DETERMINANTS OF ONLINE SHOPPING INTENTIONS DURING THE PANDEMIC

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ABSTRACT

This study analyses the key factors influencing consumers' online shopping intentions in Türkiye during the COVID-19 pandemic using Structural Equation Modelling (SEM). The digital transformation, made necessary by the pandemic, has profoundly altered consumer habits. Perceived usefulness, perceived ease of use, and perceived behavioural control are examined as the primary factors shaping attitudes and intentions towards online shopping. The findings of the study reveal that perceived ease of use and perceived usefulness strongly influence consumer attitudes and shopping intentions. Additionally, perceived behavioural control plays a decisive role in determining intention. Conducted in Türkiye, this study provides valuable insights into the transition of online shopping from a mandatory option to a permanent shopping norm during the pandemic. The findings will serve as a significant guide in shaping future digital commerce strategies.

1. INTRODUCTION

The COVID-19 pandemic has deeply affected the social and economic structure in Turkey, as it has worldwide. Restrictions, mandatory social distancing rules, and quarantine measures implemented during the pandemic significantly altered individuals' daily habits and consumer behaviours. The limitation of shopping in physical stores accelerated consumers' shift towards online shopping, leading to a substantial increase in the use of online platforms during this period. E-commerce platforms in Turkey stood out to meet the needs of consumers during the pandemic, providing significant convenience through innovative solutions such as digital payment methods and e-wallets (Cetină et al., 2022; Colaço & de Abreu e Silva, 2023). According to 2020 data from TÜİK (Turkish Statistical Institute), the volume of online shopping in Turkey increased by 66%, reaching 226.2 billion TL, highlighting how rapidly digital shopping grew during the pandemic (Telli et al., 2021).

The COVID-19 pandemic not only led to a health crisis but also significantly transformed consumer behaviour globally. Online shopping became not only a necessity but also an economic and behavioural preference for many consumers during the pandemic. Prior to the pandemic, online shopping was a convenient method favoured by a specific audience; however, during the pandemic, it became a shopping norm for the general consumer base (Cetină et al., 2022). The opportunities offered by digital platforms reshaped consumer behaviours and transformed the economy, accelerating the shift from physical to digital shopping. In this context, online shopping moved from being a mandatory alternative to becoming a permanent consumer choice during the pandemic (Colaço & de Abreu e Silva, 2023).

In this regard, it is also worth examining how online shopping has not only reshaped consumer behaviours but also restructured the economy. During the pandemic, e-commerce led to significant changes in the traditional retail sector, resulting in new trade strategies. The rapid growth of online platforms gained momentum, particularly with the widespread adoption of digital payment methods and the support of the logistics sector (We Are Social, 2021). During this period, consumers' attitudes and intentions towards online shopping caused fundamental changes in both individual and societal habits. Therefore, understanding the impact of online shopping on consumer behaviour during the pandemic is of great importance, both academically and for the business world.

Consumers' attitudes and intentions toward online shopping are shaped by various psychological and behavioral factors. In this study, the key factors influencing online shopping attitudes and intentions during the pandemic are perceived usefulness, perceived ease of use, and perceived behavioral control. These variables are explored within the framework of the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). According to the Technology Acceptance Model, an individual's intention to adopt a particular technology is driven by perceived usefulness and ease of use (Davis, 1989). Perceived usefulness reflects the positive outcomes that consumers associate with online shopping, such as cost savings, access to a broad range of products, and time efficiency, while perceived ease of use refers to how simple and effort-free individuals perceive the use of online platforms to be. During the pandemic, 78% of consumers in Turkey preferred these platforms due to the cost advantages provided by online shopping (TÜİK, 2020).

The Theory of Planned Behaviour links individuals' intentions to perform a behaviour with perceived behavioural control. Perceived behavioural control reflects individuals' belief in their

ability to shop online (Ajzen, 1991). Increasing internet access and the widespread adoption of digital payment systems in Turkey have enhanced consumers' capacity to shop online, positively affecting their perceived behavioural control.

Research on how perceived behavioural control contributes to online shopping intentions during the pandemic is also limited. While many studies focus on the general benefits of online shopping, few have thoroughly examined the role of digital payment methods and internet access infrastructure in shaping this perception during the pandemic. Perceived behavioural control can vary depending on the security, ease of use, and speed of access to digital payment systems, but these topics have not been sufficiently addressed in the literature (Colaço & de Abreu e Silva, 2023). Although existing studies have focused on the relationship between consumer attitudes and intentions, more research is needed in global crises such as pandemics. Such research will help better understand consumer behaviour in future pandemic scenarios and contribute to the development of appropriate strategies.

The primary aim of this study is to analyse the factors influencing Turkish consumers' attitudes and intentions towards online shopping during the pandemic using Structural Equation Modelling (SEM). The findings of this study aim to provide strategic guidance to the digital commerce sector and to offer a better understanding of the changing consumer behaviours during the pandemic.

2. LITEREATURE REVIEW

The COVID-19 pandemic has led to profound changes in consumer behaviour, making online shopping a mandatory choice. The closure of physical stores and the implementation of social distancing measures have accelerated consumers' shift towards digital platforms (Colaço & de Abreu e Silva, 2023). This study seeks to investigate the factors affecting online shopping intentions during the pandemic and to explore the long-term impact of these changes on consumer behavior.

2.1. Theoretical Framework: TAM and TPB

The theoretical basis of this study is grounded in the TAM and the TPB. TAM aims to explain the factors influencing users' adoption of a technology, particularly highlighting how variables such as perceived usefulness and perceived ease of use affect the intention to use the technology (Davis, 1989).

On the other hand, TPB is a broader model that explains individuals' intentions to perform a behaviour and how behaviour intentions are shaped by variables such as perceived behavioural control, attitude, and subjective norms (Ajzen, 1991). This study analyses online shopping intentions by addressing the variables of perceived usefulness, perceived ease of use, perceived behavioural control, attitude, and intention within the framework of these theoretical models.

2.1.1. Perceived usefulness

Perceived Usefulness (PU) refers to the positive outcomes consumers associate with online shopping, such as cost advantages, time savings, and a wide range of product choices. Online shopping platforms became more appealing to consumers due to the mandatory closure of physical stores during the pandemic (Adam et al. 2022). Studies conducted in Turkey also support these findings. Telli Danışmaz (2020) found that perceived usefulness had a strong impact on Turkish consumers' online shopping intentions and noted the rapid spread of online shopping.

2.1.2. Perceived ease of use

Perceived Ease of Use (PEU) refers to consumers' perceptions of how easily and effortlessly they can use online shopping platforms. Intuitive user interfaces, easy payment options, and accessibility have facilitated the adoption of these platforms by consumers (Mehrolia et al., 2020). Faqih (2011) found that consumers' trust in the ease of use of online shopping platforms positively influenced their shopping intentions.

2.1.3. Perceived behavioral control

Perceived Behavioural Control (PBC) refers to consumers' belief in their capacity to engage in online shopping. Within the TPB framework, perceived behavioural control explains individuals' perception of control over their ability to perform a particular behaviour (Ajzen, 1991). The development of digital infrastructure and increased internet access during the pandemic has enhanced consumers' capacity for online shopping. Colaço and de Abreu e Silva (2023) found that perceived behavioural control directly influenced the shopping intentions of consumers in Portugal, showing an increased confidence in their ability to use online platforms. Similarly, Bytyqi (2022) found in their study in Kosovo that perceived behavioural control had a significant effect on online shopping intentions.

2.1.4. Attitude

Attitude (A) refers to individuals' positive or negative evaluations of online shopping and is a key determinant of intention. Telli (2021) found that the positive attitudes of Turkish consumers towards online shopping had a strong effect on their shopping intentions. As attitudes improved positively, consumers were more likely to prefer online shopping.

2.1.5. Intention

Intention (I) refers to the commitment to perform a behaviour. Online shopping intentions rapidly increased among consumers due to the necessities and conveniences brought about by the pandemic. Öztürk (2023) found that online service quality and customer satisfaction strengthened online shopping intentions in Turkey. The direct impact of factors such as perceived usefulness and ease of use on intention was also distinctly observed in Turkey.

2.2. Online Shopping with Structural Equation Modeling

SEM is a powerful tool in consumer behaviour analysis, especially for understanding complex relationships between multiple variables. SEM combines both confirmatory factor analysis (CFA) and regression analysis, allowing for the simultaneous examination of multiple factors. SEM has been used in many studies to examine online shopping behaviours during the pandemic. In this context, relationships between variables such as perceived usefulness, perceived ease of use, perceived behavioural control, attitude, and intention have been analysed in detail.

Colaço and de Abreu e Silva (2023) analysed the interactions between online and physical store shopping and consumer behaviours in Portugal during the pandemic using Structural Equation Modelling (SEM). The study highlights positive relationships between variables such as perceived usefulness and behavioural control towards online shopping. The widespread adoption of online shopping during the pandemic has gradually replaced physical shopping, leading to long-term changes in consumer preferences.

Cetină et al. (2022) developed a model using the TAM and the TPB to investigate the effects of the COVID-19 pandemic on online shopping attitudes in Romania. This study analysed the impact of variables such as perceived usefulness and perceived ease of use on consumer behaviour. The findings indicate that perceived usefulness had a positive influence on consumers' online shopping intentions. Additionally, positive attitudes towards online shopping were observed to increase during this period.

In his study in Turkey, Öztürk (2023) used the PLS-SEM method to analyse the relationships between online service quality and customer satisfaction. Data collected from 981 participants revealed the impact of online shopping service quality on customer satisfaction. The study emphasised the effects of perceived usefulness and ease of use on consumer satisfaction and shopping intentions.

In a study conducted in Kosovo, Bytyqi (2022) analysed the impact of perceived usefulness and perceived behavioural control on online shopping intentions using the SEM method. The perception of online shopping as a safe and practical option during the pandemic strengthened consumer intentions.

Faqih (2011), in his study, analysed consumers' online shopping intentions using the TAM. The study found that perceived ease of use and perceived usefulness directly influenced consumers' intention to shop online.

Bayır's (2021) study investigated how e-commerce in Turkey changed during the COVID-19 pandemic and examined consumers' attitudes towards online shopping. The research showed that the security and ease of use of digital payment methods significantly affected consumers' online shopping intentions. Additionally, the study analysed how online shopping, both economically and behaviourally, altered consumer preferences during the pandemic.

McLean and Wilson (2019) explored online shopping intentions in the United Kingdom within the framework of TAM and TRA, examining how these models influenced consumer behaviours during the pandemic. This study provides important findings on how perceived usefulness shaped consumer attitudes. The results show that consumers perceived online shopping as a safe and practical option during the pandemic, positively influencing their shopping intentions.

In a study conducted in India, Mehrolia et al. (2020) analysed the effects of perceived usefulness and perceived ease of use on online shopping intentions using SEM. A direct relationship between health concerns and online shopping was established during the pandemic, and factors such as usefulness and ease of use significantly influenced shopping intentions.

In Turkey, Telli (2021) used SEM to analyse the impact of perceived usefulness and perceived ease of use on online shopping intentions. The study revealed that perceived usefulness and ease of use directly influenced consumer intentions during the pandemic.

Across all studies, perceived usefulness emerges as one of the key variables that significantly and positively affects online shopping intentions. In countries like India and Indonesia, health and safety concerns are the most critical elements of perceived usefulness, while in Turkey and Kosovo, cost advantages and a wide range of products take precedence. Especially in India, online shopping has been viewed to avoid health risks, demonstrating the strong influence of perceived usefulness. Despite differences between countries, consumers generally strengthened their shopping intentions based on benefits such as cost advantages, time savings, and health concerns provided by online shopping.

Perceived ease of use has also had a direct impact on online shopping intentions in both Turkey and other countries. However, it has been observed that this effect varies between countries. In studies conducted in India and Turkey, user-friendly interfaces and platform simplicity increased consumers' intention to shop online, while in more developed countries with advanced digital infrastructure, such as Portugal and Kosovo, ease of use was less significant, and perceived behavioural control became a more dominant factor. This can be attributed to the familiarity with digital platforms and the level of technological infrastructure in each country.

In studies conducted in Portugal, Kosovo, and Turkey, perceived behavioural control was found to have a significant effect on online shopping intentions. Consumers' ability to shop online and their capacity to use digital platforms emerged as a key factor directly influencing shopping intentions.

The attitude variable had a stronger effect on online shopping intentions in some countries, while in others, it was less studied. Positive attitudes towards online shopping in Turkey and the United Kingdom directly shaped shopping intentions, whereas in countries like India, Kosovo, and Indonesia, perceived usefulness and ease of use were more influential than attitudes. This shows that while attitude is not always deeply examined, it plays a significant role when considered.

Online shopping intentions, in general, are positively correlated in all studies, but the factors influencing these intentions vary from country to country. In Turkey and Kosovo, perceived usefulness and perceived behavioural control had a stronger impact on consumer intentions, while in India and Indonesia, health and safety concerns made perceived usefulness a more determining factor. This reveals how the local conditions and responses in each country during the pandemic shaped consumer intentions differently.

2.3. Research Hypotheses

H1: Perceived ease of use positively affects perceived usefulness.

The user-friendly and easy-to-use nature of online shopping platforms will lead consumers to perceive the benefits of this type of shopping more positively.

H2: Perceived ease of use positively affects attitude towards online shopping.

The ease of use of online shopping platforms will result in consumers having a more positive attitude towards online shopping.

H3: Perceived usefulness positively affects attitude towards online shopping.

The perception of benefits such as cost advantages, time savings, and a wide range of products from online shopping will contribute to the development of a positive attitude towards online shopping.

H4: Perceived behavioural control positively affects attitude towards online shopping.

Consumers' belief in their ability to shop online will lead to the development of a more positive attitude towards online shopping.

H5: Perceived behavioural control positively affects online shopping intention.

Consumers' confidence in their ability to shop online will directly and positively affect their online shopping intentions.

H6: Attitude positively affects online shopping intention.

Consumers' positive attitudes towards online shopping will strengthen their intention to shop.

3. METHOD

3.1. Research Model

This study utilizes a quantitative research model aimed at exploring the factors influencing attitudes and intentions toward online shopping. The model examines the direct impact of perceived ease of use on both perceived usefulness and attitude, as well as the influence of perceived usefulness on attitude. Furthermore, the model investigates the effects of perceived

behavioral control on attitude and online shopping intention. Lastly, the direct effect of attitude on online shopping intention is evaluated. The model developed for this research is shown in Figure 1, and the hypotheses are denoted as H1, H2,...H6.
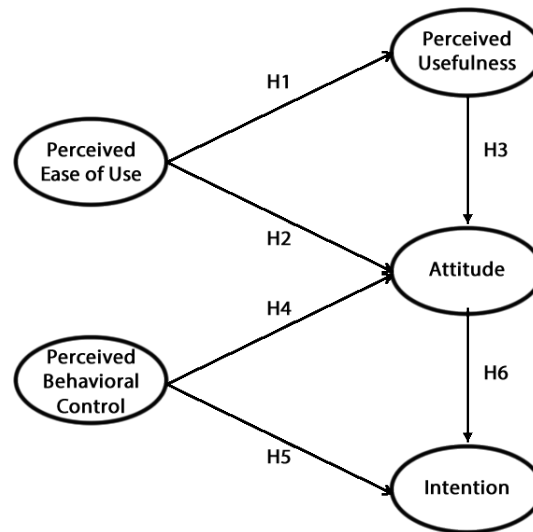

Figure 1. Research Model

3.2. Participants

The population of this research consists of individuals who engaged in online shopping during the COVID-19 pandemic. Participants voluntarily took part in the study and completed the survey form online. The purpose of the research and the privacy policy were communicated to the participants in advance, and their consent was obtained. This research, conducted under the conditions of the pandemic in 2020, collected data through an online survey method; a total of 260 people participated in the survey, and after data cleaning and outlier checks, the data of 240 individuals were included in the analysis.

The demographic characteristics of the participants are as follows: 63% of the participants are female, and 37% are male; 76% are single, and 24% are married. The age range is between a minimum of 16 and a maximum of 65 years, with an average age of 26. In terms of educational level, at least 71% of the participants are university graduates. Regarding income, 66% of the participants fall below the average income level.

In terms of occupation, the majority of the participants are students (37%), followed by private sector employees at 30%. When examining the participants' online shopping preferences, it was determined that textile products were the most preferred during the pandemic period.

3.3. Sampling Method

In this study, the convenience sampling method was used. Convenience sampling allows researchers to collect data from individuals who are easily accessible and is carried out through voluntary participants (Etikan, Musa, & Alkassim, 2016). The survey form was distributed to a wide range of participants via online platforms, and data were collected on a voluntary basis. This method provided advantages in terms of time and cost, while also allowing for the collection of data from a broad spectrum of participants.

3.4. Measures

In this study, scales developed within the framework of the TAM and the TPB were used to measure the factors influencing consumers' online shopping intentions. Perceived usefulness and perceived ease of use were measured using TAM scales proposed by Davis (1989), while perceived behavioural control, attitude, and intention were measured using TPB scales developed by Ajzen (1991). All scales have been previously tested for validity and reliability in earlier studies.

3.5. Pilot Study

A pilot study was conducted between 1 June 2020 and 15 June 2020 to test the reliability of the scales used in this study. The pilot study included 50 participants who had made at least one online purchase during the COVID-19 pandemic. The sample size was chosen in accordance with the recommended 30-50 participants for pilot studies in the literature (Johanson & Brooks, 2010; DeVellis, 2016).

The Cronbach's Alpha reliability coefficients for the scales used were as follows: 0.806 for PU, 0.792 for PEU, 0.880 for PBC, 0.774 for Attitude, and 0.915 for Intention. These results indicate that all scales are reliable and have high internal consistency (Cronbach, 1951). Cronbach's Alpha values above 0.70, as accepted in the literature, suggest that the scales are reliably acceptable (Nunnally, 1978).

No changes were made to the scales as a result of the pilot study. These findings demonstrate that the scales used are sufficiently valid and reliable for the main application of the research.

3.6. Data Analysis

In this study, descriptive statistics were first conducted, followed by structural equation model (SEM) analyses. Before conducting the SEM analyses, a multivariate normality test was performed. Multivariate normality refers to the condition where multiple variables exhibit a joint normal distribution and is a critical assumption for the accuracy of multivariate analyses (Tabachnick & Fidell, 2013). To test this assumption, the Mardia (1970) coefficient was calculated using LISREL 8.80.

Following the multivariate normality test, SEM analyses were performed to explore the relationships and mediation effects between the latent variables. The SEM procedure was conducted in two stages, in line with the approach suggested by Anderson and Gerbing (1988). Initially, the measurement model was assessed through confirmatory factor analysis (CFA), which evaluated the validity and reliability of the measurement scales. In the second stage, the structural model was used to analyze the relationships between the constructs, and the research hypotheses were tested.

All statistical analyses were carried out using IBM SPSS Statistics 23 and LISREL 8.80 software.

4. FINDINGS

4.1. Normality Test

Multivariate normality, a key assumption in SEM analyses, was evaluated using Mardia's (1970) test. This test, conducted using LISREL, produced a Mardia's Caphcha value of 2260 with $p < .001$. These results indicate that the dataset does not follow a multivariate normal distribution. Therefore, the Robust Maximum Likelihood (RML) method, which provides reliable results when the normality assumption is violated, was employed.

4.2. Measurement Model

In this study, five latent constructs were measured using their respective items, and confirmatory factor analysis (CFA) was applied. After examining the factor loadings, items with loadings below 0.50 were removed from the model, and the analyses were completed with 25 items representing the five latent constructs.

Model Fit: The measurement model's fit was evaluated using the RML method in LISREL 8.80 software. The fit indices for the measurement model, along with the recommended thresholds

for acceptable model fit, are as follows: $\chi^2/df = 495.83/265 = 1.87$ (< 3.00; Hayduk, 1987), Normed Fit Index (NFI) = 0.96 (> 0.90; Bentler & Bonett, 1980), Non-Normed Fit Index (NNFI) = 0.98 (> 0.95; Jöreskog & Sörbom, 1996), Comparative Fit Index (CFI) = 0.98 (> 0.90; Bagozzi & Yi, 1988), and Root Mean Square Error of Approximation (RMSEA) = 0.06 (< 0.08; Schermelleh-Engel & Moosbrugger, 2003). These fit indices demonstrate that the model provides a good fit to the data.

Reliability: Scale reliability was assessed using Cronbach's Alpha (α) values. A Cronbach's Alpha coefficient of .70 or above indicates that the scale is considered reliable (George & Mallery, 2003). In this study, the average Cronbach's Alpha for all items was 0.935. The Cronbach's Alpha values calculated for the latent constructs were as follows: 0.790 for PU, 0.781 for PEU, 0.717 for PBC, 0.882 for A, and 0.911 I. These values indicate that the constructs are reliable.

Convergent and Discriminant Validity: The reliability and validity of the constructs were evaluated using convergent validity and discriminant validity measures. To establish convergent validity, standardised factor loadings must be greater than .50 and statistically significant. Additionally, Composite Reliability (CR) values are expected to be greater than .70, and Average Variance Extracted (AVE) values should be above .50 (Hair et al., 1998). However, Fornell and Larcker (1981) noted that when AVE values exceed 0.40 and CR values exceed 0.60, convergent validity can still be acceptable, even if weak (Fornell & Larcker, 1981; Hair et al, 1998). For discriminant validity, the square root of the AVE for each construct should be greater than its correlations with other constructs (Hair et al., 1998).

According to the results of the confirmatory factor analysis, the standard factor loadings ranged from 0.53 to 0.90, and the t-values ranged from 8.58 to 14.82, supporting the construct validity (see Table 5). The CR values ranged from 0.73 to 0.89, and the AVE values ranged from 0.41 to 0.54, indicating that construct validity was achieved.

In the evaluation of discriminant validity, all correlations had t-values between 7.88 and 18.73 and were statistically significant. However, the square root of the AVE for each construct was not found to be greater than the correlations with other constructs. Specifically, the square root of the AVE for PBC was lower than its correlations with the other constructs, except for the correlation between PBC and PU. Fornell and Larcker (1981) noted that when discriminant validity is not established, situations where constructs are theoretically close can be accepted,

considering AVE and correlations. During crises such as pandemics, constructs may be more interconnected (Fornell & Larcker, 1981). Similarly, Hair et al. (1998) emphasised that constructs can dynamically change in extraordinary periods, and consumer behaviours in such conditions can create stronger relationships between different constructs. Kline (2015) also acknowledged that extraordinary conditions can cause variations in construct correlations, leading to weaker discriminant validity. In this context, the stronger interconnection of constructs and the weakening of discriminant validity under extraordinary conditions, such as a pandemic, can be considered a contextual effect.

The results of the Confirmatory Factor Analysis are presented in Table 1.

Table 1.
CFA results for the proposed model

	Factor Loads	t	CR	AVE
1. Perceived Usefulness (PU)			0.80	0.51
PU1. Using online shopping sites during the pandemic increases my shopping performance.	0.62	11.06		
PU2. Online shopping sites are useful for shopping during the pandemic.	0.61	8.59		
PU3. Using online shopping sites during the pandemic increases my shopping efficiency (choice, decision, etc.).	0.85	15.98		
PU4. Using online shopping sites during the pandemic provides information for better purchasing decisions.	0.75	14.23		
2. Perceived Ease of Use (PEU)			0.80	0.50
PEU1. Using online shopping sites is easy.	0.78	10.47		
PEU2. It is easy for me to find what I want on online shopping sites.	0.71	11.58		
PEU3. It provides customer service support.	0.58	9.19		
PEU4. It allows me to reach products that I cannot access due to the pandemic.	0.75	12.36		
3. Perceived Behavioural Control (PBC)			0.73	0.41
PBC1 I know what my consumer rights are when shopping online.	0.64	8.58		
PBC2. I have complete control when shopping online.	0.71	9.17		
PBC3. I can shop from online shopping sites whenever I want.	0.66	10.50		
PBC4. My financial situation is sufficient to buy the product I want from online shopping sites.	0.53	7.88		
4. Attitude (A)			0.89	0.54
A1. Using online shopping sites saves me time.	0.58	9.50		
A2. I think online shopping sites are useful for me (health, time, price, decision, etc.) during the pandemic.	0.70	14.82		
A3. I have a positive (positive) opinion about online shopping due to the Covid-19 virus.	0.75	12.45		
A4. Shopping online during the Covid-19 Pandemic is a good idea for health.	0.75	10.55		
A5. I like shopping online without taking risks during the Covid-19 Pandemic.	0.77	12.12		
A6. I am determined to shop online during the Covid-19 Pandemic.	0.75	13.65		
A7. I think shopping online is healthier and more reliable during the pandemic.	0.81	12.79		
5. Intention (I)			0.86	0.51
I1. I will shop online as soon as possible during the pandemic.	0.66	12.90		
I2. I tend to shop online in the future after the Covid-19 process.	0.85	18.01		
I3. I will continue to shop online both during the Covid-19 Pandemic and in the future.	0.89	18.73		
I4. I will shop online regularly in the future.	0.80	13.71		
I5. I intend to continue my online shopping behavior even when the Covid-19 virus outbreak is over.	0.86	16.11		
I6. I can recommend online shopping to my acquaintances to protect themselves from the Covid-19 virus due to the risks of traditional shopping.	0.75	12.10		
p < .01 (t> 2.58).				

4.3. Structural Model

Once the fit of the measurement model has been confirmed, the next step in the research involves testing the structural model. The structural model aims to determine the nature and strength of the relationships between variables, test theoretical hypotheses, and examine the direct or indirect relationships between constructs (Kline, 2015; Byrne, 2011).

Model Fit: The fit of the structural model was tested using the Robust Maximum Likelihood (RML) method with LISREL 8.80 software. The fit indices for the structural model, along with the required thresholds for model fit, are as follows: $\chi^2/df = 495.83/265 = 1.87$ (< 3.00; Hayduk, 1987), NFI = 0.96 (> 0.90; Bentler & Bonett, 1980), NNFI = 0.98 (> 0.95; Jöreskog & Sörbom, 1996), CFI = 0.98 (> 0.90; Bagozzi & Yi, 1988), and RMSEA = 0.06 (< 0.08; Schermelleh-Engel & Moosbrugger, 2003). These fit indices indicate that the structural model provides a good fit to the data.

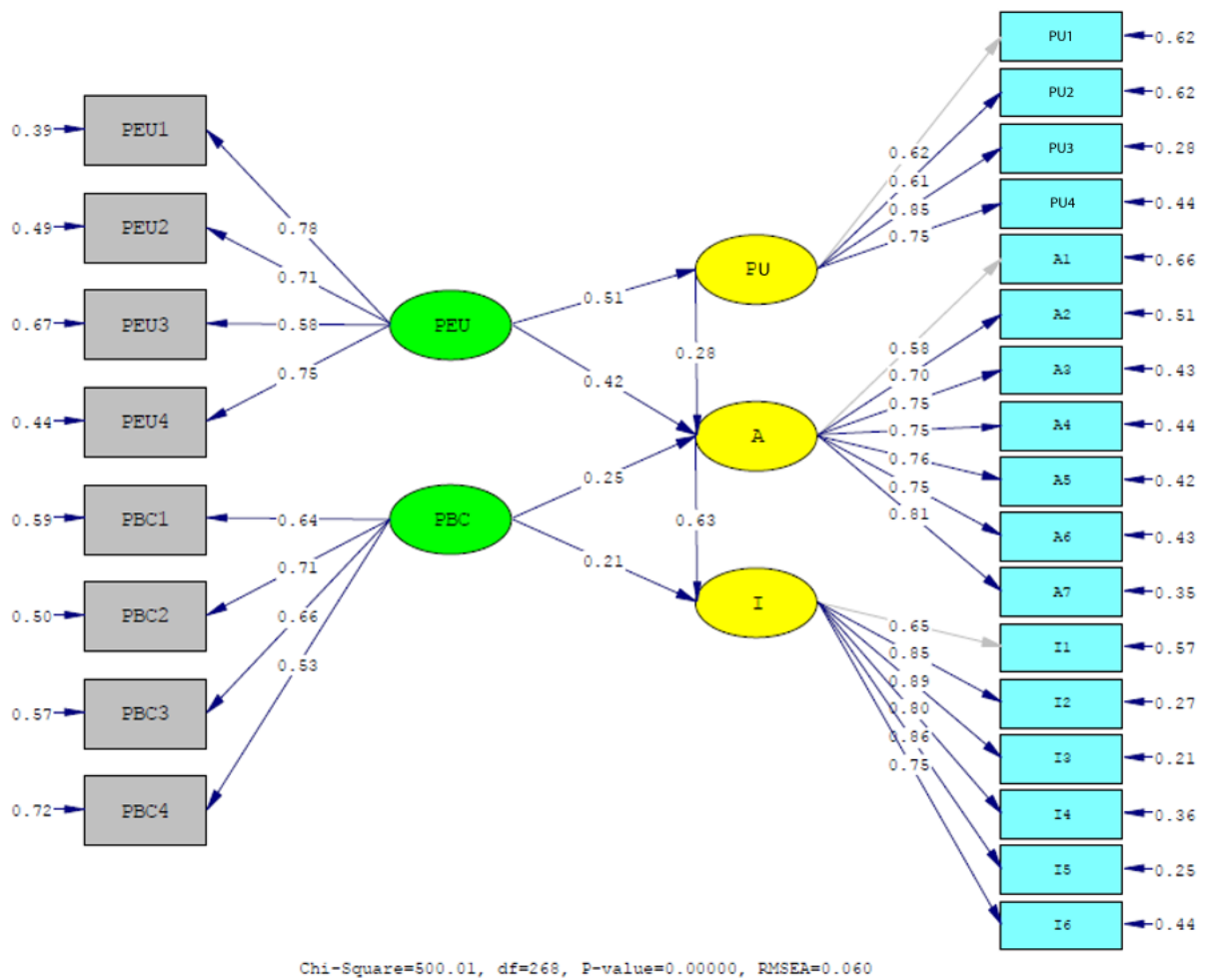Chi-Square=500.01, df=268, P-value=0.00000, RMSEA=0.060

Figure. 2. Standardized factor loading for the proposed research model

Path Coefficients and Hypothesis Testing: The statistics associated with the path coefficients obtained using the RML method can be seen in Figure 2.

In the proposed research model, hypotheses H1 to H6 were tested with SEM to determine the relationships between the constructs, and the results are presented in Table 2.

Table 2.
SEM Hypothesis Test Results

Constructs		Model		
		Confirmed (a)	β	t-value
H₁	Perceived Ease of Use → Perceived Usefulness	Yes	.51	6.29***
H₂	Perceived Ease of Use → Attitude	Yes	.42	2.93***
H₃	Perceived Usefulness→ Attitude	Yes	.28	3.31***
H₄	Perceived Behavioral Control → Attitude	Yes	.25	1.68*
H₅	Perceived Behavioral Control → Intention	Yes	.21	2.23**
H₆	Attitude→ Intention	Yes	.63	5.59***

***p<0.01 (t>2.58), **p<0.5 (t>1.96), *p<0.1 (t>1.65).

According to the results in Table 2, hypotheses H4 were supported at the 1% significance level, and H5 at the 5% significance level when tested with the structural equation model. The other hypotheses (H1, H2, H3, and H6) were found to be statistically significant at the 1% significance level. This demonstrates that the proposed model is based on strong statistical relationships between the constructs. The findings show that a one-unit increase in perceived ease of use leads to a 0.51-unit increase in perceived usefulness and a 0.42-unit increase in attitude. Additionally, a one-unit increase in perceived usefulness results in a 0.28-unit increase in attitude. A one-unit increase in perceived behavioural control results in a 0.25-unit increase in attitude and a 0.21-unit increase in intention. Finally, a one-unit increase in attitude leads to a 0.63-unit increase in intention. These findings strongly confirm the positive and significant effects between the variables in the model.

5. CONCLUSION AND DISCUSSION

This study analysed the factors influencing the attitudes and intentions of consumers in Turkey towards online shopping during the COVID-19 pandemic using SEM. The primary aim of the research was to understand the changing consumer behaviours under pandemic conditions and to reveal the relationships between variables such as perceived usefulness, perceived ease of use, perceived behavioural control, attitude, and intention. The findings show that the pandemic period has caused online shopping to become a necessary habit and significantly transformed consumer behaviour.

According to the findings, perceived ease of use and perceived usefulness strongly influence consumer attitudes and intentions. The ability of consumers to easily use online platforms led

them to perceive the benefits of these platforms more positively, contributing to the development of favourable attitudes towards online shopping. Perceived usefulness also strengthened consumer attitudes and intentions. This finding is supported by previous studies. For example, the studies by Colaço and de Abreu e Silva (2023) and Cetină et al. (2022) demonstrate how perceived usefulness and ease of use shape positive attitudes towards online shopping.

The findings regarding the relationships between perceived behavioural control and attitude and intention are also noteworthy. While the effect of perceived behavioural control on attitude was not statistically significant at the 5% significance level, a significant effect was observed at the 10% significance level. This finding suggests that behavioural control has a stronger influence on consumer intentions, while its effect on attitude is more limited. This is also supported in the literature. For example, Bytyqi (2022) and Cetină et al. (2022) emphasise that perceived behavioural control is less determinant on attitude but has a strong influence on intention.

The impact of local conditions during the pandemic on consumer behaviour varies from country to country. In countries such as India and Indonesia, health and safety concerns have been observed as the most determining factors in perceived usefulness (Mehrolia et al., 2020). In contrast, in countries like Turkey and Kosovo, cost advantages and a wide range of products have been more prominent. These findings show how the different socio-economic conditions created by the pandemic influenced consumers' online shopping intentions.

Another important finding of this study is the closer conceptual relationship between perceived behavioural control and perceived ease of use during extraordinary periods such as a pandemic. This result suggests that consumers increasingly associate their ability to shop online with their experiences of using the platforms. According to Fornell and Larcker (1981) and Hair et al. (1988), it is considered normal for constructs to become conceptually closer during crises. This finding provides valuable insight into how consumer perceptions and behaviours integrate and blur their boundaries during crises such as a pandemic.

This study provides important contributions both theoretically and practically. The findings, which reveal how online shopping affects consumer behaviour during the pandemic, highlight the need for online shopping platforms to enhance the consumer experience. Perceived ease of use, perceived usefulness, and perceived behavioural control play a decisive role in shopping

intention. Therefore, developing user-friendly interfaces, secure payment methods, and platforms that offer fast access will contribute to making online shopping a lasting preference even in the post-pandemic period.

Future studies can conduct similar analyses in different cultural and socio-economic contexts to further examine changes in consumer behaviour. Understanding how consumer behaviour will evolve in the post-pandemic period is crucial for analysing the future development potential of online shopping. Additionally, more research is needed on discriminant validity in contexts where constructs become conceptually closer in order to better understand the dynamics of consumer behaviour under extraordinary conditions such as a pandemic.

In conclusion, this study identifies the factors influencing online shopping attitudes and intentions during the pandemic and makes significant contributions to the literature. While perceived usefulness and ease of use strongly influence consumer attitudes and intentions, perceived behavioural control is found to be more determinant on intention. Understanding how consumer behaviour will evolve in the post-pandemic period is critical for shaping future strategies for both the business world and academia.

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