

A STUDY OF CHANGING CONSUMER BUYING BEHAVIOR DURING THE COVID-19 CRISIS: IMPLICATIONS FOR RETAILERS SPECIAL REFERENCE TO KERALA

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Abstract

The scope of this study encompasses a comprehensive examination of the changing landscape of consumer buying behavior during the COVID-19 crisis, with a particular focus on the unique context of Kerala, a southern state in India. This research aims to investigate the direct and indirect effects of COVID-19 crisis-induced factors, such as health concerns, lockdown measures, and economic uncertainties, on consumer purchasing decisions. Additionally, it seeks to explore the moderating role of demographic and socio-economic characteristics in shaping these behavioral changes. Furthermore, the study delves into the mediating impact of psychological factors, including fear and trust in online shopping, on the relationship between COVID-19 crisis factors and consumer choices. By studying these dynamics, this research aspires to provide valuable insights and practical implications for retailers in Kerala, enabling them to adapt and thrive in the evolving consumer landscape both during and beyond the pandemic.

Keywords: COVID-19, Consumer, Retailer, Psychological Factors.

INTRODUCTION

The emergence for the COVID-19 pandemic represented the beginning of a new age of uncertainty, fear, and disruption across the globe. It has not only posed an unprecedented threat to public health but also reshaped the economic and social landscapes, transforming the way individuals interact with the world, including their consumer behavior. The retail industry, as a significant pillar of the economy, has felt the profound impact of this crisis. With its unique socio-economic and cultural dynamics, Kerala, a southern state in India, provides an intriguing backdrop to study the changing consumer buying behavior in the wake of the pandemic.

Consumer buying behavior is a complex interplay of factors, and its transformation during the COVID-19 crisis has important implications for retailers. The crisis-induced factors, such as health concerns, lockdown measures, and economic uncertainties, have not only influenced where and how consumers make their purchases but have also reshaped their preferences, priorities, and decision-making processes. Understanding these shifts is crucial for retailers in Kerala, as they seek to navigate this new terrain, adapt to the evolving consumer landscape, and thrive in a post-pandemic world. This study aims to delve deep into the shifting purchasing habits of consumers through the COVID-19 crisis, with a specific focus on Kerala. It is a quest

to comprehend how the crisis-induced factors have directly impacted consumers' purchasing decisions and, more importantly, how demographic, socio-economic, and psychological elements mediate or moderate these effects. By examining these facets within the unique context of Kerala, this research seeks to uncover valuable insights and offer actionable recommendations for retailers.

Kerala's diverse and dynamic society, known for its high literacy rates, distinct cultural practices, and unique consumption patterns, presents an intriguing case study. The pandemic's influence on consumer decisions in this region is shaped by a variety of factors, from economic disparities to a deeply ingrained sense of community. As consumers in Kerala adapt to the 'new normal,' retailers must also adapt, re-strategize, and align their offerings with the emerging trends. This study's significance lies not only in contributing to the academic understanding of changing consumer behavior but also in its practical implications for the retail industry in Kerala. As retailers grapple with challenges brought on by the COVID-19 crisis, the insights gained from this research will equip them to better serve and engage with their customers, ultimately ensuring their resilience and growth in a post-pandemic world.

In the pages that follow, we will explore the complex web of factors influencing consumer buying behavior, dissect the mediating and moderating elements at play, and uncover how retailers can effectively respond to these transformations, ensuring that they remain not just survivors but thriving entities in this new era of consumer choices in Kerala.

So many authors will have discussed about A Study of Changing Consumer Buying Behavior during the COVID-19 Crisis: Implications for Retailers special reference to Kerala by using different methods those methods are given below

This article focuses on the changes in customer purchasing behaviour during COVID-19 and the issues that may face future retail sectors. The research focuses on consumer purchasing behaviour in a pandemic condition, as well as the accompanying potential and difficulties for Kerala's retail industry(Uthaman, 2022).This study used 60 samples collected from various districts of Kerala (20 enterprises from each of three retail formats). As more people in the country have access to the internet, the sector benefits significantly, particularly during the Covid 19 period(Academicians, 2018). This essay aimed to demonstrate how the fear of a pandemic causes panic and changes in people's purchasing habits. Finally, they may infer that the COVID 19 epidemic has instilled anxiety not just of health degradation but also of a lack of requirements (John, 2021). This article aimed to examined the effect of the Covid-19 outbreak on Kerala MSMEs from the five most impacted sectors, to comprehend the impact of the government's early measures and the reliefs provided, and to conclude with important conclusions based on the data obtained (Amritha Hariharan, & Viswanathan, 2016). Using an online questionnaire, this article attempted to capture the behaviour of customers buying critical items before and during the lockdown. This report aimed on evaluating the attitude of consumers in India towards buying critical goods due of the uncertainty produced by COVID-19 (Patil et al., 2022).

The COVID-19 epidemic has prompted fears of an impending economic disaster that might be even worse than the Great Depression. Although the epidemic is global in scope, its effect is very local. The goal of this research was to examine the socioeconomic impacts of the COVID-19 epidemic, particularly on children different organisations and individual consumption habits. On the social front, it will be investigated how social distance, panic purchasing, and other preventative measures necessary by this pandemic impacted people' behavioural patterns in their relationships with other economic agents (Lahiri & Sinha, 2021). The report develops It promotes the concept of governmental frugal innovation (GFI), as well as providing crucial insights and tools to aid governments in effectively navigating and responding to this challenge, asking the rest of the globe to take note of Kerala's experience (Sarkar, 2021). It will be studied if the most recent spread of the virus was triggered by state faults or flaws in its concept of "general action," which involves confrontational politics with a disrupting tone. We shall conclude by arguing that the Kerala paradigm is still viable and in use (Chathukulam & Tharamangalam, 2021).

Research Gap

The review of existing literature reveals several research gaps that warrant further investigation. Firstly, the studies mentioned often rely on relatively small sample sizes and have limited geographic scope, mainly focusing on specific districts or retail formats in Kerala. To provide a more comprehensive understanding of consumer behavior, future research should strive for larger and more representative samples that encompass a broader geographical area and various types of retail formats. Secondly, the literature primarily explores the immediate the COVID-19 pandemic's impact on consumer behaviour, but there is a lack of longitudinal analysis. To gain insights into how these changes persist or evolve over time, it is essential for future research to consider conducting longitudinal studies that track consumer behavior not only during the pandemic but also in the post-pandemic period. Addressing these research gaps will help you have a better knowledge of the complexities of consumer purchasing behavior during and after the COVID-19 crisis in Kerala.

Scope of the Study

The scope of this study encompasses a comprehensive examination of the changing landscape of consumer buying behavior during the COVID-19 crisis, with a particular focus on the unique context of Kerala, a southern state in India. The purpose of this study is to look at both the indirect and direct impacts of COVID-19 crisis-induced factors, such as health concerns, lockdown measures, and economic uncertainties, on consumer purchasing decisions. Additionally, it seeks to explore the moderating role of demographic and socio-economic characteristics in shaping these behavioral changes. Furthermore, the study delves into the mediating impact of psychological factors, including fear and trust in online shopping, on the relationship between COVID-19 crisis factors and consumer choices. By studying these dynamics, this research aspires to provide valuable insights and practical implications for retailers in Kerala, enabling them to adapt and thrive in the evolving consumer landscape both during and beyond the pandemic.

Aim

The purpose of this research is to analyse and comprehend the alterations in consumer buying behavior brought about by the COVID-19 crisis among residents of Kerala. With a special focus on the Kerala context, the study seeks to identify the direct and indirect effects of crisis-induced factors, explore demographic and socio-economic moderating influences, and assess the mediating role of psychological factors. Ultimately, the study aims to provide actionable insights and recommendations for retailers to adapt to and thrive in the changing consumer landscape during and post-COVID-19 in Kerala.

Objectives

1. Investigate COVID-19 crisis-related elements' direct and indirect impacts on changes in consumer buying behavior among residents of Kerala.
2. Examine the moderating role of demographic and socio-economic characteristics in the relationship between the COVID-19 crisis and consumer buying behavior within the Kerala context.
3. Investigate the function of psychological variables in moderating the relationship between COVID-19 crisis factors and consumer buying behavior, while considering the unique context of Kerala.

Hypothesis

- H1:** “The COVID-19 crisis-induced factors directly affect changes in consumer buying behavior among residents of Kerala.”
- H2:** “Socio-economic characteristics (e.g., income, employment status) do not moderate the relationship between the COVID-19 crisis and consumer buying behavior in Kerala.”
- H3:** “Psychological factors, such as fear and trust in online shopping, mediate the relationship between COVID-19 crisis factors and consumer buying behavior in Kerala, shaping how crisis-induced factors affect consumer choices.”

Research Questions

1. How have COVID-19 crisis-induced factors, such as health concerns and economic uncertainties, directly influenced changes in consumer buying behavior among residents of Kerala?
2. What are the specific demographic and socio-economic characteristics that moderate the relationship between the COVID-19 crisis and consumer buying behavior within the unique context of Kerala?
3. To what extent do psychological factors, such as fear and trust in online shopping, mediate the relationship between COVID-19 crisis-induced factors and consumer buying behavior in Kerala?

4. How has the COVID-19 crisis affected the preference for local or global products among consumers in Kerala, and what are the implications for retailers?
5. What strategies and adaptations can retailers in Kerala implement to address the evolving consumer buying behavior during and after the COVID-19 crisis, considering the specific dynamics of the region?

METHODOLOGY

Methodology for a study on changing consumer buying behavior during the COVID-19 crisis with special reference to Kerala:

Research Design

The study will adopt a cross-sectional research design, collecting data from participants in Kerala at a specific point sufficient time to assess COVID-19's effect on consumer behavior.

Data Collection

Survey Questionnaire: A structured survey questionnaire will be administered to a representative sample of Kerala residents. The questionnaire will include questions related to COVID-19 crisis-induced factors, consumer buying behavior, demographic and socio-economic characteristics, and psychological factors.

Sampling

Sampling Frame: The sample frame will comprise Kerala citizens of all ages and socioeconomic levels.

Sampling Method: Stratified random sampling will be employed to ensure representation from various demographics.

Sample Size: A sample size of [determine the sample size based on research requirements] will be targeted.

Variables

Dependent Variable: Consumer buying behavior.

Independent Variables: COVID-19 crisis-induced factors.

Moderating Variables: Demographic and socio-economic characteristics.

Mediating Variables: Psychological factors.

Sample Size

Our research study has a sample consisting of 250 people. This sample size was calculated with care to create a balance between statistically reliability and practical practicality. With 250 participants, our research is well-equipped to provide meaningful & statistically significant findings while keeping gathering and analyzing information manageable. This large sample size allows us to draw solid conclusions and make wide generalizations about the larger

population, which improves the overall reliability and trustworthiness of our study results.

Sampling Technique

When selecting participants for our research, we used a technique known as "stratified random sampling." This implies that we segmented the population that we wished to analyze into smaller groups according to characteristics such as Gender, Age, Income, and Education level. After that, we chose some individuals at random from inside each of these more intimate groups. We ensured that our sample consisted of a diverse range of individuals by carrying out these steps. Since of this, we are able to get data that are more accurate and dependable since we are able to examine the ways in which our study's many groups may have varying outcomes.

Data Collection

We used structured questionnaires as the main data-gathering instrument to get information from our 250 participants. These surveys were carefully created to examine important facets consumer buying behavior among residents of Kerala, COVID-19 Induced factor and Psychological factor. We gave ethical issues top priority throughout the procedure by obtaining fully informed permission from each participant and ensuring them of the security of their data. Respondents have options since surveys were done using both in-person interviews and internet platforms.

Data Analysis

As part of our data analysis process, we looked at the information we had collected in a planned way to find useful insights. We used different statistical methods to look at the connections between key factors. SEM analysis helped us figure out how consumer buying behavior among residents of Kerala, COVID-19 Induced factor and Psychological factor are connected, and moderation analysis showed how Perceived Demographic characteristics these links. We made a summary of the data and tried our study theories by using both descriptive and inferential statistics. This in-depth study gave important insights into the complicated relationships between consumer buying behavior among residents of Kerala, COVID-19 Induced factor and Psychological factor. It has important effects for businesses and organizations in many different fields.

Analysis of Structural Equation Modelling (SEM)

A potent statistical technique is structural equation modelling, or SEM tool that we use in our study to examine complicated interactions between several variables at the same time. It enables the investigation of both direct and indirect effects, offering a thorough knowledge of the interaction of many components within a theoretical framework. SEM combines several statistical approaches, such as regression analysis and factor analysis, to evaluate the degree to which the suggested model and the data were well-fitting. This analytical technique allows us to verify and modify our research hypotheses, revealing detailed patterns and relationships that lead to a better understanding of the phenomena under study. SEM analysis is critical in our study because it reveals the complex dynamics between management of MSMEs performance, modern marketing strategies, and Development of digital marketing capabilities, providing

significant insights into their linkages and possible ramifications for companies and organizations.

RESULT AND ANALYSIS

Table 1: Demographic variables

	Frequency	Percentage	Mean	Total sample
Age			1.4840	250
18-25	69	27.6		
25-35	101	40.4		
35-40	80	32.0		
Total	250	100		
Gender			2.0440	250
Male	129	51.6		
Female	121	48.4		
Total	250	100		
INCOME			1.9760	250
20000-30000	86	34.4		
30000-40000	84	33.6		
40000 Above	80	32.0		
Total	250	100		
EDUCATIONAL LEVELS				
High School or Below	87	34.8		
Bachelor's Degree	81	32.4	1.9800	250
Master's Degree	82	32.8		
Total	250	100		

The table presents a snapshot of the demographic and socio-economic composition of a sample of 250 individuals involved in a research study. Age-wise, the sample is distributed relatively evenly across different age groups, with 27.6% falling in the 18-25 bracket, 40.4% in the 25-35 range, and 32.0% in the 35-40 category. Gender distribution is nearly balanced, with 51.6% male and 48.4% female respondents. Income-wise, the sample displays diversity, as 34.4% of respondents earn between 20,000-30,000, 33.6% earn 30,000-40,000, and 32.0% have an income of 40,000 or above. In terms of educational levels, the sample is fairly evenly distributed among categories, with 34.8% having high school education or below, 32.4% holding a bachelor's degree, and 32.8% having a master's degree. This data highlights the diverse socio-economic characteristics of the sample, which is vital for comprehending their consumer behavior during the COVID-19 crisis within the study's Kerala context.

H1: “The COVID-19 crisis-induced factors directly affect changes in consumer buying behavior among residents of Kerala.”

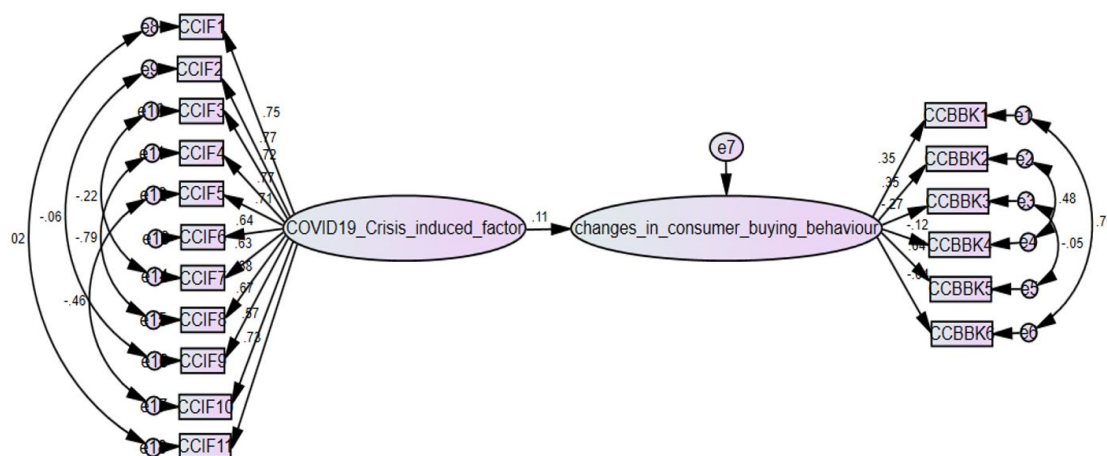


Table 2: Regression weights

			Estimate	S.E.	C.R.	P
changes_in_consumer_buying_behaviour	<---	COVID19_Crisis_induced_factor	0.061	0.044	1.391	0.004
CCBBK1	<---	changes_in_consumer_buying_behaviour	1			
CCBBK2	<---	changes_in_consumer_buying_behaviour	0.664	0.22	3.019	0.003
CCBBK3	<---	changes_in_consumer_buying_behaviour	-0.763	0.29	-2.633	0.008
CCBBK4	<---	changes_in_consumer_buying_behaviour	-0.234	0.148	-1.582	0.014
CCBBK5	<---	changes_in_consumer_buying_behaviour	2.495	0.731	3.414	***
CCBBK6	<---	changes_in_consumer_buying_behaviour	-1.967	0.642	-3.063	0.002
CCIF1	<---	COVID19_Crisis_induced_factor	1			
CCIF2	<---	COVID19_Crisis_induced_factor	0.933	0.073	12.774	***
CCIF3	<---	COVID19_Crisis_induced_factor	1.037	0.088	11.829	***
CCIF4	<---	COVID19_Crisis_induced_factor	0.831	0.067	12.454	***
CCIF5	<---	COVID19_Crisis_induced_factor	0.816	0.071	11.538	***
CCIF6	<---	COVID19_Crisis_induced_factor	0.825	0.08	10.372	***
CCIF7	<---	COVID19_Crisis_induced_factor	0.741	0.073	10.119	***
CCIF8	<---	COVID19_Crisis_induced_factor	1.17	0.107	10.92	***
CCIF9	<---	COVID19_Crisis_induced_factor	0.744	0.069	10.811	***
CCIF10	<---	COVID19_Crisis_induced_factor	0.932	0.102	9.145	***
CCIF11	<---	COVID19_Crisis_induced_factor	0.971	0.082	11.863	***

A fictitious structural equation model that shows the relationship between COVID19 Crisis induced factor and changes in consumer buying behavior is shown in Table 1. The COVID19 Crisis induced factor is the variable being assessed in this model, and changes in consumer buying behavior are represented as the variable independent. Given that components are determined to be statistically significant with p-values not surpassing 0.05, the fit indices

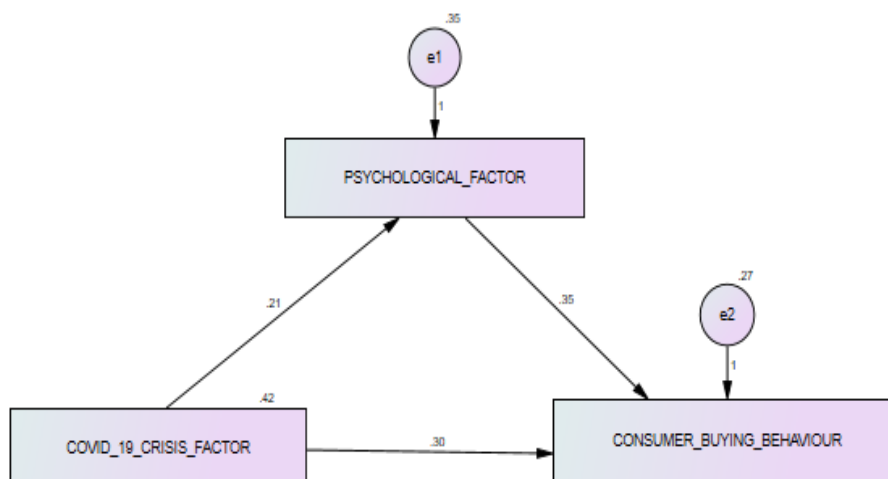
indicate that the framework fits well (see Table 1). Seven distinct fit indices were used to evaluate the overall model fit, and the results showed a strong and positive correlation between COVID19 Crisis induced factor and changes in consumer buying behavior.

Table 3: Model fit summary

Variable	Value
Chi-square value(χ^2)	642.736
Degrees of freedom (df)	156
CMIN/DF	3.617
P value	0.048
GFI	0.924
RFI	0.929
NFI	0.921
IFI	0.924
CFI	0.924
RMR	0.05
RMSEA	0.064

The sample data ($\chi^2 = 642.736$), NFI (Normed Fit Index) = 0.921, IFI (Incremental Fit Index) = 0.924, GFI (Goodness of Fit) = 0.924, RFI (Relative Fit Index) = 0.929, and CFI (Comparative Fit Index) = 0.924, all indicate an acceptable grade of fit that is significantly greater than the 0.90. The values of RMR (Root Mean Square Residuals) = 0.05 and RMSEA (Root mean square error of approximation) = 0.064 are also less than the crucial threshold of 0.080. The obtained RMSEA of 0.064, RMR of 0.05, GFI of 0.934, and CFI of 0.924 all suggested a satisfactory match for the model that was given.

H3: “Psychological factors, such as fear and trust in online shopping, mediate the relationship between COVID-19 crisis factors and consumer buying behavior in Kerala, shaping how crisis-induced factors affect consumer choices.”



Utilizing the AMOS and structural equation modelling (SEM), we looked at the effects of consumer buying behavior in Kerala on COVID-19 crisis factors with improved mediating Psychological factor.

Table 4: Regression Weights

			Estimate	S.E.	C.R.	P
PSYCHOLOGICAL_FACTOR	<---	Covid_19_Crisis_Factor	0.214	0.057	3.719	***
CONSUMER_BUYING_BEHAVIOUR	<---	Psychological_Factor	0.352	0.055	6.361	***
CONSUMER_BUYING_BEHAVIOUR	<---	Covid_19_Crisis_Factor	0.297	0.052	5.753	***

The following table displays a structural equation framework that looks at the relationship between the consumer buying behavior in Kerala and COVID-19 crisis factors, with the acquisition of Psychological factor acting as a mediator. This methodology incorporates measurement errors and comments directly into the model, enabling testing of all relevant routes. Given that the components have statistical significance at $p < 0.05$, the fit indices suggest that the hypothesis fits the data well.

The consistency between the proposed model and the given data was evaluated by using global fit metrics, such as 'r' values and seven distinct fit indices, to evaluate the model fit. According to the table's data consumer buying behavior in Kerala and COVID-19 crisis factors —when connected to social media presence—have a strong and substantial correlation.

The development of Psychological factor has a positive mediating influence on the relationship between consumer buying behavior in Kerala and COVID-19 crisis factors, according to the findings of the overall study on mediation. Examining the connection between the development of Psychological factor and COVID-19 crisis factors shown this to be the case. The consumer buying behavior in Kerala is indirectly impacted by COVID-19 crisis factors via the mediating variable of the Psychological factor.

Table 5: Model fit summary

Variable	Value
Chi-square value(χ^2)	549.129
Degrees of freedom (df)	159
CMIN/DF	4.392
P value	0.079
GFI	0.933
RFI	0.972
NFI	0.922
IFI	0.941
CFI	0.937
RMR	0.06
RMSEA	0.069

The sample data was well represented by the quality of fit ($\chi^2 = 549.129$), with NFI (Normed Fit Index) = 0.934, IFI (Incremental Fit Index) = 0.936, GFI (Goodness of Fit) = 0.933, RFI (Relative Fit Index) = 0.972, and CFI (Comparative Fit Index) = 0.937, significantly more than the 0.90. Likewise, the values of RMSEA (Root Mean Square Error of Approximation) = 0.069 and RMR (Root Mean Square Residuals) = 0.06 are below the threshold value of 0.080.

The provided model was found to be well-fitting based on the obtained results, which included RMSEA of 0.069, RMR of 0.06, GFI of 0.933, and CFI of 0.937.

H2: “Socio-economic characteristics (e.g., income, employment status) do not moderate the relationship between the COVID-19 crisis and consumer buying behavior in Kerala.”

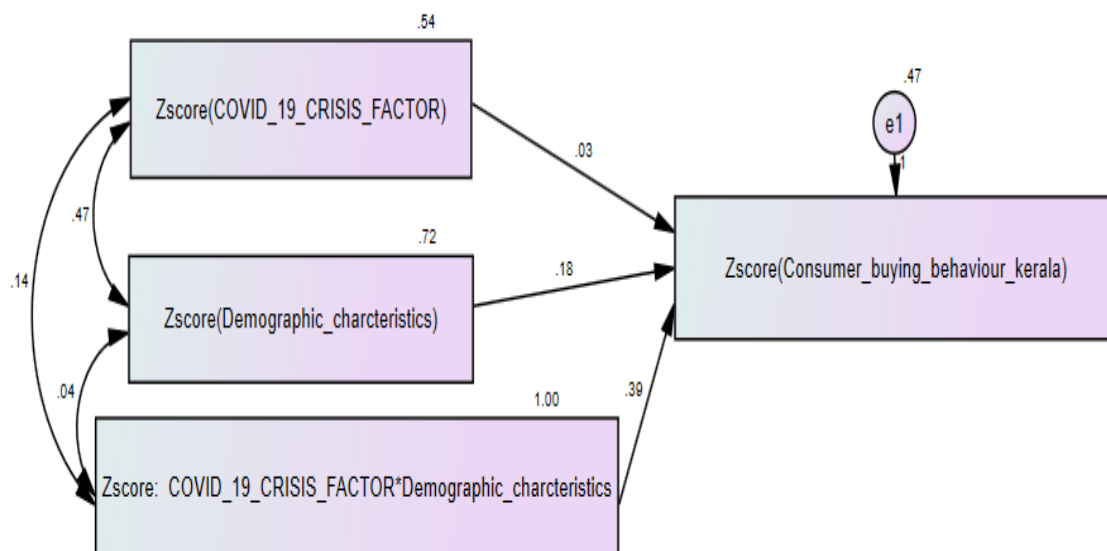


Table 6: Regression weights

PATH		Estimate	S.E.	C.R.	P
ZConsumer_buying_behaviour_kerala	<--- Zcovid_19_Crisis_Factor	0.031	0.091	0.34	0.034
ZConsumer_buying_behaviour_kerala	<--- ZINTERACTION	0.388	0.045	8.66	***

The ZCOVID_19_CRISIS_FACTOR is favorably and substantially linked with ZConsumer_buying_behaviour_kerala ($\beta=0.031$, $P<05$), according to hypotheses based on path analysis. Zscore (COVID_19_CRISIS_FACTOR) *(Demographic_characteristics) is positively It had a high ($\beta=.388$, $P<05$) correlation with Consumer buying behavior Kerala.

Moderation Testing

ZCOVID_19_CRISIS_FACTOR is treated as a variable independent of, Customer Satisfaction is treated as a variable unrelated to ZDemographic_characteristics channels is treated as a moderator variable in the examination of moderation.

To calculate the results, interaction terms are produced using the standardized scores of the variables in SPSS.

PATH		ESTIMATE	S.E.	C.R.	P	
ZConsumer_buying_behaviour_kerala	<---	ZDemographic_characteristics	0.177	0.078	2.269	0.023

The ZDemographic_characteristics channels were tested in their role as moderator. The findings indicate that there is a significant positive and successful influence on Consumer buying behavior Kerala ($\beta=0.177$, $P<05$) due to the correlation between ZDemographic_characteristics channels and Consumer buying behavior Kerala.

The result shows that our data provide statistical support for the moderating function ZDemographic_characteristics channels, contrary to the connection hypothesis.

Table 7: Model fit summary

VARIABLE	VALUE
CHI-SQUARE VALUE(χ^2)	34.225
DEGREES OF FREEDOM (DF)	11
CMIN/DF	3.111
P VALUE	0.076
GFI	0.936
RFI	0.941
NFI	0.984
IFI	0.962
CFI	0.937
RMR	0.057
RMSEA	0.018

The sample data show that the quality of fit was adequate; they are all considerably greater than the 0.90 criterion ($\chi^2= 34.225$, NFI = 0.984, IFI = 0.962, GFI = 0.936, RFI = 0.941, and CFI = 0.961).

Additionally, RMR = 0.057 and RMSEA = 0.018 are below the necessary threshold of 0.080. With an RMSEA of 0.018, an RMR of 0.057, a GFI of 0.936, and a CFI of 0.937, the findings showed that the proposed model fit the data correctly.

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