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Abstract: In this current study, a structural model developed in terms of fear of COVID-19, death anxiety, mental well-being, and online shopping attitude is tested. After obtaining data from 276 people, the structural model was tested using the Process macro. According to the study result, fear of COVID-19 has a direct positive and significant effect on death anxiety and online shopping attitude. Fear of COVID-19 has an indirect effect on online shopping attitude through the mediating role of death anxiety. However, mental well-being has a negative and significant moderating role in the effect of fear of COVID-19 on online shopping attitude. Moreover, according to the results of the study, death anxiety and mental well-being have a direct positive and significant effect on online shopping attitudes. According to these results, it is possible to argue that the model has structural validity. Theoretical and practical implications and directions for future research are provided.

Keywords: fear of COVID-19; death anxiety; mental well-being; online shopping attitude; process macro.

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1 Introduction

While the COVID-19 pandemic caused fear, anxiety, and health problems, it also affected the lifestyle and shopping habits of consumers with restrictions on social life (Çakiroğlu et al., 2020; Danışmaz, 2020; Valaskova et al., 2021). In this epidemic, legal restrictions were imposed by state administrators on the physical shopping of consumers from markets and stores due to quarantine (Dannenberg et al., 2020). Due to these restrictions and other reasons such as fear, risk and anxiety more common with

COVID-19, it is thought that many consumers with Internet access have to shop online more than before the pandemic (Alhaimer, 2021; Moon et al., 2021).

COVID-19 pandemic immediately affected consumers' behaviour towards physical and online shopping channels (Youn et al., 2021). In this pandemic, reasons such as the severity of the epidemic threat and voluntary self-isolate have led consumers to display unusual purchasing intentions (Laato et al., 2020). In this context, it is noteworthy that studies that evaluate and explain consumer behaviour during crisis/pandemic periods, contribute to the relevant literature and give marketing practitioners an idea about making the necessary investments (Rather, 2021). In other words, it is important to understand the changing consumer emotions, perceptions, and behaviours during the epidemic and to know the factors that affect and shape these behaviours in order to make theoretical and practical inferences. It is clear that brands need to reshape their marketing activities, especially distribution activities, and establish strong relationships with the consumer, depending on the changing consumer behaviours during the pandemic (Aydın and Dölek, 2020).

In the context of protection motivation theory (PMT) during this pandemic, it is possible to examine the effect of potential COVID-19 threat appraisal (e.g., altruistic fear) on consumers' attitudes towards online shopping channels (Youn et al., 2021). During the pandemic, fear of COVID-19, pandemic anxiety, psychological/spiritual well-being, and subjective happiness factors have been the subject of relevant studies (Çiçek and Almalı, 2020; Satici et al., 2020; Kasapoğlu, 2020). Unlike studies in the related literature, this current study tests a structural model for consumers' fear of COVID-19, death anxiety, mental well-being, and online shopping attitudes. Using the PMT framework, this study aims to examine consumers' online shopping attitudes in the pandemic in terms of both negative psychological approaches (fear of COVID-19 and death anxiety) and positive psychological approaches (mental well-being). In this respect, the difference of this current study from other studies is that it explains consumers' online shopping attitudes in the context of negative and positive psychology approaches, taking into account the pandemic. Therefore, this current study is considered among the innovative studies examining consumer behaviour in this pandemic.

2 Literature review

2.1 *Online shopping attitude*

In this study, online shopping attitude is defined as the consistent behaviour of consumers towards purchasing products or services in online shopping environments. Depending on whether the consumer likes it or not, there may be a consistent behaviour towards online shopping (Chen et al., 2018). Consumer's attitude towards online shopping is a structure that is common in electronic commerce and has its antecedents (Hasan, 2010). Attitude towards a particular behaviour, such as online shopping, is determined by the remarkable antecedents of that behaviour (Ajzen, 1985). Therefore, the antecedents of his attitude towards online shopping are worth summarising. Examination of the antecedents of online shopping attitude in consumer research is a subject of great interest to researchers (Zhou et al., 2007; Hasan, 2010). In this current study, it is thought that fear of COVID-19, death anxiety, and mental well-being are important precursors of online shopping attitudes in this pandemic.

2.2 Fear of COVID-19

Fear of COVID-19 is a natural response to the threat of a COVID-19 outbreak (Satici et al., 2020). The fear in this pandemic stems from the uncertainty and continuity of the threat, health and economic concerns, and of course the negative effects of social media (Mertens et al., 2020). There is a concern among mental health professionals about the widespread negative effects of the current pandemic on human psychology worldwide (Bitan et al., 2020).

PMT, which is the subject of research as a disease prevention and health promotion model, can be used to explain the leading causes of death (Floyd et al., 2000). This theory argues that “the magnitude of the harmfulness of a depicted event, the likelihood of that event occurring, and the effectiveness of a protective response” are the three components that trigger fear (Rogers, 1975). Using this theory, the perceived severity of the potential COVID-19 disease threat can be defined by relating it to the severity of death anxiety experienced in the event of contracting the COVID-19 disease (Rad et al., 2021). The perceived severity (risk) of the potential COVID-19 threat leads to a significant increase in death distress, in other words, “death anxiety, death depression, and death obsession” (Yıldırım and Güler, 2021). Especially due to the fear of COVID-19, individuals who have negative emotions experience death anxiety (Çelik and Kabak, 2021; Habiboğlu et al., 2021; Menzies and Menzies, 2020). Fear of COVID-19 has a significant relationship with stress, anxiety, and depression (Bitan et al., 2020). Accordingly, H_1 was developed.

H_1 Fear of COVID-19 has a significant positive effect on death anxiety.

Based on the PMT framework, the effect of fear of COVID-19 disease and the perceived risk arising from this disease on consumer behaviour in this pandemic environment has been explained in empirical studies (Rather, 2021). This theory argues that three components: “the magnitude of the harmfulness of a depicted event, the likelihood of that event occurring, and the effectiveness of a protective response” initiate cognitive appraisal processes and thus lead to attitude change (Rogers, 1975). A study based on this theory found that feeling of fear during COVID-19 was negatively affected by perceived vulnerability to the COVID-19 threat, perceived severity of potential COVID-19 threat, and response effectiveness, while a feeling of fear influenced customers' intentions to engage in behaviour, in other words, “health-focused behaviour, conscious consumption, and supporting local businesses and products” (Kim et al., 2021). Moreover, in another study based on this theory, it has been observed that fashion consumers have an attitude of switching to online stores due to both the perceived severity of COVID-19 and the altruistic fear of COVID-19 (Youn et al., 2021). In another study, it was observed that due to the fear of getting sick, social distance, self-isolation, and travel restrictions in this pandemic, food was bought and stocked in panic, thus increasing demand for products and services (Nicola et al., 2020). In summary, the fear of COVID-19, along with the increasing demand during the pandemic process, has an important role on consumers' online shopping attitudes, online shopping intentions (Çelik and Kabak, 2021; Vázquez-Martínez et al., 2021), and online grocery shopping preferences (Yılmaz and Mutlu, 2020), in other words, their online behaviours (Kaynak, 2020). Accordingly, H_2 was developed based on the PMT framework and the empirical evidence presented here.

H₂ Fear of COVID-19 has a significant positive effect on online shopping attitude.

2.3 *Death anxiety*

People attribute feelings such as anxiety, worry, or fear to the concept of death that threatens existence (Erciş et al., 2016). Death anxiety has been defined in the related literature as an emotion associated with death awareness and the fear of extinction (Abdel-Khalek and Tomás-Sábado, 2005; Karakuş et al., 2012).

It is stated that death images shown in advertisements during periods when human life is under threat can positively affect consumers' attitudes towards products (Boeuf, 2019). In the COVID-19 pandemic, where human life is under threat, advertisements containing the element of fear have significant effects on both consumers' attitudes towards advertising and purchase intentions (Aydın, 2021). At this point, it would be right to expect that death anxiety will be reflected in the attitudes of the individual towards consumption during epidemics (Erciş et al., 2016).

It is thought that there are consumers who see online shopping channels as a preventive measure and show attitudes towards these channels to protect their motivation (mental health or positive mood) against the death anxiety thought to be caused by contracting the COVID-19 disease in this pandemic. Because COVID-19, which spreads rapidly and threatens the whole world, brings death and destruction, changes the face of today's capitalist world, and initiates new consumer attitudes and behaviours (Kotler, 2020). The PMT framework can be used to explain the attitudes and behaviours of these new consumers. Indeed, as research shows, consumers are generally less willing to shop in the physical market when COVID-19 case rates increase (Grashuis et al., 2020). That is, some consumers who have an attitude towards online shopping due to fear of illness and death anxiety during this pandemic tend to shop more online (Çakiroğlu et al., 2020; Çelik and Kabak, 2021). Based on the theoretical background and practical evidence described here, the H₃ was developed.

H₃ Death anxiety has a significant positive effect on online shopping attitude.

Using the PMT framework, which explains the components that cause behavioural attitudes, it is considered possible to explain whether the perceived the severity of fear of COVID-19 and death anxiety from the potential COVID-19 threat are predictors of consumer shopping attitudes, because there is both theoretical and clinical evidence that death anxiety affects the behavioural and emotional response of the individual during this pandemic, where anxiety is increasing worldwide (Menzies and Menzies, 2020). In addition, there is scientific evidence that individuals are more unhappy and experience death distress due to the increased risk of COVID-19 during this pandemic (Yıldırım and Güler, 2021). In summary, the death anxiety experienced by consumers during the time of the pandemic mediates the effect of their fear of COVID-19 on their online shopping attitudes (Çelik and Kabak, 2021). Accordingly, H₄ was developed.

H₄ Fear of COVID-19 has an indirect effect on online shopping attitude through the significant mediating role of death anxiety.

2.4 Mental well-being

Studies are evaluating COVID-19 fear and prevention motivation/consumer behavioural intentions based on the PMT framework (Youn et al., 2021; Rad et al., 2021; Kim et al., 2021). It is important to contribute to the relevant literature by considering the fear of COVID-19 and the positive psychology approach (Stănculescu, 2021). It has been observed that the anxiety experienced in the COVID-19 pandemic negatively affects the psychological well-being of some individuals (Çiçek and Almalı, 2020). An individual's mental health is adversely affected by the fear of COVID-19 (Satici et al., 2020). As there is a negative relationship between fear of COVID-19 and mental well-being, this pandemic will have negative psychological effects on many people as long as the spread continues (Kasapoğlu, 2020). However, individuals can overcome the fear of COVID-19 thanks to their psychological strengths (for example, believing in coping with stress) and thus be happy by improving their mental health (Satici et al., 2020). Mental well-being is defined by the World Health Organization as the state of overcoming the stress in one's life (Keldal, 2015). When the consumer feels happy by coping with negative emotions, he/she can exhibit positive behaviour towards shopping (Goldsmith, 2016). Based on this, H₅ was developed.

H₅ Mental well-being has a significant positive effect on online shopping attitude.

It has been observed that some consumers have more online grocery shopping behaviour during the periods when the fear of COVID-19 is felt most in daily life (Yılmaz and Mutlu, 2020). There is a negative relationship between happiness and fear of COVID-19 (Stănculescu, 2021). So much so that while the risk of COVID-19 affects the distress of death positively, it negatively affects positivity; however, while positivity affects happiness positively, it affects death distress negatively (Yıldırım and Güler, 2021). Moreover, in one study using the PMT framework, the emotion of fear caused by COVID-19 positively affected consumer behavioural intentions (Kim et al., 2021), while in another study, there was a significant negative relationship between fear of COVID-19 and mental/psychological well-being (Kasapoğlu, 2020). Accordingly, it is possible to expect a negative course in the consumer's online shopping behaviour when the consumer's fear of COVID-19 is low, that is, when he feels mentally relaxed. Based on this, H₆ was developed.

H₆ Mental well-being has a significant moderating role on the effect of fear of COVID-19 on online shopping attitude.

3 Research method

3.1 Measurement and survey design

The scale items whose validity and reliability values have been proven were taken from the previous studies. Seven items of the COVID-19 fear scale (Ahorsu et al., 2020), ten items of the death anxiety scale (Sarıkaya and Baloğlu, 2016), 14 items of the mental well-being scale (Tennant et al., 2007), and four items of the online shopping attitude scale (Chen et al., 2018) were adapted from related studies. The survey was designed using these scale items. In the preparation of the survey, the opinions of three marketing experts were taken on whether the scale items were understood, and firstly, the

six participants with whom the survey was shared were asked to give their feedback. Minor changes were made to the survey after feedback from experts and participants. The final survey was then shared with other participants.

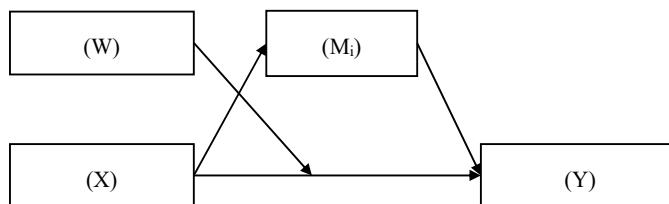
3.2 Participants and data collection

The target population is a group of people who are interested in online products and services due to different or similar needs, facing the COVID-19 pandemic. However, it does not seem possible to reach the entire target audience due to pandemic conditions and time/cost constraints. While using the convenience sampling method, it is possible to collect data from the population in the simplest, fastest, and most cost-effective way (Aaker et al., 2007). For this reason, the convenience sampling method, which helps to eliminate the limitations of the research, was preferred (Taherdoost, 2016). Using the convenience sampling method, the online survey link was shared with the target audience via social media accounts. Those who participated in the self-administered online survey constitute the sample size of the research. The sample size of 276 people provides the minimum sample criteria with 15 questionnaires per independent variable [Stevens, (1996), p.72]. A sample size of 200 is considered a fair sample size for using factor analysis through classical test theory methods (Pang et al., 2020; WilsonVon Voorhis and Morgan, 2007). Some studies use similar sampling techniques in the pandemic conditions and also have the approximate sample size of this current study (Yılmaz and Mutlu, 2020).

3.3 Model of the research and analysis

The research model (Figure 2) is compatible with model 5 (Figure 1) developed by Hayes (2018, p.591) for mediation, moderator, and contingent process analysis. For this reason, the structural validity of the research model was first tested with the Process Macro software, which works with the regression plugin developed by Hayes in 2013.

Figure 1 Model 5



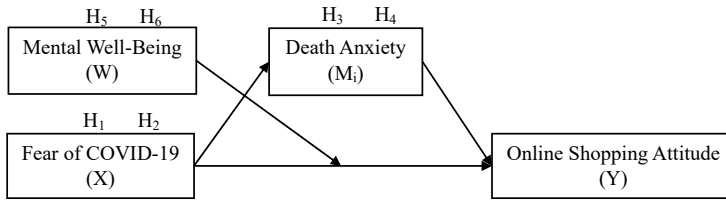
Source: Hayes (2018, p.586)

The research model (Figure 2) was developed for consumers' fear of COVID-19 (independent variable), online shopping attitude (dependent variable), death anxiety (mediating variable), and mental well-being (moderator variable).

It is worth noting that: In the path analysis made with the Process macro method if there is no zero ('0') between BootLLCI and BootULCI for intermediary roles, the estimated paths are considered significant (Hayes, 2018). Contrary to the traditional approach (Baron and Kenny, 1986), according to the modern approach (Hayes, 2018), if the indirect effect of X (a.b) is found to be significant in the bootstrap test, the mediation

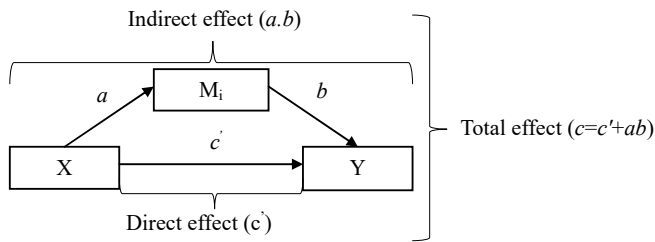
model is validated (Figure 3) and in this case, there is no need for another test [Gürbüz and Bayık, (2018), p.41].

Figure 2 Model of the research



Source: Developed by the author

Figure 3 Mediation model



Source: Gürbüz and Bayık (2018, p.37)

4 Results

Frequency analysis was used for the demographic characteristics of the participants and the results are shown in Table 1.

Among all the participants (n = 276; 100.0%), female (n = 197; 71.4%), 26–40 years old – Y generation (n = 147; 53.3%), university graduate (n = 187; 67.8%) and the number of participants whose monthly income varies between 0–2,500 TL (n = 84; 30.4%) is higher.

Factor and reliability analysis results are shown in Table 2.

Since the KMO value is ≥ 0.50 and the p-value is ≤ 0.05 , the size of the dataset should be accepted for factor analysis (Field, 2000). Factor loadings and total variance explained are accepted values since factor loadings are $\geq .50$ and the total variance explained is $\geq 60\%$ (Hair et al., 2009). Finally, since the Cronbach alpha value of each factor dimension is ≥ 0.70 , factor dimensions should be considered reliable (Nunnally, 1978).

Before testing the research model, it was deemed appropriate to conduct difference analyses regarding the demographic characteristics of the participants. The results of the difference analysis for the demographic characteristics of the participants are shown in Table 3.

According to the t-test results for independent groups, there is no significant difference between the genders in the online shopping attitudes of the participants ($t_{274} = -271, p > 0.05$). Similarly, according to the ANOVA results for independent

groups, there is no significant difference between different income groups ($F_{(3,272)} = 2.659$, $p > 0.05$). However, there is a significant difference between different age groups ($F_{(3,272)} = 4,298$, $p < 0.05$). Likewise, according to the results of one-way analysis of variance for independent groups, there is a significant difference between groups with different educational backgrounds ($F_{(3,272)} = 5.728$; $p < 0.05$). A follow-up test was performed to find the source of the difference. The Scheffe value was interpreted since the equal variance condition was fulfilled. Participants aged 57–75 have a more positive online shopping attitude than participants aged 26–40. There is no significant difference between other age groups. In addition, university graduates have a more positive online shopping attitude than high school graduates. There is no significant difference between other education groups.

Table 1 Participants' demographic characteristics

<i>Variables</i>	<i>Groups</i>	<i>f</i>	<i>%</i>
Gender	Female	197	71.4
	Male	79	28.6
	Total	276	100
Age	9–25 years old (1996–2012; z generation)	34	12.3
	26–40 years old (1981-1995; y generation)	147	53.3
	41–56 years old (1965-1980; x generation)	73	26.4
	57–75 years old (1946-1964; baby boomer generation)	22	8.0
	Total	276	100
Education (graduated)	Primary school	4	1.4
	Secondary school	4	1.4
	High school	81	29.3
	University	187	67.8
	Total	276	100
Monthly income	0-2500 TL	84	30.4
	2501-5000 TL	63	22.8
	5001-7500 TL	54	19.6
	Over 7500 TL	75	27.2
	Total	276	100

Process macro analysis results for the research model are shown in Table 4.

Fear of COVID-19 has a direct significant positive effect on death anxiety (coeff = 0.6708; $p = 0.0000$; LLCI = 0.5460; ULCI = 0.7956) and online shopping attitude (coeff = 0.8781; $p = 0.0051$; LLCI = 0.2659; ULCI = 1.4903). In addition, death anxiety has a mediating role for an indirect, significant positive effect of fear of COVID-19 on online shopping attitude (Effect = 0.0810; BootLLCI = 0.0084; BootULCI = 0.1576). However, the interaction of fear of COVID-19 with mental well-being has a significant negative effect on online shopping attitude (coeff = -0.2311 ; $p = 0.0051$; LLCI = -0.3922 ; ULCI = -0.0699). On the other hand, both death anxiety (coeff = 0.1208; $p = 0.0314$; LLCI = 0.0108; ULCI = 0.2308) and mental well-being (coeff = 0.7896; $p = 0.0017$; LLCI = 0.2996; ULCI = 1.2796) have a direct significant positive effect on online shopping attitude. At this point, it seems that all hypotheses are supported.

Table 2 Factor and reliability analysis results

<i>Factors</i>	<i>Items</i>	<i>Loadings</i>	<i>Variance explained (%)</i>	<i>Cronbach's alpha</i>
Death anxiety	"Not being able to know what kind of a feeling dying is makes me anxious."	0.884	27.317	0.941
	"Not being able to know what will happen after death makes me anxious."	0.871		
	"Not being able to know how I will die makes me anxious."	0.860		
	"Seeing a funeral procession passing by makes me anxious."	0.840		
	"Talking about death makes me anxious."	0.826		
	"Watching a TV program about death makes me anxious."	0.824		
	"Seeing a coffin makes me anxious."	0.758		
	"The idea of suffering while dying makes me anxious."	0.727		
	"Not being able to know how death will happen makes me anxious."	0.689		
	"I've been feeling good about myself."	0.833		
	"I've been feeling confident."	0.824		
	"I've been dealing with problems well."	0.777		
	"I've been thinking clearly."	0.761		
Mental well-being	"I've been feeling cheerful."	0.756		
	"I've been able to make up my own mind about things."	0.719		
	"I've been feeling useful."	0.706		
	"I've been feeling close to other people."	0.676		
	"I've been feeling loved."	0.675		
	"I've been interested in new things."	0.635		
	"I've been feeling interested in other people."	0.630		
	"I've had energy to spare."	0.590		
	"I've been feeling optimistic about the future."	0.565		
	"I've been feeling relaxed."	0.500		

Note: The "I am anxious of coming down with a terminal disease" of death anxiety item was removed from the analyses because it reduced reliability.

Table 2 Factor and reliability analysis results (continued)

<i>Factors</i>	<i>Items</i>	<i>Loadings</i>	<i>Variance explained (%)</i>	<i>Cronbach's alpha</i>
Online shopping attitude	"Online shopping fits my shopping way."	0.915	8.725	0.879
	"Online shopping is a wise choice."	0.885		
	"I have a positive attitude to online shopping."	0.803		
	"I like to use online shopping."	0.798		
Fear of covid-19	"I am most afraid of coronavirus-19."	0.786	6.673	0.877
	"My heart races or palpitates when I think about getting coronavirus-19."	0.763		
	"I am afraid of losing my life because of coronavirus-19."	0.747		
	"When watching news and stories about coronavirus-19 on social media, I become nervous or anxious."	0.740		
	"It makes me uncomfortable to think about coronavirus-19."	0.734		
Total variance explained (%)			60.153	
	Kaiser-meyer-olkin (kmo) measure of sampling adequacy		0.901	
	<i>Bartlett's test of sphericity</i>		<i>Approx. chi-square</i>	<i>6,038.131</i>
		df		561
		P		0.000

Note: The "I am anxious of coming down with a terminal disease" of death anxiety item was removed from the analyses because it reduced reliability.

Table 3 Results of the difference analysis for the demographic characteristics of the participants

<i>The results of t-test for independent (gender) groups</i>						
<i>Group</i>	<i>n</i>	\bar{x}	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Female	197	3.89	0.84	274	-0.271	0.787
Male	79	3.92	0.75			
<i>ANOVA results for independent (age) groups</i>						
<i>Source of variance</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean Squares</i>	<i>F</i>	<i>p</i>	
Between groups	8.247	3	2.749	4.298	0.006	
Within groups	173.973	272	0.640			
Total	182.220	275	3.389			
<i>ANOVA results for independent (education status) groups</i>						
<i>Source of variance</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean Squares</i>	<i>F</i>	<i>p</i>	
Between groups	10.828	3	3.609	5.728	0.001	
Within groups	171.392	272	0.630			
Total	182.220	275	4.239			
<i>ANOVA results for independent (monthly income) groups</i>						
<i>Source of variance</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean Squares</i>	<i>F</i>	<i>p</i>	
Between groups	5.191	3	1.730	2.659	0.051	
Within groups	177.029	272	0.651			
Total	182.220	275	2.381			

The conditional effects of fear of COVID-19 on online shopping attitude at low, middle and high values of mental well-being are shown in Figure 4.

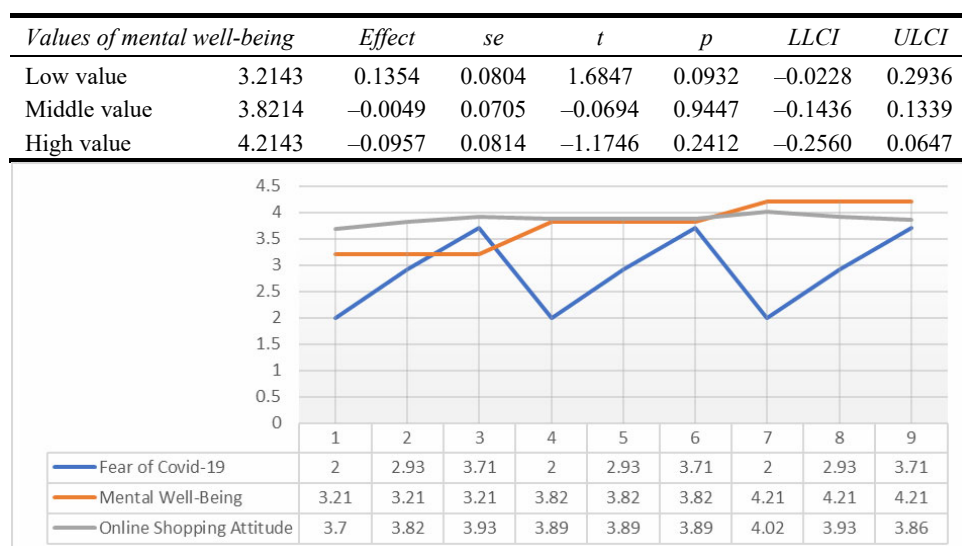
Figure 4 The conditional effects of fear of COVID-19 on online shopping attitude at low, middle and high values of mental well-being (see online version for colours)

Table 4 Process macro analysis results for the research model

Model 5	Fear of COVID-19 (X)		Online shopping attitude (Y)			Death anxiety(Mi)		Mental well-being (W)	
	R	H	R-sq	MSE	F	df1	df2	LLCI	ULCI
<i>Model summary</i>	0.5386		0.2901	0.7494	111.9700	1.0000	274.0000	0.0000	
Outcome variable	H		<i>coeff</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>	
Death anxiety			1.0655	0.1890	5.6376	0.0000	0.6934	1.4376	
Constant	H1		0.6708	0.0634	10.5816	0.0000	0.5460	0.7956	
Fear of COVID-19	R		<i>R-sq</i>	<i>MSE</i>	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p</i>	
<i>Model summary</i>	0.2402		0.0577	0.6336	4.1465	4.0000	271.0000	0.0028	
Outcome variable	H		<i>coeff</i>	<i>se</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>	
Online shopping attitude			0.5263	0.9619	0.5472	0.5847	-1.3675	2.4201	
Constant	H2		0.8781	0.3109	2.8241	0.0051	0.2659	1.4903	
Fear of COVID-19	H3		0.1208	0.0559	2.1629	0.0314	0.0108	0.2308	
Death anxiety	H5		0.7896	0.2489	3.1723	0.0017	0.2996	1.2796	
Mental well-being	H6		-0.2311	0.0819	-2.8225	0.0051	-0.3922	-0.0699	
Int_1									
Product terms key: Int_1: Fear of COVID-19 × Mental well-being									
INDIRECT EFFECT:									
Fear of COVID-19 (X) -> death anxiety (Mi) -> online shopping attitude (Y)									
Indirect effect(s) of fear of COVID-19 (X) on online shopping attitude (Y):									
	<i>Effect</i>	<i>BootSE</i>	<i>BootLLCI</i>	<i>BootULCI</i>					
H4	0.0810	0.0374	0.0084	0.1576					

When mental well-being (Orange Line) is low, fear of COVID-19 (Blue Line) and online shopping attitude (Gray Line) are high. However, this conditional relationship is not significant (effect = 0.1354; $p = 0.0932$; LLCI = -0.0228 ; ULCI = 0.2936). When mental well-being is middle, fear of COVID-19 is high, but online shopping attitude is constant. However, this conditional relationship is not significant (Effect = -0.0049 ; $p = 0.9447$; LLCI = -0.1436 ; ULCI = 0.1339). On the other hand, when mental well-being is high, fear of COVID-19 is high, but online shopping attitude is low. However, this conditional relationship is still not significant (effect = -0.0957 ; $p = 0.2412$; LLCI = -0.2560 ; ULCI = 0.0647). As a result, the moderating role of mental well-being is not significant for the conditional effect of fear of COVID-19 on online shopping attitude. In other words, the conditional effects of fear of COVID-19 on online shopping attitude are not significant at low, middle and high values of mental well-being.

5 Discussion and conclusions

This current study aims to test whether a structural model is valid for fear of COVID-19, death anxiety, mental well-being, and online shopping attitude. According to the results of the statistical analysis made with the process macro, it was seen that the research model had structural validity.

Based on previous studies, hypotheses have been developed that fear of COVID-19 affects death anxiety during the pandemic period (Çelik and Kabak, 2021; Menzies and Menzies, 2020; Yıldırım and Güler, 2021) and that consumers' attitudes towards online shopping are affected by fear of COVID-19 and death anxiety (Çelik and Kabak, 2021). On the other hand, according to the relevant literature review, the effect of mental well-being on online shopping attitude was first examined with this study. According to the results of the research, consumers have death anxiety due to the fear of COVID-19 during the pandemic period (Çelik and Kabak, 2021; Habiboğlu et al., 2021). Consumers' fears of COVID-19 (Çelik and Kabak, 2021), death anxiety (Çelik and Kabak, 2021; Erciş et al., 2016; Habiboğlu et al., 2021) and mental well-being are factors that directly positively affect their online shopping attitudes. Accordingly, it is possible to state that the results of the study are similar to the results of some other studies in the relevant literature. Such results are important for academics and marketing practitioners to be aware that consumers have attitudes in the face of fear, anxiety, and mental health (Erciş et al., 2016; Rogers, 1975). It is important to know that there is a significant relationship between the shopping behaviours of consumers and their psychological motivations, especially during the pandemic period (Di Crosta et al., 2021; Youn et al., 2021). It is possible to explain the behaviour of consumers due to their psychological motivations during the pandemic period, based on PMT, which forms the theoretical background of this study and as can be seen in previous studies (Kim et al., 2021).

COVID-19 has affected consumers' attitudes and purchasing patterns to shop online (Vázquez-Martínez et al., 2021). Based on previous studies, a hypothesis has been developed in this current study that consumers' attitudes towards online shopping are indirectly caused by fear of viruses, depending on the mediating role of death anxiety during the pandemic period (Çelik and Kabak, 2021). According to this current study result, fear of COVID-19 has an indirect, significant positive effect on consumers' online shopping attitudes due to the mediating role of death anxiety (Çelik and Kabak, 2021). Accordingly, it should be stated that the result of the study is similar to the results of the

previous studies. On the other hand, according to the relevant literature review, the moderator role of mental well-being in the effect of fear of COVID-19 on online shopping attitude was first examined with this study. As a result of the study, it is seen that the interaction between the fear of COVID-19 and mental well-being negatively affects the online shopping attitudes of consumers. However, it is worth noting that according to the results of this current study, consumers' online shopping attitudes differ significantly according to age ranges and educational status. During the pandemic period, consumers' demographic characteristics play an important role in their shopping behaviour (Valaskova et al., 2021). It has been observed that the baby boomers generation and university graduate consumers between the ages of 57–75 have more online shopping attitudes. Because, according to the results of the study, the fear of the COVID-19 pandemic is not only effective on the consumer's attitudes towards consumption, but also consumer psychology. For this reason, it is natural that the oldest participants between the ages of 57–75 have a higher attitude towards online shopping, as they are more likely to be affected by the COVID-19 outbreak (Hesham et al., 2021). In conclusion, the result of this current study is similar to some previous study results which stated that fear of COVID-19 affects the shopping behaviours of Baby Boomers, X and Y generation consumers (Eger et al., 2021). On the other hand, it is not surprising to expect the participants with the highest level of education to have higher attitudes towards online shopping (Danışmaz, 2020).

As a result, according to the results of this current study, online shopping attitudes of consumers in the COVID-19 pandemic are affected by positive and negative psychological factors. Although positive and negative psychological factors have a direct significant and positive effect on online shopping attitude in the COVID-19 pandemic, positive and negative psychological factor interactions have a significant but negative effect on online shopping attitude.

6 Theoretical implications

The results of the study can make a few theoretical contributions. First, although current studies have extensively examined consumer behaviour during the pandemic within the framework of PMT, this study is the first attempt within the framework of PMT to examine consumers' online shopping attitudes in this pandemic in terms of both positive and negative psychological approaches. Because no study tests the structural validity of a model with the Process Macro path analysis technique to explain the positive and negative psychological predictors of consumers' online shopping attitudes during this pandemic process using the PMT framework. Secondly, this study contributes to the marketing literature by understanding the fear, anxiety, and mental well-being of consumers who have an attitude towards online shopping during the COVID-19 epidemic. Since shopping from online channels is very intense in this pandemic, it is time to learn about the factors that affect consumers' attitudes towards these channels (Dannenberg et al., 2020). Third, unlike previous studies conducted during this pandemic, this study provides a better understanding of consumers' attitudes towards online shopping by comparing positive and negative psychological factors and depending on the relationships and interactions between these factors. In addition, this study provides a better understanding of online shopping attitudes during the pandemic period, as it

compares consumers in terms of monthly income, education level, gender, and age-range (generation).

7 Practical implications

It is possible to make suggestions for companies or brands by making inferences from the results of the study. First, it was found that consumers' attitudes towards online shopping during the pandemic were affected by their fear, anxiety, and positive psychological moods. It is clear that during the pandemic period, consumers have an attitude against shopping online in order to protect themselves from the fear and death threat caused by the COVID-19 disease. During the pandemic, brands need to understand consumers' fears and death concerns. Brands should be aware that mentally exhausted, frightened, and death-worn consumers need someone during this difficult time. However, what brands do to establish sustainable strong emotional bonds with consumers should not be limited to rhetoric. Brands should take action with the awareness of social responsibility. Important marketing activities for the benefit of society during this difficult pandemic process will affect the brand preference of consumers (Puriwat and Tripopsakul, 2021). It should not be forgotten that e-commerce has a significant leverage effect in this difficult period when pandemic restrictions are widespread and significant developments are experienced in digital transformation (Dannenberg et al., 2020). Second, according to the findings of this study, older and more educated consumers had higher online shopping attitudes during the epidemic. For this reason, when it comes to older (Eger et al., 2021) and highly educated groups (Danışmaz, 2020), it would be beneficial to adopt a different approach in a product, brand, and service campaigns on online shopping sites.

8 Limitations and future research directions

This present study was conducted under various limitations, especially due to the COVID-19 pandemic conditions. First, the sample size of this study is limited to 276 participants who have Internet access and request online products and services. At this point, it does not seem possible to evaluate the results of the study on the general population. However, further studies are needed to evaluate the results of this current study in a broader framework. Secondly, in this current study, certain factors were evaluated with the data obtained for the COVID-19 pandemic process. In further studies, based on new data obtained, it is possible to evaluate other additional factors such as lifestyle (Çakiroğlu et al., 2020), which are thought to have an impact on online shopping attitude in the process of adapting to the new normal life. Third, this current study examines the impact of relevant positive and negative psychological factors on online shopping attitudes during this pandemic. Thanks to the research model of this current study, it is possible to examine the influence of these factors on consumers' physical grocery/market shopping behaviour during the pandemic in future studies.

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