

The influence of COVID- 19 on buying behavior of consumers in Kathmandu city

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Abstract

The main goal of this research was to analyze the impact of COVID-19 on buying behaviors of consumers during lockdowns in Kathmandu city. Fear of health, fear of economy, and fear of scarcity were taken as independent variables to measure the buying behaviors of consumers. The study used positivist epistemology with predetermined hypotheses and a deductive approach with a single ontological foundation. The study used a quantitative method. To obtain the primary data, and questionnaire based on a seven-point Likert scale was utilized. The population for this study was comprised of customers of consumer goods in and a sample size of 395 was used. In this study, a convenient sampling technique and a causal-comparative research design were used. Path analysis through Structural Equation Modeling was utilized to determine the effect of influencing variables on buying behaviors of consumers. The regression path analysis result found that fear of the economy and fear of scarcity had a substantial effect on consumer buying behavior. In contrast, the fear of health had not significantly affected consumer buying behavior. The results provide future scholars and business people with a road map to view the emerging context of market development.

Keywords: Fear, Health, Economic, Scarcity, Lockdown

Introduction

The spread of COVID-19 made the implementation of lockdowns necessary everywhere in the world. To stop the spread of the virus, some governments imposed limits on people's freedom of movement. Only necessary services were allowed to operate inside the nation's borders, which were sealed. The COVID-19 global outbreak has had a significant impact on economies, societies, and a variety of societal sectors around the world. Numerous effects of this atypical position on consumers' daily lives have been noted, and as a result, enterprises and consumers have changed significantly in how they respond and react (Donthu & Gustafsson, 2020). Inevitably, industries across diverse sectors underwent substantial transformations. Restaurants embraced drone technology for delivery, locations explored immersive virtual tours, and automotive companies expedited investments in autonomous cars for both private and public travel. The requirements for advanced networking and technology, characteristic of the industry 4.0 revolution, were speeded by the ongoing impact of pandemic (Rajbhandari et al., 2020). According to Sheth (2020), as a result of the current situation the first and second waves of the COVID-19 outbreak across the globe, many customers have been compelled to reassess their long-standing purchasing habits or even to adopt new ones. For instance, some customers have been compelled to use cashless payment options, internet purchasing, or home delivery that they had never thought of previously (Pantano et al., 2020). For deciding by retail managers and marketers which new methods to be employed, must understand changes in consumer shopping behavior and habits (Verma & Gustafsson, 2020).

The aim of this research is to determine how the COVID-19 pandemic has affected consumer behavior and purchasing patterns. Marketers, retailers, business executives, and public policymakers must all be well-versed in consumer buying habits in the context of the epidemic and beyond in order to devise tactics, and strategies for retaining current customers and luring new ones. With the first and second COVID-19 pandemic waves

having hit the entire world, this study aims to expand our understanding of consumer behavior. Unexpected regulations that forbid social interaction are also significantly influencing how consumers prefer to make transactions. Online food purchases have grown steadily over the past 10 years, but they have significantly increased during the COVID-19 pandemic outbreak, according to Harris et al. (2017).

The evaluation of purchases of essentials, including those spurred on by utilitarian (necessity) and hedonistic (fear) stimuli is the main objective of the research (Ahmed et al., 2020). According to Maslow (1970), the process of consumer behavior can be conceived of as starting with consumer requirements even if many factors influence how consumers make purchases. The first basic need, according to Maslow's hierarchy of needs theory, frequently develops during fear time, suffering, and deprivation, in this situation the COVID-19 outbreak. Some fundamental human desires drive consumer behavior, including buying decisions (Seeley, 1992). Consumers have assessed their purchasing habits and learned about the benefits of services they had never used before, claim Pantano et al. (2020). For instance, when consumers learn more about the benefits of home delivery, store pickups, and cashless transactions, some are switching to online shopping.

According to recent studies, the main causes of planned (conscious) or impulsive (subconscious) buying behaviors are emotional (hedonic) and practical (utilitarian) inputs (Ahmed et al., 2020). Based on numerous studies, the unsettling COVID-19 phenomenon has significantly increased the amount of impulsive purchases around the world (Kim, 2020; Chinazzi et al., 2020). Because of this, the researcher included the concept of fear appeal in the investigation. Due to the diminishing economic turnover, a sizeable portion of the workforce had to accept pay cutbacks, which led to many people losing their employment. Strict lockdown regulations caused business closures, a stop in goods production, and more difficult transportation. This interconnected reality emphasizes the importance of a vibrant and motivated workforce for sustained economic development, aligning seamlessly with research findings that documented the existence of a co-integrating relationship among the economic variables over the long run (Karki, 2012, 2018). On the other hand, people began to pay more attention to medical and hygienic items. Equipment including Personal Protection Equipment (PPE), N-95 surgical masks, surgical gloves, and sanitizers are now more frequently used. In these situations, the researcher wanted to identify the factors influencing consumer behavior during the COVID-19 period. The main goal of this research was to identify the variables influencing customers' purchasing decisions during COVID-19. The study's specific objectives were as follows;

- To identify the influence of health fear on purchasing decisions made during COVID-19.
- To examine the influence of economic fear on purchasing decisions made during COVID-19.
- To identify the influence of scarcity fear on consumer buying behavior during COVID-19.

Literature Review

Fear of health

Kim et al. (2022) researched the themes of optimism, fear, and consumer behavioral change in the middle of the COVID-19 epidemic in the U. S. They found that under the threat of COVID-19, the fear induced by risk perception, cognitive appraisals of the threat, and the ability for risk-reducing acts were strongly predictive of restaurant patron behavior. The health of the consumers was their top priority. Eger et al. (2021) carried out research to identify the impact of COVID-19 on consumers' buying behaviors. The study's results showed that fear played a significant role in consumer purchasing behaviors during the COVID-19 epidemic; the more fear and greater the change in behavior. As expected, statistically significant health concern was the main factors influencing the decision to buy new products. According to our sample of respondents, their new purchases were motivated by three factors: quality, accessibility, and convenience of purchase. Hesham et al. (2021) discovered the COVID-19 pandemic's impact on consumer behavior. They discovered that consumers of healthier foods had higher purchase intentions. Compared to men, women were more concerned about the COVID-19 outbreak and took additional precautions to avoid exposure. The senior group had more dread of COVID-19 than did the younger population. According to Hussien (2020), supply chains have been disrupted

and raw material prices have gone up as a result of the countries' stringent steps to stop the virus's spread. Health concerns and the desire to avoid contracting COVID-19 frequently take a back seat to the need to receive a daily diet. It leads to a breach in lockdown protocols and crowded marketplaces and establishments. Food has therefore always been a part of people's daily existence from a physical and psychological standpoint, but the COVID-19 health pandemic seems to have transformed their connection with food.

The new coronavirus has significantly impacted Indian markets, claimed Patil and Patil (2020). Sellers were black marketing necessities including medicines, face masks, hand gloves, and hand sanitizers. In this study, an effort was made to comprehend the numerous elements that influence consumers' purchasing decisions. Consumers' attention was redirected toward the usage of preventative measures. Research on the impact of the COVID-19 Crisis on consumers' purchasing patterns in Panipat City was conducted by Batra (2021). People are reluctant to leave their homes and prefer to order their daily necessities online. Customers are concerned about their health and favor products for cleanliness and healthcare, among other things. There is a significant need for hand washes, masks, and sanitizers. Due to rushes on the products during the shutdown, individuals are not being loyal to a specific brand.

The effects of Covid-19 on consumer behavior were conducted by Bisaria (2021). Many products, including medications, masks, immune boosters, Internet/net packs, gloves, sanitizers, health & nutritional products, and disinfectants, among others, have seen an increase in sales as a result of consumers' rising concern for their health. This shows that buyers are more interested in sanitary and health-related concerns. Net packs and internet consumption increased as more people began working from home and enrolling in schools during the lockdown. Stanciu (2020) studied how Romanians behaved as consumers throughout times of crisis. Even if there will be many primarily economic issues, every crisis has the benefit of allowing for an accurate and comprehensive study of an industry. As a result, the COVID-19 pandemic in Romania has emphasized the need for consumer health investments, with the primary focus of the measures being to meet fundamental needs. The primary reasons people leave their homes are related to their health (buying medications or going to the doctor), getting food, or engaging in financial transactions at a bank.

H1: Health fear positively influences consumer buying behavior.

Fear of Economic

The effect of COVID-19 on customer buying behavior was the subject of a study carried out by Eger et al. (2021). They discovered that during the COVID-19 epidemic, consumer purchasing behavior was significantly influenced by the fear of economic loss.

The decline in the country's average income during the lockdown, according to Tanveer et al. (2020), may have produced a bottleneck in the supply chain. In India, during the outbreak, people spent more than 14% on self-care products while less than 15% was spent on luxury cosmetics, according to a study by McKinsey and Company (2020). A study on the impact of Covid-19 on consumer behavior was conducted by Bisaria (2021). It was examined that buying necessities such as vegetables, milk and milk products, fruits, flour, pulses, edible oils, chips, spices, snacks, and biscuits continued throughout the lockdown, lockout duration, and lockdown period. Because of the recession, fewer individuals spent money on a range of items during the lockdown, including furniture, newspapers, home appliances, electronics, books, stationery, clothing, sports equipment, cosmetics, jewelry, and shoes, as well as restaurants and autos. Many workers are getting ready for pay cuts or job loss.

Research on the COVID-19 epidemic crisis' effects on Romanian consumer behavior was undertaken by Stanciu (2020). The researcher discovered that during and after the COVID-19 epidemic, investments in health and basic necessities increased. They bought medicines and went to the doctor because they thought about the consumers' health. The pandemic's effects have varied from nation to nation depending on the population's total health and the emergence of disease cases, the economic climate, the expansion and modernization of

the national healthcare system, the policies put in place by policymakers, and the population's scrupulosity (Gopinath, 2020).

The implementation of previously unheard-of measures in the context of the global coronavirus outbreak causes profound changes in both the corporate environment and the way that people live (Ho et al., 2020). The difficulties the healthcare system faces also have an impact on the standard of living. Rai (2021) explored the factors influencing the buying motive of Smartphones. He found the brand personality, price, and attributes of Smartphone affect the purchase behavior. Rai (2020) conducted the research to pinpoint the elements influencing consumers' decisions to buy smartphones. He discovered that the purchasing choice is significantly influenced by the price, social considerations, brand image, and product attributes.

H2: Economic fear has a positive significant influence on consumer buying behavior.

Fear of Scarcity

The perception of product scarcity has been proven to have a considerable impact on customer decisions in recent literature (Laato et al., 2020).

An investigation into the fearful buying patterns of consumers during the COVID-19 pandemic was conducted by Singh et al. (2021). According to the findings, customers' attitudes are positively correlated with projected personal outcomes and negatively correlated with expected community-related outcomes. Customers' intentions to purchase in a panic were found to be positively influenced by factors like subjective norms, attitude, time constraints, scarcity, and perceived competition. Furthermore, it was found that while felt social detection hazard has a negative effect on the intentions of customers to buy in a panic, scarcity and time constraints favorably influence perceived competition.

A study on the effect of goods shortage of medical protection on consumers' imprudent buying during the COVID-19 outbreak in China was done by Zhang et al. (2021). The results show that the scarcity influence on impulsive buying is dominated by the missing out fear, perception, and bandwagon. The results give us more knowledge about impulsive consumer spending in the context of a lack of medical protection products.

Zhang et al. (2022) did research on the subject of how scarcity influences consumers' impulsive purchases based on the SOR hypothesis. The findings of the research demonstrate that scarcity causes consumers to worry about the chances of missing to buy protective medical tools, which ultimately leads to impulsive purchasing during COVID-19. It was also found scarcity impact on consumers' impulsive purchases relying on other customers' subsequent behaviors in such urgent situations. Omar et al. (2021) investigated how customer purchasing behaviors during the COVID-19 epidemic was influenced by perceptions of shortage, perceptions of severity, uncertainty, and fear. The results of structural equation modeling show that consumer anxiety is positively connected with beliefs about scarcity and uncertainty but not with consumers' irrational purchasing behavior.

Islam et al. (2021) investigated the panic buying trends during the COVID-19 epidemic. The researchers' findings indicate that limited temporal scarcity (LTS) and limited quantity scarcity (LQS) both significantly increase consumers' sense of arousal, which further promotes impulsive and compulsive buying.

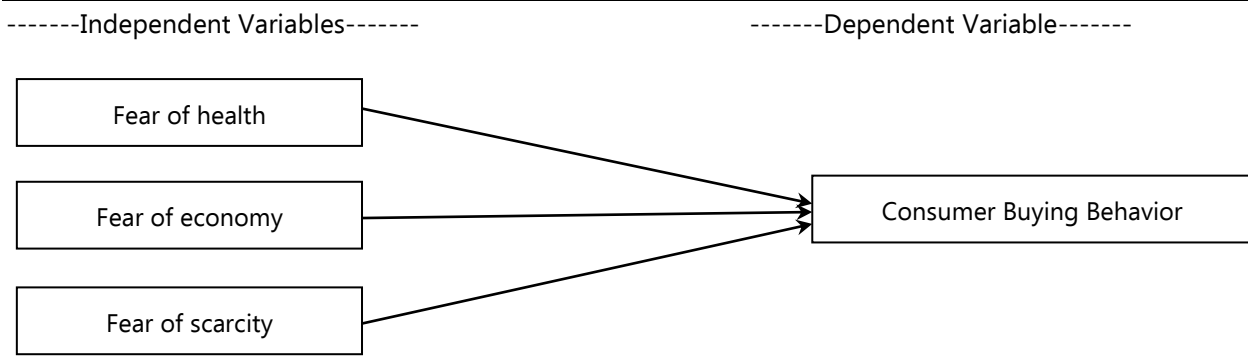
Chua et al. (2021) studied the variables that affect panic buying during COVID-19. The research found that consumers' perceived shortages have an impact on their panic buying.

H2: Fear of scarcity positively influences consumer buying behavior.

According to earlier studies, a variety of factors may affect customer purchasing decisions. However, in this study, three independent variables are used to measure the purchasing patterns of consumers in Kathmandu during the COVID-19: fear of health, fear of the economy, and fear of scarcity.

The study's model is as below:

Figure 1
Conceptual Framework



Materials and Methods

Research Approach

The study has examined the effect of fear of health, fear of the economy, and fear of scarcity on consumer behavior. It was based on positivist epistemology with a deductive approach and a single reality ontological foundation. The study has adopted quantitative research methods.

Research Design and Type of Data

A causal comparative research design was utilized in the study to recognize the effect of fear of health, fear of economy, and fear of scarcity factors on consumer behavior.

The primary data from consumers were gathered for this study using a seven-point Likert-type scale questionnaire. Closed-ended questionnaires have been used to investigate the factors influencing consumer behavior among consumers in the Nepalese market.

Instrument Development

Structured survey questionnaires were used for the fear of health, fear of economy and fear of scarcity factors, and customer behavior by giving a score of 1 equal to strongly disagree, and 7 equal to strongly agree. The structure of the questionnaire is as follows:

Table 1
Questionnaire Structure

Group and Area	Qs	Measurement Scale	Remarks
Group A: Demographic Information	3	Various Options	
Group B: Fear of health	3	7-point Likert Scale	1 = strongly disagree to 7 = strongly agree
Group C: Fear of economy	3		
Group D: Fear of scarcity	5		
Group E: Consumer behavior	5		
Total	19		

Population and Sample

The target population of the study was Nepalese people who purchase consumer items in the Nepalese market. Based on the convenience sampling technique, the study gathered a response from 395 respondents, for the study's sample size.

Respondents Profile

Table 2 presents the personal information of the respondents. These variables were gender, age groups, and level of education.

Table 2
Profile of Respondents

Variables	Categorization	Frequency	Percentage
Gender	Male	151	38.2
	Female	244	61.8
Age Groups	Below 25	116	29.4
	26-35	150	38.0
	Above 35	129	32.7
Total		395	100

Analytical Tools

Mean was used to understand consumer behavior during the COVID-19 period. The standard deviation has been used to measure the dispersion of a set of data. The relationship of variables was evaluated using Karl Pearson's Coefficient Correlation. Regression analysis was used to examine the effect of independent variables on consumer behavior.

Confirmatory Factor Analysis

The outcome of the exploratory factor analysis was validated using confirmatory factor analysis. Using SPSS AMOS 23 and a sample size of 295, CFA was performed. The measurement model was fitted using the following criteria: (AGFI), (RMSEA), (GFI), (CFI), (IFI) and (NFI). These criteria were recommended by Byrne (2010) and Hair et al. (1998). Using structural equation modeling, the theories have been investigated. The model fit indices have been evaluated before looking at the hypotheses. The following table includes several fit indices that can be used to evaluate the model as a whole. Table 3 shows that CMIN/DF is valued at 2.721, which is lower than the amount suggested by (Byrne, 2010; Hair et al., 1998). This model is therefore thought to be suitable. All the model fit values listed above are all within the acceptable range. As a result, it appears possible to examine the model of structural output.

Table 3
Overall Model Fit Summary

Fit Indices	Suggested Range of Fit Byrne (2010), Hair et al. (1998)	Model Value Result	Model Value Result
CMIN/DF	<3	2.721	Good
CFI	>0.9	0.974	Good
GFI	>0.9	0.922	Good
AGFI	>0.8	0.892	Good
IFI	>0.9	0.974	Good
NFI	>0.9	0.960	Good
RMSEA	<0.08	0.066	Good

Reliability and Validity

The study ran validity and reliability tests to make sure that the variables and latent constructs were suitable for achieving the stated goals. Using Cronbach's alpha (α) and CR, the convergent validity of the components was tested, as well as their internal consistency (reliability). The test's outcomes are shown in Table 4.

Table 4
Overview of Reliability and Validity Measures

Constructs	CR	AVE	MSV	MaxR(H)	EFA	HFA	SFA	CBB
EFA	0.921	0.703	0.674	0.942	0.838			
HFA	0.838	0.716	0.333	0.889	0.577	0.846		
SFA	0.969	0.912	0.674	0.972	0.821	0.383	0.955	
CBB	0.964	0.843	0.305	0.968	0.552	0.399	0.551	0.918

No validity concern

The study's validity and dependability were evaluated. The CR of the CFA model was conducted for measuring the model of constructs. Bagozzi and Baumgartner (1994) state that for convergent validity, the values of Cr must be higher than 0.7, the values of AVE must be greater than 0.5), and the values of CR must be greater than the values of AVE. The findings in Table 3 demonstrated that all AVE values are larger than 0.5, the values of CR are greater than 0.7, and all CR values are bigger than AVE. Therefore, it is discovered that convergent validity occurred. Fornell and Larcker (1981) asserted that the AVE must be more than MSV for the discriminant validity, and greater than the square of the correlations between the constructs. Therefore, all of the aforementioned values supported the discriminant validity requirements. Table 4 presents no validity issues.

Results

Table 5 indicates the descriptive and correlation analyses of all the study's variables. According to the research framework, the dependent variables include consumer buying behavior (CBB), whereas the independent variables are fear of health (HF), fear of economy (EF), and fear of scarcity (SF).

Table 5
Descriptive Statistics and Correlation Insights

Variables	Mean	SD	HF	EF	SF	CBB
HF	4.8110	1.58925	1			
EF	5.9407	1.01112	.344**	1		
SF	5.7637	1.29185	.491**	.742**	1	
CBB	5.4009	1.16170	.309**	.540**	.521**	1

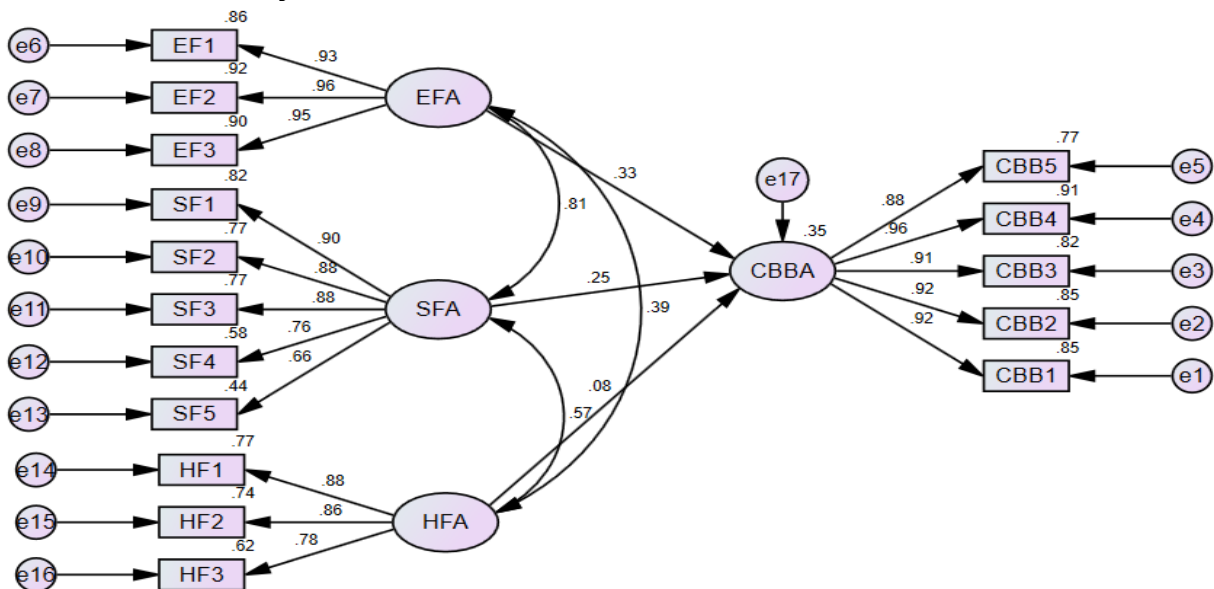
*** Correlation is significant at the 0.01 level (2-tailed).*

Source: Field Survey 2021

Table 5 shows that the mean values of HF, EF, SF, and CCB were 4.81, 5.94, 3.91, 5.76, and 5.40 respectively. All the average scores of the independent latent variables were more than the mid-point value of 3.5 and indicated that most of the responses were inclined to agree on CBB. Therefore, the independent variables had a positive impact on CBB. As a result, HF, EF, and SF significantly impact consumer buying behavior in the Nepalese market. Additionally, the data were consistent as proved by the values of the standard deviation of the HF, EF, and SF factors ranging from 1.59 to 1.01, and the responses dispersion from the mean values are somewhat similar across the respondents. Table 5 presents that there is a positive significant relationship between HF and CBB ($r=0.309, p<0.05$), EF and CBB ($r=.540, p<0.05$), and SF and CBB ($r=.521, p<0.05$).

The path diagram of the study model has shown in Figure 2. The model fit statistics, presented in Figure 2, satisfied the respective threshold values suggested by the researchers.

Figure 2
Structural model of the study



The percentage of variance in CBB that can be explained by EF, SF, and HF shows the predictive power of the model. The capacity of the model to predict events is higher when more variance is explained. In structural equation modeling, the variance value is expressed in squared multiple correlations linked to dependent variables. The four independent variables have been explained 35 percent proportion of variance in CBB for buying emergency products in Nepal.

Hypotheses were put to the test by evaluating path estimates by using the t-value, Critical values below the 5 % level of significance at t-value = 1.96 support the hypothesis. The many study-related parameters were examined against each of the separate hypotheses. The study's formulated hypotheses were put to the test using the calculated SEM regression coefficients. Table 6 presents the hypotheses testing results of dependent variables on CBB.

Table 6
Status of Study Hypotheses

Hypotheses		Path		Estimate	S.E.	C.R.	P	Results
H1	HFA	--->	CBB	.118	.088	1.342	.179	Rejected
H2	EFA	--->	CBB	.413	.104	3.969	***	Accepted
H3	SFA	--->	CBB	.312	.123	2.547	.011	Accepted

Discussion

Various factors influence consumer buying behavior. Customer tastes and preferences are ever-changing, and consumers' purchasing behavior is diverse, unexpected, and surprising; as a result, people have learned that traditional business practices no longer work (Dahal, et al. 2020; Dahal, 2021). In such circumstances, the study aimed to examine the effects of HF, EF, and SF on the consumer buying behavior of emergency products in the Nepalese market.

The study's results presented in Table 6 shown that the fear of health has no significant influence on consumer buying behavior in the buying of emergency products ($\beta = 0.118$, $p = 0.179$), which not supported the hypothesis (H1). The result of the study confirmed that consumer buying behavior is influenced by the fear of health in the buying of emergency products. The finding was not similar to the previous findings of Kim et al. (2022), Eger et al. (2021), Heshman et al. (2021), and Batra (2021) that consumer shopping buying behavior is significantly affected by the fear of health. Consumer behavior is the individual perception and it can differ from individual to individual (Dahal, 2022). Next, the finding supported hypothesis (H2) indicating that the fear of economic factors influences consumer buying behavior ($\beta = 0.413$, $p = 0.000$). This result is confirmed that consumer buying behavior of consumer is significantly influenced by fear of the economy. This finding was consistent with the previous findings of Eger et al. (2021), Baisaria (2021), and Stanciu (2020) that there is a significant impact of fear of economic loss on consumer buying behavior in Nepal.

Likewise, Hypothesis (H3) is also supported by the finding as the fear of scarcity factor influence on consumer buying behavior ($\beta = 0.312$, $p = 0.011$). This result confirmed that consumer buying behavior is significantly impacted by fear of scarcity. This finding was similar to the prior findings of Zhan et al. (2022), Zhan et al. (2021), Singh et al. (2021), Omar et al. (2021), and Islam et al. (2021) that there is a significant effect of fear of scarcity on the buying behavior of the consumer.

Conclusions and Implications

The goal of this study was to identify the impact of product attributes on consumer buying behavior. It was found that there is no significant influence of fear of health on consumer buying behavior during and after COVID-19. Therefore, it is concluded that the fear of health is not considered in the buying of goods and services during and after COVID-19 in Nepal. Another objective of the study was to examine the influence of fear of economic loss factors on consumer buying behavior. It was found that the regression coefficients of fear of economic loss factors significant influence on consumer buying behavior and the hypothesis (H2) was

supported by the finding of the research. Therefore, it is concluded that Nepalese consumers considered fear of economic loss factors in their consumer buying behavior. It is the universal truth that customers may feel fear of loss of job and other economic loss affect the consumer buying behavior in the COVID-19 period. The next objective of the study was to examine the influence of the fear of economic loss on consumer buying behavior. It was found that the fear of scarcity of products influences on consumer buying behavior. So, it is concluded that the fear of scarcity is an important factor to determine consumer buying behavior and it may increase consumer buying behavior regarding shopping in Nepal. It is the universal truth that the fear of scarcity factors influences the consumers buying behavior.

The research was based on the conceptual framework of the consumer buying behavior model. The findings of the study are useful to identify how consumer buying behavior works in the purchase of services and goods. For practitioners, the study's conclusions have a wide range of practical implications. Specifically, the marketing departments of different goods and services businesses should pay more attention to shaping consumers' buying behavior.

According to the research, in Nepal, fear of health doesn't directly affect how people behave towards goods and services. So, when coming up with marketing strategies in a crisis situation, the marketing manager shouldn't worry about how the fear of health might change how people act. But the fear of economic loss is considered by the consumers in their shopping behavior. When making marketing plans for goods and services, the marketing manager and company need to think about the fear of economic loss and the fear of scarcity of products in Nepal.

Limitations and Future Research Directions

In the study, only the fear of health, fear of economic loss, and fear of scarcity were taken as independent variables. Other factors that affect consumer buying behavior were not captured. Most of the responses have been collected from the Kathmandu Valley. The responses provided by the sample respondents are what determine the research's findings. So, the result may not be suitable for general application to other products.

Numerous recommendations and directions for future research exist in light of the limitations of the aforementioned study. First of all, the study is being carried out in Nepal, a developing nation. In various established and developing nations, where individuals come from varied socioeconomic backgrounds and have varying perspectives, traits, cultures, customs, habits, purchasing power, attitudes, etc., this research can be carried out. Second, this model can be further investigated by measuring customer purchasing behavior utilizing demographic data as moderating variables. Third, it is also proposed that real consumer buying behavior can be determined using additional independent variables, such as individual factors, advertising, word-of-mouth, technology, and sales promotion tools, etc., that were not included in the study. These results will provide as cutting-edge empirical evidence and a starting point for further research in various scenarios.

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