



2528-9705

Örgütsel Davranış Araştırmaları Dergisi

Journal Of Organizational Behavior Research

Cilt / Vol.: 9, Sayı / Is.: S, Yıl/Year: 2024, Kod/ID: 24S0-994



## THE IMPACT OF UNCERTAINTY ON THE HEALTH OF THE COMMODITY AFTER CORONA'S OUTBREAK ON CONSUMER BEHAVIOR AND WITH THE MEDIATING ROLE OF E-MARKETING

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### ABSTRACT

COVID-19 first spread to other parts of the world at an extraordinary speed in December 2019. Countries closed their borders and businesses, and implemented full or partial quarantines. In this context, digital marketing was heavily used by organizations to target customers, including high-involvement products such as real estate, cars, and servers. Today, in response to the multiple waves of the pandemic, consumers have turned to new behavioral patterns for a considerable period of time. The purpose of this study is to investigate the impact of uncertainty about product hygiene after the outbreak of COVID-19 on consumer behavior, with the mediating role of e-marketing. The target population of this study is Digikala customers, which is considered unlimited due to the wide range of the target population. Due to the unlimited nature of the target population, 384 managers and employees were selected as a sample based on the Morgan table. A standard questionnaire was used to collect data. In this study, the structural equation modeling approach was used by the PLS software to test the hypotheses. The results showed that uncertainty about product hygiene after the outbreak of COVID-19 has an impact on consumer behavior with the mediating role of e-marketing. E-marketing after the outbreak of COVID-19 has an impact on consumer behavior. Uncertainty about product hygiene after the outbreak of COVID-19 has an impact on e-marketing. Uncertainty about product hygiene after the outbreak of COVID-19 has an impact on consumer behavior.

**Keywords:** Covid-19, E-marketing, Consumer behavior, Uncertainty on product health

### INTRODUCTION

The COVID-19 pandemic had an impact on every aspect of business, regardless of size or ownership type. Most organizations struggled to survive and grow during the pandemic. However, companies with a strong digital platform, such as Zoom, Amazon, Uber Eats, and Slack, gained many new customers and had healthy growth rates while most companies struggled to generate revenue and retain customers. Companies like Mahindra Tractors were able to achieve sales growth in rural markets by using digital marketing. Various researchers have emphasized that embracing digital is one of the most effective ways to manage the pandemic (Donthu & Gustafsson, 2020; Hwang, Nageswaran, & Cho, 2020).

The stress burden of COVID-19 has had a negative impact on interpersonal relationships (e.g., conflict with a partner and domestic violence) due to close living conditions, social restrictions,



and increased concerns (Mitchell et al., 2020). The pandemic has led to anxiety and depression in individuals. However, there is not enough information about the effects of COVID-19 on individuals and their coping mechanisms. Therefore, mental health problems related to the pandemic should be quickly assessed (Otson, 2020). A direct consequence of COVID-19 is the increase in the use of online services. The shift to online shopping in China has been highlighted (by Crown et al., 2020). In addition, the authors consider that "customers' changing priorities are unlikely to return to pre-pandemic norms." Following this potential change in customer purchase preference, the business model of banks was significantly affected (Byko et al., 2021).

Organizations that were quick to adapt to the digital mode and internal systems and processes began to generate positive financial results as soon as the pandemic began to show signs of improvement in the third quarter of 2020. Adaptation goes beyond simply putting digital infrastructure in place within an organization, but also involves a change in employee mindset and organizational culture for productivity in a digital business environment. Adaptation was also imposed on organizations in the current pandemic situation due to its suddenness, unprecedented duration, and scale and scope. Organizations' digital platforms were updated. In some cases, cloud-based software services were co-opted to facilitate sales planning, tracking, and optimization (Pandita, 2021).

Companies are required to present a range of offerings in order to cater to the evolving preferences and concerns of their customers. It is crucial for companies facing a crisis to develop and implement marketing programs, including advertising, service, and sales initiatives, to effectively address the needs of both new and potential customers (Pantano et al., 2020). Moreover, companies can leverage information technology and systems to facilitate customer-to-customer communication, thereby fostering increased trust and loyalty. Social media platforms and mobile technologies, for instance, can be utilized to facilitate dynamic interactions between buyers and sellers, as well as to disseminate important public information such as health and safety certifications (Cortez and Johnston, 2020). As the spread of the disease in the United States and Europe has attracted significant media attention, the COVID-19 pandemic has had a devastating impact on many vulnerable communities around the world in low- and middle-income countries. This is because emerging economies lack the resources and capacity to cope with the increased risk of disease transmission and the socioeconomic consequences of containment measures (Luisa and Pennington, 2020). For example, these countries have weak health infrastructure to cope with an influx of patients, and they are heavily reliant on exports and tourism, which have been severely disrupted by border quarantines. They also lack effective policy measures to combat the economic recession caused by COVID-19 (Zhang and Zhang, 2021).

To properly assess the potential impact of the COVID-19 pandemic on customer behavior, it is necessary to start from the perspective of the degree of adoption and use of mobile/internet services and then analyze the benefits. In many fields, technology has been used as a solution to all problems, and companies that invest in research to maintain their competitive advantage (Batano et al., 2020; Gherghiu et al., 2017; Krachunov et al., 2015). Today, companies, alongside individuals, are increasingly turning to digital technologies. (Dincă et al. [1], 2019)



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Globalization has led to increased competition in many business sectors, and more sensitive data is being transferred through various online channels (Zhang and Zhang, 2021).

The reconfiguration of shopping priorities, personal lifestyles, and work practices imposed on us by the COVID-19 pandemic may portend a seismic shift in the retail industry. Consumer adoption of technology-enabled commerce channels is likely to become deeper and broader, even in sectors that have so far resisted the mass migration from stores to the internet. As stores, businesses, and manufacturing facilities around the world closed to manage the COVID-19 pandemic, retailers in both essential and non-essential sectors saw a surge in online sales (Hcltech, 2020). Given that consumer behavior is becoming increasingly complex and consumers are looking for more engagement with companies' products or services, marketers must also look for ways to increase these interactions in order to reach their audiences and build loyalty. In this regard, social media users are very curious and have many questions about the COVID-19 crisis on their minds. Due to the quarantine conditions and the closure or telecommuting of workers in many jobs, the amount of people's use of social media and other media has increased significantly. For this reason, they are looking for a clear and honest answer from brands in response to their questions in these conditions. And since social media is the bridge of communication between companies and customers, the use of social platforms such as Instagram is considered the best way to answer their questions and concerns. Therefore, it can be said with confidence that despite all the crises that the COVID-19 virus has created for businesses, now is the best time to build a positive relationship, influence customers, and attract an audience. For this purpose, it is essential to review the impact of digital marketing strategies for companies during the COVID-19 pandemic.



### *Theoretical foundations*

#### *Consumer behavior*

Consumer behavior is the study of individuals, groups, or organizations, and all activities related to the purchase, use of goods and services, as well as consumer emotional, mental, and behavioral responses. Consumer behavior emerged as a distinct subfield in the field of marketing in the 1940s and 1950s. Consumer behavior is an interdisciplinary social science that combines elements from psychology, sociology, social anthropology, anthropology, ethnography, marketing, and economics, especially behavioral economics. It examines how emotions, attitudes, and preferences influence buying behavior. Consumer characteristics, such as demographic characteristics, lifestyle, and behavioral variables such as usage rate, loyalty, brand advocacy, and efforts to understand people's wants and consumption patterns, are all examined in formal studies of consumer behavior (Fullerton, 2013).

In turn, Schiffman and Kanuk (2000) define consumer behavior as the decision-making process individuals go through when spending their budgets on consumer items. However, according to Jacoby (1976), consumer behavior is the process of determining the consumption and ownership of goods, services, and ideas by consumers. Engel et al. (1986) emphasize the internal consistency of the decision-making process, and they propose it as the act of individuals engaging in the acquisition and use of economic goods and services. Many studies on consumer behavior have primarily focused on expanding and improving existing theories related to buying and consuming. Researchers consider acquisition and consumption to be the most important

factors influencing buying behavior, so they use them as the main topics of marketing (Ting et al., 2019).

Consumer behavior refers to the selection, purchase, and consumption of goods and services to satisfy their needs. Various processes are involved in consumer behavior. Initially, the consumer tries to find goods that they are willing to consume. Then, they only select goods that promise greater benefits. After selecting the goods, the consumer estimates the amount they can spend. Finally, the consumer analyzes the prevailing prices of the goods and makes a decision about which goods to consume. In the meantime, various other factors also influence consumer buying, including social, cultural, personal, and psychological factors (Agrawal and Goyal, 2017: 237).

#### *Consumer behavior and Covid-19*

Behavioral responses during pandemics such as Ebola, SARS, MERS, swine flu, and dengue have been studied in the past (Balinska & Rizzo, 2009). Such changes were observed during pandemics and outbreaks such as SARS due to motivated individuals and government policies (Wen et al, 2005). Areas affected by pandemics generally experience unemployment, uncertainty, and economic recession. Individuals take safety measures to reduce perceived risk during pandemic situations due to ambiguity and unpredictability (Brug et al, 2009). Increased purchase of food, face masks, and disinfectants was reported during the swine flu outbreak (Goodwin et al, 2009). During the first phase of the COVID-19 quarantine in India, citizens experienced unprecedented conditions that led to an unprecedented shift in priorities among consumers. Goods were categorized into essential and non-essential goods. Only essential goods were available to citizens, and there was no demand for lifestyle products (Enormous, 2020).

Recent studies have discussed the negative effects of the COVID-19 pandemic on mental and physical health (Bitan et al, 2020). For example, Schimmenti et al (2015) showed that the COVID-19 pandemic has led to increased negative emotions and insecure attachment (Schimmenti et al, 2020). However, the pandemic may also have positive outcomes. According to a recent BBC news report (Robson et al, 2020), the COVID-19 pandemic may have encouraged people to behave more ethically. Previous research has already provided consistent evidence that fear of natural or human disasters can promote social commitment and prosocial behavior. However, although the COVID-19 pandemic has been described as "nature's revenge," few studies have examined the effects of COVID-19 fear and uncertainty on consumer environmental concerns (Jian et al, 2020).

#### *E-marketing*

According to the "Business Dictionary," digital marketing is the promotion of products or brands through one or more forms of electronic media. For example, advertising media that may be used as part of a business's digital marketing strategy can include advertising efforts through the internet, social media, mobile devices, and electronic billboards, as well as through digital channels and television and radio (Adedayo, 2017). Organizations used analytics-based digital marketing to reach target customers as direct channel options were reduced or impractical due to the COVID-19 pandemic. The use of augmented reality, virtual reality, and artificial



intelligence (AI) is also being used to target customers. The use of channels such as WhatsApp, Zoom, and Google Meet has increased several times during the COVID-19 crisis (Pandey, 2021).

Kaplan and Haenlein (2010) found that social media are a group of internet-based applications that are built on the ideology and foundations of Web 2.0 technology and enable the creation and exchange of content. Social media also examined websites and applications that allow customers to share content quickly, efficiently, and in real time (Al-Azem et al., 2021).

### *Literature review*

Yufan et al. (2020) investigated the effects of COVID-19 fear and uncertainty on consumers' environmental concerns, brand trust, and behavioral intentions towards green hotels. An analysis of 613 fully completed responses to a survey tool showed that COVID-19 fear and uncertainty increased consumers' environmental concerns and brand trust in green hotels, which in turn increased their willingness to pay more and their willingness to make sacrifices to stay at green hotels.

Van et al. (2020) investigated the use of social and behavioral sciences to support the response to the COVID-19 pandemic. This study identified several insights for an effective response to the COVID-19 pandemic and highlighted an important gap that researchers need to address quickly in the coming weeks and months. In the context of public emergencies such as the COVID-19 pandemic, prosocial behaviors can be increased by strengthening empathy factors and a sense of control. These findings are useful for promoting prosocial government behavior and disaster risk management.

Wu (2020) investigated the effects of pandemic-related uncertainty on household consumption: Evidence from cross-country data. To estimate the theoretical model, we consider a panel dataset of 138 countries for the period 1996-2017. We also use a pandemic uncertainty index to measure pandemic-related uncertainty. The theoretical model and the empirical findings of the feasible generalized least squares (FGLS) estimation show that gross fixed capital formation, government consumption, trade balance, and the pandemic uncertainty index have a negative impact on household consumption. The results are also valid in the remaining dataset of 42 high-income economies and 96 emerging economies.

Alola Andrew Adewale (2020) investigated the fear of COVID-19 health among pandemics and the spillover of safety-related drug products in the United States. The result showed that global uncertainty has imposed a major shock to the drug compounds under review, thus confirming the vulnerability of some drugs to pandemic-related uncertainty.

Cruz-Cárdenas et al. (2021) investigated COVID-19, consumer behavior, technology, and society: A literature review and bibliometric analysis. Cluster analysis further identified different thematic clusters among the studies. The input-output behavioral model of consumer behavior guided the systematic review and covers several psychological and behavioral features of consumers. Based on this, actions taken by governments, technology, and social media are highlighted as external factors. However, revised marketing strategies have been in place to address various consumer risks. Therefore, given that technological and digital formats shape consumer behavior, companies should factor in digital changes in their processes.



## MATERIALS AND METHODS

The current study is classified as a descriptive survey research, with a practical objective. The research method is correlational. The target population of the study is the customers of Digikala, which is considered unlimited due to its large size. Based on the Morgan table, 384 managers and employees were selected as the sample. In this study, data were collected using the standard research questionnaires of Pandey et al. (2020), Baik et al. (2021), Khayyam et al. (2021), and Shi et al. (2021). In this study, validity was tested using convergent and divergent validity, using the pls software. Cronbach's alpha was used to determine reliability, which indicates internal consistency and measurement accuracy. The structural equation modeling approach was used to test the hypotheses using the PLS software.

### *Research hypotheses*

#### *Main hypothesis*

Uncertainty about the hygiene of goods after the COVID-19 outbreak has an impact on consumer behavior through the mediating role of e-marketing.

#### *Sub-hypotheses*

Uncertainty about the hygiene of goods after the COVID-19 outbreak has an impact on consumer behavior. Uncertainty about the hygiene of goods after the COVID-19 outbreak has an impact on e-marketing. E-marketing after the COVID-19 outbreak has an impact on consumer behavior.

## RESULTS AND DISCUSSION

The results indicated that 202 respondents, or 52.6% of the sample, were male, while 182 respondents, or 47.4% of the sample, were female. 83 respondents, or 21.6% of the sample, were less than 30 years old. 128 respondents, or 33.3% of the sample, were between 30 and 40 years old. 112 respondents, or 29.2% of the sample, were between 40 and 50 years old, and 61 respondents, or 15.9% of the sample, were 50 years old or older. 32 respondents, or 8.3% of the sample, had a high school diploma. 56 respondents, or 14.6% of the sample, had an associate degree. 117 respondents, or 30.5% of the sample, had a bachelor's degree. 134 respondents, or 34.9% of the sample, had a master's degree, and 45 respondents, or 11.7% of the sample, had a doctorate degree.

**Table 1.** Descriptive statistics

Variables	Number	variation range	Min	Max	Mean	standard error	SD
E-marketing	384	4	1	5	3.43	.039	.760
Unreliability	384	4	1	5	2.55	.039	.769
Consumer behavior	384	4	1	5	3.47	.038	.754

Based on the data presented in Table (1), it is clear that 384 valid data were collected about the research variables. The mean scores of the variables ranged from 2.55 to 3.47, with consumer

behavior having the highest mean. The highest level of dispersion in terms of the range index is equal to 4, which is high. In terms of the standard deviation index, the uncertainty variable has the highest dispersion.

**Table 2.** Measurement of sample adequacy

Test	Statistics	
Kaiser-Meir-Olkin (KMO)	Measuring sample adequacy	.878
Bartlett's sphericity test	Chi-square approximation	5862.269
	Degrees of freedom	253
	Significance	.000

According to Table (3), the composite reliability (CR) and Cronbach's alpha coefficients for all dimensions of the model under study are greater than 0.7. Therefore, it can be claimed that the questionnaire has acceptable reliability.

**Table 4.** Convergent validity of research variables

Variables	AVE	CR
Unreliability	0.538	0.912
E-marketing	0.546	0.905
Consumer behavior	0.575	0.889

It is observed that the average variance extracted (AVE) value is always greater than 0.5, and the composite reliability value is also found to be greater than 0.7 in all cases, which is also greater than the average variance extracted (AVE) value. Therefore, convergent validity is also confirmed.

**Table 5.** Commonality variance and redundancy indexes

Variables	Commonality indexes )CV Com(	Redundancy index )CV Red(
Unreliability	0.433	0.433
E-marketing	0.425	0.087
Consumer behavior	0.408	0.309

In Table (5), the values of each of the indexes for the independent and dependent variables are presented. As can be seen, the indexes are positive and greater than zero. It can be said that the model has acceptable quality and validity.

In the overall research model that is depicted in Figure (1), the measurement model (the relationship between each of the observable variables and the latent variable) and the structural model (the relationships between the latent variables with each other) are calculated. To measure the significance of the relationships, the t-statistic is calculated using the bootstrapping technique, which is presented in Figure (2). In this model, which is the output of the Smart PLS



software, a summary of the results related to the significance of the standardized factor loading and the significance of the relationships between the research variables is presented. The path coefficients and their significance are also presented in Table (6).

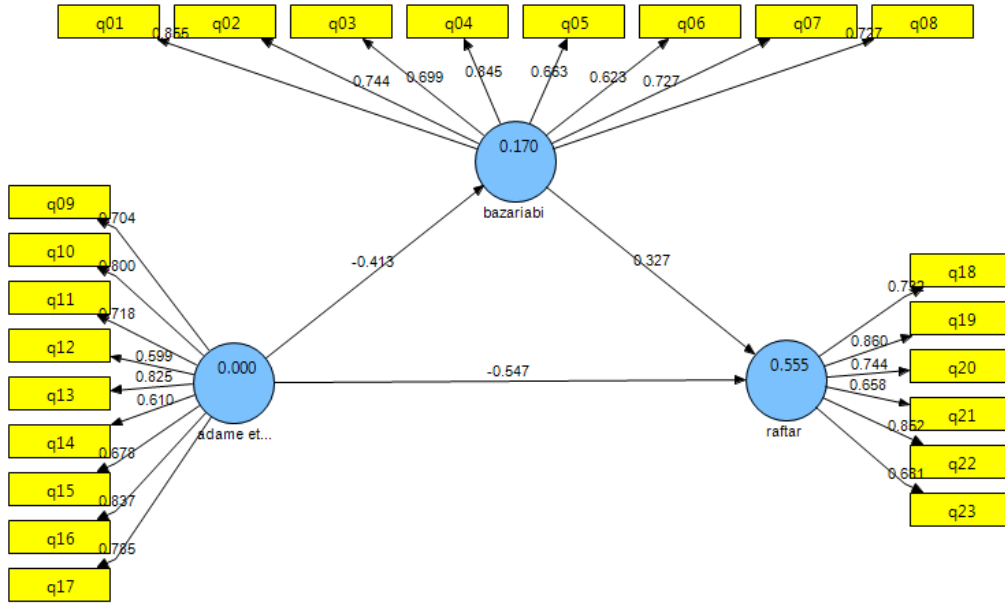


Figure 1. General research model with partial least squares technique

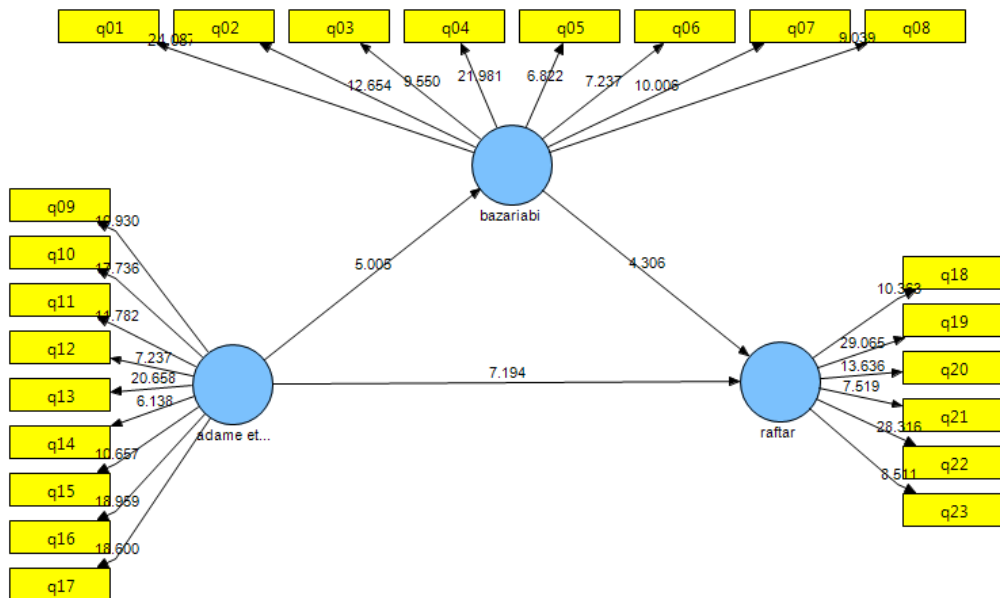


Figure 2. T-statistics of the general research model with bootstrapping technique

Tenenhaus et al. (2005) introduced the goodness of fit (GOF) index to assess the fit of a model. The GOF index can be calculated by taking the geometric mean of the average communalities and the coefficient of determination ( $R^2$ ). For this index, values of 0.01, 0.25, and 0.36 are described as weak, moderate, and strong, respectively.

$$GOF = \sqrt{(\text{Communality}) \times (\text{R Square})}$$

**Table 6 .Commonality values and  $R^2$**

Variables	Commonality value	$R^2$
Unreliability	0.538	---
E-marketing	0.546	0.170
Consumer behavior	0.575	0.555

As can be seen in Table (6), only endogenous variables have a value of  $R^2$ . After calculations, the value of the GOF index is 0.448, which is a strong indicator of the overall quality of the model.

**Table 7. Path coefficients**

Path direction	Impact	T-statistics
Uncertainty → E-marketing	-0.413	5.005
Uncertainty → Consumer behavior	-0.547	7.194
E-marketing → Consumer behavior	0.327	4.306

As can be seen in Table (7), the total effect of uncertainty on consumer behavior with the mediation of e-marketing is equal to 0.682, and the significance value is calculated to be 130.10, which is greater than the critical value of t at the 5% error level of 1.96, indicating that the observed effect is significant. Therefore, based on the tests performed, it can be said that with 95% confidence, uncertainty about the hygiene of goods after the Corona outbreak has a significant effect on consumer behavior with the mediating role of e-marketing, and the main hypothesis is confirmed.

## CONCLUSION

The purpose of this study is to investigate the effect of uncertainty about the hygiene of goods after the Corona outbreak on consumer behavior with the mediating role of e-marketing. The results showed that the total effect of uncertainty on consumer behavior with the mediating role of e-marketing is equal to 0.682, and the significance value is calculated to be 10.130, which is greater than the critical value of t at the 5% error level of 1.96, indicating that the observed effect is significant. Therefore, with 95% confidence, uncertainty about the hygiene of goods after the Corona outbreak has a significant effect on consumer behavior with the mediating role of e-marketing. Fear leads to hoarding and panic buying. Studies on consumer behavior show



that consumers may overspend and overindulge in both household and national levels during challenging times (Lee et al., 2020). In this context, Ramezani et al. (2022) showed that marketing has been affected by the pandemic and will continue to change. Vazifehdoost and Lotfi (2022) showed that trust propensity is a highly significant predictor of perceived trustworthiness in an online store. We also found that the mediating role of trust propensity between national culture and trustworthiness is highly dependent on the individual cultural dimensions under study. Crick and Crick (2020) showed that they must decide whether to continue collaborating with their competitors after the end of the pandemic or to continue operating on the basis of individual business models. Hey and Harris (2020) showed how marketing has been affected by the pandemic and how it will change, not only the field of marketing, but also how organizations approach their strategic marketing.

The results showed that the direct effect of uncertainty about the hygiene of goods after the Corona outbreak on consumer behavior was calculated to be  $-0.547$ , and the test probability statistic was also calculated to be  $7.194$ , which is greater than the critical value of  $t$  at the 5% error level of  $1.96$ , indicating that the observed effect is significant. Therefore, with 95% confidence, uncertainty about the hygiene of goods after the Corona outbreak has a significant effect on consumer behavior. In this context, Saebnia and Karimi (2022) showed that the positive and significant relationship between COVID-19 and customer performance was confirmed, and the significant relationship between COVID-19 and market performance was also confirmed. The positive and significant relationship between financial performance and COVID-19 was also confirmed. Hoseinzadeh et al. (2022) showed that people can expect safer and more sustainable economic equations and frameworks to emerge in the world after COVID-19, as well as the expansion of the digitalization and e-commerce arena, in social relations and economic behaviors. Yuvar et al. (2020) showed that fear and uncertainty from COVID-19 have increased consumers' environmental concerns and trust in the brand of green hotels, which in turn has increased their willingness to pay more and willingness to sacrifice to stay at green hotels.

The results showed that the direct effect of uncertainty about the hygiene of goods after the Corona outbreak on e-marketing was calculated to be  $-0.413$ , and the test probability statistic was also calculated to be  $5.005$ , which is greater than the critical value of  $t$  at the 5% error level of  $1.96$ , indicating that the observed effect is significant. Therefore, with 95% confidence, uncertainty about the hygiene of goods after the Corona outbreak has a significant effect on e-marketing. Consumers under stress see shopping as a daunting task and do not enjoy the shopping experience (Aiello and Mitchell, 1998). Similarly, the COVID-19 pandemic creates a space where each individual poses a threat to the other, and an individual who feels threatened releases stress hormones. In the context of COVID-19 and consumption, people use the fight-or-flight system with panic buying, impulsive buying, cooking, hoarding, or stockpiling. Thus, they regain a sense of security. Similarly, Camp and colleagues (2021) note that people can manage their negative emotions through consumption. Therefore, it is fair to say that consumers find different ways to calm their nervous system and cope with COVID-19. This section discusses consumers' behavioral reactions to the pandemic. In this context, Deshpande et al. (2021) showed that customer engagement moderated the relationship between content marketing and association with purchase intention. This research work generally helps life insurance



marketers. Digital channel managers clearly understand their core strengths with regard to the five dimensions of digital marketing strategies.

The results showed that the effect of e-marketing after the COVID-19 outbreak on consumer behavior was calculated to be 0.327, and the test statistic was also calculated to be 4.306. This is greater than the critical t-value of 1.96 at the 5% significance level, indicating that the observed effect is significant. Therefore, with 95% confidence, e-marketing after the COVID-19 outbreak has a significant effect on consumer behavior, and the third hypothesis is confirmed. In this context, Wang et al. (2020) showed that COVID-19 pandemic can increase prosocial behaviors by strengthening empathy factors and a sense of control. These findings are useful for promoting government prosocial behavior and disaster risk management. Olla and Al-Issa (2020) showed that global uncertainty has imposed a major shock on the drug compounds under investigation, thus confirming the vulnerability of some drugs to pandemic-related uncertainty. Shi et al. (2021) showed that public health events can increase residents' awareness and safety behavior, while residents' focus on relevant information plays an important role in improving knowledge and behavioral impact.

One of the limitations of the study is related to the study sample. In fact, the study with a larger sample can be more effective. The second limitation is related to the measurement of the dimensions. Other dimensions can be added to this model that can improve its predictive ability.

Based on the results, it is suggested that retailers can divide their space for planned shoppers who want to quickly visit stores, and prepare consumer lists through "buy online, deliver in store" or "reserve online, pick up and pay in store" strategies. This prevents the spread of the virus by reducing the time spent in the store and eliminates consumer stress and fear. Businesses should limit the purchase of each person at any retailer or online to prevent hoarding. This is referred to as a retailer intervention. Businesses should provide more information about their stock to ensure that there will be no product shortages and prevent hoarding.



**ACKNOWLEDGMENTS:** None

**CONFLICT OF INTEREST:** None

**FINANCIAL SUPPORT:** None

**ETHICS STATEMENT:** None

## References

- Hosseinzadeh, Hedayat and Ramzanzadeh Arounqi, Elias and Shohor Bakhshaish, Khadijah, 2019, a review of the effects of the Covid-19 pandemic on e-commerce in the world and solutions for passing through the era of Corona and post-Corona, the third economic and accounting management conference, Tehran, <https://civilica.com/doc/1038659>
- Ramezani, Fahima and Mahmoudzadeh Vashan, Mehdi Hakimpour, Hossein, 2019, Investigating the impact of the Corona Virus (COVID-19) crisis on marketing philosophy and consumer behavior,

Second International Conference on Innovation in Business Management and Economics, Tehran,  
<https://civilica.com/doc/1120980>

- Saeb Nia Samieh, Karimi Fereshte. 2019. The impact of Corona disease (Covid-19) on business performance (case study: small and medium businesses in Ardabil province), accounting and management perspective, third term, spring 2019, number 24 (volume 4)
- Dost, Hossein and Lotfi Anbagh, Amin, 2019, Iranian culture and consumer trust in e-commerce in the era of Corona, 17th International Management Conference, Tehran, <https://civilica.com/doc/1162154>
- Adedayo Fasasi Lukmon.(2017).THE AWARD OF BACHELOR OF SCIENCE DEGREE (B.Sc) IN ACCOUNTING, <https://www.grin.com/document/490222>
- Agrawal, A. & Gentry, J.W. (2020) Why do many consumers prefer to pay now when they could pay later? *Journal of Consumer Affairs*, 54(2), 607– 627.
- Alola Andrew Adewale & Olowu Funmilayo Boluwatife.(2020) The health scare of COVID-19 amidst pandemics and the immune-related pharmaceutical products spillovers in the USA, Short Research and Discussion Article Published: 16 October 2020
- Aylott, R. & Mitchell, V.W. (1998) An exploratory study of grocery shopping stressors. *International Journal of Retail & Distribution Management*, 26(9), 362– 373.
- Baicu Claudia Gabriela & Gârdan Iuliana Petronela & Gârdan Daniel Adrian & Epuran Gheorghe, 2020. "The impact of COVID-19 on consumer behavior in retail banking. Evidence from Romania," *Management & Marketing, Sciendo*, vol. 15(s1), pages 534-556, October.  
 IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
- Balinska, M., Rizzo, C. (2009). Behavioural responses to influenza pandemics: What do we know? *PLoS Curr.* 1. <https://doi.org/10.1371/currents.rnm1037>
- Bitan, D.T.; Grossman-Giron, A.; Bloch, Y.; Mayer, Y.; Shiffman, N.; Mendlovic, S. Fear of COVID-19 scale: Psychometric characteristics, reliability and validity in the Israeli population. *Psychiatry Res.* 2020, 289, 113100. [Google Scholar] [CrossRef]
- Cortez, R.M. and Johnston, W.J. (2020), "The coronavirus crisis in B2B settings: crisis uniqueness and managerial implications based on social exchange theory", *Industrial Marketing Management*, Vol. 88 No. 1, pp. 125-135
- Crick James M., Crick Dave.(2020). Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis
- Cruz-Cárdenas Jorge 1 2, Ekaterina Zabelina 3, Jorge Guadalupe-Lanas 1 2, Andrés Palacio-Fierro 2 4, Carlos Ramos-Galarza 5 .(2021).COVID-19, consumer behavior, technology, and society: A literature review and bibliometric analysis, *Technol Forecast Soc Change*
- Dash, G.; Chakraborty, D. Digital Transformation of Marketing Strategies during a Pandemic: Evidence from an Emerging Economy during COVID-19. *Sustainability* 2021, 13, 6735. <https://doi.org/10.3390/su13126735>
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of business research*, 117, 284–289. <https://doi.org/10.1016/j.jbusres.2020.06.008>



- Enormous . (2020). The India lockdown study: Understand the change in attitudes, motivations, and behaviour of the young Indian consuming class. [www.enormous.be](http://www.enormous.be)
- Hcltech.(2020).Realigning Security for Retail and Consumer Goods, <https://www.hcltech.com/brochures/consumer-services/re-aligning-security-retail-consumer-goods>
- He H., Harris L., (2020), The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy, *Journal of Business Research* doi: <https://doi.org/10.1016/j.jbusres.2020.05.030>
- Hwang, E. H., Nageswaran, L., & Cho, S. H. (2020). Impact of COVID-19 on Omnichannel Retail: Drivers of Online Sales during Pandemic. Available at SSRN 3657827
- Jian, Y.; Yu, I.Y.; Yang, M.X.; Zeng, K.J. The Impacts of Fear and Uncertainty of COVID-19 on Environmental Concerns, Brand Trust, and Behavioral Intentions toward Green Hotels. *Sustainability* 2020, 12, 8688. <https://doi.org/10.3390/su12208688>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kemp, E., Bui, M.M. & Porter, M., III. (2021) Preparing for a crisis: examining the influence of fear and anxiety on consumption and compliance. *Journal of Consumer Marketing.*, 38, 282– 292.
- Li, M., Zhao, T., Huang, E. & Li, J. (2020) How does a public health emergency motivate People's impulsive consumption? An empirical study during the COVID-19 outbreak in China. *International Journal of Environmental Research and Public Health*, 17(14), 5019.
- Pandita, S., Mishra, H.G. & Chib, S. (2021) The psychological impact of covid-19 crises on students through the lens of the stimulus-organism-response (SOR) model. *Children and Youth Services Review*, 120, 105783.
- Robson, D. The Threat of Contagion Can Twist Our Psychological Responses to Ordinary Interactions, Leading Us to Behave in Unexpected Ways. BBC News. Available online: <https://www.bbc.com/future/article/20200401-covid-19-how-fear-of-coronavirus-is-changing-our-psychology> (accessed on 2 April 2020).
- Schimmenti, A.; Billieux, J.; Starcevic, V. The four horsemen of fear: An integrated model of understanding fear experiences during the COVID-19 pandemic. *Clin. Neuropsychiatry* 2020, 17, 41–45. [Google Scholar]
- Shi MIN, XIANG Cheng<sup>2</sup>, ZHANG Xiao-heng<sup>1</sup> .(2020).Impacts of the COVID-19 pandemic on consumers' food safety knowledge and behavior in China, *Journal of Integrative Agriculture* 2020, 19(12): 2926–2936
- Van Jay J. Bavel , Katherine Baicker, [...]Robb Willer .(2020).Using social and behavioural science to support COVID-19 pandemic response,
- Wu Shuiting.(2020). Effects of Pandemics-Related Uncertainty on Household Consumption: Evidence From the Cross-Country Data, *Front. Public Health*, 24 November 2020 | <https://doi.org/10.3389/fpubh.2020.615344>



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Zheng, Chen & Zhang, Junru, 2021. "The impact of COVID-19 on the efficiency of microfinance institutions," *International Review of Economics & Finance*, Elsevier, vol. 71(C), pages 407-423.

