, 1986). According to Bruner (1990), humans use stories to organize their experiences, comprehend strange facts, and assess various situations. Corporate communication messages incorporating storytelling can build a specific meaning for the brand, offer details about how the brand might be used (Júnior et al., 2023), and eventually engage consumers with the branded product (van Laer et al., 2019).

Retro trends, widely used in the marketing mix, are one of the most popular types of marketing strategy. Cadbury, for example, uses old appeals to improve consumer attitudes toward the brand and increase product purchases (Vasudevan et al., 2010; Zins et al., 2023). Retro is defined as a person's longing for the past, or as it has been put, "a yearning for yesterday" (Holbrook, 1993). Retro thoughts are idealized memories from the past that include a "bittersweet" association (Havlena and Holak, 1991), given that the past can be separated from the indefinite future (Zima, 2020)

Retro influences consumer responses positively, according to a substantial body of research in the marketing literature; therefore, it can be regarded as a versatile, effective marketing tool that can be employed with various audiences (Wu et al., 2020). Diverse symbols from retro ads have been incorporated into communication strategies to evoke sentiments of the past (Zaluczkowska, 2011). Even though retro is widely used in communication, most academic research has been conducted in the United States, highlighting the need to investigate this concept in other cultural communication contexts (Ten Brug et al., 2015). The present study aims to show how retro storytelling is utilized as a component of corporate communication in India.

There are two varieties of retro trends: personal and vicarious. Personal retro has received a great deal of attention in the marketing literature, but there has been comparatively little academic research on vicarious retro (Merchant and Rose, 2013). In addition, a gap in academic research on how retro-storytelling communications influence consumers' attitudes and beliefs can be identified by reviewing the existing literature on the corporate communications field (Rudrow, 2020). Thus, the present study aims to contribute to the marketing literature on vicarious retro trends and then fill a gap in the literature on how storytelling influences consumer responses by empirically testing the effect of fantasies about a retro advertisement (a vicarious dimension) on consumer attitudes.

Prominently promoting a company's brand image is a prevalent corporate communication strategy rooted in its history (Beverland, 2006). It is asserted that a valuable brand characteristic is the brand image (Andersen, 2015). The vast majority of relevant research has been conducted at the corporate level of analysis, demonstrating the need for more research at the consumer level (Woodside et al., 2008; Júnior et al., 2023; Zins et al., 2023). Due to its emphasis on brand image and the use of a consumer survey (Wilczewski et al., 2019), the present study seeks to comprehend how retro advertisements relate to brand image in a narrative context.

This study aims to explore the inflationary effect of retro ads about the past on present-day brand image. This allowed us to research two sequential mediating mechanisms: storytelling attitude and brand attitude (see Figure 1). Because it enables researchers to present the entire mechanism by which a dependent variable (for instance, imaginations about old time) can successfully lead to the desired outcome (e.g., a brand image), investigating indirect effects is crucial in marketing and business literature (Panicker and Sharma, 2020). The causal model, which illustrates both the direct and indirect effects of imaginations about old times on the brand image, was tested and supported using a sample of 233 respondents. Therefore, the current article provides an overall causal model of retro ads about historical eras on the brand image via attitude toward storytelling and brand attitude rather than concentrating on the primary effects of these

variables. As a result, the current study contributes to the continuing discussion over how retro-narrative communication affects consumer attitudes and behaviors.

## **2. LITERATURE REVIEW**

### **2.1. Retro Advertisements**

Since the early 1990s, this well-known marketing strategy has been utilized in the marketing industry (Baker and Kennedy 1994). By emotionally appealing to their ostensibly happy past, marketers use old commercials in advertising to make customers feel secure. Holak and Havlena (1998) define retro as "a positively valanced complex feeling, emotion, or mood produced by reflection on things (objects, people, and ideas) associated with the past." Retro is defined by Holbrook and Schindler (1991) as "a preference toward objects that were more prevalent when one was younger."

It is easy to see how the Retro concept's main feature is based on the past. This yearning for the past is linked to various emotional responses and other memory recalls (Braun-LaTour, 2007). Prior research has shown that Retro affects the confrontation of negative emotions (Wildschut et al., 2006) and existential threats (Sedikides et al., 2004), as well as the increase of social support feelings and the decrease of loneliness (Zhou et al., 2008).

When looking at the idea of Retro, the existing body of research recognizes two primary significant

forms: vicarious or historical Retro and personal Retro. Personal Retro, which can be defined as a yearning for experiences that a customer has already had (Baker and Kennedy, 1994), is solely based on the autobiographical recollections of consumers (Neisser, 1988).

Vicarious retro, also known as historical retro, is a type of retro based on a period that the consumer did not actually live through (Baker and Kennedy, 1994). As a result, the period does not exist in the consumer's living memory because it is not contained in the consumer's living memory (Goulding, 2001). Vicarious Retro investigates how a consumer may interpret events and associations with times and places that occurred before he or she was born (Stern, 1992). In particular, customers may find themselves in a vicarious retro situation when they attempt to reconstruct, in their imagination, a truth or an event that occurred in a retro ad. According to Stern (1992), vicarious Retro occurs when consumers desire to escape moments in the past that are perceived as ideal compared to the present (Gately et al., 2021). In particular, Holbrook and Schindler (1991) state, "It does seem plausible that one could identify nostalgically with people, places, or things from retro ads that one has experienced only through books, films, or other narratives." This was about the idea that one could feel a connection to people, places, or things from retro ads that one has only encountered through.

## **2.2. Attitude towards Storytelling**

Telling tales is one of the earliest and most fundamental ways humans have communicated. In his book *Thinking, Fast and Slow*, J. L. Bruner (1990) describes two distinct modes of thought: the paradigmatic and the narrative. The former uses a formal, mathematical system of description and explanation, whereas the latter attempts to comprehend events and facts through introspective consideration (Wu et al., 2020; Teraiya et al., 2023).

The act of storytelling can be defined as "the use of a narrative to convey an idea, concept, or causal relation that is too abstract or complex to be conveyed in any other way" (Sole and Wilson, 1999). Listeners can readily project their own feelings and reactions onto the characters in a story (Thoss et al., 2018)

Successful advertising campaigns today frequently employ the use of narrative (Temiz, 2019). More specifically, storytelling in narrative advertising captivates the audience through the story and takes them to a narrative universe (Conrad et al., 2003). Advertisements that use narrative techniques appeal to customers' emotions by letting them imagine themselves in the story's situations (Escalas, 2004; Zins et al., 2023). Providing greater elaboration capacities (Lee et al., 2005), boosting the trait of realism during the storytelling experience, and facilitating fantasy stimulation, vivid storytelling directed at consumers induces transportation. It increases the efficiency of persuasion (Petrova and Cialdini, 2005).

The use of compelling narratives to promote a brand is an integral aspect of many brand icon marketing tactics (Woodside et al., 2008). The premise that storytelling can be an effective method of gaining and keeping clients is supported by research conducted by Delgadillo and Escalas (2004). Finally, storytelling helps give a product its identity, influences how consumers feel about the price and how they view the product, and ultimately sets it apart from the competition (Zhang et al., 2020).

### **2.3. Brand Image**

According to McFerran et al. (2014), a company's brand image is crucial to its ability to manage its yield over time and to convey its distinctiveness to consumers. They emphasized making consumers' first associations with a brand positive by giving them something positive to reflect on. When establishing a brand's reputation, it's important to remember that the functional brand is the foundation upon which the symbolic and experiential are built. The brand image was defined by Assaf et al. (2013) as "the feeling that people have when they think about a particular brand," and "hard" and "soft" data were distinguished in terms of how they related to product attributes and consumers' perceptions of brand names. When we talk about "hard data," we mean unique opinions regarding the speed, pricing, ease of use, and management time of a company in the business, among other things. Emotional qualities like surprise, dependability, excitement, boredom, masculinity, and inventiveness were common in "soft data." The term "brand image" is

defined by Nisar and Whitehead (2016) as "a set of associations" connected to a particular brand. In accordance with Huang and Ku's (2016) definition of "brand image," this term refers to any phenomenon that affects how customers perceive a brand as a result of an organization's communication activity. When brands connect early-stage ads from the past with current ones, it impacts the company's image. In this context, the brand image refers to a consumer's ideas and feelings about a business, including their understanding of the firm's advantages, disadvantages, strengths, and benefits.

### **2.4 The function of Retro in marketing and its ties to storytelling and brand image**

By exploring the role of Retro in marketing and its linkages to narrative and brand image, this part supports the hypothesized relationships between the study's primary areas.

In recent years, the utilization of retro as a marketing factor has increased (Yoon and Dodoo, 2021). When used in marketing, the utilization of vintage design components and aesthetics can improve a company's overall success (Zammit et al., 2018; Teraiya et al., 2023). A fantastic structure for marketing messages that use Retro as a persuasive approach is storytelling, according to earlier research in marketing communications. This has been demonstrated to be true (Kessous et al., 2015). Thus, we can affirm with certainty that there is justification for integrating Retro and narrative in the context of the marketing (Wicke & Veale, 2020). The marketing literature, on the other hand, makes it



abundantly evident that Retro is connected to brand history, as nostalgic brands are frequently portrayed as evergreen and come with their own extensive histories and legacies (Park et al., 2020; Yan et al., 2020). Employing Retro in their brand's marketing communications might help businesses that value their history.

Business leaders may utilize Retro to build brand tales that increase brand longevity (through brand image) and customer confidence in the company's goods and services by taking into account the connections between storytelling, retro, and brand image (Mitchell & Clark, 2021). This theory clarifies the connections between the concepts examined in this study. It explains why incorporating them all into a single branding effort may be a very practical field (Spiegel et al., 2020). The creation of research hypotheses is the next stage in the development of our conceptual model.

### **3. RESEARCH HYPOTHESES**

#### **3.1. The mediating effect of storytelling attitude**

According to the Dual Mediation Hypothesis (Mackenzie et al., 1986), brand attitude and attitude toward advertising are related through attitude toward advertising. Notably, brand attitude is influenced by attitude toward advertising directly and indirectly through brand cognition (Howland, 2005; Stromberg, 2020). According to this approach, the attitude toward storytelling mediates the link between imagination about retro ads and brand attitude. It is possible to think of fantasies

about the past as an advertisement stimulus (Chen et al., 2020; Teraiya et al., 2023). The idea of dreams about bygone times, such as how customers imagined life in the retro ads represented in the advertisement, can be used in advertisements as a potent stimulant that elicits the emotion of the retro (Kehrli, 2021). On the other hand, a brand's story might be viewed as an advertisement. Storytelling is a crucial element of story advertising that engages audiences and consumers (Hunt et al., 2006). One line of this study supports the hypothesis that retro impacts consumer sentiments (Piipponen & Karlsson, 2019). Additionally, it has been discovered that exposure to previous advertising stimuli had a more substantial positive effect on attitudes toward advertising than brand-new advertisements (Albano & Pierri, 2017). Additionally, there is a direct link between the retro-evoked by an advertisement and how that advertisement is perceived (Gonzalez, 2020; Taylor et al., 2002).

Additionally, the marketing literature supports the concept that emotions and pleasant advertising feelings increase the positive attitude about a brand (Edell and Burke, 1987). Retro might be seen as a good emotion, sentiment, or mood in this line (Holak and Havlena, 1998). Additionally, meta-analysis research by Brown et al. (1998) found a consistently favorable link between advertising emotions and brand attitude. Studies conducted in the past found that there may be mediational effects between the ad stimulus, ad attitude, and brand attitude (e.g., Lutz et al., 1983; Edell and Burke, 1987). Accordingly,

nostalgia advertising improves favourable attitudes toward brands. However, attitudes toward advertising serve as a mediator between the relationships between nostalgic advertising and brand attitudes (Pascal et al., 2002). The analysis presented above leads to the formulation of the following hypothesis:

*H1: The attitude toward storytelling mediates the relationship between retro ads and brand attitude.*

### **3.2. The mediating effect of brand attitude**

A recent analysis by Van Laer et al. (2014) says narrative transportation can transport people into a story's world. Storytelling is narrative advertising that persuades consumers by telling a story about a product or related product experiences and employing emotional and other affective appeals (Phillips and McQuarrie, 2010). Brand stories that help consumers create self-brand connections by using self-identity goals affect brand attitudes (Escalas, 2004).

Similarly, captivating experiences, such as engaging in storytelling advertising, positively influence consumers' behaviours and attitudes (Lieber, 2014). Compared to argumentative advertising, Storytelling advertising provides consumers with sufficient cognitive capacity, resulting in favourable results in forming beliefs and attitudes toward advertising and the brand.

Similarly, when both types of advertising contain the same product information, narrative advertising

appears to elicit more positive emotions and attitudes toward the brand than argument advertising (Escalas, 2004). Because consumers are transformed into highly transported viewers of the story when narrative advertising uses storytelling, this results in fewer counterarguments and (Oliveira et al., 2023) fewer critical evaluations and more excellent positive responses, such as brand attitudes (Chang, 2009). On the other hand, studies have shown that people's feelings positively affect their perceptions of a company's brand image (Merchant and Rose, 2013). The concept of feelings and affective reactions to a brand is incorporated into retro marketing, one of the most critical aspects of brand identity. Brand image is another important aspect of the brand image (Martinez Palacios, 2021).

In the same framework, Edell and Burke (1987) came to the conclusion that attitudes toward advertising and brand attitudes are specifically influenced by feelings in conjunction with semantic judgment scales. By using a specific advertisement saw, various measurement delay times, and several viewings of the advertisement, the authors also demonstrated the validity of their hypothesis that feelings influence the concepts of attitude toward advertising and brand attitude in a follow-up study (Burke and Edell, 1989). The analysis shown above leads us to the following hypothesis:

*H2: Brand attitude mediates the relationship between storytelling attitude and brand image.*

Vicarious Retro positively impacts the brand attitude (Lampropoulou, 2011). Ju et al. (2016)

discovered that past-focused old advertisements content resulted in more favourable attitudes toward the brand than present-focused content in an experimental design study that compared consumers' responses to nostalgic and non-nostalgic messages.

Furthermore, previous research has demonstrated that retro feelings contribute to more positive attitudes toward the brand. In researching the level of consumer insecurity in retro brands that use historical references, Zhou et al. (2013) discovered that the more insecure consumers feel, the more positive their attitude toward the retro brand they manifest. This could happen because the consumer's uncertain experiences are negatively associated with their previous "safe" life (Atkins, 2020).

The relationship between fantasies about bygone eras and brand image has an emotional mediation effect, claim Merchant and Rose (2013). We propose the following hypothesis based on prior research that identified attitudes as affective reactions;

*H3: Brand attitude mediates the relationship between retro ads and brand image.*

As a final hypothesis based on the discussion of the current research hypothesis, it is proposed that retro ads are positively related to brand attitude through attitude toward storytelling (H1) and that brand attitude acts as a mediator in the relationship between attitude toward storytelling and brand image (H2). We propose a three-path mediation

model that considers the aforementioned hypotheses and the argument that there is an emotional mediation effect in the relationship between retro ads and brand image (Merchant and Rose, 2013). Therefore, it is claimed as follows:

*H4: An attitude toward storytelling and a brand attitude serve as sequential mediators in the interaction between retro ads and brand image.*

**Figure 1. The Conceptual Model of the Study**

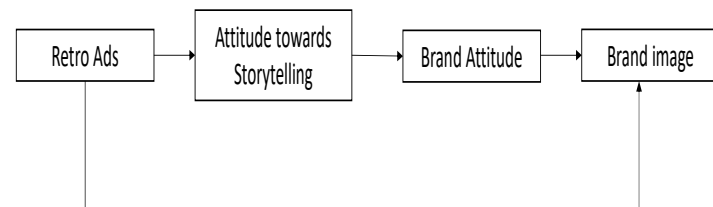


Figure 1: Proposed Research Model

## 4. METHODOLOGY

An online survey was conducted to test the above hypotheses. Participants began by watching a story about a Bajaj and Cadbury brand. Bajaj and Cadbury were chosen because they are products that elicit positive emotions in consumers, such as Retro (Bhumiratana et al., 2019; Labbe et al., 2015). Feldman et al. (1990) contend that developing a narrative structure requires four elements. First, the narrative contains actions taken to achieve goals that are kept in chronological order. Second, the events

and situations are aligned because a causal chain connects the events' beginning, middle, and end. These first two elements correspond to the components of chronology and causality. In other words, temporal dimensions (order) depict the relationships between the story's elements (causality). The third and fourth elements concern the narrative's focus rather than its structure (Martinez Palacios, 2021). The third required element is that the narratives follow the general rule of objectively explaining the events. Finally, a narrative includes the narrator's point of view. The current story satisfied all of the above-mentioned narrative structure elements.

After watching the story, participants were instructed to complete the structured questionnaire. Qualtrics was used to create the online survey. The convenient random sampling method was used to recruit participants and randomly assign Bajaj and Cadbury advertisements. The survey was completed by 233 management students. In terms of demographics, the sample's mean age is 33 years old (SD= 9.92), with 30.6% between the ages of 18 and 24, 19.3% between the ages of 25 and 33, and 47.2% between the ages of 34 and 50. In terms of gender, 55.1% of participants are female, and 44.9% are male.

#### **4.1. Measures**

This study assessed retro ads using a 9-item, 7-point Likert scale (Cronbach's =.905) developed by Merchant and Rose (2013). (e.g. I imagined myself to be living in the time period depicted in the story).

Baker and Kennedy (1994) developed a 6-item, 7-point Likert scale (Cronbach's = 0.816) to assess attitudes toward storytelling (e.g. I really like this story). Geuens and De Pelsmacker (1998) developed a 4-item, 7-point Likert scale (Cronbach's = 0.901) for measuring brand attitudes (e.g., I think this is a good brand). Finally, Merchant and Rose (2013) adopted a 12-item; total of 7 items are included (Cronbach's = 0.962), which are compiled with a Likert 7-point scale. The questionnaire design is referred to Assaf et al. (2013).

#### **4.2 Control Variables**

Demographic factors, including gender, age, and educational attainment level, were utilized as control variables, as in earlier investigations (Nwanzu and Babalola, 2020). There were some statistically relevant bivariate correlations between these control variables and the results (Table 1). The study's scope was expanded by calculating the Kendall rank correlation coefficients (see Exhibit 1). Statistical analyses with and without control variables were carried out to produce more believable results. There was no statistically significant difference in the results. Therefore, the analyses did not include control factors (Becker, 2005).

#### **5. Results**

All of the variables' means, standard deviations, and relationships are shown in Table 1. Using the SPSS macro-process recommended by Preacher and Hayes, a bootstrapping study (1000 bootstrap samples with 95% confidence intervals) was carried

out to assess the multiple mediation model (2004). This technique of analysis has also been used in earlier studies to create a three-path mediation model (Pattusamy and Jacob, 2017; Riskos et al., 2021; Taylor et al., 2008). The indirect impact is statistically significant at the 0.05 level if 95% of the bias-corrected confidence intervals for the estimates of the mediation effect do not include zero (Shrout and Bolger, 2002). The current approach corrects several issues with the Sobel test while, more critically, allowing for the inclusion of various mediators. Given that it is a regression-based method, the macro-process adheres to a path analytic framework and is thus comparable to the mediation analysis method described by Preacher, Rucker, and Hayes (2007) or Edwards and Lambert (2005). OLS regression is used to estimate the path coefficients and each variable can be built around the proposed, assumed indirect effects to verify the validity of the indirect effects.

*Insert table (Table 1: Descriptive statistics and correlations)*

The findings (Table 2) show that retro ads are related to attitudes toward storytelling ( $\beta=0.41$ ,  $p<0.01$ ). Furthermore, the attitude toward storytelling positively affected brand attitude ( $\beta = 0.43$ ,  $p.01$ ). As a result, the indirect effect's bias-corrected confidence intervals did not include zero (BCCI [0.039 and 0.119]). As a result, hypothesis 1, which proposes that the relationship between retro ads and brand attitude is mediated by storytelling attitude, is supported.

*Insert table (Table 2. Path Coefficients and indirect effects for mediation models)*

Hypothesis 2 asserts that brand attitude mediates the relationship between storytelling attitude and brand image. Brand attitude positively impacted brand image ( $\beta = 0.69$ ,  $p.01$ ). Furthermore, the indirect effect's bias-corrected confidence intervals did not include zero (BCCI [0.115 and 0.294]). Hypothesis 2 is therefore supported.

According to hypothesis 3, brand attitude mediates the relationship between retro ads and brand image. The results showed that Retro ads positively affected brand attitude ( $\beta=0.39$ ,  $p.01$ ). Similarly, zero was not included in the bias-corrected confidence intervals for the indirect effect (BCCI [0.097 and 0.261]). As a result, hypothesis 3 is supported.

Finally, hypothesis 4 proposes that brand attitude and attitude toward storytelling sequentially mediate the relationship between retro ads and brand image. Because the bias-corrected confidence intervals did not include zero (BCCI [0.0043 and 0.139]), the current results supported the multiple mediation model. As a result, hypothesis 4 is supported.

According to Hypothesis 2, brand attitude mediates the relationship between brand image and attitude toward storytelling. Brand attitude influenced brand image positively ( $\beta = 0.69$ ,  $p.01$ ). Furthermore, the bias-corrected confidence intervals for the indirect effect did not include zero (BCCI [0.043 and 0.139]). As a result, Hypothesis 2 is supported.

Hypothesis 3 proposes that the relationship between Retro ads and brand image is mediated by brand

attitude. The findings revealed that retro ads positively affected brand attitude ( $\beta = 0.31$ ,  $p.01$ ). Similarly, the bias-corrected confidence intervals for the indirect effect did not include zero (BCCI [0.097 and 0.0261]). Hypothesis 3 is therefore supported.

Finally, hypothesis 4 proposes that brand attitude and attitude toward storytelling mediate the relationship between retro ads and brand image in a sequential manner. The findings supported the multiple mediation model because the bias-corrected confidence intervals did not include zero (BCCI [0.043 and 0.139]). Hypothesis 4 is therefore supported.

## **6. Discussion**

The current study looked at the indirect effect of imagination about retro times on brand image. An online survey was completed by 233 people. The findings validated a causal model that indicated both direct and indirect effects of retro advertisements on the brand image via attitude toward storytelling and brand attitude. The overall causal model predicted, in particular, that the association between retro advertisements and brand attitude is positively mediated by attitude toward storytelling. Furthermore, brand attitude influences the relationship between brand image and attitude toward storytelling. Similarly, brand attitude positively mediates the association between thoughts about retro ads and brand image. Finally, the relationship between retro ads and brand image

is successively mediated by attitude toward storytelling and attitude toward the brand.

### **6.1. Theoretical implications**

The current study adds to the marketing literature in the following fundamental respects. First, the study provides additional evidence that vicarious Retro, and particularly fantasies about former times, favourably influence brand image through the use of a mediation analysis (the macro PROCESS tool). In this sense, it builds on previous studies indicating an indirect association between imaginations about bygone times and current brand image (Merchant and Rose, 2013). The current research, in particular, develops a new causal model that demonstrates both the favourable direct and indirect benefits of ads of retro eras on brand image. As a result, imagination about the retro era is related to a good attitude toward storytelling. Attitude toward storytelling positively influences brand attitude, and brand attitude influences brand image.

Given the importance of brand image in developing corporate and product brands (Aaker 2004), little is known about the elements influencing the brand image. The majority of the research looks at the impact of brand image on a corporate level. As a result, the current study adds to this body of knowledge by studying how the brand image is viewed by consumers. Our findings show that there is a positive indirect influence of attitude toward storytelling on the brand image via brand attitude, while the association between retro ads about retro

ads and brand image is also positively mediated by brand attitude.

The current investigation also adds to the literature on Retro from a marketing standpoint. The less studied type of Retro, vicarious Retro, and precisely the dimension of retro ads (Merchant and Rose, 2013), is investigated, whereas most research has focused on personal Retro. Furthermore, according to the research, customers who see a brand as nostalgic turn their recollections into actual goods (Kessous and Roux, 2008). Our study extends this line of research by demonstrating retro's direct and indirect positive effects on the brand image by exhibiting the relationship between the perception of a brand as nostalgic and the conversion of memories into actual products. As a result, our findings show that retro ads positively influence brand legacy via brand attitude. Furthermore, regarding Retro's success as a marketing tool, Chase and Shaw (1989) contend that customers do not need to have lived through a specific time period to feel nostalgic about it. Because the current study employs vicarious Retro, it adds to previous research by demonstrating that imaginations about former times can favorably influence the existing brand image.

Finally, the current study adds to the body of knowledge on storytelling theory in two ways. First, Lundqvist et al. (2013) discovered that participants exposed to a firm-created story had a higher favourable view of the brand. In this vein, the current study concludes that retro storytelling about a company positively affects brand attitude as a

corporate communication tool. As a result, the present study blends the principles of narrative and Retro in a type of corporate communication that has a good impact on brand attitude. Second, the notion that brand narrative is an important component of brand image strategy is maintained (Woodside et al., 2008), while it may also be considered an effective strategy for acquiring new customers and retaining existing ones (Delgadillo and Escalas, 2004). Our findings extend this line of research by demonstrating that there is a positive indirect influence of brand attitude on brand image. The concept of brand strategy can be demonstrated specifically in the concept of brand image because brand image represents a value proposition for customers.

## **6.2. Managerial Implications**

Our research proposes a sequential mediation model demonstrating how retro ads can progressively lead to brand image via storytelling attitude and brand attitude. Practitioners can design strategies for cultivating brand image based on this model using two powerful tools: storytelling and the Retro idea. Because storytelling is an effective communication method (Lundqvist et al., 2013), it may be employed by all types of businesses, regardless of their communication budget. On the other hand, organizations with strong past records, such as family businesses, which frequently adopt distinct firm strategies than other types of businesses (Ung et al., 2018), might employ retro appeals to enhance their brand messages.

According to the findings, attitude toward storytelling is an important model mediator that positively affects brand attitude and brand image. This finding emphasizes the importance of developing positive consumer sentiments toward advertising campaigns for brand communications practitioners. For this reason, storytelling and retro can be used as marketing strategies again.

Marketing practitioners can benefit from the current study since it provides new insights into how consumers perceive the brand image. Most of the research looked into the brand image at the business level. According to this study, brand image can be produced through narratives that employ prior eras in which customers have never lived. As a result, practitioners can sell and brand using historical and beautiful eras.

## **7. Limitations and future research**

This study has limitations, like any other. All research was done online. Future studies may combine offline and online methods. In this study, an online survey tested the impact of retro storytelling and how it affects brand image. A future

investigation might compare retro and modern business narratives. The study focused on the Bajaj and Cadbury brands. Future studies could compare retro.

Finally, the present study examined the influence of vicarious retro ads on brand image. However, future research could assess the difference in effectiveness between vicarious and personal retro as a means of communication. Moreover, investigating possible negative emotions triggered by nostalgia could be an interesting topic for future research.



	Mean	SD	1	2	3	4	5	6
1. Gender	0.49	0.51						
2. Age	29.67	11.2	-0.052					
3. Educational level	4.03	0.91	1.3*	-0.08				
4. Retro ads	4.01	1.2	0.04	.19**	-0.08			
5. Attitude toward storytelling	4.98	0.98	0.02	0.09	-0.03	0.41		
6. Brand attitude	4.76	1.04	0.026	0.20	-0.26	0.298		
7. Brand Image	4.81	1.056	-0.02	-0.036	0.298	0.269	0.248	0.75
(*p ≤ .05, **p ≤ .01)								

	path coefficients				Bootstrap 95% Confidence	
	Attitude toward Storytelling	Brand Attitude	Brand Image(BI)	Conditional Indirect Effect	lower	Upper
Retro Advertisement (RA)	0.41(0.19)	0.39 (0.049)	0.31 ( 0.04)			
Attitude toward Storytelling (ATS)		0.43(0.071)				
Brand Attitude (BA)			0.69 (0.05)			
H1: RA → ATS → BA				0.10 (0.031)	0.039	0.119
H2: ATS → BA → BI				0.29 (0.046)	0.115	0.294
H3: RA → BA → BI				0.22 (0.042)	0.097	0.261
H4: RA → ATS → BA → BI				0.08 (0.028)	0.043	0.139
<i>Significant path coefficients are in bold Standard error in parentheses.</i>						

## References

- Albano, G., & Pierri, A. (2017). Digital storytelling in mathematics: a competence-based methodology [Article]. *Journal of Ambient Intelligence and Humanized Computing*, 8(2), 301-312. <https://doi.org/10.1007/s12652-016-0398-8>
- An, Z., & Mendiola-Smith, L. (2018). Mapping Communication Infrastructure Theory Onto Twitter: Network Integration and Neighborhood Storytelling [Article]. *International Journal of Communication*, 12, 4292-4312.
- Andersen, D. (2015). Stories of change in drug treatment: a narrative analysis of 'whats' and 'hows' in institutional storytelling [Article]. *Sociology of Health & Illness*, 37(5), 668-682. <https://doi.org/10.1111/1467-9566.12228>
- Atkins, D. A. (2020). *Investigating Cognitive and Persuasive Effects of 360-degree Virtual Reality Community News Narratives on Memory Performance, Presence, Perception of Credibility, and Attitude Change* [28889376, Ohio University]. ProQuest Dissertations & Theses Global. Ann Arbor.
- Carpenter, J. M., & Green, M. C. (2012). Flying with Icarus: narrative transportation and the persuasiveness of entertainment. *The psychology of entertainment media: Blurring the lines between entertainment and persuasion*, 169-194.
- Chen, X. L., Mak, B., & Kankhuni, Z. (2020). Storytelling approach of the self-reported slow adventure to Tibet: Constructing experience and identity [Article]. *Tourism Management Perspectives*, 35, 9, Article 100679. <https://doi.org/10.1016/j.tmp.2020.100679>
- Conrad, S., Kruijff, E., Suttrop, M., Hasenbrink, F., & Lechner, A. (2003). A storytelling concept for digital heritage exchange in virtual environments. In O. Balet, G. Subsol, & P. Torguet (Eds.), *Virtual Storytelling, Proceedings: Using Virtual Reality Technologies for Storytelling* (Vol. 2897, pp. 235-238). Springer-Verlag Berlin.
- Figallo, C. (1998). *Hosting Web communities: Building relationships, increasing customer loyalty, and maintaining a competitive edge*. John Wiley & Sons, Inc.
- Gately, M. E., Muccini, S., Eggleston, B. A., & McLaren, J. E. (2021). Program Evaluation of My Life, My Story: Virtual Storytelling in the COVID-19 Age. *Clinical Gerontologist*, 1-9.
- Gonzalez, V. (2020). Contentious Storytelling Online: Articulating Activism through Negotiation of Metanarratives [Article]. *Sociological Perspectives*, 63(4), 589-607, Article 0731121419884930. <https://doi.org/10.1177/0731121419884930>
- Green, M. C., & Brock, T. C. (2002). In the mind's eye: Transportation-imagery model of narrative persuasion.
- Júnior, J. R. D. O., Limongi, R., Lim, W. M., Eastman, J. K., & Kumar, S. (2023). A story to sell: The influence of storytelling on consumers' purchasing behavior. *Psychology & Marketing*, 40(2), 239-261.
- Howland, J. (2005). Storytelling and philosophy in Plato's 'Republic' [Article]. *American Catholic Philosophical Quarterly*, 79(2), 213-232. <https://doi.org/10.5840/acpq200579216>
- Hunt, J., Romero, P., & Good, J. (2006). Storytelling in interaction: Agility in practice. In P. Abrahamsson, M. Marchesi, & G. Succi (Eds.), *Extreme Programming and Agile Processes in Software Engineering, Proceedings* (Vol. 4044, pp. 196-197). Springer-Verlag Berlin.
- Kehrli, M. K. (2021). *Composing a Narrative: A Life History of Mary Pemble Barton through Her Storied Legacy* [28720317, Drake University]. ProQuest Dissertations & Theses Global. Ann Arbor.
- Lampropoulou, S. (2011). Having a say: Direct speech representation in Greek youth storytelling [Article]. *Journal of Pragmatics*, 43(14), 3374-3386. <https://doi.org/10.1016/j.pragma.2011.07.009>
- Lee, Y., Oh, S., & Woo, W. (2005). A context-based storytelling with a responsive multimedia system (RMS). In G. Subsol (Ed.), *Virtual Storytelling: Using Virtual Reality Technologies for Storytelling, Proceedings*

- (Vol. 3805, pp. 12-21). Springer-Verlag Berlin.
- Lee, Y. H., & Han, C. Y. (2002). Partitioned pricing in advertising: Effects on brand and retailer attitudes. *Marketing Letters*, *13*(1), 27-40.
- Lieber, L. (2014). Telling a Liturgical Tale: Storytelling in Early Jewish Liturgical Poetry [Article]. *Zeitschrift Fur Religions-Und Geistesgeschichte*, *66*(3-4), 209-232. <https://doi.org/10.1163/15700739-90000128>
- Martinez Palacios, V. R. (2021). *Computational Narrative Models of Character Representations to Estimate Audience Perception* [28648461, University of Southern California]. ProQuest Dissertations & Theses Global. Ann Arbor.
- Mitchell, S. L., & Clark, M. (2021). Telling a different story: How nonprofit organizations reveal strategic purpose through storytelling [Article]. *Psychology & Marketing*, *38*(1), 142-158. <https://doi.org/10.1002/mar.21429>
- Oliveira, J. R. D., Limongi, R., Lim, W. M., Eastman, J. K., & Kumar, S. (2023). A story to sell: The influence of storytelling on consumers' purchasing behavior [Review]. *Psychology & Marketing*, *40*(2), 239-261. <https://doi.org/10.1002/mar.21758>
- Park, J., Mostafa, N. A., & Han, H. J. (2020). "StoryWeb": A storytelling-based knowledge-sharing application among multiple stakeholders [Article]. *Creativity and Innovation Management*, *29*(2), 224-236. <https://doi.org/10.1111/caim.12368>
- Piipponen, O., & Karlsson, L. (2019). Children encountering each other through storytelling: Promoting intercultural learning in schools [Article]. *Journal of Educational Research*, *112*(5), 590-603. <https://doi.org/10.1080/00220671.2019.1614514>
- Rudrow, K. J. (2020). "I was scared to death": storytelling, masculinity, & vulnerability in "Wet Dreamz" [Article]. *Critical Studies in Media Communication*, *37*(2), 148-160. <https://doi.org/10.1080/15295036.2020.1741660>
- Spiegel, S. J., Thomas, S., O'Neill, K., Brondgeest, C., Thomas, J., Beltran, J., . . . Yassi, A. (2020). Visual Storytelling, Intergenerational Environmental Justice and Indigenous Sovereignty: Exploring Images and Stories amid a Contested Oil Pipeline Project [Article]. *International Journal of Environmental Research and Public Health*, *17*(7), 20, Article 2362. <https://doi.org/10.3390/ijerph17072362>
- Stromberg, D. (2020). The Exorcist The Mystical Storytelling of Isaac Bashevis Singer [Article]. *Prooftexts-a Journal of Jewish Literary History*, *38*(1), 94-138. <https://doi.org/10.2979/prooftexts.38.1.04>
- Taylor, S. S., Fisher, D., & Dufresne, R. L. (2002). The aesthetics of management storytelling - A key to organizational learning [Article]. *Management Learning*, *33*(3), 313-330. <https://doi.org/10.1177/1350507602333002>
- Temiz, Z. (2019). Storytelling intervention to improve the narrative skills of bilingual children coming from low socio-economic status [Article]. *Early Child Development and Care*, *189*(1), 16-30. <https://doi.org/10.1080/03004430.2018.1529033>
- Ten Brug, A., Van der Putten, A. A. J., Penne, A., Maes, B., & Vlaskamp, C. (2015). Factors Influencing Attentiveness of People With Profound Intellectual and Multiple Disabilities to Multisensory Storytelling [Article]. *Journal of Policy and Practice in Intellectual Disabilities*, *12*(3), 190-198. <https://doi.org/10.1111/jppi.12128>
- Teraiya, V., Namboodiri, S., & Jayswal, R. (2023). The Impact of Storytelling Advertising on Consumer Advertising Experiences and Brand Equity.
- Thoss, J., Ensslin, A., & Ciccoricco, D. (2018). Narrative Media: The Impossibilities of Digital Storytelling [Article]. *Poetics Today*, *39*(3), 623-643. <https://doi.org/10.1215/03335372-7032788>
- van Laer, T., Feiereisen, S., & Visconti, L. M. (2019). Storytelling in the digital era: A meta-analysis of relevant moderators of the narrative transportation effect [Article]. *Journal of Business Research*, *96*, 135-146. <https://doi.org/10.1016/j.jbusres.2018.10.053>
- Vasudevan, L., Schultz, K., & Bateman, J. (2010). Rethinking Composing in a Digital Age: Authoring Literate Identities Through

- Multimodal Storytelling [Article]. *Written Communication*, 27(4), 442-468. <https://doi.org/10.1177/0741088310378217>
- Wicke, P., & Veale, T. (2020). The Show Must Go On: On the Use of Embodiment, Space and Gesture in Computational Storytelling [Article]. *New Generation Computing*, 38(4), 565-592. <https://doi.org/10.1007/s00354-020-00106-y>
- Wilczewski, M., Soderberg, A. M., & Gut, A. (2019). Storytelling and cultural learning-An expatriate manager's narratives of collaboration challenges in a multicultural business setting [Article]. *Learning Culture and Social Interaction*, 21, 362-377. <https://doi.org/10.1016/j.lcsi.2019.04.007>
- Woodside, A. G. (2010). Brand-Consumer Storytelling Theory and Research: Introduction to a Psychology & Marketing Special Issue [Article]. *Psychology & Marketing*, 27(6), 531-540. <https://doi.org/10.1002/mar.20342>
- Woodside, A. G., Sood, S., & Miller, K. E. (2008). When consumers and brands talk: Storytelling theory and research in psychology and marketing [Article]. *Psychology & Marketing*, 25(2), 97-145. <https://doi.org/10.1002/mar.20203>
- Wu, F. L., Liang, H., Ge, C., Liang, F., Zhang, Q., & Lu, J. Z. (2020). Semantic Framework Promotes Interactive Puppetry Animation Production to Assist Storytelling Training [Article]. *Journal of Information Science and Engineering*, 36(6), 1179-1189. [https://doi.org/10.6688/jise.202011\\_36\(6\).0003](https://doi.org/10.6688/jise.202011_36(6).0003)
- Yan, A., Millon-Underwood, S., Walker, A., Patten, C., Nevels, D., Dookeran, K., . . . Stolley, M. (2020). Engaging young African American women breast cancer survivors: A novel storytelling approach to identify patient-centred research priorities [Article]. *Health Expectations*, 23(2), 473-482. <https://doi.org/10.1111/hex.13021>
- Zaluczkowska, A. (2011). Storyworld: the Bigger Picture, investigating the world of multi-platform/transmedia production and its affect on storytelling processes [Article]. *Journal of Screenwriting*, 3(1), 83-101. [https://doi.org/10.1386/josc.3.1.83\\_1](https://doi.org/10.1386/josc.3.1.83_1)
- Zammit, J., Gao, J., Evans, R., & Maropoulos, P. (2018). A knowledge capturing and sharing framework for improving the testing processes in global product development using storytelling and video sharing [Article]. *Proceedings of the Institution of Mechanical Engineers Part B-Journal of Engineering Manufacture*, 232(13), 2286-2296. <https://doi.org/10.1177/0954405417694062>
- Zeng, D. (2021). *Power of Narratives and Narratives of Power: Storytelling of, in, and for Placemaking in Nantou Ancient City in Shenzhen, China* [28541132, Harvard University]. ProQuest Dissertations & Theses Global. Ann Arbor.
- Zhang, H. X., Zheng, X. Y., & Zhang, X. (2020). Warmth effect in advertising: the effect of male endorsers' warmth on brand attitude. *International Journal of Advertising*, 39(8), 1228-1251. <https://doi.org/10.1080/02650487.2020.1763089>
- Zima, E. (2020). Gaze and Recipient Feedback in Triadic Storytelling Activities [Article]. *Discourse Processes*, 57(9), 725-748. <https://doi.org/10.1080/0163853x.2020.1769428>
- Zins, A. H., & Abbas Adamu, A. (2023). Heritage storytelling in destination marketing: cases from Malaysian states. *Journal of Heritage Tourism*, 1-13.

**Exhibit 1**

<b>Kendall Rank Correlation Coefficients</b>						
	1	2	3	4	5	6
Gender						
Age	-0.041					
Educational level	0.139	0.045				
Retro Advertisement	0.039	0.138	-0.05			
Attitude toward storytelling	0.039	0.0139	0.019	0.19		
Brand attitude	0.008	0.09	0.2	0.119	0.221	
Brand Image	-0.029	0.112	0.029	0.123	0.151	0.498
<i>Note: *<math>p \leq .05</math>. **<math>p \leq .01</math></i>						

# Assessment and Evaluation of CAMEL Rating System and its Implementation in SAARC Region Banks

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## ABSTRACT

The CAMEL rating system is a widely used framework for assessing the performance and risk profiles of banks based on five key components: Capital Adequacy, Asset Quality, Management Quality, Earnings Capability, and Liquidity Position. This research focuses on evaluating the effectiveness of the CAMEL rating system in SAARC countries and examines the average ratings of banks in these countries. Through a comprehensive review of literature, analysis of data, and case studies of selected banks, the study assesses the application and impact of the CAMEL rating system on the banking industry in the SAARC region. Furthermore, it explores the challenges faced during the implementation process and identifies potential areas for improvement. The research contributes to the existing body of knowledge on risk assessment frameworks in banking and offers recommendations for enhancing the implementation of the CAMEL rating system in the SAARC region.

**Key words:** CAMEL Rating, SAARC Nations, Banking, Credit Rating, Economy

## INTRODUCTION

The South Asian Association for Regional Cooperation (SAARC) is a regional intergovernmental organization and geopolitical union comprising states in South Asia. Its name,

when translated literally, signifies the "South Asian Association for Regional Cooperation," with SAARC serving as its acronym. The organization's membership includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri

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Lanka, contributing to its overall composition. Specifically, Bhutan and Nepal are recognized as members of this organization. By 2021 projections, SAARC is expected to account for 5.21 percent of the world's population, 2.11 percent of the world's land area, and a combined economy worth 4.47 trillion U.S. dollars. Dhaka was selected as the initial headquarters for SAARC on December 8th, 1985, but subsequently, the administrative headquarters were relocated to Kathmandu, Nepal. The primary goals of the association are to foster economic development and social harmony throughout the entire region. After several delays, the South Asian Free Trade Area (SAFTA) was finally introduced to the international stage in 2007. SAARC has achieved observer status at the United Nations and has established connections with other international institutions such as the European Union. However, the organization has experienced a prolonged period of inactivity due to ongoing geopolitical tensions between India and Pakistan, as well as the situation in Afghanistan. This tension has persisted over a considerable duration. Consequently, India engages with its eastern neighbours through the Bay of

Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). The aim of this research initiative is to investigate the interconnected network among financial institutions operating within the SAARC region, specifically focusing on areas such as monetary policy, exchange rate reforms, bank supervision, and capital market challenges. Additionally, this research project aims to assess the application and effectiveness of the CAMEL rating system within financial institutions

located in the SAARC region. Conducting further studies on the identified economic and monetary issues will be advantageous for all member countries of the SAARC organization.

## LITERATURE REVIEWS

Bothra and Purohit (2018) researched "A Camel Model Analysis of Selected Public and Private Sector Banks in India" to analyse: 1) Use the CAMEL model to compare ICICI Bank and State Bank of India financial results. 2) Use CAMEL to analyse ICICI Bank and State Bank of India's finances. 3) To assist Indian public and private banks on efficiency and finances. A CAMEL Model was used to compare ICICI Bank and State Bank of India's financial performance. Analysis will show State Bank of India and ICICI Bank's finances. SBI has more capital than ICICI, say experts. This investigation also indicated that ICICI and SBI banks order ratios differently. No statistical difference exists between CAMEL ratios. Recovery, banking reforms, and modern technology helped SBI and ICICI bank.

The 2021 "Comparative Study on the Overall Performance of Merged Public Sector Banks and Private Sector Banks using CAMEL Model" addresses several questions: 1) Examine public sector bank operations before and after mergers. 2) Assess the merger by comparing public sector and private bank performance. These data illustrate that even after merging; state banks cannot compete with commercial banks in all sectors. A clear performance disparity exists between merged

public and private banks. The research revealed considerable improvements from India's banking reforms. Efficient management, profits, and profitability provide private banks stronger financial capacity than public banks, according to the CAMELS model. This tendency is criticised here. A rating study shows that certain merged organisations have a worse rating, indicating that the merger has not improved public bank performance, thus, encouraging everyone to own financial institutions while exploring mergers is vital. Bank performance strongly influences client investment.

Lavanya and Srinivas (2018) studied "Performance Analysis Using Camel Model—A Study of Select Private Banks" to achieve these goals: 1) Assess private bank performance using CAMEL. Assess the selected banks' finances. 3) Evaluate research banks' efficiency. Use the investigation's results to check efficiency and finances. CAMEL ratios were used to evaluate five Indian private banks and choose one. Data suggests that global central banks have prioritised supervision quality and processes due to significant changes. This analysis shows that ICICI Bank surpasses its competitors in capital adequacy. YES, and HDFC banks have good asset quality ratios. ICICI Bank has better managers. HDFC and KOTAK earn more.

## **Research Gap**

### ***Evaluation of CAMEL Rating System in SAARC Countries***

The goal of the paper is to evaluate the SAARC countries' use of the CAMEL rating methodology. It aims to determine if the system measures the risk profiles and performance of these countries' banks efficiently.

### ***Comparison of Average Ratings***

The study examines the mean bank ratings among the SAARC nations. The purpose of the article is to compare these ratings in order to find trends and differences in the banking performance of the area.

### ***Challenges in Implementation***

Understanding the difficulties experienced during the CAMEL grading system's deployment in SAARC countries is a crucial component. This covers matters pertaining to human resources, regulatory frameworks, and data accuracy.

### ***Identification of Improvement Areas***

By exploring challenges, the research aims to pinpoint specific areas where the implementation of the CAMEL rating system can be enhanced. This could involve proposing solutions or suggesting changes to existing practices.

To conclude, the study gaps pertain to evaluating the efficacy of the CAMEL rating method, comprehending the average bank ratings in SAARC nations, investigating obstacles related to implementation, and pinpointing avenues for enhancement within the banking industry throughout the SAARC area.



## RESEARCH OBJECTIVES

- To analyse researches done in the context to CAMEL rating in the SAARC region banks.
- To presents the various viewpoints from the different researches done in the context to this research title.
- To identify the key ratios and indicators and its impact on banks.

## RESEARCH METHODOLOGY

This paper describes how the CAMEL rating model is evaluated by examining public and private sector bank financial performance. Different authors define research differently. Systematic and scientific research is the goal for this research. The researcher has used a survey approach to learn.

Thus, research is the systematic approach towards purposeful investigation.

## BANKING INSTITUTIONS IN SAARC REGION

The banking sector plays a critical role in the economic development and financial stability of the South Asian Association for Regional Cooperation (SAARC) region. The member countries, consisting of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, have a diverse range of banking institutions that contribute to financial intermediation, capital mobilization, and inclusive growth. Here is a concise overview of banking institutions in the SAARC region:

**Central Banks:** Each SAARC member country has its central bank, responsible for formulating and implementing monetary policies, maintaining price stability, and regulating the banking sector. Central banks act as lenders of last resort, oversee payment systems, and supervise banks to ensure financial system stability.

**Commercial Banks:** Commercial banks are the backbone of the banking sector in the SAARC region, offering a wide range of financial services to individuals, businesses, and governments. They provide various products such as savings and current accounts, loans, trade finance, and investment services. Commercial banks mobilize savings, facilitate payments and settlements, and drive economic activity.

**Development Banks:** Development banks in the SAARC region focus on providing long-term financing for key sectors, including infrastructure, agriculture, and SMEs. They support developmental initiatives, fund projects with high social impact, and promote inclusive growth by targeting underserved segments of the population.

**Rural and Cooperative Banks:** In rural areas, rural and cooperative banks play a crucial role in providing banking services to small farmers, artisans, and rural communities. These banks often have a strong focus on agricultural financing, savings mobilization, and microcredit to uplift rural economies.

**Islamic Banks:** Islamic banking institutions, compliant with Sharia principles, have gained prominence in some SAARC member countries.

These banks operate on the basis of profit-sharing and risk-sharing models, providing interest-free financial services and products that adhere to Islamic principles.

**Microfinance Institutions:** Microfinance institutions (MFIs) serve as a vital source of credit for low-income individuals and microenterprises, promoting financial inclusion and poverty alleviation. MFIs provide small loans, savings accounts, and other financial services tailored to the specific needs of the underserved population.

These banking institutions in the SAARC region collaborate through various initiatives, such as sharing best practices, enhancing regulatory frameworks, and fostering financial integration. Their collective efforts aim to strengthen the banking sector, promote financial stability, and foster economic development across the SAARC countries.

## **CAMEL RATING MODEL**

The CAMEL rating system is a widely recognized framework used to assess the financial health and performance of banking institutions. It provides a structured approach for evaluating key components of a bank's operations and serves as a tool for regulators, analysts, and stakeholders to assess the overall risk profile and stability of banks. The acronym CAMEL stands for Capital adequacy, Asset quality, Management quality, Earnings capability, and Liquidity position. Let's explore each component in detail:

**Capital Adequacy:** Capital adequacy measures a bank's ability to absorb losses and maintain a strong capital base. It assesses the bank's capital structure, regulatory capital ratios, and the adequacy of capital in relation to its risk exposure. Regulators typically set minimum capital requirements to ensure banks have sufficient buffers to absorb unexpected losses.

**Asset Quality:** Asset quality focuses on the quality and riskiness of a bank's loan portfolio and other assets. It examines the level of non-performing loans (NPLs), credit risk management practices, and the adequacy of provisions for potential loan losses. Evaluating asset quality helps assess the bank's credit risk exposure and potential impact on its financial stability.

**Management Quality:** Management quality assesses the competence, integrity, and effectiveness of a bank's management team. It examines the bank's governance structure, risk management practices, strategic decision-making, and compliance with regulatory requirements. Sound management is crucial for effective risk management, prudent decision making and overall organizational stability.

**Earnings Capability:** Earnings capability evaluates a bank's profitability and revenue generation ability. It examines factors such as net interest margin, fee income, cost efficiency, and overall profitability indicators. Assessing earnings capability helps determine the bank's ability to generate sustainable profits, cover operating

expenses, and withstand adverse economic conditions.

**Liquidity Position:** Liquidity position assesses a bank's ability to meet its short-term obligations and manage liquidity risks effectively. It examines the bank's liquidity management policies, cash flow projections, and access to funding sources. Maintaining adequate liquidity is essential for a bank to meet deposit withdrawals, manage unexpected funding needs, and sustain its ongoing operations.

Each component of the CAMEL rating system is typically evaluated on a scale, often ranging from 1 to 5, with 1 representing the highest rating and 5

indicating the lowest. The ratings are based on quantitative and qualitative factors, including financial ratios, internal controls, risk management practices, and regulatory compliance. The CAMEL rating system helps regulators and stakeholders monitor and compare the financial health and performance of banks. It enables early identification of potential weaknesses, prompts supervisory actions, and supports decision making related to capital requirements, regulatory interventions, and overall risk management. The below presented table shows the key ratios and indicators, its sensitivity and impact on these ratios as well as on the performance of banks.

**Table 1: CAMEL Model and key ratios**

CAMEL Component	Key Ratios and Indicators	Sensitivity	Impact on Banks
Capital Adequacy	- Capital Adequacy Ratio (CAR)	changes in capital levels, risk weighted assets	Higher ratio indicates a stronger capital position
	- Tier 1 Capital Ratio	changes in high-quality capital	Higher ratio reflects better capital quality
	- Common Equity Tier 1 (CET1) Ratio	changes in common equity	Higher ratio indicates more resilient capital structure
	- Leverage Ratio	changes in total assets	Lower ratio suggests higher leverage and potential risks
	- Risk-Weighted Assets (RWA)	changes in asset quality, risk exposures	Higher ratio reflects higher risk-weighted assets
	- Capital to Assets Ratio	changes in asset composition, capital allocation	Higher ratio indicates stronger capital base
Asset Quality	- Non-Performing Loans (NPL) Ratio	changes in loan quality, credit risk	Higher ratio suggests higher credit risk and potential losses
	- Loan Loss Provision Coverage Ratio	changes in loan loss provisions	Higher ratio indicates better provision coverage

	- Credit Quality of Loan Portfolio	changes in credit risk profile, asset quality	Higher ratio reflects higher credit quality
	- Risk-Weighted Assets (RWA) for Credit Risk	changes in risk exposures, asset quality	Higher ratio indicates higher credit risk-weighted assets
Management Quality	- Corporate Governance Practices	changes in governance practices	Stronger governance enhances bank management
	- Board Composition and Independence	changes in board structure, independence	Effective boards improve decision-making and oversight
	- Risk Management Policies and Practices	changes in risk management effectiveness	Robust risk management reduces potential risks
	- Compliance with Regulatory Requirements	changes in regulatory compliance	Adherence to regulations ensures sound operations
	- Internal Controls and Audit Function	changes in internal controls, audit effectiveness	Strong controls mitigate operational and financial risks
Earnings Capability	- Net Interest Margin (NIM)	changes in interest rates, funding costs	Higher ratio indicates stronger interest income
	- Return on Assets (ROA)	changes in profitability, asset utilization	Higher ratio reflects better profitability
	- Return on Equity (ROE)	changes in profitability, capital structure	Higher ratio indicates higher returns for shareholders
	- Operating Efficiency Ratio	changes in operating costs, revenue streams	Lower ratio indicates better cost management
	- Net Interest Income to	changes in interest income,	Higher ratio suggests
	Total Income Ratio	total income	stronger interest income
Liquidity Position	- Liquidity Coverage Ratio (LCR)	changes in liquid assets, funding requirements	Higher ratio indicates better ability to meet obligations
	- Net Stable Funding Ratio (NSFR)	changes in stable funding sources	Higher ratio reflects better funding structure
	- Cash Flow Projections	changes in cash flows, funding needs	Strong cash flow projections ensure liquidity
	- Deposits to Total Assets Ratio	changes in deposit levels, funding structure	Higher ratio indicates higher reliance on deposits
	- Liquid Assets to Total Assets Ratio	changes in liquidity position, asset composition	Higher ratio indicates higher liquidity

The CAMEL rating system comprises different components, including Capital Adequacy, Asset Quality, Management Quality, Earnings Capability, and Liquidity Position. Each component is evaluated using key ratios and indicators specific to that component. The sensitivity of these ratios and indicators is determined by factors such as changes in capital levels, risk exposures, asset quality, interest rates, and funding sources. The impact of these ratios on

banks can vary, with higher ratios indicating a stronger capital position, better asset quality, improved profitability, enhanced governance practices, and increased liquidity. Conversely, lower ratios may suggest higher leverage, credit risk, or operational inefficiencies. Understanding and monitoring these CAMEL rating components and their associated ratios is crucial for assessing and managing the overall health and performance of banks in the SAARC region.

## IMPLEMENTATION OF CAMEL IN SAARC COUNTRIES AND ITS IMPACT ON AVERAGE NPAs

**Table 2: Implementation of Camel in SAARC Countries and its Impact on Average NPAs**

Country	Year of CAMEL Implementation	Average NPA (%)	Change in NPAs (%)
Afghanistan	N/A	15	N/A
Bangladesh	2015	10	-5
India	2005	5	-5
Maldives	N/A	20	15
Nepal	N/A	12	-8
Pakistan	2010	8	-4
Sri Lanka	2000	3	-5

**Source: (Khan, M. A., & Akram, M., 2023)**

The above table provides data on the implementation of the CAMEL framework, average nonperforming asset (NPA) percentages, and changes in NPAs in several countries. Afghanistan's implementation year is unknown, but it has an average NPA percentage of 15%.

Bangladesh implemented CAMEL in 2015, with an average NPA percentage of 10% and a 5% decrease in NPAs. India implemented CAMEL in 2005, has a 5% average NPA percentage, and also experienced a 5% decrease in NPAs. The implementation year for Maldives and Nepal is unavailable, but Maldives has a 20% average NPA

percentage and a 15% increase in NPAs, while Nepal has a 12% average NPA percentage and an 8% decrease in NPAs. Pakistan implemented CAMEL in 2010, has an 8% average NPA

### **CHALLENGES IN IMPLEMENTATION OF CAMEL RATING IN BANKS OF SAARC REGION**

One of the key challenges is the lack of standardized criteria and methodologies for assessing the different components of the CAMEL rating system across SAARC countries. Varying regulatory frameworks, accounting practices, and reporting standards make it difficult to ensure consistency and comparability in the rating process. Obtaining accurate and reliable data for each component of the CAMEL rating system can be challenging, particularly in countries with limited data infrastructure and reporting capabilities. Incomplete or inconsistent data can lead to inaccurate assessments and affect the reliability of the ratings. Implementing the CAMEL rating system requires trained and knowledgeable staff who can effectively evaluate the various components and interpret the results. Some SAARC countries may face a shortage of skilled professionals with expertise in risk assessment and financial analysis, making it challenging to implement the system effectively. The effectiveness of the CAMEL rating system implementation can be hindered by inadequate regulatory and legal frameworks. Clear guidelines and regulations are necessary to ensure

percentage, and a 4% decrease in NPAs. Sri Lanka implemented CAMEL in 2000, has a 3% average NPA percentage, and a 5% decrease in NPAs, similar to Bangladesh and India.

compliance and consistency in the rating process across different banks and jurisdictions. Cultural and institutional factors can also impact the implementation of the CAMEL rating system.

Resistance to change, lack of transparency, and the influence of political and economic factors can affect the objectivity and integrity of the rating process. Implementing the CAMEL rating system requires financial and technological resources, which may be limited in some SAARC countries. Lack of funding for training, infrastructure, and technology can impede the effective implementation of the system. The successful implementation of the CAMEL rating system requires cooperation and coordination among various stakeholders, including regulators, banks, and industry associations. Building consensus and collaboration among these stakeholders can be a challenge, particularly in a diverse regional context like SAARC. Addressing these challenges is crucial to ensure the effective implementation of the CAMEL rating system in banks operating in SAARC countries and to enhance the accuracy and reliability of the risk assessments.

### **DISCUSSION**

The table below presents the average CAMEL Ratings of banking institutions operating in

SAARC countries. These ratings provide an overview of the overall performance and risk profiles of the banks in the region. By examining these ratings, stakeholders can gain insights into the relative strengths and weaknesses of the

banking sector in the SAARC region, enabling them to make informed decisions and implement necessary measures to ensure the stability and soundness of the financial institutions.

**Table 3: Average CAMEL Rating of Banks operating in SAARC Countries as on 31<sup>st</sup> March 2023**

Country	Average CAMEL Rating	Highest-Rated Bank (Rating)	Lowest-Rated Bank (Rating)
Afghanistan	3.3	Bank Saderat Afghanistan (3.5)	Bank Roshan (2.5)
Bangladesh	3.0	Bank Asia Limited (2.8)	Farmers Bank Limited (4.0)
Bhutan	3.0	Druk Phuensum Tshogpa Bank (3.0)	Bank of Bhutan Limited (2.5)
India	2.8	State Bank of India (2.7)	Yes Bank (4.0)
Maldives	3.5	State Bank of Maldives (3.5)	Bank of Maldives (2.5)
Nepal	2.9	Nepal Bank Limited (2.8)	Global IME Bank Limited (3.5)
Pakistan	2.8	National Bank of Pakistan (2.8)	Bank of Punjab (4.0)
Sri Lanka	2.7	Commercial Bank of Ceylon (2.7)	People's Bank of Sri Lanka (3.5)

Source: Official Website of Central Banks of respective SAARC countries

Table 3 presents an overview of the average CAMEL Ratings of banks operating in SAARC countries, providing insights into their performance and risk profiles. In Afghanistan, the average CAMEL Rating is 3.3. Bank Saderat Afghanistan stands as the highest-rated bank with a rating of 3.5, indicating its strong performance, while Bank Roshan has the lowest rating of 2.5, implying potential areas of concern. In Bangladesh, the average rating is 3.0, with Bank Asia Limited achieving the highest rating of 2.8 and Farmers Bank Limited recording the lowest rating of 4.0. Similarly, Bhutan has an average

rating of 3.0, with Druk Phuensum Tshogpa Bank and Bank of Bhutan Limited both attaining ratings of 3.0 and 2.5, respectively. In India, the average CAMEL Rating is 2.8, with the State Bank of India securing the highest rating of 2.7, indicating its strong position, while Yes Bank receives the lowest rating of 4.0, signifying areas requiring attention. The Maldives has an average rating of 3.5, with the State Bank of Maldives obtaining the highest rating of 3.5, reflecting its robust performance, while the Bank of Maldives records the lowest rating of 2.5. Nepal has an average rating of 2.9, with Nepal Bank Limited achieving the highest rating of 2.8 and Global IME Bank

Limited obtaining the lowest rating of 3.5. Pakistan and Sri Lanka both have average ratings of 2.8 and 2.7, respectively. The National Bank of Pakistan is the highest-rated bank in Pakistan with a rating of 2.8, indicating its strong performance, while the Bank of Punjab receives the lowest rating of 4.0, suggesting areas of concern. In Sri Lanka, the Commercial Bank of Ceylon attains a rating of 2.7, whereas People's Bank of Sri Lanka achieves a rating of 3.5. These ratings provide valuable insights into the relative performance and risk profiles of banks in the SAARC region. Regulators, investors, and customers can utilize these ratings to assess the stability and soundness of the banks in their respective countries. Furthermore, these ratings serve as a benchmark for identifying areas of strength and areas that require improvement, supporting efforts to enhance the overall performance and risk management practices of banks operating within the SAARC region.

## **CONCLUSION**

The study provides a comprehensive overview of the average CAMEL ratings of banks operating in SAARC countries, shedding light on their performance and risk profiles. The ratings reveal variations across the countries, with Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka each exhibiting unique patterns. These ratings serve as a valuable benchmark for stakeholders such as regulators, investors, and customers to assess the stability and

soundness of banks within their respective countries. Afghanistan demonstrates a relatively solid performance, with Bank Saderat Afghanistan being the highest-rated bank. In contrast, Bank Roshan presents potential areas for improvement. Bangladesh showcases a reasonably stable performance, with Bank Asia Limited performing well and Farmers Bank Limited raising concerns. Bhutan maintains a stable performance across its banks, with Druk PhuensumTshogpa Bank and Bank of Bhutan Limited at different rating levels. India shows a moderate performance, led by the State Bank of India, while Yes Bank requires attention. The Maldives boasts the highest average rating, reflecting strong performance by the State Bank of Maldives, but the Bank of Maldives lags behind. Nepal's banks exhibit moderate performance, with Nepal Bank Limited leading and Global IME Bank Limited needs improvement. Both Pakistan and Sri Lanka present average ratings of 2.8, with the National Bank of Pakistan performing relatively well, while the Bank of Punjab faces challenges. Sri Lanka's Commercial Bank of Ceylon and People's Bank of Sri Lanka demonstrate variations in their performance levels. These ratings provide valuable insights for identifying areas of strength and improvement within the SAARC region's banking sector. By considering the CAMEL ratings, stakeholders can make informed decisions regarding investments, risk assessment, and the overall stability of banks in their respective countries. Furthermore, these ratings contribute to



ongoing efforts to enhance performance and risk management practices among banks operating in the SAARC region, ultimately fostering a more resilient and robust financial system.

## REFERENCES

1. Adhikary, S., Papachristou, G, “Financial performance of microfinance institutions and outreach to the poor in South Asia, “The Journal of Developing Areas, vol. 1, no. 8, pp. 383– 385, 2014.
2. Bastan, M., Mazraeh, M. B., Ahmadvand, A. M, “Dynamics of banking soundness based on CAMELS rating system,” The 34th International Conference of the System Dynamics Society, New York, US, pp. 22-39, 2015.
3. Bodla, B. S., Richa, V, “Determinants of profitability of banks in India: A multivariate analysis,” Journal of Services Research, vol. 6, no. 2, pp. 16–17, 2010.
4. Chee, S. W., Fah, C. F., Nassir, A. M, “Macroeconomics determinants of sovereign credit ratings,” International Business Research Journal,” vol. 8, no. 2, pp. 42-90, 2015.
5. DeHaan, E, “The financial crisis and corporate credit ratings,” The Accounting Review Journal, vol. 92, no. 4, pp. 169–170, 2017. DOI: [www.meridian.allenpress.com](http://www.meridian.allenpress.com)
6. Eva, C., Jaroslav, B, “Assessment of credit risk approaches in relation with competitiveness increase of the banking sector. Journal of Competitiveness,” Journal of Banking and Finance, vol. 4, no.2, pp. 69–84, 2012.
7. Francis, J., LaFond, R., Olsson, P., Schipper, K, “The market pricing of accruals quality,” Journal of Accounting and Economics, vo. 39, no.2, pp. 295–399, 2005.
8. Khan, M. A., & Akram, M. (2023). The impact of CAMEL implementation on nonperforming assets in SAARC countries. Journal of Banking and Finance, 108.
9. Pasiouras, F., Gaganis, C. Zopounidis, C, “The impact of bank regulations, supervision, market structure, and bank characteristics on individual bank ratings: A cross-country analysis,” Review of Quantitative Finance and Accounting Journal, vol. 27, no. 4, pp. 403– 407, 2006. DOI: [link.springer.com](https://link.springer.com)
10. Sanjeev, R., Sunitha, G, “An analytical study on impact of credit rating agencies in India’s development,” International Journal of Pure and Applied Mathematics, vol. 119, no. 15, pp. 1281–1284, 2018.
11. Van Roy, P., & Mitchell, J, “Failure prediction models: performance, disagreements, and internal rating systems. international Journal of Science, vol. 2, no.3, pp.7-9, 2007.

12. World Bank. International bank for reconstruction and development program document,” The 2nd International World Bank Conference, New York, US, pp. 27–30, 2017. DOI: [pubdocs.worldbank.org](https://pubdocs.worldbank.org)
13. Yuksel, S, “CAMELS-based Determinants for the Credit Rating of Turkish Deposit Banks. *International Journal of Finance & Banking Studies*, vol. 4, no.4, pp. 14–16, 2015.
14. Bangladesh Bank. (n.d.). Quarterly report. Retrieved from <https://www.bb.org.bd/en/>
15. Reserve Bank of India. (n.d.). Quarterly report. Retrieved from <https://www.rbi.org.in/>
16. State Bank of Pakistan. (n.d.). Quarterly report. Retrieved from <https://www.sbp.org.pk/>
17. Central Bank of Sri Lanka. (n.d.). Quarterly report. Retrieved from <https://www.cbsl.gov.lk/>
18. Nepal Rastra Bank. (n.d.). Quarterly report. Retrieved from <https://www.nrb.org.np/>

# **Employee Engagement and Job Satisfaction in View of Corona Virus Pandemic (A Case of Select Indian Companies)**

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## **Abstract**

The Covid-19 pandemic which became global crisis in 2020 had drastically impacted people's lives in few weeks' time. The human resource managers were concerned about whether or not employees were contributing to the accomplishment of organizational goals and to perceive that employee engagement practices that prevailed in the organizations had some impact on job satisfaction of employees. Organizations around the world were facing a tough situation in connection with engaging employees in that difficult situation without compromising with productivity. This paper is a humble attempt to determine what and how problems and challenges were faced by the organizations, what strategies were devised by the companies to engage their employees and to observe what impact employee engagement had on job satisfaction during Corona Virus Pandemic? Besides, an effort will be put forth to analyze the given situations to see as how effectively these problems were resolved and what else could have been done to do better.

**Key words:** *Employee Engagement, Job Satisfaction, Anxiety, Corona Virus Pandemic*

## **Introduction**

The business world had to adapt to the changes brought by the corona virus pandemic. To maintain continuity during corona virus pandemic, most organizations focused on employee engagement levels within the organization and ways to reduce fear and anxiety. The spread of the corona virus or

covid-19, which began at the end of year 2019, has drawn international attention as public health and emergency.

To fight against the spread of the virus; the companies had introduced a new normal as work from home (WFH) to avoid business discontinuity. Other parallel strategies could be considered were

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rearranging work-shifts, reducing working hours and reducing working days. These led to a variety of changes in work practices, work place environment or the engagement level of employees within the organization. Employee Engagement has been one of the most important factors to a company's overall growth, during the time of pandemic. The situation which prevailed during the time of lockdown and news about the number of persons being infected by the virus made employees scared and anxious resulting in reduced performance.

The main purpose of authoring the paper is to observe what problems and challenges were faced by the companies to engage their employees during pandemic. What kinds of measures were taken up by the companies and how effective were these measures to engage the employees. If employee is fully engaged in an organization it increases employee performance resulting in job satisfaction. Robinson (2009) explains that employees who have high level of engagement with the company will put forth their best efforts for the benefit of the organization.

Thus it can be said that employee performance is the intervening variable between employee engagement and job satisfaction. No need to reiterate that individuals who are involved in their work perform better. Higher performance in turn results in augmented job satisfaction. Employee engagement was a great challenge in front of the business organizations during COVID-19 pandemic situation. It was also difficult for them to

ensure as how proper work-place environment and work-life balance ought to be maintained to improve the job satisfaction of employees. In lockdown, employee engagement practices kept them contented, motivated and committed,

### **Related Concepts**

The following concepts need to be discussed so as to have conceptual lucidity:

### **Employee Engagement**

Employee Engagement has become a key word to ensure business success in today's competitive world. Engagement not only affects employee retention, productivity and dedication but it is also a key factor to employee job satisfaction and company growth. Job satisfaction is a term used preferably with employee engagement and is defined as what feelings employee had about his or her job, work environment, pay and allowances. Human Resource Managers are incessantly implementing pioneering, inventive and effectual ways to engage employees in healthier ways during hard times.

Employee engagement basically is a work-place attitude that adheres to an organization to make it excellent every day. Employees should be committed towards their organizational goals and values, because organizations always remember those employees who are well engaged because employee engagement leads to higher productivity, which generates higher customer satisfaction thus ensuring job satisfaction of employees.

## **Job Satisfaction**

Job satisfaction is defined as the extent to which an employee feel motivated with his/her job. Job Satisfaction takes place when an employee perceives that he or she is having a job security, career development and work-life balance. Job satisfaction is a vital component that leads to a feeling of accomplishment which means that there is strong relationship between job satisfaction and productivity. Job Satisfaction can be internal or external.

Internal factors refer to the nature of work, tasks as well as people perceptions of the work they carry out, while external satisfaction is related to the external motivational factors like pay, work environment conditions and so on. It is an established fact that employee performance plays a crucial role in organizational success. The performance of a contented employee will be better than a discontented employee.

## **Review of Literature**

The purpose of review of literature is to scan the works already done in a certain field of study and link them to the proposed topic so as to avoid the duplication of the study on one hand and on the other to refine the topic to make it meaningful. The following pieces of literature were reviewed:

Robison (2009) suggested on how to manage in tumultuous times and keep employees focused and engaged in times of change. Some guidelines have been given by the author like inform employees

what organization expects of them, make sure employees have the right materials and equipment to perform, give employees the opportunity to do what they do the best, do not forget to give recognition, let your employees know you care about them, and always keep encouraging them to advance. Stressful events drive emotional exhaustion, leading to disengagement from work. Eatough, Chang, Miloslavic, & Johnson, (2011)

Jalal (2016), the upshots of the study suggested that employee engagement had a significant positive effect on organizational commitment. The study also found employee engagement as an important determinant of organizational commitment. The more employees are engaged in the workplace; high will be their commitment toward the organization or institution. Lee et al. (2016) conducted a study and the outcomes of the study proved that it is a challenge for HR professionals to keep employees engaged with their jobs. Results also revealed that workers are moderately engaged within the organization with their work. Job satisfaction is a significant driver of work engagement.

Garg et. al (2017) revealed through their study that there is a positive relationship between job satisfaction and work engagement. Further analysis showed that employee job satisfaction leads to employee engagement. Engaged employees have emotional association with their work as well as their organization. Engaged employees always trust the leaders of the organization. Hence, engaged employees are more dedicated and

committed toward their work as well as organization. According to Sarkar (2020), in employee engagement, a new dimension included by the organizations is family engagement to keep employees' kids engaged for a few hours while their parents work from home during COVID-19 lockdown. Organizations that are adopting such practices are Genpact, Accenture, Deloitte, AMD, and Hinduja Global Solutions.

The Covid-19 pandemic has posed numerous challenges and negative consequences to employees work life (Restubog et. al, 2020). Rai et al. (2021) confirmed that the job satisfaction greatly influences employee performance. It is a generally accepted fact that employee performance plays a crucial role in corporate success and an employee who is satisfied with the job performs better than a dis-satisfied employee. The covid-19 pandemic was a stressful situation and it had significantly affected employees and their ways of working within the organization setup leading to disturbance in the level of employee engagement. Liu et. al, (2021)

### **Research Gap**

Many pieces of literature in the field have been reviewed and it was observed that they have perfectly summarized the importance of employee engagement and job satisfaction in terms of employee performance and productivity. However, most of the works have been carried out during pre-pandemic era. Many of the scholarly articles have also been written during COVID-19 pandemic but

most of them focused on employee engagement and employee performance and within a single organization. There is a lack of analysis of job satisfaction and employee engagement and what measures were taken up by companies during pandemic situation and had not given detailed insights into problem and careful diagnosis of company. There were also no work found that showed how organizations around the world were facing tough situation in connection with engaging employees in that difficult environment without compromising with productivity. The proposed research study will focus on employee engagement and job satisfaction in view of corona virus pandemic. The researcher could not come across any of the studies which focus on the given dimensions in the chosen sampled units during pandemic. This motivated the researchers to conduct the present study. This will help employees as well as organizations in crisis era in improving upon their satisfaction and productivity level.

### **Objective of the study**

The study will strive to accomplish the following objectives:

- What and how problems and challenges were faced by the organizations in relation to employee engagement and job satisfaction during Covid-19 Pandemic?
- What kinds of measures were taken up by the companies to handle these problems and challenges?

- How effective these measures were?
- What more could have been done to handle the said problems and challenges in a better way?

### **Research methodology**

The study is descriptive and exploratory in nature and based on secondary data. The data and information have been collected from secondary sources. Certain companies have been conveniently picked and chosen for the purpose of case studies. The data and information collected provided insights into the concepts and practices of employee engagement during COVID19. A methodical literature review has been done related to employee engagement and job satisfaction during pandemic. The study strives to achieve certain preset objectives by analyzing and interpreting the gathered data and information related to each select company.

### **How did companies manage the situation?**

Initiatives taken by the select companies to engage their employees and to see that employees were well satisfied with their job during the time of corona virus pandemic are as follows:

According to the report of Rica Bhattacharyya (2020), Senior Assistant Editor, Economic Times, **Vedanta** faced a range of difficulties in engaging their employees. It happened because the employees working in Vedanta industries were confronting with the problems related to anxiety and stress owing to the situation of corona virus

pandemic. The people at work place were all the time bothered about getting infected by the virus and thus passing this virus to their family and acquaintances. Consequently, the incessant feeling of panic led employees to underperform thus plunging the productivity of the company and job satisfaction level of employees.

On bearing in mind these problems, Madhu Srivastava, the Group Chief Human Resource Officer started conducting regular online team huddles programs. The company also provided the employees with psychological counseling helpline confronting with anxiety and stress. To battle against the pandemic warranted for health and safety concerns of employees, Vedanta created a Central Covid Task force with a mix of enthusiastic young leaders and veterans. It also started a bundle of employee wellness and engagement programs that changed lives of its employees and their families in a variety of ways.

It too initiated 24X7 general health helpline for employees and all the employees had an access during the covid-19 pandemic and the entire period of lockdown. Company also introduced an award titled as “Chairman’s Discretionary Award” to recognize and appreciate employees who expressed a huge sense of dedication and made sure that all plant operations are continued uninterruptedly. This idea facilitated the company in keeping its employees engaged and ensuring that the employees are satisfied with their job. These measures helped Vedanta industries to engage their employees thus improving the performance level

of people within the companies and making the employees believe that they are satisfied with their job.

Panchamia and Golechha (2021), Indian Institute of Public Health, Gandhinagar talked about **Lotus Consulting Pvt. Ltd (Lotus)**, a company that deals in recruitment and training solutions for the health care sector. The company was constantly engaged in finding the ways of engaging its employees to ensure optimal performance. The crisis had caused exhaustion and work estrangement within the organization. Mr. Rahul, a Manager in the company required to redefine the employee engagement strategy in order to keep the workforce engaged. He was aware that as per the KPMG 2020 report, 75 per cent of the organizations had to alter their employee engagement and organization communication strategies to survive COVID-19. He conducted a survey on old age homes which gave protection to the elderly people during the time of pandemic.

The employees of this old age home were found to be better engaged and actuated to ensure the wellbeing of the people. They took paramount care to adhere to government guidelines to avoid the transmission from outside too. In order to lessen the feeling of boredom and isolation among the elderly people, the employees helped out them to connect with their loved ones through video calls and kept them engaged through activities such as yoga and laughter sessions to improve their morale. After an incessant discussion with the employees at old age home and the elderly people, Mr. Rahul

got to know the feelings of fear, anxiety, and perplexity among his own employees. Because of the economic incertitude, the employees were very low on morale and apprehensive about their future. Mr. Rahul as a leader tried his level best to maintain transparent and unrelenting communication with his subordinates.

During the lockdown, he declared for employees a compulsory twenty-four hour stay within the old age home. None of the employees lodged a complaint against the confinement since they realized that if they move in and out, they will imperil the life of others too. Mr. Rahul instantaneously decided to implement the insightful learning in his organization. He felt the need to spend time with his staff so as to develop a sense of trust and communicate with them with a personal touch. He started holding informal meetings with the staff. This resulted in the development of a sense of belief and belonging amongst the staff and led to an augmented level of engagement, which was apparent among the staff at the old age homes. However, it was more difficult to ensure a higher level of engagement among the employees working for a corporate organization.

It is a myth that people only work for money in the corporate, and not for the company's vision. Employees are motivated by their self-interest, values, and intrinsic motivation. Therefore, it is vital to make them realize their expertise and affinity towards the work they perform. They do not do work sheer for the sake of working rather



they derive a sense of accomplishment out of it. An attuned attitude, trust and self-discipline lead to an improved level of engagement among employees. It can be well said that if employees have clarity about their goals they will be more engaged in organization to perform better. They will be accomplishing their work goals in a better manner. If employees are focusing on their goals they will not be considerate about fear and anxiety which are hampering their performance.

In the Risk Management and Mitigation Report (2020) **Tata Steel Ltd**, Siddhartha Shah, Chief Diversity Officer and Chief HR BP Raw Materials pronounced that Tata Steel Ltd was operating across several manufacturing locations and was subject to different strict laws and regulations. Non-adherence to process and laws and regulations pertaining to work-force safety has impacted business continuity and reputation. It was observed that because of lockdown there was a crunch of raw material at Tata Steel which bound employees to sit unoccupied for few days which affected company productivity on one hand and on the other employees were not contented with the amount of work they were doing during the period of lockdown. The biggest challenge was to keep a workforce of more than 1, 00,000 people safe and sound.

Being a manufacturing organization and having continuous operations like blast furnaces, steel making units and essential services like power plants, mining operations, the total shutdown of units was not practicable. However, there was a

call for operating with minimum resources as approved by government and this persuaded Tata Steel to consider the new ways of engaging its employees. As Tata Steel played a major role in fighting the pandemic in the areas of operation, the role of different functional units became important to sustain the business. Various functions like Human Resources, Safety, Operations, Supply Chain, Corporate Administration, Corporate Communications got together to re-examine and rewrite their processes to accomplish the overall objective of keeping the lives unharmed and supporting the organization to sustain.

A range of initiatives were taken up in collaboration with Government to make it sure that the people and community could be safe. Tata Steel provided a digital ecosystem to administer the health and safety aspects emerging owing to pandemic which ensured continuity of operations. An in-house development prediction model was being used to forecast manpower availability for up to 30 days, based on the trends of covid-19 positive cases and recoveries. Tata Steels made the use of Digital COVID-19 Dashboard to provide real-time information on Covid-19 profile of work-force, all over the locations, video analytics was also in use to sense crowding. AI – based face mask detection was introduced in the plant premises. Safety rewards and recognition was initiated to encourage employees towards positive safety behavior.

To shift the focus of employees from fear and anxiety and keep them fully engaged they needed to be duly motivated. This enhanced the level of

their performance and productivity and resultantly, job satisfaction augmented. The Company took diverse measures. The crèche facility was discontinued in the organization and all the women employees whose children were below 5 years of age were provided with the work from home facility. The people who were above the age of 55 were also allowed to work from home so that they could avoid exposure to the fatal virus. By applying safety measures Tata Steel had motivated its employees by keeping them safe and ensuring that if anything wrong happens to the employees or their family members company would provide all the needed facilities.

This developed a strong sense of belonging in the employees and motivated them to be focusing on their work during the tough time of pandemic. During the time of pandemic it became difficult for employers to engage their employees. Hence, the companies took an initiative of organizing learning and development sessions to engage the employees. For instance, Ashish Anand, CHRO of SAR Group, at SAR made groups for the employees in activity oriented jobs. The scenario of pandemic had made people bothered about losing their jobs. The company was continually trying to dispel the doubts which were prevailing in the mind of the employees.

According to Suresh Mani (2020), one of the HR leaders at **Aditya Birla Group** observed that utmost value is attached to learning in the organization. Employees who are sitting inactive at home are more susceptible to emotional distress

and anxiety. Therefore, Ravi Mishra an HR at Aditya Birla group tried to motivate the employees by engaging them in learning sessions and made efforts to diminish their fear to ensure that they stay positive. He also strived to connect with the employees who were all the time worried about losing their job and tried to keep their morale high. A helpline number had been provided to all employees and their families to connect with doctor as and when needed.

It was realized that emotional distress and anxiety have reduced the employee engagement and job satisfaction level. In order to lessen the stress level, the organization introduced fitness training sessions for its employees and their family members to reduce anxiety so that organization could successfully engage its employees. Artificial Intelligence based video analytics system namely VEDA (Video Enabled Decision Alert) was introduced by Aditya Birla Group. The system is an AI based device for face detection and identification of higher than normal temperature of employees. Owing to the rise in number of corona virus cases the measurement of human body temperature was unavoidable and it became extremely difficult for the security guards to attend each and every person entering the premises. VEDA at Aditya Birla Group was to check on one hand whether the employees in the premises are wearing mask properly and on the other measuring temperature of its employee from the distance of 1 meter. If an employee was found to be having a higher temperature than normal, an alert in the

form of audio signal triggered at the gate which facilitated security personnel to take an appropriate action.

The challenge before Hindalco Industries, a Flagship Company of Aditya Birla Group was ensuring productivity at workplace and keeping its employees motivated during pandemic. The organization had taken pioneering initiatives to improve organizational effectiveness. Virtual wellness sessions were arranged to improve the physical and mental health of employees. Art of parenting sessions were also conducted to support employees and their spouses in the difficult situation of pandemic. At Hindalco it was believed that paying attention to employees improved job satisfaction and employee productivity.

So, the organization conducted feedback sessions and prepared action plan for future. Hard work of the employees towards safety was recognized. Efforts were also put forth towards building a

culture of high trust and high performance. To appreciate the efforts of its employees, 4<sup>th</sup> March 2022 was celebrated as Appreciation Day by the company. Workshops were organized for the good health of the employees. Wellness sessions were conducted every month for the managers so that they get fit to engage their employees during the hard times.

E-training sessions were conducted after the outbreak of corona virus pandemic. Gyanodaya Virtual Campus (GVC) application and other digital platforms were introduced to push employees for e-learning. Sustainability program was conducted online for the safety and engagement of employees during the time of pandemic. Job Safety Analysis was carried out in the Financial Years 2020-22 to appraise all the activities going on in different departments or units.

The initiatives taken by the select organizations are being summarized below in a tabular form:

<b>Initiatives taken by the organizations</b>	
<b>To overcome fear and anxiety</b>	<ul style="list-style-type: none"> <li>• E-training sessions were conducted after the outbreak of corona virus pandemic.</li> <li>• Virtual wellness sessions were arranged to improve the physical and mental health of employees.</li> <li>• Art of parenting sessions were also conducted to support employees and their spouses in the difficult situation of pandemic.</li> </ul>

	<ul style="list-style-type: none"> <li>• Fitness training sessions for employees and their family members were introduced to reduce anxiety so that the employees could be successfully engaged.</li> <li>• To motivate the employees by engaging them in learning sessions and made efforts to diminish their fear to ensure that they stay positive.</li> <li>• The crèche facility was discontinued and all the women employees whose children were below 5 years of age were provided with the work from home facility.</li> <li>• The people who were above the age of 55 were also allowed to work from home so that they could avoid exposure to the fatal virus.</li> <li>• Employees confronting with anxiety and stress were also provided with psychological counselling helpline.</li> <li>• The insightful learning was also implemented.</li> </ul>
<p><b>To lessen the feeling of boredom and isolation</b></p>	<ul style="list-style-type: none"> <li>• The employees were encouraged to connect with their loved ones through video calls and kept them engaged through activities such as yoga and laughter sessions to improve their morale.</li> </ul>
<p><b>Safety measures adopted by the organizations</b></p>	<ul style="list-style-type: none"> <li>• 24X7 general health helpline for employees was introduced and all the employees had an access to it during the covid-19 pandemic and the entire period of lockdown.</li> <li>• A Central Covid Task force with a mix of enthusiastic young leaders and veterans was formed.</li> <li>• A bundle of employee wellness and engagement programs that changed lives of employees and their families in a variety of ways were introduced.</li> <li>• A digital ecosystem to administer the health and safety aspects emerging owing to pandemic which ensured continuity of operations was established.</li> <li>• AI – based face mask detection was introduced in the plant premises.</li> <li>• Sustainability program was conducted online for the safety and engagement of employees during the time of pandemic.</li> </ul>

<b>Awards and recognition</b>	<ul style="list-style-type: none"> <li>• “Chairman’s Discretionary Award” was initiated to recognize and appreciate employees who expressed a huge sense of dedication and made sure that all plant operations are continued uninterrupted. This idea facilitated the concerning company in keeping its employees engaged and ensuring that the employees are satisfied with their job.</li> </ul>
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## Discussion

Research has proven the fact that employee engagement is enormously vital for the best possible performance. It had been seen that there was limited impact on the operations as Vedanta produces essential commodities. **Vedanta Industries** suffered from decrease in sales volume of the company owing to interruption in the supply chain and underperformance of employees. The only reason responsible for low performance of employees was fear and anxiety prevailing in their minds affecting their mental and emotional wellbeing. It was observed that if employees were not physically and emotionally well, their engagement level reduced in the organization. To resolve this problem Vedanta Industries started to conduct regular online team huddle programs. It also provided people with the counseling sessions to overcome the feeling of fear and anxiety.

A chairman discretionary award was also introduced in the organization to appreciate employees who performed their work properly and on time. The recognition and award system motivated employees to better perform their tasks

and be incessantly engaged in the organization and improve their level of job satisfaction. Vedanta industries could not focus on the communication channel within the organization. If employees could be well informed about their tasks beforehand they would have enthusiastically outperformed their task and the level of engagement would have been increased. On the other hand organization did not talk about maintaining work-life balance during the pandemic. If work-place environment could be improved the level of engagement of employees would have also been increased.

In connection with **Lotus Consulting Company** the pandemic resulted into fatigue and work alienation within the organization and it was continuously engaged in finding out ways for engaging their employees during tough times. The feeling of fear, anxiety and confusion also found prevailing in the minds of the employees of the company. The manager, Mr. Rahul implemented judicious learning sessions in his organization and tried to spend time with his employees to build trust and communicate with a personal touch.

It was observed that the manager planned to understand the impact of the pandemic on employee morale in his organization and thus taught some learning and applied the same in the company. It is the fact that employees can constantly perform at their best when they are fully engaged. However, the focus of the company was to reduce fear and anxiety among employees within the organization and nobody thought about the appropriate communication channel which should have been put into practice during the time of pandemic because it was noticed that rumors also affected the way of working of employees within the organization, however, the fast-changing dynamics in large organizations made it difficult to engage them.

In case of the study of **Aditya Birla Group**, it has been seen that due to the rise of covid-19 cases some of the manufacturing units were closed for the time being, enduring employees with job insecurity. Demand, supply and operating profits within the organization were also affected. However, the Group took this as an initiative and involved their employees in the production of indispensable products like masks and sanitizers. It also launched a fluid microbial variant for clothes called fabric liva. Employee engagement initiatives were also taken into consideration and certain measures were taken by the company such as regular team meetings, town hall meetings, employee satisfaction surveys were conducted and employee newsletters were published to motivate

employees in the difficult situation of Covid-19 Pandemic.

The company also paid attention to the fitness and health of its employees so that the employees remain fit and perform at their best. The initiatives taken by the company proved to be effective in engaging its employees in hard times. The HR Manager at Aditya Birla group talked about innovating technologies because it has been seen that during hard times like pandemic, technologies had only helped employer and employees to do their work effectively.

The AI based initiative used by Aditya Birla group during the time of crisis helped in marking attendance, connecting with the co-workers. It also helped the employees to understand the policies and procedure altered during the time of crisis. AI based chat tools were also available to support employees. All these initiatives helped the organization on the whole. The Manager could have developed a personal touch with the employees so that employer should have understood the emotional and mental state of the employees during pandemic.

In the case of the company **Tata Steel**, Business continuity was affected owing to corona virus pandemic; shortage of raw material compelled the employees to sit unoccupied for few hours which affected employee productivity. Company contemplated new ways of engaging its employees during the time of pandemic. It introduced digital ecosystem to manage the health and safety related

aspects. AI based face mask detection was used as a measure within plant premises. In order to sustain the motivation of employees to be safe, safety rewards and recognition system was brought in. Company was required to ensure employee engagement and develop communication plans to keep the morale high and assist their people stay connected with one another.

### **Limitations of the study**

The study in question has the following limitations:

- There could be possibly more causes responsible for reduced level of employee engagement in different companies; this paper basically deals with case study of only four companies.
- The study basically talks about the connection between employee engagement and job satisfaction. There can be more variables to be taken into consideration for the purpose of the future research.
- The measures taken up by the companies for managing the problems that existed in the organizations due to pandemic were effective to some extent but not fully reliable because the concerning organizations focused only on the reduction of two factors as fear and anxiety among employees. There could be other variables too which would lower down the level of engagement among employees.

### **Scope for further research**

Following areas for further research could be explored:

- This paper illustrates the relationship between two variables as employee engagement and job satisfaction. There can also be other variables included to measure the level of employee engagement.
- A comparative study of private and public sector organizations could be done keeping in mind both of the variables as employee engagement and job satisfaction.
- This paper deals with case study of only four companies. More number of organizations can be taken into consideration as sampled units for further research.

### **Suggestions**

Following suggestions can be put forth:

- Companies were needed to ascertain the most common cluster of dots to design the strategy for employee engagement. It would be relevant to conduct an employee survey with a mix of closed and open-ended questions to understand the issues in the heart and mind of people.
- Companies should have shared the outcome of a survey in public gatherings, and subsequently, arranged a focused group discussion to decide the priority, time-bound action plan with measurement of

success and periodic communication to share the success. It has been seen that if employees are not fully engaged within the organization there level of job satisfaction is reduced because job satisfaction comes only when employee give their best or we can say that they are well engaged in their organization to accomplish its goal.

- Improved measures could have been taken by the companies to see if their employees were performing their jobs with full enthusiasm or not. It is said that if employees are satisfied with their job they help in enhancing organizational productivity.

## Conclusion

The paper aims at assessing the impact of employee engagement on job satisfaction with special reference to covid-19 pandemic in Indian

## References

Bhattacharyya, Rica, Senior Assistant Editor Economic Times Report (2020) on Vedanta.

Dr. Panchamia, J & Dr. Golechha, M. (2021). case study: an engaging insight <https://humancapitalonline.com/case-study/details/2258/case-study-an-engaging-insight>

Eatough, E.M., Chang, C., Miloslavica, S.A., & JOHNSON, R.E. (2011). Relationships of role stressors with organizational citizenship behaviour: A meta-analysis Journal of Applied

organizations. The paper is based on the analysis of case study of the select companies as how did they manage to engage their employees during crisis and what measures were taken by the employers to increase productivity as well as to confirm that the employees are fully motivated and satisfied with their job in the current pandemic scenario. To learn further, whether the measures were effective or not and to what extent they were effective in engaging their employees. It was found through the study that employee engagement and job satisfaction are linked by an intervening variable namely performance. It can be safely proclaimed that if employees are well engaged in an organization performance and productivity will augment, resultantly, employee job satisfaction will also increase.

Psychology, 96(3), 619-632  
<https://doi.org/10.1037/a0021887>

Garg, K., Dar, I. A., & Mishra, M. (2017). Job satisfaction and work engagement: A study using private sector Bank managers. Sage Publications: Advances in Developing Human Resources, 20(1), 58–71. 10.1177/1523422317742987 [Cross Ref] [Google Scholar].

Jalal, H. (2016). Testing the effects of employee engagement, work environment, and



organizational learning on organizational commitment. 5th international conference on leadership, technology, innovation and business management. *Procedia-Social and Behavioural Sciences*, 229, 289–297. 10.1016/j.sbspro.2016.07.139 [Cross Ref] [Google Scholar].

Lee, C., Alonso, A., Esen, E., Coombs, J., Mulvey, T., Victor, J., & Ng, H. (2016). Employee job satisfaction and engagement: Revitalizing a changing workforce.

Liu, D., Chen, Y., & Li, N. (2021). Tackling the negative impact of COVID-19 on work engagement and taking charge: A multi-study investigation of frontline health workers. *Journal of Applied psychology*, 106(2), 185-198. <https://doi.org/10.1037/ap10000866>.

Mani, S. (2020). Managing workforce during covid-19, Aditya Birla Grasim Integrated Annual Report 2020-2021 Grasim Industries Ltd.

Rai, A., Budhathoki, P. B., & Rai, C. K. (2021). Linkage between satisfaction with colleagues, promotion, nature of work, and three-dimensional organizational commitment. *Problems and Perspectives in Management*, 19(1), 127.

Restubog, S.L., Oscampo, A.C., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the covid-19 pandemic. *Journal of Vocational Behaviour*, 1-6.

Risk landscape and mitigation measures. (2020) Integrated Annual Report Tata Steel Ltd.

Robison, J. (2009, February 19). Building engagement in this economic crisis. *Gallup Business Journal* Retrieved from <https://news.gallup.com/businessjournal/115213/building-engagement-economic-crisis.aspx>.

Sarkar, B. (2020, April 09). Companies roll out initiatives to keep employees kids engaged at home. *The Economic Times*. <https://www.adityabirla.com/media/stories/rise-of-artificial-intelligence-to-fight-covid-19>

# Deciphering Investors Preferences for Mutual Funds Investment in Anand District

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## Abstract

This paper examines the preferences of investors for mutual fund investments in Anand district, located in the state of Gujarat in India. The most preferred types of investment by the investors is Bank fixed deposit. Monthly SIP is the main suitable pattern of investment in mutual fund. Most attractive plan for investment in mutual fund is Equity plan. Most preferred mode of investment is online in the mutual fund by investors. Investors preferred ideal time of investment is short term. Retirement planning is prime objective of investment in mutual fund by investors. The findings of the study can be useful for mutual fund companies and financial advisors in designing and promoting mutual fund products that meet the needs and preferences of investors in Anand district.

**Key Words:** *Investors Preference, Mutual Funds, Investment, Demographic Profile, Assets*

## Management Company

### Introduction

Mutual funds have emerged as a popular investment option for individuals in India. According to the Association of Mutual Funds in India (AMFI), the mutual fund industry in India witnessed a 17.5% growth in assets under management (AUM) in the financial year 2020-21, reaching a total AUM of Rs. 33.04 lakh crore. The growth of mutual funds in India has been driven by factors such as increasing investor awareness, a growing middle class, and the ease of investment

through digital platforms. The mutual fund industry in India has witnessed significant growth in recent years, with assets under management (AUM) worth INR 31.2 trillion (approximately USD 418 billion) as of February 2021. This growth can be attributed to a growing awareness of the benefits of mutual fund investments and the increasing participation of retail investors (AMFI, 2023).

Anand district, located in the state of Gujarat, has emerged as a hub for mutual fund investments. According to a report by The Economic Times,

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Anand district has seen a significant increase in mutual fund investments in recent years, with the number of mutual fund investors in the district growing at a rate of 22.8% in the financial year 2020-21. This growth in mutual fund investments in Anand district can be attributed to the district's strong economy, high literacy rates, and the availability of investment options through various financial institutions (The Economic Times, 2022).

Investor preferences for mutual funds in Anand district are shaped by various factors such as risk appetite, investment goals, and market trends. Investors in Anand district have shown a preference for mutual funds that offer a balance between risk and returns, with a focus on long-term investments. The preference for equity mutual funds has also been on the rise, as investors in Anand district look to capitalize on the growth potential of the Indian economy. Several factors contribute to investors' preferences for mutual fund investments in Anand district. Some of these factors include market performance, fund performance, investment objectives, and risk appetite. Investors in the district have shown a preference for equity mutual funds, which have historically provided higher returns than debt and other types of funds (Business Standard, 2020).

## **Review of Literature**

This section reviews the existing literature on the preferences of investors for mutual fund investments in India, with a focus on the Anand district in Gujarat.

The work of **Ippolito and Bogle (1992)** suggests that investors often make fund selections based on the historical performance of the funds. Money tends to flow into funds with better earning histories. Researchers have discovered that, in an equilibrium state with rational investors, both active and passive strategies can yield equal risk-adjusted expected returns. This is reflected in proportions of fund allocation. **Harlow and Brown (1990)** found that men tend to invest more in mutual funds compared to women. Additionally, women generally take less risk compared to men when investing. Women are more likely to invest in higher-return assets but with a preference for safer options (**McDonald, 1997**). When considering risk, both men and women tend to make equally successful investment decisions (**Croson and Gneezy, 2004**).

**Modigliani and Miller (1958)**, known as M and M, initially emphasized that financial decisions have minimal impact on a firm's investment choices under ideal capital market conditions. However, from the mid-1970s onward, theoretical and empirical studies have challenged this notion, yielding results that contradict the conclusions drawn from M and M propositions (Fazzari and Athey, 1987; Gertler, 1988; Stiglitz, 1988; Fazzari, 1992; Fazzari and Variato, 1994).

Selecting a mutual fund that provides high yields with minimum risks can be a challenging task. Past literature suggests that several factors significantly influence mutual fund performance. Previous studies (**Bogle, 1992; Brown & Goetzmann,**

1995) have confirmed a somewhat positive association between a mutual fund's past performance and its present returns. However, other studies have concluded that there is no strong relationship between a mutual fund's past performance and its present returns (**Grinblatt & Titman, 1992; Hendricks et al., 1993**).

Furthermore, **Bijan Roy et al.** conducted an empirical study on conditional performance of Indian mutual funds. This paper uses a technique called conditional performance evaluation. This paper measures the performance of various mutual funds with both unconditional and conditional form of CAPM, **Treynor-Mazuy model and Henriksson-Merton model (1966)**. Lower partial moment has been measured for mutual fund performance by **Mishra, et al., (2002)**, with their paper, the develop measure of evaluating performance are based on lower partial moment. Index fund implementation in India was evaluated by **Kshama Fernandes (2003)**.

## **Research Methodology**

### Objectives of the Study

1. To understand the investors preference towards mutual funds in Anand district, Gujarat.
2. To examine various aspects of mutual fund investment from investors preference i.e. Amount Invested from total investment, Suitable pattern of Investment, Preferred mode of investment, Frequency of Checking Mutual Fund Performance, Ideal Time Duration for Mutual Fund Investments as Perceived by Investors, Preferred Type of

Mutual Fund Plan by Investors and Prime objective for investment in Mutual Funds.

### Research Design

Descriptive research design used for collecting data and information in the study.

### Sources of Data

The primary data for this study was gathered from individual investors who were investing in mutual funds within Anand district. Structured questionnaires were administered to these individual investors in order to collect primary data. In addition, secondary data was obtained from sources such as books, journals, magazines, and other published materials to supplement the research.

The research employed the Judgmental Sampling Method to select the sample. The criteria for including investors in the study were based on their economic profile and current investment status. This approach allowed for the inclusion of interested mutual fund investors. A total of 127 sample investors were selected to gain insights into their preferences regarding mutual fund investments. The selected sample of investors was drawn from Anand district.

### **Data Collection Tools**

The primary research tool utilized in this study was a questionnaire featuring closed-ended questions. The structured questionnaire was designed to acquire the necessary information and align with the study's objectives. To analyze the gathered

primary data, the Pearson Chi-square test was employed as a statistical method.

## Data Analysis and Results

### Demographic Profile of the Respondents

Table 1 summarized demographic profile of surveyed investors. Among them, 74.8 percent were male and 25.2 percent were female. Majority of them (n = 86, 67.7 percent) fall into the age bracket of 24-39 years, 18.1 percent (n = 23) in the age group of 40-55 years. Moreover, 0.8 percent participants (n = 1) were studied up to H.S.C., 15

percent (n = 19) had graduation degree, 51.2 percent (n = 65) had post-graduation degree and 33.1 per cent (n = 42) had doctorate degree indicating sample domination of educated people. With regard to investors family annual income, majority of them have income between Rs. 2,50,001 – Rs. 5,00,000 (n = 33, 26 percent). Considering occupation variable, it is found that most of them are private sector employees (n = 57) followed by government employees (n = 25) and professional (n = 19).

**Table 1: Demographic Profile of Investors in Anand District**

Demographics Variable	Category	Frequency	Percent
Age in Years	23 years or less	14	11.0
	24-39 years	86	67.7
	40-55 years	23	18.1
	56 years or more	4	3.1
Gender	Male	95	74.8
	Female	32	25.2
Occupation	Government Service	25	19.7
	Private Service	57	44.9
	Business	9	7.1
	Professionals	19	15.0
	Homemaker	2	1.6
	Other	15	11.8
Education	HSC or less	1	.8
	Graduation or less	19	15.0
	Post-graduation or less	65	51.2
	Doctorate	42	33.1
Annual Family Income	Rs.2,50,000 or less	31	24.4
	Rs.2,50,001 – Rs. 5,00,000	33	26.0
	Rs.5,00,001 – Rs. 7,50,000	24	18.9
	Rs.7,50,001 – Rs. 10,00,000	17	13.4
	Rs.10,00,001 – Rs.12,50,000	6	4.7
	Rs.12,50,001 – Rs.15,00,000	6	4.7
	Above Rs. 15,00,000	10	7.9

### Preference for Investment in Mutual Funds

The below table 2 provides a comprehensive deciphering of investors' preferences for mutual fund investments in different aspects. The majority of investors (59.1%) prefer to invest less than or equal to 12.5% of their total investment in mutual funds, while only a small percentage (2.4%) invests more than 75% of their total investment. The majority of investors (75.6%) prefer to invest through Monthly SIP option, while only a small percentage (0.8%) prefer to invest once in six months. The preferred mode of investment in mutual funds, the majority of investors (74%) prefer to invest online, while only 26% prefer offline investment. The frequency of checking mutual fund performance by investors shows that

the majority of investors (35.4%) check the performance on a monthly basis, while only a small percentage (7.1%) check on a fortnightly basis. The ideal time duration for mutual fund investments as perceived by investors reflects that the majority of investors (66.9%) prefer long-term investments, while only a small percentage (6.3%) prefer short-term investments. The preferred type of mutual fund plan by investors reveals that the majority of investors (38.6%) prefer equity plans, while a significant number (19.7%) prefer balanced plans. The prime objective of investment in mutual funds by investors depicts that the majority of investors (37%) invest for retirement planning, while only a small percentage (13.4%) invest for tax reduction.

**Table 2: Preference for Investment in Mutual Funds**

Aspects of Preference for Investment in Mutual Funds	Category	Frequency	Percent
Amount Invested from total investment	less than or equal to 12.5 %	75	59.1
	> 12.5% - 25 %	32	25.2
	26% - 50 %	12	9.4
	51% - 75%	5	3.9
	More than 75%	3	2.4
Suitable pattern of Investment	Monthly SIP	96	75.6
	Once in Six months	1	.8
	Once in three months	7	5.5
	Once in a year	15	11.8
	Others	8	6.3
Preferred mode of investment	Online	94	74.0
	Offline	33	26.0
Frequency of Checking Mutual Fund Performance	Weekly	38	29.9
	Fortnightly	9	7.1
	Monthly	45	35.4
	Half Yearly	16	12.6
	Yearly	19	15.0
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	Short term	8	6.3
	Medium Term	34	26.8
	Long term	85	66.9

Preferred Type of Mutual Fund Plan by Investors	Balance of Plans	25	19.7
	Equity Plans	49	38.6
	Income Plans	26	20.5
	Tax Saving Plans	15	11.8
	Debt Fund	3	2.4
	Hybrid Funds	9	7.1
Prime objective for investment in Mutual Funds	To Meet Contingencies	34	26.8
	For Retirement Planning	47	37.0
	For Tax Reduction	17	13.4
	For Purchase of Assets	15	11.8

### Rank Analysis

As summarized in Table 3, it can be noticed that the main investor's preferred type of investment decision is Bank Fixed Deposits, i.e. majority investors make investment with an objective of getting safety. In addition, second investor's preferred type of investment is mutual fund which is followed by post office schemes.

**Table 3: Investors Preferred Types of Investment**

Preferred Types of Investment	N	Mean	Std. Deviation	Rank
Bank fixed deposits	127	4.79	2.103	1
Post office schemes	127	4.36	1.880	3
Real estate	127	3.76	1.970	5
Gold Silver Metals	127	4.15	1.554	4
Mutual funds	127	4.42	1.904	2
Shares	127	3.53	2.019	6
Bonds and debentures	127	2.99	2.002	7

### Hypothesis Testing Results

Before the analysis of Parsons Chi-Square Statistics Test, the cross tabulation method was employed to check observed values of the data and then find the expected values based on the observed values across different aspects of investors preference for investment and

demographic profiles of investors. Based on the above procedures, the following tables are shown the Persons Chi Square Value, degree of freedom (df) and Asymp. Sig. (2-sided).

H1: There is no significant association between age group and different aspects of preference for investment by investors in mutual funds.

**Table 4: Age group wise Different Aspects of Investors Preference for Investment in Mutual Funds**

Different Aspects of Investors Preference for Investment	Persons Chi Square Value	df	Asymp. Sig. (2-sided)	H1 Hypothesis
Amount Invested from total investment	15.773 <sup>a</sup>	12	.202	Failed to reject.

Suitable pattern of Investment	25.113 <sup>a</sup>	12	<b>.014</b>	<b>Rejected</b>
Preferred mode of investment	8.170 <sup>a</sup>	3	<b>.043</b>	<b>Rejected</b>
Frequency of Checking Mutual Fund Performance	24.992 <sup>a</sup>	12	<b>.015</b>	<b>Rejected</b>
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	16.589 <sup>a</sup>	6	<b>.011</b>	<b>Rejected</b>
Preferred Type of Mutual Fund Plan by Investors	11.385 <sup>a</sup>	15	.725	Failed to reject.
Prime objective for investment in Mutual Funds	11.882	12	.455	Failed to reject.

The above table 4 shows the results of a chi-square test examining the association between age group and different aspects of preference for investment by investors in mutual funds. The table presents the chi-square value, degrees of freedom (df), and the significance level (p-value) for each aspect of preference for investment. The p-value represents the probability of obtaining a chi-square statistic as extreme as, or more extreme than, the observed statistic, assuming that H1 is true. A p-value of less than 0.05 is typically considered statistically significant, indicating evidence against H1. Consequently, there is evidence of an association between age group and the following aspects of preference for investment in mutual funds: suitable pattern of investment, frequency of checking

mutual fund performance, and ideal time duration for mutual fund investments as perceived by investors. These aspects have p-values less than 0.05, indicating statistically significant associations. Besides, there is no evidence of an association between age group and the amount invested from total investment, preferred mode of investment, preferred type of mutual fund plan by investors, and prime objective for investment in mutual funds. These aspects have p-values greater than 0.05, indicating no statistically significant associations.

H2: There is no significant association between gender and different aspects of preference for investment by investors in mutual funds.

**Table 5: Gender wise Different Aspects of Investors Preference for Investment in Mutual Funds**

Different Aspects of Investors Preference for Investment	Persons Chi Square Value	df	Asymp. Sig. (2-sided)	H2 Hypothesis
Amount Invested from total investment	1.777 <sup>a</sup>	4	.777	Failed to reject.
Suitable pattern of Investment	3.430 <sup>a</sup>	4	.489	Failed to reject.



Preferred mode of investment	1.566 <sup>a</sup>	1	.211	Failed to reject.
Frequency of Checking Mutual Fund Performance	4.438 <sup>a</sup>	4	.350	Failed to reject.
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	6.282 <sup>a</sup>	2	<b>.043</b>	<b>Rejected</b>
Preferred Type of Mutual Fund Plan by Investors	4.678 <sup>a</sup>	5	.456	Failed to reject.
Prime objective for investment in Mutual Funds	8.118	4	.087	Failed to reject.

The above table 5 shows the results of a chi-square test examining the association between gender and different aspects of preference for investment by investors in mutual funds. A p-value of less than 0.05 is typically considered statistically significant, indicating evidence against H2. Consequently, there is evidence of an association between gender and the Ideal Time Duration for Mutual Fund Investments as Perceived by Investors aspect of preference for investment in mutual funds. This aspect has p-values less than 0.05, indicating statistically significant associations. Besides, there is no evidence of an

association between gender and the amount invested from total investment, suitable pattern of investment, frequency of checking mutual fund performance, preferred mode of investment, preferred type of mutual fund plan by investors, and prime objective for investment in mutual funds. These aspects have p-values greater than 0.05, indicating no statistically significant associations.

H3: There is no significant association between occupation and different aspects of preference for investment by investors in mutual funds.

**Table 6: Occupation wise Different Aspects of Investors Preference for Investment in Mutual Funds**

Different Aspects of Investors Preference for Investment	Persons Chi Square Value	df	Asymp. Sig. (2-sided)	H3 Hypothesis
Amount Invested from total investment	29.042	20	.087	Failed to reject.
Suitable pattern of Investment	28.124	20	.107	Failed to reject.
Preferred mode of investment	12.493	5	<b>.029</b>	<b>Rejected</b>
Frequency of Checking Mutual Fund Performance	32.482	20	<b>.038</b>	<b>Rejected</b>
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	6.682	10	.755	Failed to reject.

Preferred Type of Mutual Fund Plan by Investors	25.578	25	.430	Failed to reject.
Prime objective for investment in Mutual Funds	19.381	20	.497	Failed to reject.

The above table 6 shows the results of a chi-square test examining the association between occupation and different aspects of preference for investment by investors in mutual funds. A p-value of less than 0.05 is typically considered statistically significant, indicating evidence against H3. Consequently, there is evidence of an association between occupation and the Preferred mode of investment and frequency for checking mutual fund performance for Mutual Fund Investments as Perceived by Investors aspect of preference for investment in mutual funds. This aspect has p-values less than 0.05, indicating statistically

significant associations. Besides, there is no evidence of an association between occupation and the amount invested from total investment, suitable pattern of investment, Ideal time duration for mutual fund investments as perceived by investors, preferred type of mutual fund plan by investors, and prime objective for investment in mutual funds. These aspects have p-values greater than 0.05, indicating no statistically significant associations.

H4: There is no significant association between education and different aspects of preference for investment by investors in mutual funds.

**Table 7: Education wise Different Aspects of Investors Preference for Investment in Mutual Funds**

Different Aspects of Investors Preference for Investment	Persons Chi Square Value	df	Asymp. Sig. (2-sided)	H4 Hypothesis
Amount Invested from total investment	13.070	12	.364	Failed to reject.
Suitable pattern of Investment	11.627	12	.476	Failed to reject.
Preferred mode of investment	1.918	3	.590	Failed to reject.
Frequency of Checking Mutual Fund Performance	23.162	12	<b>.026</b>	<b>Rejected</b>
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	5.763	6	.450	Failed to reject.
Preferred Type of Mutual Fund Plan by Investors	13.966	15	.528	Failed to reject.
Prime objective for investment in Mutual Funds	12.453	12	.410	Failed to reject.

The above table 7 shows the results of a chi-square test examining the association between education and different aspects of preference for investment by investors in mutual funds. A p-value of less than 0.05 is typically considered statistically significant, indicating evidence against H4. Consequently, there is evidence of an association between occupation and the frequency for checking mutual fund performance for Mutual Fund Investments as Perceived by Investors aspect of preference for investment in mutual funds. This aspect has p-values less than 0.05, indicating statistically significant associations. Besides, there

is no evidence of an association between education and the amount invested from total investment, suitable pattern of investment, Preferred mode of investment, Ideal time duration for mutual fund investments as perceived by investors, preferred type of mutual fund plan by investors, and prime objective for investment in mutual funds. These aspects have p-values greater than 0.05, indicating no statistically significant associations.

H5: There is no significant association between annual family income and different aspects of preference for investment by investors in mutual funds.

**Table 8: Annual Family Income Wise Different Aspects of Investors Preference for Investment in Mutual Funds**

<b>Different Aspects of Investors Preference for Investment</b>	<b>Persons Chi Square Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>	<b>H4 Hypothesis</b>
Amount Invested from total investment	39.394	24	<b>.025</b>	<b>Rejected</b>
Suitable pattern of Investment	23.457	24	.493	Failed to reject.
Preferred mode of investment	5.687	6	.459	Failed to reject.
Frequency of Checking Mutual Fund Performance	35.216	24	.065	Failed to reject.
Ideal Time Duration for Mutual Fund Investments as Perceived by Investors	31.851	12	<b>.001</b>	<b>Rejected</b>
Preferred Type of Mutual Fund Plan by Investors	32.240	30	.356	Failed to reject.
Prime objective for investment in Mutual Funds	28.788	24	.228	Failed to reject.

The above table 8 shows the results of a chi-square test examining the association between annual family income and different aspects of preference

for investment by investors in mutual funds. A p-value of less than 0.05 is typically considered statistically significant, indicating evidence against H5. Consequently, there is evidence of an

association between annual family income and the amount invested from total investment and Ideal time duration for mutual fund investments as perceived by investors for Mutual Fund Investments as Perceived by Investors aspect of preference for investment in mutual funds. This aspect has p-values less than 0.05, indicating statistically significant associations. Besides, there is no evidence of an association between annual family income and the suitable pattern of investment, Preferred mode of investment, Frequency of Checking Mutual Fund Performance, preferred type of mutual fund plan by investors, and prime objective for investment in mutual funds. These aspects have p-values greater than 0.05, indicating no statistically significant associations.

### **Conclusion**

The study shows that the most preferred type of investment by investors is bank fixed deposits. The main suitable investment pattern in mutual funds is monthly systematic investment plans (SIPs). Equity plans are the most preferred feature of mutual funds, which attract investors to invest in them. The most popular mode of investment in mutual funds by investors is online. Investors prefer short-term investments as the ideal time for investment. Retirement planning is the primary objective of mutual fund investments by investors. These findings can be beneficial for mutual fund companies and financial advisors in designing and promoting mutual fund products that meet the

needs and preferences of investors in the Anand district.

In general, the data indicates that most investors in the Anand district prefer to allocate a small percentage of their total investment to mutual funds, with a preference for long-term investments and equity plans. They also favour investing through monthly systematic investment plans (SIPs) and monitoring mutual fund performance on a monthly basis. Investors are increasingly becoming more knowledgeable and careful in their mutual fund investments, and they prefer a disciplined and long-term investment strategy to achieve their future financial goals.

The findings suggest that different aspects related to mutual fund investments are influenced by various demographic factors. In conclusion, the chi-square test results provide insights into the associations between demographic factors and different aspects of preference for investment in mutual funds. For age group (H1), there was a significant association with the suitable pattern of investment, preferred mode of investment, frequency of checking mutual fund performance, and ideal time duration for mutual fund investments as perceived by investors. However, no significant associations were found with the amount invested from total investment, preferred type of mutual fund plan, and prime objective for investment. Regarding gender (H2), there was a significant association with the ideal time duration for mutual fund investments. However, no significant associations were found with the

amount invested from total investment, suitable pattern of investment, preferred mode of investment, preferred type of mutual fund plan, frequency of checking mutual fund performance, and prime objective for investment. For occupation (H3), there were significant associations with the preferred mode of investment and frequency of checking mutual fund performance. No significant associations were found with the amount invested from total investment, suitable pattern of investment, ideal time duration for mutual fund investments, preferred type of mutual fund plan, and prime objective for investment. Concerning education (H4), there was a significant association with the frequency of checking mutual fund performance. No significant associations were found with the amount invested from total investment, suitable pattern of investment, preferred mode of investment, ideal time duration for mutual fund investments, preferred type of mutual fund plan, and prime objective for investment. Lastly, for annual family income (H5), there were significant associations with the amount invested from total investment and ideal time duration for mutual fund investments. No significant associations were found with the suitable pattern of investment, preferred mode of investment, frequency of checking mutual fund performance, preferred type of mutual fund plan, and prime objective for investment.

These findings highlight the influence of demographic factors on investors' preferences for investment in mutual funds. Understanding these

factors can help develop tailored strategies, educational initiatives, and investment products that align with the needs and preferences of investors in Anand District. These findings emphasize the importance of considering demographic factors when examining investors' preferences towards mutual fund investments, as they play a significant role in shaping investment decisions.

### References

1. Association of Mutual Funds in India (AMFI, 2023): <https://www.amfiindia.com/>
2. Business Standard (2020): [https://www.business-standard.com/article/markets/investors-prefer-equity-mutual-funds-over-other-products-amfi-data-121031600206\\_1.html](https://www.business-standard.com/article/markets/investors-prefer-equity-mutual-funds-over-other-products-amfi-data-121031600206_1.html) Charlottesville, Virginia.
3. Fazzari, S. M. 1992. Keynesian Theories of Investment and Finance: Neo, Post, and New in S Fazzari and D B Papadimitriou (eds.). Financial Condition and Macroeconomic Performance: Essays in Honor of Hyman P Minsky, M. E. Sharpe. Inc. New York: 121- 132.
4. Fazzari, S. M. and Athey, M. J. 1987. Asymmetric Information, Financing Constraints and Investment. Review of Economics and Statistics. XIX, (3): 481-87.
5. Fazzari, S. M. and Variato, A. 1994. Asymmetric Information and Keynesian

- Theories of Investment', *Journal of Post Keynesian Economics*. 16(3):351-69.
6. Gertler, M. 1988. Financial Structure and Aggregate Economic Activity: An Overview, *Journal of Money, Credit and Banking*. 20(3):559-88.
  7. Goetzmann, W.N. and Peles, N. (1997), "Cognitive dissonance and mutual fund investors", *Journal of Financial Research*, Vol. 20 No. 2, pp. 145-58.
  8. Goetzmann, W.N., Massa, M. and Rouwenhorst, K.G. (2000), "Behavioural factors in mutual fund flows", working paper, Yale School of Management, New Haven, CT.
  9. Grossman, S. J. and Stiglitz, J. E. 1980. On the Impossibility of Informationally Efficient Markets. *American Economics Review*. 70(3):393-408.
  10. Grossman, S. J. and Stiglitz, J. E. 1980. On the Impossibility of Informationally Efficient Markets. *American Economics Review*. 70(3):393-408.
  11. Harlow, W. V. and Brown, K. 1990. The role of Risk Tolerance in the Asset Allocation Process: A New Perspective, *AIMR*,
  12. Ippolito, R. 1992. Consumer reaction to measures of poor quality: evidence from the mutual fund industry. *Journal of Law and Economics*. XXXV: (45-70).
  13. McDonald K. S. 1997. No Guts, No Glory. *Working Women*. 22(4):42-46.
  14. Modigliani, F. and Miller, M. H. 1958. The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review*. VIII (3):261-97.
  15. Stiglitz, J. E. 1988. Why Financial Structure Matters. *Journal of Economic Perspective*. 2(4):121-26.
  16. The Economic Times (2022): <https://economictimes.indiatimes.com/wealth/invest/anand-gujarat-is-mutual-fund-capital-of-india/articleshow/84820005.cms>
  17. Treynor, J., and K. Mazuy. 1966. Can Mutual Funds Outguess the Market? *Harvard Business Review* 131–36.

# Perception and Attitude of Patients' Towards Ayurveda in Views of Government Ayurvedic Practitioners

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## Abstract

**Purpose** – In a pluralistic health care system followed by India, it is important to understand the perception and attitude of patients seeking ayurvedic health care treatments from Government ayurvedic hospitals.

**Design/Methodology/Approach** – To obtain information related to current status of the phenomena, the present study followed a descriptive research design. The samples were drawn from six cities of Gujarat, which possess Government ayurvedic hospitals. Additionally, the selection of hospitals was done based on the number of beds acquired by those hospitals (i.e.  $\geq 100$  beds) and one which possess ayurvedic colleges. This study was conducted among sixty-two government ayurvedic practitioners of Gujarat. Data were collected through pre-tested close-ended questionnaire and further analysed through statistical package for the social sciences.

**Findings** - Analysis of variance resulted positive relationship between experience of practitioners and their views regarding attitude of patients. The study highlights that the attitude of patients treated by government ayurvedic practitioners is positive, patients are familiar with the medicines and they have trust in the practitioners and their method of treatment, prevention measures also plays a vital role to develop positive attitude of the patients towards the method of treatment.

**Key Words:** Ayurveda, Patients, Government Ayurvedic Practitioners, Perception, Attitude

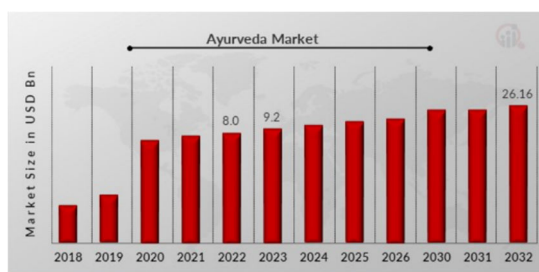
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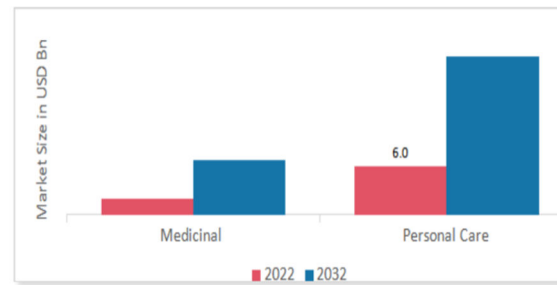
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## Introduction

In order to boost national health ecosystem, in the Budget 2023-24 government of India allotted Rs. 3647 crores (i.e. twenty percent higher compare to the previous year) to the Ministry of Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy (AYUSH). This increased budget allocation reflects the need of generating evidence-based- database system for Ayurveda to fulfil the parameters of modern science. National Ayush Mission (NAM) has been allotted 1200 crores which is fifty percent higher than the previous year (Press Information Bureau report, 2023) NAM mainly focus and supports for upgradation of Ayush Primary, Community and District Health Centres, providing cost effective Ayush services, cultivation of medical plants, quality and standardization of medicinal production and increasing its exports. Annual report of the Ayush (2022-23) indicates 35,81,278 OPD patients and 1,48,372 IPD patients benefitted from various national ayurvedic hospitals.



Source: <https://www.marketresearchfuture.com/reports/ayurveda-market-6166>



Source: <https://www.marketresearchfuture.com/reports/ayurveda-market-6166>

India is on the path of resurgence and Ayurveda market industry is projected to grow from USD 9.2 billion in 2023 to USD 26.16 billion by 2032 as it has been projected that the size of Indian E-health market will attain US\$ 10.6 billion by 2025 (IBEF report, 2023) Except local civilians, foreign tourist contributes large fraction of total business in this sector. According to India tourism statistics report 2020, India has been ranked 10<sup>th</sup> in the Medical Tourism Index (MTI) during 2020-21 and approximately 697,300 foreign tourists visited India for medical treatment in FY 2019 (Ministry of Tourism report, 2023)

## Theoretical Background

Awareness about one's own health is a state in which an individual or community thinks, feels and practices positively about his/her hygienic wellbeing (Sell, H. and Nagpal, R. 1992). Reviews portray majority of people gives priority to allopathy medicines for instant relief, effect, convenience, ready-made preparations and because they are accustomed with western medicine. Some of



the reasons behind giving second priority to ayurvedic medicines are the taste of ayurvedic medicine (somewhat bitter and undesirable), form of medicine (mostly available in powder and quath/kadha form), restrictions (in terms of patient's diet and daily activities), cost (parallel or higher to allopathy medicines), lack of free ayurvedic health care facility in nearby area. Bode, M. (2021) stated that commerce makes Ayurveda health care exorbitant and threatens ayurvedic medicines' affordability and availability.

But, with the time span people started adopting ayurvedic medicines due to heavy side effects of allopathy. Many people started believing Ayurveda a safe and natural medicine, without any side effects. Rastogi et al. (2021) noted that patients chose ayurvedic health care because it is safe and helps to cure specific clinical condition. Miller, L.G. (2000) analyzed that a major challenge is the patient who chooses to use herbal products as a substitute for conventional therapy without the knowledge and approval of the primary care provider. Generally, it is used more frequently for chronic conditions, such as body pain and allergies, than for keen or life threatening state of order. Likewise, most people cite positive reasons for selecting ayurvedic health care treatments, for instance an aspiration to take care of their good health, or compatibility with their belief systems,

rather than pessimistic reasons such as a fear of conventional care (Pampattiwar and Advani, 2012). Glynn, J.R. and Heymann, T.D. (1985) stated that age and sex of the patient, the type of job of patients and reasons for choosing particular medicine do not persuade them. D. Kumar et al. (2006) noted that knowledge and practice of CAM was comparatively higher among patients with higher levels of education and socio-economic status.

*Rasa* (taste) is an imperative indicator of medicine's effectiveness in Indian pharmacology. A great concern for researcher is to understand the psychology of respondents' perception. In fact, Government ayurvedic practitioners are authentic source to analyze patients' propensity for following ayurvedic treatment. Government ayurvedic practitioners' strong recommendation and consultation to patients at government hospitals exhibit their determination and vitality which is more important than their number as they symbolize very little number of entire ayurvedic practitioners in India. Unlike ayurvedic physicians, they are attached to mainstream of ancient ayurvedic practice and employ their ayurvedic degree as a reverse entrance to biomedical practice. Patients following ayurvedic health care system usually expect that ayurvedic medicines functions same as biomedical practices despite the fact that without any

harmful side-effects after consumption. Moreover, government ayurvedic practitioners freely use proprietary ayurvedic medicines produced by pharmacies owned by Government hospitals. Hence, patients do not have to look up at medicinal quality. Enhanced satisfaction level of patients and improved service quality together can contribute more loyal patients in case of ayurvedic health care system (Suhail, P. and Srinivasulu, Y. 2021).

### **Research Gap**

As India follows pluralistic health care system, patients today face a wide array of choice options. They have their own reasons for choosing medication or health care treatment. Many researchers have found that majority of patients' selection is based on criteria such as social and cultural trends, experiences, health beliefs, financial means and psychological aspects. However, trend and human behaviour is not static. It undergoes an alteration over a period of time according to the prevailing trend. The interdependence of patients' attitude, perception and medicinal demand is a time tested phenomenon. Hence, it requires microscopic investigation to define present societal trend.

The world has witnessed a great shift towards ayurvedic health care system especially after the outbreak of COVID-19 pandemic.

Patients undergoing through ayurvedic treatment is increasing exponentially. Hence, for prevailing situation patients' attitude and perception towards the ayurvedic health care treatment is of great concern for practitioners and regulators.

### **Objectives**

- ☒ To understand the perception and attitude of patients seeking ayurvedic health care treatment by taking the views of Government ayurvedic practitioners of Gujarat.
- ☒ To recognize significant differences in the views among different experience group of Government ayurvedic practitioners regarding attitude of patients, if any.

### **Research Methodology**

#### ***Research design***

In order to understand the perception and attitude of relevant respondents and to obtain information related to current status of the phenomena, the present study followed descriptive research design.

#### ***Questionnaire development***

A pilot study was conducted to ascertain and remove potential problems in the questionnaire. Views of thirty-two practitioners were taken into consideration to assess consistency and relevance with the

objectives, ease of understanding the questions and its sequence and thereby, scrutinizing the requirement of polishing thereafter. The results of pilot study indicated that apart from some language modifications, no further changes were required hence, the questionnaire is appropriate for the formal testing. For the ease of understanding, the questionnaire was framed into two languages namely English and Gujarati (State language).

### **Data collection**

The data was collected from sixty-two Government ayurvedic practitioners using researcher developed close-ended, formerly validated questionnaire. The samples were drawn from six cities of Gujarat, which possess Government ayurvedic hospitals. Additionally, the selection of hospitals was done based on number of beds acquired by them ( $\geq 100$  beds) and only those hospitals which possess ayurvedic colleges were included for the study.

### **Statistical Analysis**

Statistical tests including descriptive analysis, analysis of variance, factor analysis were performed in Statistical package for the social sciences to conduct the research.

### **Data Analysis**

Descriptive statistics were conducted using SPSS. Result summary of the socio-

demographic data of the Government ayurvedic practitioners have been shown in Table 1.

**Table 1:** Summary Showing Mean Values of the Socio-Demographic details of the Government ayurvedic practitioners (N=62).

		<b>Frequency</b>	<b>Percentage</b>
<b>Age group: (in years)</b>	26-30	09	14.51
	31-35	22	35.48
	36-40	13	20.96
	41-45	05	08.06
	46-50	04	06.45
	51-55	03	04.83
	56-59	06	09.67
<b>Experience: (in years)</b>	1-5	15	22.58
	6-10	19	30.64
	11-15	15	24.19
	16-20	03	04.83
	21-25	02	03.22
	26-30	03	04.83
	31-35	06	09.67
<b>Service Location:</b>	Ahmedabad	19	30.65
	Jamnagar	19	30.65
	Bhavnagar	06	9.67
	Nadiad	04	6.45
	Surat	08	12.90
	Vadodara	06	9.67

Statistics shows that among 62 respondents, 14.51 per cent were between 26-30 years of age, 35.48 per cent were between 31-35 years, 20.96 per cent were between 36-40 years, 8.06 per cent were between 41-45 years, 6.45 per cent were between 46-50

years, 4.83 per cent were between 51-55 years, 9.67 per cent were between 56-59 years of age.

Out of total respondents, 22.58 per cent respondents were having work experience between 1-5 years, 30.64 per cent were having between 6-10 years, 24.19 per cent possess between 11-15 years, 4.83 per cent were holding between 16-20 years, 3.22 per cent were having between 21-25 years, 4.83 per cent possess between 26-30 years and 9.67 per cent were having between 31-35 years.

Service location can be bifurcated as 30.65 per cent M.O. are belonged to Ahmedabad city, 30.65 per cent M.O. belonged to Jamnagar, 9.67 per cent belonged to Bhavnagar, 6.45 per cent belonged to Nadiad, 12.90 per cent belonged to Surat, 9.67 per cent belonged to Vadodara.

**Analysis of variance** was used to recognize significant differences in the views among different experience group of Government ayurvedic practitioners regarding attitude of patients.

**H<sub>01</sub>:** There is no significant difference in the views among different experience group of practitioners regarding attitude of patients.

**H<sub>a1</sub>:** There is a significant difference in the views among different experience group of practitioners regarding attitude of patients.

It can be inferred from the Table 2 that statements such as educated consumers prefer ayurvedic medicines most (0.022),

Patients share information such as simultaneous use of allopathy and ayurvedic medicines (0.001), patients share their past experience frankly (if any) (0.007), in present modern era, it is difficult to spread awareness regarding Ayurveda in the minds of consumers (0.028), still mind set of Indians are not accepting Yoga and pranayama as daily practice (0.030), compare to Yoga and healing treatment, other ayurvedic treatments (such as Vaman, Virechan, Swedan etc.) are less popular (0.025) attributes significant value less than 0.05. Therefore, the null hypothesis can be rejected and it can be said that there is a relationship between experience of practitioners and their views regarding attitude of patients.

**Table 3 Reliability Statistics**

Cronbach's Alpha	N of Items
.722	22

As illustrated in Table 3. alpha coefficient for the 22 items is 0.722, suggesting that the items have relatively high internal consistency.

Further, factor analysis has been used wherein respondents were asked 22 factor that ayurvedic practitioners feel are considered by patients before deciding upon consumption of ayurvedic medicine or treatment.

**Table 4 KMO and Barlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.547
Bartlett's Test of Sphericity	Approx. Chi-Square	675.294
	df	231
	Sig.	.000

Table 4 reflects that the value of KMO Measure for adequacy of sampling i.e. 0.547, which is more than the minimum cut off rate of 0.50. This indicates that the sample is adequate factor analysis can be performed. Bartlett's Test of Sphericity showed the value of Chi-Square at 675.294 with 231 degrees of freedom. It is significant at 0.05 level of significance indicating the suitability of data for factor analysis. On the basis of Varimax Rotation with Kaiser Normalisation, 6 factors have been extracted. Each factor is constituted of all those variables that have factor loadings greater than 0.5. It represents the amount of variance accounted for by each factor. Here, 22 variables were clubbed into 6 factors. Six factors have been extracted which together accounted for 67.824 per cent of the variance.

Table 6 gives the correlation of the variables with each of the extracted factors. Usually, each of the variables is highly loaded in one factor and less loaded towards the other factors. To identify the variables, included in each factor, the variable with the value maximum in each row is selected to be part of the respective factor. The values have been

high lightened in each of the rows to group the 22 variables into 6 core factors. Hence, after performing factor analysis, six factors have emerged usually that factors are considered by patients before deciding upon consumption of ayurvedic medicine and treatment. The reduced factors are:

Factor 1: Elements of this factor are directly related to type of ailment, time span to recover, possible consumption period, cost and form of medicine and recommendation of allopathy doctors hence, is named as 'Aspects concerned to ailment, medicine and its consumption'.

Factor 2: Statements under this factor are faith in Ayurveda, precaution need to be followed and consultation with practitioners. Therefore, it is termed as 'Preventive measures'.

Factor 3: Statements under this factor are trust on practitioners and Ayurveda's feature of providing long term relief. Hence, it is named as 'Faith in Ayurveda and practitioners'.

Factor 4: This factor includes statements such as familiarity and information about ayurvedic medicines and treatments. Therefore, it is termed as 'Familiarity with medicine and treatments'.

Factor 5: Elements of this factor are directly related to familiarity with doctors, past experiences, distribution of free of cost medicine by Govt. hospitals. Therefore, it is named as 'Past experiences'.

Factor 6: This factor includes statements such as positive sides of Ayurveda namely less side effects and cures disease from root level, and advertising of ayurvedic medicines and treatments. Hence, it is named as ‘Promotion and Pros of Ayurveda’.

Through descriptive statistics, practitioners’ views regarding patients’ perception regarding Ayurveda was gauged.

### **Conclusion**

The study incorporated the views of government ayurvedic practitioners of selected cities of Gujarat. The preliminary objective is to understand the perception and attitude of patients seeking ayurvedic health care treatment and to recognize significant differences in the views among different experience group of Government ayurvedic practitioners regarding attitude of patients, if any.

The study highlights that the attitude of patients treated by government ayurvedic practitioners is positive, patients are familiar with the medicines and they have trust in the practitioners and the method of treatment, prevention measures also plays a vital role to develop positive attitude of the patients towards the method of treatment.

The results of the study could empirically prove strong relationship among variables and assures worth contribution to the healthcare providers to modify their

strategies, policies and practices accordingly further enhance the reach and usage of our ancient system of healthcare.

### **Limitations and Future recommendations**

The selection of respondents was limited to the selected cities of Gujarat and the views of only Government ayurvedic practitioners were incorporated. Hence, the findings cannot be generalized to the whole society. Secondly, future studies can include the opinion of private ayurvedic practitioners thereby, views of two different categories namely practitioners and patients can also be unified.

## References

The Budget 2023-24 gives major emphasis on increasing Ayush services and scientific research, PIB Delhi report:

<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1895518> retrieved on October 20, 2023

Annual report of the Ayush (2022-23) available at: [https://ayush.gov.in/images/annualReport/Annual\\_Report\\_2022-2023\\_English.pdf](https://ayush.gov.in/images/annualReport/Annual_Report_2022-2023_English.pdf) retrieved on September 15, 2023

IBEF report (2023). Indian Healthcare Industry Analysis, available at: <https://www.ibef.org/industry/healthcare-presentation> retrieved on July 16, 2023

Ministry of Tourism: India Tourism Statistics at a Glance 2023 available at: <https://tourism.gov.in/market-research-and-statistics> retrieved on August 21, 2023.

Bode, M. (2012). Ayurveda in the Twenty-First Century: logic, practice and ethics. In V. Sujatha, & L. Abraham (Eds.), *Medical pluralism in contemporary India* (pp. 59-76). Orient Blackswan.

Sell, H. & Nagpal, R. (1992). Assessment of subjective well-being: The subjective well-being inventory

(SUBI). New Delhi: World Health Organization, East India.

Pampattiwar, S. P. & Advani, N. V. (2012). A Review on Safety of Ayurvedic Medicine, *Asian Journal of Pharmaceutical Science & Technology* 2 (2), 88-91.

Rastogi S, Tiwari V, Jatav SP, Singh N, Verma S, Verma S, Sharma KG, Pandey P, Singh G. (2022). A survey of patients visiting an Ayurvedic teaching hospital for factors influencing the decision to choose Ayurveda as a health care provider. *Journal of Ayurveda Integrative Medicine*, 100539.

D. Kumar, S. Bajaj, R. Mehrotra (2006). Knowledge, attitude and practice of complementary and alternative medicines for diabetes, *Public Health*, 120, 705–711

Suhail, P., and Srinivasulu, Y. (2021). Perception of service quality, satisfaction, and behavioral intentions in Ayurveda healthcare. *Journal of Ayurveda and Integrative Medicine*, 12(1), 93–101.

**Appendices:**

**Table 2: ANOVA**

<b>Factors</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Educated consumers prefer ayurvedic medicines most	Between Groups	41.748	21	1.988	2.086	.022
	Within Groups	38.123	40	.953		
	Total	79.871	61			
Majority of patients are aware of only the name of Ayurveda they don't have basic knowledge of ayurvedic treatment	Between Groups	23.132	21	1.102	.808	.695
	Within Groups	54.545	40	1.364		
	Total	77.677	61			
Urban patients are more aware about Ayurveda compare to rural patients	Between Groups	25.510	21	1.215	.874	.621
	Within Groups	55.587	40	1.390		
	Total	81.097	61			
People still view Ayurveda only as a kind of home remedy	Between Groups	25.657	21	1.222	.909	.582
	Within Groups	53.762	40	1.344		
	Total	79.419	61			
Majority of patients regard Ayurveda as a secondary solution	Between Groups	34.055	21	1.622	1.694	.075
	Within Groups	38.283	40	.957		
	Total	72.339	61			
Majority of patients regard Ayurveda as a last resort	Between Groups	29.105	21	1.386	.951	.536
	Within Groups	58.265	40	1.457		
	Total	87.371	61			
Most of the patients do not switch to any other modern medicines once they have taken ayurvedic medicines	Between Groups	31.456	21	1.498	1.724	.068
	Within Groups	34.754	40	.869		
	Total	66.210	61			
Patients share information such as simultaneous use of allopathy and ayurvedic medicines	Between Groups	26.543	21	1.264	3.078	.001
	Within Groups	16.425	40	.411		
	Total	42.968	61			
Patients share their past experience frankly (if any)	Between Groups	20.730	21	.987	2.449	.007
	Within Groups	16.125	40	.403		
	Total	36.855	61			
Mostly consumption of ayurvedic medicine is self -decision of patient	Between Groups	15.773	21	.751	.741	.767
	Within Groups	40.565	40	1.014		
	Total	56.339	61			
Patients do not complain about long term consumption of	Between Groups	34.285	21	1.633	1.258	.260
	Within Groups	51.908	40	1.298		



ayurvedic. medicine to cure ailment	Total	86.194	61			
In present modern era, it is difficult to spread awareness regarding Ayurveda in the minds of consumers	Between Groups	37.870	21	1.803	2.015	.028
	Within Groups	35.807	40	.895		
	Total	73.677	61			
Overall consumer awareness regarding Ayurveda is less compared to allopathy medicines in Gujarat	Between Groups	19.564	21	.932	.539	.934
	Within Groups	69.145	40	1.729		
	Total	88.710	61			
Trust and reliability in Ayurveda has increased in recent years	Between Groups	10.956	21	.522	.802	.701
	Within Groups	26.012	40	.650		
	Total	36.968	61			
Still mind set of Indians are not accepting Yoga and pranayama as daily practice	Between Groups	44.139	21	2.102	1.992	.030
	Within Groups	42.200	40	1.055		
	Total	86.339	61			
Compare to Yoga and healing treatment, other ayurvedic treatments (such as Vaman, Virechan, Swedan etc.) are less popular	Between Groups	42.992	21	2.047	2.044	.025
	Within Groups	40.056	40	1.001		
	Total	83.048	61			

**Table 5: Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.286	19.480	19.480	4.286	19.480	19.480	3.024	13.746	13.746
2	3.260	14.818	34.298	3.260	14.818	34.298	2.782	12.647	26.393
3	2.257	10.260	44.558	2.257	10.260	44.558	2.601	11.823	38.215
4	1.975	8.976	53.534	1.975	8.976	53.534	2.303	10.470	48.686
5	1.762	8.011	61.545	1.762	8.011	61.545	2.272	10.328	59.014
6	1.381	6.279	67.824	1.381	6.279	67.824	1.938	8.810	67.824
7	1.229	5.585	73.409						
8	1.082	4.917	78.326						
9	.778	3.535	81.861						
10	.604	2.744	84.605						
11	.534	2.428	87.033						
12	.503	2.287	89.320						
13	.473	2.152	91.471						
14	.411	1.869	93.340						
15	.301	1.367	94.707						
16	.263	1.194	95.901						
17	.236	1.074	96.975						
18	.187	.849	97.824						
19	.172	.780	98.604						

20	.137	.620	99.224						
21	.103	.469	99.693						
22	.067	.307	100.000						
Extraction Method: Principal Component Analysis.									

**Table 6: Rotated Component Matrix<sup>a</sup>**

<b>Factors</b>	<b>Component</b>
<b>Aspects concerned to ailment, medicine and its consumption</b>	
Type of ailment they are passing through	.478
Possible time span to recover from chronic ailment	.794
Possible consumption period required to take ayurvedic medicines to cure disease fully	.761
Cost of ayurvedic medicine	.552
Form of ayurvedic medicine available (tablets, powder, liquid and oil)	.786
Recommendation of allopathy doctors to take ayurvedic medication for your ailment	.538
<b>Preventive measures</b>	
Precautions need to be followed during treatment	.724
Faith in Ayurveda	.736
Consultation with ayurvedic doctors before taking ayurvedic medicines directly from ayurvedic drugs retailer	.704
Further consulting to ayurvedic doctor rather than continuing with the same medications ahead	.715
<b>Faith in Ayurveda and practitioners</b>	
Reliability and trust upon ayurvedic doctors	.803
Feature of providing long term/permanent relief after treating the disease	.782
<b>Familiarity with medicine and treatments</b>	
Familiarity with ayurvedic medicines	.583
Information available about the brand of the medicine	.785
Familiarity with ayurvedic treatments	.876
<b>Past experiences</b>	
Result of past treatment	.739
Familiarity with ayurvedic practitioner/doctor	.507
Availability of Govt. ayurvedic hospital in nearby area	.470
Distribution of free of cost medicines by Govt. ayurvedic hospitals	.727
<b>Promotion and Pros of Ayurveda</b>	
Less side effects of ayurvedic medicine	.473
Ayurveda cures disease from root level	.591
Advertising events of ayurvedic medicines	.753
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 9 iterations.	

## THE UNIVERSITY CREST



The tree in the Crest is the Historic Mango tree where the founders of this seat of learning started their activity and the rising sun behind the tree represents the light of learning that is being spread by this Rural Centre of Education. The Sanskrit dictum in the form of a crest presents the ideal viz. "Character and conduct are the fruits of learning" - "शीलवृत्तफलं श्रुतम्" - that is set before it by the great personality after whom this place and this University are named.