# UNDERSTANDING THE EFFECTS OF FEAR OF CONTRACTING COVID-19 ON CUSTOMER BEHAVIOR AND PSYCHOLOGY FROM AN ONLINE SHOPPING PERSPECTIVE

Çağlar SAMSA<sup>1</sup>

#### ABSTRACT

This study, designed based on the psychological reactance theory, examined the reasons and consequences of the increase in customers' online shopping experiences during the Covid-19 period from a customer-based perspective. In the model formed with the idea that the fear of contracting Covid-19 is a reason for the increase in online shopping, the effect of the fear of contracting Covid-19 on trust in online shopping was evaluated. In addition, the effect of trust in online shopping on the value of the online shopping experience during the Covid-19 process was exhibited. It was also determined that the effects of the online shopping experience value on online shopping addiction reveal the online shopping behavior of customers. Using the PLS-SEM algorithm, a questionnaire form was applied to 231 participants (increased to 5000 participants by bootstrapping method) with the convenience sampling method, and the collected data were analyzed using SEM (Structural Equation Modeling). As a result, it was concluded that the fear of contracting Covid-19 increased the trust in online shopping, and the trust in online shopping affects customer value perceptions (hedonic and utilitarian). Another notable result is hedonic value, one of the customers' online shopping value perceptions, affects all dimensions of customer online shopping addiction, but it has been noted that utilitarian value perceptions have no effect on the dimensions of online shopping addiction.

**Keywords:** Fear of Covid-19, trust to online shopping, experience value, hedonic value, utilitarian value, PLS-SEM

Doi: 10.15659/ppad.16.1. 1134494

Dr. Öğr. Üyesi, Kafkas Üniversitesi Sosyal Bilimler Meslek Yüksekokulu, Pazarlama ve Reklamcılık Bölümü, cglrsms@gmail.com, ORCID: 0000-0002-9827-7969, Etik Kurul Onayı: Kafkas Üniversitesi Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etiği Kurulu, E-35608 sayı, 10.01.2022. Geliş Tarihi / Received: 22.06.2022, Kabul Tarihi / Accepted: 16.10.2022

# COVİD 19 KORKUSUNUN MÜŞTERİ DAVRANIŞLARI VE PSİKOLOJİSİ ÜZERİNDEKİ ETKİLERİNİ ÇEVRİMİÇİ ALIŞVERİŞ PERSPEKTİFİNDEN ANLAMAK

#### ÖZ

Psikolojik tepki teorisi temelinde dizayn edilen çalışma, Covid-19 döneminde müsterilerin online alışveriş deneyimlerindeki artışın sebeplerini ve sonuçlarını müşteri temelli bir bakış açısıyla incelemiştir. Covid-19 korkusunun online alışverişteki artışın bir sebebi olduğu fikriyle oluşturulan modelde Covid-19' a yakalanma korkuşunun online alışverişe güven üzerindeki etkisi incelenmistir. Ayrıca Covid-19 sürecinde online alışverişe güvenin ise online alışveriş deneyim değeri üzerindeki etkişi araştırılmıştır. Yine müşterilerin online alışveriş davranışlarındaki artış dikkate alınarak online alışveriş deneyim değerinin online alışveriş bağımlılığı üzerindeki etkileri tespit edilmeye çalışılmıştır. PLS-SEM algoritması kullanılarak 231 katılımcıya (türev örneklemesi aracılığıyla 5000 katılımcıya çıkarılmıştır) kolayda örneklem yöntemiyle anket formu uygulanmış ve toplanan verileri yapısal eşitlik modellemesi kullanılarak analiz edilmiştir. Araştırmada Covid-19 korkusunun online alışverişe güveni arttırdığı, online alışverişe güvenin ise müsterilerin değer algılarını (hedonik ve faydacı) etkilediği sonucuna ulaşılmıştır. Calışmada göze çarpan bir diğer önemli sonuç ise müşterilerin online alışveriş değer algılarından hedonik değerin müşterilerin online alışveriş bağımlılığının tüm boyutlarını etkilediği ancak faydacı değer algılarının online alışveriş bağımlılığının boyutları üzerinde herhangi bir etkisinin olmadığıdır.

Anahtar Kelimeler: Covid-19 Korkusu, Online Alışverişe Güven, Deneyim Değeri, Hedonik Değer, Faydacı Değer, PLS-SEM

## 1. Introduction

The covid-19 pandemic has affected many sectors both economically and socially, including factors such as high infection rates, high death rates, quarantine, social distance, and isolation also cause significant changes in the perceptions such as fear and behaviors of individuals (Sakib *et al.*, 2020). The first of these behaviors is the use of information and communication technologies. Here, individuals started to virtually realize their daily physical experiences (shopping, health, educational experiences, etc.) (Mouratidis and Papagiannakis, 2021). One of these experiences is the customer's online shopping behavior, which increased significantly during the Covid-19 period (Donthu and Gustafsson, 2020; Le *et al.*, 2021).

The change in customers' online shopping behavior can be evaluated within the framework of the psychological reactance theory (Akhtar *et al.*, 2020). This theory explains that individuals are motivated to regain their freedom when restricted or threatened (Brehm and Brehm, 1981; Rosenberg and Siegel, 2018). This theory, which is widely used in understanding the changes in customer attitudes and behaviors (Kavvouris et al., 2020), has been evaluated with the restrictions in the pandemic process. When individuals' freedoms are restricted, they show reactions such as anger, ignorance, and regaining their freedom (Argouslidis *et al.*, 2018). During the Covid-19 pandemic period, individuals preferred to secure their freedom of shopping through online shopping (Akhtar *et al.*, 2020).

The transformation into online shopping brought about by the Covid-19 pandemic has paved the way for intensifying studies in marketing (Alaimo et al., 2021). When the literature examined, online shopping satisfaction has been investigated through the use of mobile technologies (Fernando, 2021), participation in online activities (Mouratidis and Papagiannakis, 2021), food stocking through online channels (Hao *et al.*, 2020), virtual reality and augmented reality in e-commerce (Billewar et al., 2021), food prices in online channels (Hillen, 2021), customer online shopping behaviors and changes in these behaviors (Chenarides et al., 2021), customer online food shopping demands (Chang and Meyerhoefer, 2021), fruit and vegetable markets (Richards and Rickard, 2020), risk factors in online shopping (Alhaimer, 2021), factors that customer satisfaction created factors (Alaimo et al., 2020), online shopping motivators according to generations (Koch et al., 2020) fields. Furthermore, many researchers have investigated the factors contributing to online shopping behavior during the Covid-19 pandemic period (Ben Hassen et al., 2020; Eger et al., 2021; Grashuis et al., 2020; Moon et al., 2021; Pham et al., 2020; Safara, 2020; Sheth, 2020). These studies showed significant increases in customers' online shopping experiences during the Covid-19 pandemic (Pantano et al., 2020). Despite the increasing number of studies, the causes and effects of these increases are still an important research gap. It has been aimed to investigate the relationship between "fear of contracting Covid-19," "trust in the online shopping experience," "value of the online shopping experience," and "online shopping addiction" in order to reveal

these dynamics. On the other hand, the increase observed in customers' online shopping behavior (especially in the Covid-19 pandemic) in recent years, where shopping is considered an activity or experience, led marketers to explain the factors affecting this increase. Understanding the online shopping experiences of customers is of great importance not only for researchers but also for companies. These research results will help to understand how effective customer fears are in online shopping during the pandemic process and how customers are affected by shopping addiction, which is quite common today. It is predicted that the research data findings will have an important place in today's marketing conditions. In this context, answers to the following questions were sought.

**Question 1:** Does the fear of contracting Covid-19 trigger customers' trust in online shopping?

**Question 2:** Do customers' trust in online shopping trigger their perception of experience value?

**Question 3:** Do customer experience value perceptions affect customer online shopping addiction?

### 2. Conceptual Background

World Health Organization data show that the Covid-19 pandemic began in December 2019 and affected many people worldwide. About 245 million Covid-19 cases have been reported worldwide between the pandemic's start and October 29, 2021, and about 5 million people have died as a consequence of the pandemic. These numbers are increasing day by day. Both the restrictions and prohibitions and the individuals' psychological situation led to various changes in people's behavior. One of them was that it caused changes in the activities of individuals. The pandemic has prompted individuals to engage in online activities globally (Nguyen et al., 2020; Wijesooriya et al., 2020) and has triggered a new wave of online shopping in both developed and developing countries. Scientists assumed that this wave of online shopping would continue for years to come. (Chetioui et al., 2021). The psychological reactance theory can explain these changes in the behavior and habits of individuals. The basis of the theory is based on the motivation of individuals to regain their freedom when their freedoms are threatened by the behavior and may bring about a variety of behavioral reactions (Brehm, 1966). Since psychological reactance is a factor that motivates individuals, the response is measured through behavior and attitude (Lee and Lee, 2009). In the study, customer attitudes were examined within the scope of fear, trust, and value, and customer behavior are discussed within the framework of the addiction concept.

*Fear of contracting Covid-19* is considered an individual's fear of contracting infectious diseases. Although there are many disasters in the world, epidemics of infectious diseases are among the most remarkable disasters due to their

uncertainty. This disaster affects individuals both physically and mentally and causes individuals to feel at risk and vulnerable (Brief *et al.*, 2004; Reznik *et al.*, 2021). Today, one of the most important of these disasters, the Covid-19 pandemic, is a global danger that seriously affects public health. Fear is the most common psychological response to this danger (Broche-Pérez *et al.*, 2022).

*Perceived trust* has been identified with many different concepts in the literature. Perceived trust is the individual's low-risk perception of individuals about their current situation (Siegrist, 2000). In other words, customers' perceptions of low anxiety about a particular situation (Freidenburg, 1993). Psychological reactance theory, as mentioned above, is about turning to alternatives when freedom is endangered. This orientation is possible with confidence in other alternatives. Therefore, trust plays a critical role for individuals during the outbreak of infectious diseases (Balog-Way and McComas, 2020). The fact that people avoid physical contact with other people and objects during the Covid-19 pandemic period has allowed online shopping to come to the fore as an alternative to physical shopping.

**Perceived value** is the ratio of benefits to products and sacrifices from value products and services based on customers' interactions with products and services (Payne and Holt, 2001). It is also defined as the increase in social self-benefit resulting from the purchase of products and services by customers (Sweeney and Soutar, 2001). In other words, customers' overall evaluation of products, services, and experiences is defined as the perceived value (Zeithaml, 1988). In the study, perceived value has been discussed in two basic dimensions: hedonic and utilitarian. *Hedonic value* is where stimulation and pleasure come to the fore in product and service purchases (Kuikka and Laukkanen, 2012)brand equity, brand value, brand trust. It is the perception of value from the emotional, sensory and hedonistic aspects of individuals' shopping experiences (Hirschman and Holbrook, 1982). *Utilitarian value* has been defined as rational and cognitive evaluations of products and services (Whitten *et al.*, 2014).

**Online shopping addiction;** the concept of dependency is the continuation of the use of something despite the problems arising from its use in the traditional sense (Young, 2004). Internet addiction is the excessive use of the internet and the display of moody and restless behaviors when not used (Mitchell, 2000). Online shopping addiction occurs after internet addiction, defined as excessive online shopping characterized by moody and restless behavior when it is not done. This type of addiction has been reported to consist of salience, tolerance, mood modification, withdrawal, relapse, and conflict dimensions (Duong and Liaw, 2021). Salience is that online shopping takes the most important place in consumer life and that the individual dominates her/his emotions, behaviors, and thoughts. Tolerance has been defined as online shopping being done more and more every day, and this thought dominates the individual's emotions, behaviors, and thoughts. Mood modification is when online shopping creates a calming effect on the mood of the customers at that moment and is expressed as the domination of the individual's

emotions, behaviors, and thoughts. Withdrawal is the unpleasant emotional state that occurs when online shopping does not take place, and this thought dominates the individual's feelings, behaviors, and thoughts. Relapse is an effort to quit online shopping, but this effort does not yield results, and online shopping dominates the individual's emotions, behaviors, and thoughts. Conflict is the customer's online shopping dominates the emotions, behaviors, and thoughts of the individual and comes into conflict with those around him as a result of online shopping (Griffiths, 2005).

### 3. Hypotheses Development

The emergence of the Covid-19 pandemic has brought various negative changes in individuals' emotional states. One of these negative changes is the fear of contracting Covid-19 (Eger *et al.*, 2021; Martínez-Lorca *et al.*, 2020). Fear of contracting Covid-19 has caused various psychological symptoms, such as fear of death and doubt in people. These emotions also lead to behavioral changes (Khan *et al.*, 2020). One of these behavioral changes among individuals is consumer purchasing behavior. Many studies in the literature suggested that fears about the Covid-19 pandemic have influenced customer purchasing behavior (Addo *et al.*, 2020; Chinazzi *et al.*, 2020; Wiranata and Hananto, 2020). The observed behavior change can be clarified by the fear theory, which is the emotional reaction of individuals to the emergence of fear in the human mind (Eger *et al.*, 2021). By considering the trust variable, one of these emotional responses, the following hypotheses have been developed within the framework of this theory.

## *H*; Fear of contracting Covid-19 positively affects trust in online shopping.

Customers' shopping value perceptions are one of the most critical factors shaping customer behavior in customer experiences (Lao *et al.*, 2021). These perceptions also significantly affect other perceptions, such as trust in shopping, and play a crucial role in customers' online shopping experience. The lack of customers' trust in the online shopping experience is an essential factor and causes them not to prefer online shopping (Beldad *et al.*, 2010). The prospect theory can explain this situation. Prospect theory, first introduced into the literature by Kahneman and Tversky (1979), was developed to study how individuals behave in risky situations (Edwards, 1996). Considering this theory, it has been proven that customers' attitudes toward online shopping were influenced during the Covid-19 process (Chetioui *et al.*, 2021). Based on this, it has been aimed to investigate the trust-value relationship in online shopping, and the following hypothesis has been determined.

 $H_2$ : Trust in online shopping positively affects online shopping value. ( $H_{2a}$ : Trust in online shopping positively affects hedonic value.  $H_{2b}$ : Trust in online shopping positively affects utilitarian value).

Changing conditions during the pandemic brought up shopping addiction, which

gained significant momentum in customer behavior. Factors such as stress, social isolation, ample free time, and risk caused customers to become addicted to shopping. During this period, changes in the social sphere also led to the acceleration of digitalization and online shopping (Niedermoser *et al.*, 2021). The reflection of this increase in customer behaviors and its uncontrolled continuation in the following processes led to customer online shopping addiction (Duong and Liaw, 2021). According to the main-end chain theory, the value factor is critical in shaping customer behaviors in online environments (Chiu *et al.*, 2014). One of these behaviors is the online shopping addiction of customers. It has been formed the following hypothesis by considering the value of experience, which is an essential antecedent in shaping the decisions and behaviors of customers (Samsa and Yüce, 2022; Zhang *et al.*, 2022).

 $H_{3:}$  Online shopping value has a positive effect on online shopping addiction.  $(H_{3a}:$  Hedonic value has a positive effect on mood modification.  $H_{3b}:$  Hedonic value has a positive effect on relapse.  $H_{3c}:$  Hedonic value has a positive effect on salience.  $H_{3d}:$  Hedonic value has a positive effect on tolerance.  $H_{3e}:$  Hedonic value has a positive effect on withdrawal.  $H_{3f}:$  Hedonic value has a positive effect on conflict.  $H_{3g}:$  Utilitarian value has a positive effect on mood modification.  $H_{3h}:$ Utilitarian value has a positive effect on relapse.  $H_{3f}:$  Utilitarian value has a positive effect on salience.  $H_{3f}:$  Utilitarian value has a positive effect on tolerance.  $H_{3k}:$  Utilitarian value has a positive effect on withdrawal.  $H_{3f}:$  Utilitarian value has a positive effect on salience.  $H_{3f}:$  Utilitarian value has a positive effect on tolerance.  $H_{3k}:$  Utilitarian value has a positive effect on withdrawal.  $H_{3f}:$  Utilitarian value has a positive effect on conflict)

## 4. Research Method

### Sample and Measures

In this study, the questions of each scale were translated from English to Turkish, and some of the questions were adjusted according to the Covid-19 process. After translation and adaptation, it was thoroughly checked by an expert. In this stage, the required permission was obtained by the Kafkas University Social and Human Sciences Scientific Research and Publication Ethics Committee (Issue: E-35608, Date: 10.01.2022). In addition, a pre-test study was conducted to test the survey questions' suitability and gather the participants' opinions. In the pre-test application, the validity and reliability values were checked, and the questionnaire was finalized by taking into account the participants' opinions. The questionnaire form consists of 5 multiple-choice questions containing the characteristics of the participants and 36 measurement items determined using a 5-point Likert scale. The characteristics of the participants and measurement items are presented in Tables 1 and 2.

In this study, which was carried out under pandemic conditions, an online questionnaire was used in line with the predictable request of both health conditions and participant demands. Since the sample group also consisted of online shoppers, it was assumed that individuals who would fill out the online survey would be interested in online shopping, and the data were collected through an online survey. These may constitute the limitation of the study. The data were collected through an online survey from people who had an online shopping experience during the Covid-19 outbreak between August 28, 2021, and March 18, 2022, using the convenience sampling method. Participants were first asked if they had shopped online during the Covid-19 period. In the next step, the questionnaire was sent to the participants, and they were asked if they would like to answer it. Thus, 231 participants who had an online shopping experience during the Covid-19 period were reached. The PLS-SEM algorithm, which is used in cases where the sample group is relatively small, offers a significant advantage over other algorithms. This advantage is the bootstrapping method. In this method, the sample was increased to 5000 using derivative sampling, and the data were analyzed over 5000 samples (Hair *et al.*, 2017). Characteristics of the sample group are given in Table 1.

Characteristics		Ν	Percantenge (%)
	Male	104	45.2
Sex	Female	126	54.8
	No answer	1	-
	Under 20	10	4.3
	20-29	125	54.1
Age	30-39	78	33.8
	40-49	14	6.1
	50 and older	4	1.7
Marital Status	Single	134	58
Marital Status	Married	97	42
	Under 1500 TL	50	22.5
	1501 TL-3000 TL	34	15.3
<b>Revenue (Monthly)</b>	3001 TL-4500 TL	27	12.2
	4501 TL-6000 TL	53	23.9
	Over 6000 TL	58	26.1
	Clothes	119	52.7
	Food- Nutrition	69	30.5
	Hobby (Game-Toy etc.)	12	5.3
The product categories with the	Cosmetic	7	3.1
most online shopping during the	Household appliances	7	3.1
Covid-19 process	Herbal supplements	3	1.3
	Book	2	0.9
	Others	7	3.1
	No answer	5	-

 Table 1. Characteristics of the Sample

According to Table 1, about 55% of the participants are women; the vast majority (87.9%) is between 20 and 39 years old. In addition, about 58% of the participants are single. The monthly income of the participants was distributed pro-rata, and the participants mainly shopped online in the categories of clothing (52.7%) and food nutrition (30.5%) during the Covid-19 period.

Construct	Measurement Items	References
	Fear of contracting Covid-19	
	Q1. I am most afraid of Covid-19 during the pandemic pro-	
	cess.	
	Q2. It bothers me to think about Covid-19 in the pandemic	
	process.	
	Q3. My hands get sweaty when I think of Covid-19	Sakib et al., 2020
	Q4. I am afraid of losing my life because of Covid-19.	
	Q5. I get nervous or anxious when watching news and stories about Covid-19 on social media.	
	Q6. I cannot sleep because I am worried about catching Covid-19.	
	Q7. My heart beats fast when I think of catching Covid-19.	
	Perceived Value	
Utilitarian Value	Q8. Considering the quality during the Covid-19 process, the prices of the products and services I buy from online stores are reasonable.	
	Q9. I save time when I shop from online stores during the Covid-19 process	
	Q10. The products and services I bought from online stores during the Covid-19 period are excellent purchases.	
	Q11. During the Covid-19 period, online stores offer good economic value.	Overby and Lee, 2006
Hedonic Value	Q12. The thought of shopping from online stores during the corona period absorbs me.	
	Q13. During the Covid-19 period, I not only bought products and services but also had fun shopping in online stores.	
	Q14. During the Covid-19 period, shopping from online stores took me away from everything.	
	Q15. Shopping from the online store during the Covid-19 process gives me the feeling of "escape from the pressure of life."	
	Trust to Online Shopping	
	Q16. Trusts what the company says about the products while shopping online during the Covid-19 period.	
	Q17. Online shopping is reliable during the Covid-19 process.	Kim et al., 2009
	Q18. The claims and promises of the online shopping site	
	about the product during the Covid-19 process are reliable.	
	Online Shopping Addiction	
Salience	Q19. When I am not shopping online, I think about it all the time during the Covid-19 process	
	Q20. I often think about how you can devote more time or	
	money to online shopping during the Covid-19 process	
	Q21. Online shopping has an important place in my life	
	during Covid-19 process	

### Table 2. Measurement Items

Mood Modi- fication	<ul><li>Q23. I spend much more time online shopping during the Covid-19 process.</li><li>Q24. During the Covid-19 process, I am shopping online without a plan.</li><li>Q25. When I am feeling bad, online shopping makes me feel better.</li></ul>	
Withdrawal	<ul><li>Q26. When I feel bad, worried, helpless, or restless during the Covid-19 process, I shop online to feel better.</li><li>Q27. Online shopping helps me temporarily forget my troubles during the Covid-19 process.</li><li>Q28. I feel depressed when I find some excuses and do not shop online during the Covid-19 process.</li></ul>	Duong and Liaw, 2021
	Q29. A life without online shopping for a while during the Covid-19 process would be boring and unpleasant for me. Q30. I feel restless or depressed when I try to shop online during the Covid-19 process but fail.	
Relapse	<ul><li>Q31. I tried to cut or stop my online shopping during the Covid-19 process but failed.</li><li>Q32. During the Covid-19 process, I decided to do online shopping less frequently, but I could not.</li><li>Q33. If I reduce the amount of online shopping in a certain</li></ul>	
Conflict	period during the Covid-19 process and then start again, I will shop as often as before. Q34. My work or educational productivity has decreased due to online shopping during the Covid-19 period. Q35. There were times when I argued with my family about	
	my online shopping during the Covid-19 process. Q36. During the Covid-19 process, I cut my time with my family and friends for my online shopping.	

This study consisted of four main elements, fear of contracting Covid-19, trust in online shopping, perceived value, and online shopping addiction. Fear of contracting Covid-19 has been associated with one of seven items scales adapted from Sakib et al. (2020). Trust in online shopping was measured with three items scale adapted from Kim et al. (2009). Perceived value scale adapted from Overby and Lee (2006). This scale consists of two dimensions, utilitarian value (4 items) and hedonic value (4 items). The online shopping addiction scale was adapted from Zhao et al. (2017) and consists of 6 dimensions, salience (3 items), tolerance (3 items), mood modification (3 items), withdrawal (3 items), relapse (3 items), and conflict (3 items) adapted from Zhao et al. (2017) and Duong and Liaw (2021). Participants evaluated the items on a 5-point Likert scale.

## 5. Data Analysis

Here, SmartPLS 3 was used to test the hypotheses. SPSS 20 program was used for the analysis of demographic data and descriptive. Structural equation modeling was used to test the study model, and the study was handled within the scope of the "measurement model" and "structural model."

### Measurement Model

The measurement model is used to test the construct validity and reliability of the study. For this purpose, it is appropriate to examine the Average Variance Extracted (AVE), item loadings, t-statistics values, Cronbach alpha( $\alpha$ ), and composite reliability (CR) values (Kaya *et al.*, 2020). These results are shown in Table 3 and Figure 1.

Table 3. Converge	ent and Discrin	ninant Validity
-------------------	-----------------	-----------------

Variables	α	CR	AVE	1	2	3	4	5	6	7	8	9	10
	For	nell-Lar	rcker Ci	riterion				-			_		
Conflict	0.782	0.873	0.696	0.834									
FearCV19	0.882	0.910	0.629	0.135	0.793								
Hed.Value	0.707	0.837	0.632	0.369	0.128	0.795							
M.Modif.	0.826	0.920	0.852	0.566	0.131	0.588	0.923						
Relapse	0.858	0.913	0.779	0.773	0.214	0.470	0.612	0.883					
Salience	0.773	0.868	0.687	0.616	0.172	0.473	0.617	0.658	0.829				
Tolerance	0.811	0.888	0.725	0.598	0.147	0.567	0.749	0.677	0.692	0.851			
Trust	0.804	0.884	0.717	0.177	0.198	0.382	0.362	0.264	0.420	0.335	0.847		
Uti.Value	0.769	0.866	0.684	0.029	0.110	0.302	0.244	0.162	0.207	0.213	0.537	0.827	
Withdr.	0.818	0.892	0.734	0.670	0.171	0.502	0.718	0.755	0.704	0.678	0.347	0.205	0.857

AVE = ((summation of the square of the factor loadings)/(summation of the square of the factor loadings))+(summation of the error variances)), CR(Composite reliability) = (square of the summation of the factor loadings)/((square of the summation of the factor loadings)+(square of the summation of the error variances))



Figure 1. Measurement Model Results

To ensure construct validity, AVE, item loadings, t-statistic values, Cronbach  $alpha(\alpha)$ , and CR values must meet certain criteria. AVE scores, the first of these criteria, were greater than 0.60 (Bagozzi and Yi, 1988). In addition, the square root of the AVE value of each variable was greater than the correlation coefficient of the other variables and was also considered an important criterion (Fornell and Larcker, 1981). It has shown that AVE values meet the conditions (Table 3). Cronbach alpha values of the variables were greater than 0.70 indicating high reliability (Hair et al., 2013). The variables in Table 3 have a high degree of reliability. In addition, CR values were greater than 0.70 (Hair et al., 2013). Therefore, Table 3 shows that the CR values meet the necessary criteria. It has been given item loads and t-statistics values. These values also proved to be significant.

### Structural Model

The structural model shows the relationship between dependent and independent variables. Therefore, the structural model tests the hypotheses (Hair et al., 2011). The structural model results and the hypothesis tests are presented in Figure 2 and Table 4.



Figure 2. Structural Model Results

Table 4.	Hypothesis	Test Results
----------	------------	--------------

	Hypothesis	<b>O-Samples</b>	S-Mean	St-Dev	<b>P-Values</b>
$\mathbf{H}_{1}$	Fear of cont.Covid-19 -> Trust to online shop- ping	0.198	0.214	0.066	0.003
Н,	Trust in online shopping -> Online shopping				
-	value				
	$H_{2a}$ : Trust to online shopping -> Hedonic value	0.382	0.385	0.069	0.000
	$H_{2b}$ : Trust to online shopping -> Utilitarian Val- ue	0.537	0.539	0.065	0.000
H,	Online shopping Value -> Online shopping ad-				
3	diction				
	$H_{3a}$ : Hedonic Value -> Mood modification	0.566	0.567	0.055	0.000
	$H_{33}$ : Hedonic Value -> Relapse	0.463	0.465	0.055	0.000
	$H_{3c}$ : Hedonic Value -> Salience	0.451	0.455	0.062	0.000
	$H_{3d}^{-}$ Hedonic Value -> Tolerance	0.552	0.554	0.053	0.000
	$H_{3e}$ : Hedonic Value -> Withdrawal	0.484	0.487	0.053	0.000
	$H_{3f}$ Hedonic Value -> Conflict	0.396	0.402	0.061	0.000
	$H_{3e}$ : Utilitarian Value -> Mood modification	0.073	0.076	0.064	0.253
	$H_{3\mu}^{s}$ : Utilitarian Value -> Relapse	0.022	0.025	0.060	0.712
	$H_{3i}$ : Utilitarian Value -> Salience	0.071	0.075	0.075	0.346
	$H_{3i}$ : Utilitarian Value -> Tolerance	0.047	0.051	0.062	0.451
	$H_{3k}$ : Utilitarian Value -> Withdrawal	0.059	0.062	0.058	0.305
	$H_{3r}$ : Utilitarian Value -> Conflict	-0.091	-0.089	0.075	0.228

According to the structural model results, fear of contracting Covid-19 affects trust in online shopping. Furthermore, the research results supported that trust in online shopping significantly impacts all dimensions of online shopping value. Of the shopping value dimensions, utilitarian value is more influenced by other hedonic values than trust in online shopping. Another research finding demonstrated that hedonic value significantly impacts online shopping addiction, but the utilitarian value is not affected. When the effect of hedonic value on shopping addiction was examined based on dimensions, the hedonic value was most affected by the mood change dimension and the least by the conflict dimension. In this respect, the dimension of online shopping addiction in which hedonic value was most effective is mood modification. The third dimension of addiction, in which hedonic value has the most effect, is withdrawal. It has been concluded that customers with hedonic values feel bad when they do not shop online and push themselves to shop online. According to the effect levels, the relapse dimension is found in the fourth dimension. It has been concluded that the new hedonic value caused customers not to give up even though they tried to give up shopping. The fifth dimension in terms of impact levels was salience. The new hedonic value has led customers to constantly think about online shopping. The dependency dimension where hedonic value was least effective is conflict. In other words, it caused customers to constantly shop online and to be in conflict with their social environment.

### 6. Discussion

The present study includes an experience-based view of the impact of fear of contracting Covid-19 on customers' online shopping addiction. The study has analyzed the impact of fear of contracting Covid-19 on customers' online shopping experiences (trust in online shopping experiences and online shopping experience value) and the outcomes of these experiences (online shopping addiction) concerning rated online shopping. The fear of contracting Covid-19 was discussed for the significant increase in online shopping with the pandemic. The effect of this fear on the trust of the customers in the online shopping experience and the effect of the trust in the online shopping on the value of the online shopping experience was investigated. Another aspect of the study examined the effect of the value of the online shopping experience on shopping addiction.

It has been investigated first how the fear of contracting Covid-19 is affecting customer trust in online shopping. Appraisal theory argues that individuals' experiences lead to various changes in their emotions and behaviors (Roseman, 1991). Based on the theory, it has been discussed the fear factor a critical situation affecting customer behavior. There are many studies examining the online shopping behavior of customers at risk (Bianchi & Andrews, 2012; Dinev & Hart, 2006; Lee, 2009). Since customers used masks, adapted social distancing, and avoided touching during the Covid-19 pandemic process (Samsa, 2021), trust in online shopping increased. This study, parallel to this information, has concluded that the fear of contracting Covid-19 positively affected customer trust in online shopping. Customers can rely on safer alternatives in case of fear of circumstances. As a result of the study, this aspect came to the fore, and individuals felt fear of the risk posed by Covid-19, and they trusted online shopping, which is a less risky medium. It has been mentioned above that there was a remarkable increase in customers' online shopping behavior during the Covid-19 process. The reason is that customers find online shopping more reliable as a result of the fear of contracting the disease.

Secondly, the effect of customer trust in online shopping on customer shopping experience values has been examined. Trust is a concept that has a very important place in the online shopping behavior of customers (Chetioui et al., 2021; Kim & Peterson, 2017) because trust affects many perceptions of customers about shopping. For example, customers' trust in online shopping was a significant share in their online shopping, and trust in online shopping had a very important effect on the WOM (word of mount) behavior of the customers (Rita et al., 2019). Another important effect of trust in online shopping was customer satisfaction. The satisfaction level of customers who trust online shopping was just as high (Muhdiyanto and Pramesti, 2018). In literature, it has been found that trust had a very important effect on the intention to use (Park et al., 2018). Apart from these relationships, the trust had a very important place in the perception of the purchase value (Ponte et al., 2015; Chai et al., 2015). In this study, the effect of online

shopping trust on online shopping value perceptions was investigated. The study has filled a very important gap in the literature both in terms of process (Covid-19 pandemic) and dimensions of online shopping experience value (hedonic and utilitarian value). It has been concluded that trust has a very important effect on the utilitarian value and hedonic value in the Covid-19 process. While it has a very high effect on utilitarian value, it has relatively little effect on hedonic value.

In the final, the effect of online shopping experience value on online shopping addiction has been measured. It has been found that the utilitarian value of online shopping did not affect customers' online shopping addiction. In contrast, hedonic values influence online shopping addiction. In previous studies, the effects of various variables on online shopping addiction were noted. These variables were age, gender, marital status, internet experience, daily internet shopping use, daily internet shopping frequency (Duong and Liaw, 2021), well-being, time spent online (Savci et al., 2021), daily spiritual experiences and self-efficacy (Charzyńska et al., 2021). In addition, hedonic motivators affect the shopping addiction of customers (Jhamb and Mittal, 2022). It has been concluded that hedonic value is effective across all dimensions of customers' online shopping addiction. In other words, the hedonic value offered by online shopping to customers created relief in the moods of customers, and this situation has led them to continue shopping. Considering that hedonism is conceptualized as openness to pleasurable experiences, it has an important place in the happiness of customers (Veenhoven, 2003). Therefore, the effect of hedonic value on mood modification, which is based on keeping the customers' moods at a high level, was inevitable. The second dependency dimension on which the hedonic value had the most influence was tolerance. Hedonic value caused customers to realize their purchasing behavior constantly and to dominate customer feelings and thoughts. It triggers customers' repurchase intention (Kim et al., 2012). The third dimension of addiction, in which hedonic value has the most effect, is withdrawal. Customers with hedonic values feel bad when they do not shop online and need online shopping. When the dimension of pleasure is examined, it has been noted that individuals' lack of hedonism caused them to seek pleasure again. This situation leads individuals to addiction (Victoria et al., 2021). Therefore, the effect of hedonic value on withdrawal can be evaluated from this perspective. Hedonism caused individuals to not be able to control themselves and to realize unplanned buying behavior. Therefore, considering that hedonism causes impulsive buying, it can be supported that hedonic value in online shopping has a significant effect on the behavior of customers not giving up on online shopping. Another important online shopping addiction variable affected by hedonic value is salience. In other words, it has been concluded that the hedonic value aspect of online shopping causes customers to constantly think about online shopping and that online shopping is an important part of their lives. The opinion that the above-mentioned customer pleasures affect customer happiness provides important support for this result. Because it is possible for individuals to always have in their minds the elements that increase their happiness. The dimension

of online shopping addiction that hedonic value affects the least compared to other dimensions is conflict. Today, addiction has become not only a problem for individuals but also a problem for the individual's social environment. The dependence of individuals on technological devices leads to continuous use of these devices and leading a life disconnected from society (Zhang and Wu, 2022). In such a case, the individual can conflict with his social environment. Therefore, the pleasure that customers get from online shopping may cause conflict with their social environment. This evidence supports that hedonic value affects conflict.

## 7. Conclusion

In this article, the linear effect between the triad of fear-experience-dependence has been examined. Fear has been studied as customers' fear of contracting the coronavirus. Within the scope of experience, trust in the online shopping experience of customers and the effect of this trust on customers' perceptions of experience value have been discussed. The addiction dimension has been designed as the online shopping addiction of the customers. This study provides theoretical and practical contributions to the literature on the impact of global changes in the Covid-19 pandemic process on customer emotions and behaviors.

The study is based on psychological reactance theory. The presented study is important both to examine online shopping experiences during the pandemic and to examine the relationships in terms of variables to understand the new world order brought by the pandemic. In addition, expectancy theory, main chain theory, and fear theory, which is used to create working hypotheses, allowed the study to be examined from different theoretical backgrounds.

The value perception of customers' online shopping experiences holds an essential place in customers' online shopping addiction during the pandemic period. However, results supported that hedonic values create online shopping addiction, but utilitarian values do not create online shopping addiction. Another important finding is that trust in online shopping influences both the hedonic and utilitarian aspects of the online shopping experience value. Customers' fear of contracting Covid-19 has made them safer in their online shopping experience.

The study contains beneficial results both in the pandemic process and in theory. In times of crisis, people trust the online shopping experience with the instinct of protection when their health is at risk, and they perceive value in those experiences. However, it has been observed that hedonic values rather than utilitarian values trigger customers' online shopping addiction. Fear of contracting Covid-19 pushes customers to trust online shopping. Confidence in online shopping positively affects individuals' perceptions of value. On the other hand, customer value perceptions partially affect online shopping addiction. That is, while customers' hedonic value perceptions do not affect online shopping addiction. In addition, it

was concluded that the most effective dimension of the hedonic value was mood modification, and the least affected dimension was the conflict dimension.

The Covid-19 process has brought along various changes in customer typologies. The restrictions brought by the Covid-19 process have caused social isolation of individuals and brought a significant increase in online shopping rates. With the thought that this increase will trigger online shopping addiction, the factors affecting online shopping addiction have been examined. In this respect, online shopping behaviors in the quartet of fear-trust in alternatives-value-dependence were examined based on the Covid-19 pandemic process.

In future studies, it may be interesting to investigate which emotions are triggered in customers other than the fear of contracting Covid-19, to what extent emotions affect the online shopping experience, and to examine the differences in online shopping according to product categories. It may also be interesting to examine which of the product categories with online shopping experience create online shopping addiction. It is known that demographic factors such as age, gender, and marital status also affect online shopping, but due to the nature of the study, there are very few studies investigating these variables. Again, trust is not the only factor affecting the value of the online shopping experience, and further studies are needed.

### References

- Addo, P.C., Jiaming, F., Kulbo, N.B., & Liangqiang, L. (2020). COVID-19: fear appeal favoring purchase behavior towards personal protective equipment, *The Service Industries Journal*, 40(7-8), 471–490. https://doi.org/10.1080/ 02642069.2020.1751823
- Akhtar, N., Nadeem Akhtar, M., Usman, M., Ali, M., & Iqbal Siddiqi, U. (2020). COVID-19 restrictions and consumers' psychological reactance toward offline shopping freedom restoration, *The Service Industries Journal*, 40(13–14), 891–913. https://doi.org/10.1080/02642069.2020.1790535
- Alaimo, L.S., Fiore, M., & Galati, A. (2021). Measuring consumers' level of satisfaction for online food shopping during COVID-19 in Italy using POSETs, *Socio-Economic Planning Sciences*, Online ahead of print. https:// doi.org/10.1016/j.seps.2021.101064
- Alaimo, L.S., Fiore, M., & Galati, A. (2020). How the COVID-19 pandemic is changing online food shopping human behaviour in Italy, *Sustainability*, *12*(22), 1–18. https://doi.org/10.3390/su12229594
- Alhaimer, R. (2021). Fluctuating attitudes and behaviors of customers toward online shopping in times of emergency: The case of Kuwait during the COVID-19 Pandemic, *Journal of Internet Commerce*, 21(1), 26-50. https:// doi.org/10.1080/15332861.2021.1882758
- Argouslidis, P., Skarmeas, D., Kühn, A., & Mavrommatis, A. (2018). Consumers' reactions to variety reduction in grocery stores: a freedom of choice perspective, *European Journal of Marketing*, 52(9-10), 1931-1955. https:// doi.org/10.1108/EJM-12-2016-0844
- Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models, Journal of the Academy of Marketing Science, 16(1), 74-94. https://doi. org/10.1007/BF02723327
- Balog-Way, D.H.P., & McComas, K.A. (2020). COVID-19: Reflections on trust, tradeoffs, and preparedness, *Journal of Risk Research*, 23(7-8), 838-848. https://doi.org/10.1080/13669877.2020.1758192
- Beldad, A., de Jong, M., & Steehouder, M. (2010). How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust, *Computers in Human Behavior*, 26(5), 857-869. https://doi.org/10.1016/j. chb.2010.03.013
- Ben Hassen, T., El Bilali, H., & Allahyari, M.S. (2020). Impact of COVID-19 on food behavior and consumption in Qatar, *Sustainability*, 12(17), 1-18. https://doi.org/10.3390/su12176973
- Bianchi, C., & Andrews, L. (2012). Risk, trust, and consumer online purchasing behaviour: aChileanperspective, editedbyFastoso,F.*InternationalMarketing Review*, 29(3), 253-275. https://doi.org/10.1108/02651331211229750
- Billewar, S.R., Jadhav, K., Sriram, V.P., Arun, D.A., Mohd Abdul, S., Gulati, K., & Bhasin, N.K.K. (2021). The rise of 3D E-Commerce: the online shopping gets real with virtual reality and augmented reality during COVID-19, *World Journal of Engineering*, 19(2), 244-258. https://doi.org/10.1108/ WJE-06-2021-0338

- Brehm, J. V. (1966). *A Theory of Psychological Reactance*, Academic Press, New York.
- Brehm, S.S., & Brehm, J. V. (1981). *Psychological Reactance: A theory of freedom* and control Academic Press, San Diego CA.
- Brief, D.J., Bollinger, A.R., Vielhauer, M.J., Berger-Greenstein, J.A., Morgan, E.E., Brady, S.M., Buondonno, L.M., Keane, T.M., & For The Hiv/aids Treatment Adherence, Health Outcomes And Cost Study Group (2004). Understanding the interface of HIV, trauma, post-traumatic stress disorder, and substance use and its implications for health outcomes, *AIDS Care Psychological and Socio-Medical Aspects of AIDS/HIV*, 16(1), 97-120. https://doi.org/10.1080/09540120412301315259
- Broche-Pérez, Y., Fernández-Fleites, Z., Jiménez-Puig, E., Fernández-Castillo, E., & Rodríguez-Martin, B.C. (2022). Gender and Fear of COVID-19 in a Cuban population sample, *International Journal of Mental Health and Addiction*, 20(1), 83–91. https://doi.org/10.1007/s11469-020-00343-8
- Chai, J.C.Y., Malhotra, N.K., & Alpert, F. (2015). A two-dimensional model of trust– value–loyalty in service relationships, *Journal of Retailing and Consumer Services*, 26(1), 23-31. https://doi.org/10.1016/j.jretconser.2015.05.005
- Chang, H.H., & Meyerhoefer, C.D. (2021). COVID-19 and the demand for online food shopping services: Empirical evidence from Taiwan, *American Journal* of Agricultural Economics, 103(2), 448-465. https://doi.org/10.1111/ ajae.12170
- Charzyńska, E., Sitko-Dominik, M., Wysocka, E., & Olszanecka-Marmola, A. (2021). Exploring the roles of daily spiritual experiences, self-efficacy, and gender in shopping addiction: A moderated mediation model, *Religions*, 12(5), 355. https://doi.org/10.3390/rel12050355
- Chenarides, L., Grebitus, C., Lusk, J.L., & Printezis, I. (2021). Food consumption behavior during the COVID-19 pandemic, *Agribusiness*, 37(1), 44-81. https://doi.org/10.1002/agr.21679
- Chetioui, Y., Lebdaoui, H., & Chetioui, H. (2021). Factors influencing consumer attitudes toward online shopping: the mediating effect of trust, *EuroMed Journal of Business*, *16*(4), 544-563. https://doi.org/10.1002/agr.21679
- Chinazzi, M., Davis, J.T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., Pastore Y Piontti, A., Mu, K., Rossi, L., Sun,K., Viboud,C., Xiong, X., Yu, H., Halloran, M.E., Longini, I.M., & Vespignani, A. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak, *Science*, 368(6489), 395-400. doi: 10.1126/science.aba9757
- Chiu, C.M., Wang, E.T.G., Fang, Y.H., & Huang, H.Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk, *Information Systems Journal*, 24(1), 85-114. https://doi.org/10.1111/j.1365-2575.2012.00407.x
- Dinev, T., & Hart, P. (2006). An extended privacy calculus model for e-commerce transactions, *Information Systems Research*, 17(1), 61-80. doi.org/10.1287/ isre.1060.0080

- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research, *Journal of Business Research*, 117(30), 284-289. https://doi. org/10.1016/j.jbusres.2020.06.008
- Duong, X.L., & Liaw, S.Y. (2021) Determinants of online shopping addiction among Vietnamese university students, *Journal of Human Behavior in the Social Environment*, 32(3), 1-13. https://doi.org/10.1016/j.jretconser.2021.102542
- Edwards, K.D. (1996). Prospect theory: A literature review, *International Review of Financial Analysis*, 5(1), 19-38. https://doi.org/10.1016/S1057-5219(96)90004-6
- Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021). The effect of COVID-19 on consumer shopping behaviour: Generational cohort perspective, *Journal of Retailing and Consumer Services*, 61(7-8), 1-11. https://doi.org/10.1016/j.jretconser.2021.102542
- Fernando, M.W. (2021). The use of mobile technologies in online shopping during the Covid-19 pandemic-An empirical study, *Procedia Computer Science*, 192(1), 3413-3422. https://doi.org/10.1016/j.procs.2021.09.114
- Fornell, C., & Larcker, D.F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics, *Journal of Marketing Research*, 18(3), 382-388. https://doi.org/10.2307/3150980
- Freidenburg, W.R. (1993). Risk and recreancy : weber , the division of labor , and the rationality of risk perceptions, *Social Forces*, *17*(4), 909–932. https://doi.org/10.1093/sf/71.4.909
- Grashuis, J., Skevas, T., & Segovia, M.S. (2020). Grocery shopping preferences during the COVID-19 Pandemic, *Sustainability*, *12*(13), 1-10. https://doi. org/10.3390/su12135369
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework, *Journal of Substance Use*, *10*(4),191-197. https://doi.org/10.1080/14659890500114359
- Hair, J., Hult, G.T., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage Publications, Los Angeles.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet, Journal of Marketing Theory and Practice, 19(2), 139-152. https://doi. org/10.2753/MTP1069-6679190202
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance, *Long Range Planning*, 46(1-2), 1-12. http://dx.doi. org/10.1016/j.lrp.2013.01.001
- Hao, N., Wang, H.H., & Zhou, Q. (2020). The impact of online grocery shopping on stockpile behavior in Covid-19, *China Agricultural Economic Review*, 12(3), 459-470. https://doi.org/10.1108/CAER-04-2020-0064
- Hillen, J. (2021). Online food prices during the COVID-19 pandemic, *Agribusiness*, 13(1), 91-107. https://doi.org/10.1002/agr.21673

- Hirschman, E.C., & Holbrook, M.B. (1982). Hedonic consumption: emerging concepts, methods and propositions, *Journal of Marketing*, 46(3), 92-101. https://doi.org/10.1177/002224298204600314
- Jhamb, D., & Mittal, A. (2022). How do possessiveness, nongenerosity and envy in young female consumers convert into shopping addiction?, *Journal of Consumer Behaviour*, 21(4), 728-742. https://doi.org/10.1002/cb.2027
- Kahneman, D., & Tversky, A. (1979). Prospect theory: an analysis of decision under risk, *Econometrica*, 47(2), 263-292. https://doi. org/10.1142/9789814417358\_0006
- Kaya, B., Abubakar, A.M., Behravesh, E., Yildiz, H., & Mert, I.S. (2020). Antecedents of innovative performance: Findings from PLS-SEM and fuzzy sets (fsQCA), *Journal of Business Research*, 114, 278-289. https:// doi.org/10.1016/j.jbusres.2020.04.016
- Khan, K.S., Mamun, M.A., Griffiths, M.D., & Ullah, I. (2020). The mental health impact of the covid-19 pandemic across different cohorts, *International Journal of Mental Health and Addiction*, 20(1), 380-386. https://doi.org/10.1007/s11469-020-00367-0
- Kim, C., Galliers, R. D., Shin, N., Ryoo, J. H., & Kim, J. (2012). Factors influencing internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, 11(4), 374-387. https:// doi.org/10.1016/j.elerap.2012.04.002
- Kim, J., Jin, B., & Swinney, J.L. (2009). The role of etail quality, e-satisfaction and e-trust in online loyalty development process, *Journal of Retailing* and Consumer Services, 6(4), 239-247. https://doi.org/10.1016/j. jretconser.2008.11.019
- Kim, Y., & Peterson, R.A. (2017). A Meta-analysis of online trust relationships in e-commerce, *Journal of Interactive Marketing*, 38(1), 44-54. https://doi. org/10.1016/j.intmar.2017.01.001
- Koch, J., Frommeyer, B., & Schewe, G. (2020). Online shopping motives during the COVID-19 pandemic lessons from the crisis, *Sustainability*, 12(24), 1-20. https://doi.org/10.3390/su122410247
- Kuikka, A., & Laukkanen, T. (2012). Brand loyalty and the role of hedonic value, *Journal of Product and Brand Management*, 21(7), 529-537. https://doi.org/10.1108/10610421211276277
- Lao, A., Vlad, M., & Martin, A. (2021). Exploring how digital kiosk customer experience enhances shopping value, self-mental imagery and behavioral responses, *International Journal of Retail & Distribution Management*, 49(7), 817-845. https://doi.org/10.1108/IJRDM-09-2020-0357
- Le, H.T.K., Carrel, A.L., & Shah, H. (2021). Impacts of online shopping on travel demand: a systematic review, *Transport Reviews*, 42(3), 273-295. https:// doi.org/10.1080/01441647.2021.1961917
- Lee, G., & Lee, W.J. (2009). Psychological reactance to online recommendation services, *Information & Management*, 46(8), 448-452. https://doi. org/10.1016/j.im.2009.07.005

- Lee, M.C. (2009). Predicting and explaining the adoption of online trading: An empirical study in Taiwan, *Decision Support Systems*, 47(2), 133-142. https://doi.org/10.1016/j.dss.2009.02.003
- Martínez-Lorca, M., Martínez-Lorca, A., Criado-Álvarez, J.J., Armesilla, M.D.C., & Latorre, J.M. (2020). The fear of COVID-19 scale: Validation in spanish university students, *Psychiatry Research*, 293(1), 1-6. https://doi. org/10.1016/j.psychres.2020.113350
- Mitchell, P. (2000). Internet addiction: genuine diagnosis or not?, *Lancet*, 335(9204), 632. doi:https://doi.org/10.1016/S0140-6736(05)72500-9
- Moon, J., Choe, Y., & Song, H. (2021). Determinants of consumers' online/ offline shopping behaviours during the COVID-19 pandemic, *International Journal of Environmental Research and Public Health*, 18(4), 1-17. https:// doi.org/10.3390/ijerph18041593
- Mouratidis, K., & Papagiannakis, A. (2021). COVID-19, internet, and mobility: The rise of telework, telehealth, e-learning, and e-shopping, *Sustainable Cities and Society*, 74(1), 1-11. https://doi.org/10.1016/j.scs.2021.103182
- Muhdiyanto, M., & Pramesti, D. A. (2018). Creating e-loyalty on online shopping transaction through e-service quality and e-trust. *Muhammadiyah International Journal of Economics and Business*, 1(1), 39-45. doi: 10.23917/mijeb.v1i1.7305
- Nguyen, M.H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A., & Hargittai, E. (2020). Changes in digital communication during the COVID-19 global pandemic: implications for digital inequality and future research, *Social Media* + *Society*, 6(3), 1-6. https://doi.org/10.1177/2056305120948255
- Niedermoser, D. W., Petitjean, S., Schweinfurth, N., Wirz, L., Ankli, V., Schilling, H., Zueger, C., Meyer, M., Poespodihardjo, R., Wiesbeck, G., & Walter, M. (2021). Shopping addiction: A brief review. *Practice Innovations*, 6(3), 199–207. https://doi.org/10.1037/pri0000152
- Overby, J.W. ,& Lee, E.-J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions, *Journal of Business Research*, 59(10-11), 1160-1166. https://doi.org/10.1016/j. jbusres.2006.03.008
- Pantano, E., Pizzi, G., Scarpi, D., &Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak, *Journal of Business Research*, 116, 209-213. https://doi.org/10.1016/j. jbusres.2020.05.036
- Park, J., Amendah, E., Lee, Y., & Hyun, H. (2019). M-payment service: Interplay of perceived risk, benefit, and trust in service adoption. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 29(1), 31-43. https:// doi.org/10.1002/hfm.20750
- Payne, A., & Holt, S. (2001). Diagnosing customer value: integrating the value process and relationship marketing, *British Journal of Management*, 12(2), 159-182. https://doi.org/10.1111/1467-8551.00192

- Pham, V.K., Do Thi, T.H., & Ha Le, T.H. (2020). A study on the COVID-19 awareness affecting the consumer perceived benefits of online shopping in Vietnam, *Cogent Business and Management*, 17(1), 1-16. https://doi.org/10 .1080/23311975.2020.1846882
- Ponte, E.B., Trujillo, E.C., & Rodríguez, T.E. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents, *Tourism Management*, 47(1), 286–302. https://doi.org/10.1016/j.tourman.2014.10.009
- Reznik, A., Gritsenko, V., Konstantinov, V., Khamenka, N., & Isralowitz, R. (2021). COVID-19 fear in Eastern Europe: validation of the fear of COVID-19 scale, *International Journal of Mental Health and Addiction*, 19(5), 1903-1908. https://doi.org/10.1007/s11469-020-00283-3
- Richards, T.J., & Rickard, B. (2020). COVID-19 impact on fruit and vegetable markets, *Canadian Journal of Agricultural Economics*, 68(2), 189-194. https://doi.org/10.1111/cjag.12231
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), 1-14. https://doi.org/10.1016/j.heliyon.2019.e02690
- Roseman, I.J. (1991). Appraisal determinants of discrete emotions, *Cognition & Emotion*, 5(3), 161-200. https://doi.org/10.1080/02699939108411034
- Rosenberg, B.D., & Siegel, J.T. (2018). A 50-year review of psychological reactance theory: Do not read this article, *Motivation Science*, 4(4), 281-300. https://doi.org/10.1037/mot0000091
- Safara, F. (2020). A computational model to predict consumer behaviour during COVID-19 pandemic, *Computational Economics*, *59*(1), 1525-1538. https://doi.org/10.1007/s10614-020-10069-3
- Sakib, N., Bhuiyan, AKMI, Hossain, S., Al Mamun, F., Hosen, I., Abdullah, A.H., Sarker, M.A., Mohuiddin, M.S., Rayhan, I., Hossain, M., Sikder, T.M., Gozal, D., Muhit, M., Islam, S.M.S., Griffits, M.D., Pakpour, A.H., & Mamun, MAH (2020). Psychometric validation of the bangla fear of COVID-19 scale: Confirmatory factor analysis and rasch analysis", *International Journal of Mental Health and Addiction*, 20, 2623-2634. https://doi.org/10.1007/s11469-020-00289-x
- Samsa, Ç. (2022). Müşteri Yolculuğu Bakış Açısıyla Sağlık Sektöründe Müşteri Deneyimlerinin Değerlendirilmesi, Sonçağ Akademi Yayınları, Ankara.
- Samsa, Ç., & Yüce, A. (2022). Understanding customers hospital experience and value co-creation behavior", *TQM Journal*, 34(6), 1860-1876.https://doi. org/10.1108/TQM-09-2021-0282.
- Savci, M., Ugur, E., Ercengiz, M., & Griffiths, M.D. (2021). The development of the Turkish craving for online shopping scale: A validation study, *International Journal of Mental Health and Addiction*, Online ahead of print. https://doi.org/10.1007/s11469-021-00490-6

- Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?, *Journal of Business Research*, 117(1), 280-283. https://doi. org/10.1016/j.jbusres.2020.05.059
- Siegrist, M. (2000). The influence of trust and perceptions of risks and benefits on the acceptance of gene technology, *Risk Analysis*, 20(2), 195-204. https:// doi.org/10.1111/0272-4332.202020
- Sweeney, J.C., & Soutar, G.N. (2001). Consumer perceived value: The development of a multiple item scale, *Journal of Retailing*, 77(2), 203-220. https://doi. org/10.1016/S0022-4359(01)00041-0
- Veenhoven, R. (2003). Hedonism and happiness. *Journal of Happiness Studies*, 4(4), 437-457. https://doi.org/10.1023/B:JOHS.0000005719.56211.fd
- Victoria, C., Kalyana, V., & Manaf, P. A. (2021). The effect of sales promotion, self-control, and hedonism on impulsive buying in e-commerce platform during the covid-19 pandemic. *International Conference on Informatics*, *Multimedia, Cyber and Information System-ICIMCIS*. 330-336.
- Whitten, D., Hightower, R., &Sayeed, L. (2014). Mobile device adaptation efforts: The impact of hedonic and utilitarian value, *Journal of Computer Information Systems*, 55(1), 48-58. https://doi.org/10.1080/08874417.2014 .11645740
- Wijesooriya, N.R., Mishra, V., Brand, P.L.P., & Rubin, B.K. (2020). COVID-19 and telehealth, education, and research adaptations, *Paediatric Respiratory Reviews*, 35(1), 38-42. https://doi.org/10.1016/j.prrv.2020.06.009
- Wiranata, A.T., & Hananto, A. (2020). Do website quality, fashion consciousness, and sales promotion increase impulse buying behavior of e-commerce buyers?", *Indonesian Journal of Business and Entrepreneurship*, 6(1), 74-85. https://doi.org/10.17358/ijbe.6.1.74
- Young, K.S. (2004). Internet addiction, American Behavioral Scientist, 48(4), 402-415. https://doi.org/10.1177/00027642042702
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence, *Journal of Marketing*, *52*(3), 2-22. https://doi.org/10.1177/002224298805200
- Zhang, L., Yang, S., Wang, D., &Ma, E. (2022). Perceived value of, and experience with, a World Heritage Site in China the case of Kaiping Diaolou and villages in China, *Journal of Heritage Tourism*, 17(1), 91-106. https://doi. org/10.1080/1743873X.2020.1820014
- Zhang, M. X., & Wu, A. M. (2022). Effects of childhood adversity on smartphone addiction: The multiple mediation of life history strategies and smartphone use motivations. *Computers in Human Behavior*, 134, 1-9. https://doi. org/10.1016/j.chb.2022.107298
- Zhao, H., Tian, W., & Xin, T. (2017). The development and validation of the online shopping addiction scale, *Frontiers in Psychology*, 8(735), 1-9. https://doi. org/10.3389/fpsyg.2017.00735