

Factors influencing online shopping intentions: The mediating role of perceived enjoyment

Çevrimiçi alışveriş niyetlerini etkileyen faktörler: Algılanan keyfin aracılık rolü

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Abstract

The study aimed to understand factors influencing customers' online shopping intentions. This study used the technology acceptance model (TAM) and extended it, including social value and perceived enjoyment, to measure customers' intentions in the online shopping context. Three hundred one validated data was collected using personal interviews and the online survey approach through convenience sampling technique from 20 to 60 years old. Subsequently, data were analyzed through PLS-SEM. The measurement model was first examined to determine whether the constructs predict online shopping intentions. After validating the measurement model, the subsequent structural model was analyzed using Smart PLS 3.3.3. The study results revealed that perceived usefulness, attitude, social value, and perceived enjoyment are significant positive predictors of online shopping intentions. However, perceived ease of use insignificantly impacted online shopping intentions. Moreover, this study results showed that perceived enjoyment partially mediates the relationship between perceived usefulness, perceived ease of use, social value, and online shopping intentions. In contrast, the influence of attitude on intentions is insignificantly mediated by perceived enjoyment. This study will provide online e-retailers with insights into how practitioners can influence customers to shop online. Customer behaviour is the result of customers' intentions, built through perceived usefulness, ease of use, attitude, social value, and enjoyment.

Keywords: Perceived Usefulness, Perceived Ease of Use, Attitude, Social Value, Perceived Enjoyment, Online Shopping Intentions

Jel Codes: M31

Öz

Çalışmanın amacı, müşterilerin çevrimiçi alışveriş niyetlerini etkileyen faktörleri anlamaktır. Bu çalışma, teknoloji kabul modelini (TAM) kullanmış ve onu sosyal değer ve algılanan zevk dahil olmak üzere, müşterilerin çevrimiçi alışveriş bağlamındaki niyetlerini ölçmek için genişletmiştir. 20 ila 60 yaşları arasında kolayda örnekleme tekniği ile kişisel görüşmeler ve çevrimiçi anket yaklaşımı kullanılarak toplam 301 doğrulanmış veri toplanmıştır. Daha sonra veriler PLS-SEM ile analiz edildi. İlk olarak, yapıların çevrimiçi alışveriş niyetlerini tahmin edip edemeyeceğini belirlemek için ölçüm modeli incelenmiştir. Ölçüm modeli doğrulandıktan sonra, sonraki yapısal model Smart PLS 3.3.3 kullanılarak analiz edildi. Çalışma sonuçları, algılanan fayda, tutum, sosyal değer ve algılanan keyfin çevrimiçi alışveriş niyetlerinin önemli pozitif yordayıcıları olduğunu ortaya koymuştur. Bununla birlikte, algılanan kullanım kolaylığı, çevrimiçi alışveriş niyetlerini önemsiz bir şekilde etkiledi. Ayrıca, bu çalışma sonuçları, algılanan zevkin algılanan fayda, algılanan kullanım kolaylığı, sosyal değer ve çevrimiçi alışveriş niyetleri arasındaki ilişkiye kısmen aracılık ettiğini göstermiştir. Tersine, niyetin niyetler üzerindeki etkisi, algılanan zevk tarafından önemsiz bir şekilde aracılık eder. Bu çalışma, çevrimiçi e-perakendecilere, uygulayıcıların müşterileri çevrimiçi alışveriş yapma konusunda nasıl etkileyebileceklerine ilişkin bilgiler sağlayacaktır. Müşteri davranışı, müşterilerin algılanan kullanışlılığı, kullanım kolaylığı, tutumu, sosyal değeri ve keyfi yoluyla oluşturulan müşterilerin niyetlerinin bir sonucudur.

Anahtar Kelimeler: Algılanan Fayda, Algılanan Kullanım Kolaylığı, Tutum, Sosyal Değer, Algılanan Zevk, Online Alışveriş Amaçları

JEL Kodları: M31

Introduction

The emergence of e-commerce has enhanced the rapid growth of online shopping. Online shopping is a mechanism by which customers browse, search for, compare, and purchase goods via the internet. The online retail sector has contributed USD 4.2 trillion to the digital economy worldwide in 2020 (Coppola, 2021). Thus, the significance of online shopping has grown in recent years. Furthermore, most people spend their leisure time using online social networking activities, web surfing, and gaming leads them to be accustomed to digital shopping using the internet. Given the potential importance, online business organizations, especially online retailers, are uncovering how they can increase customers' online shopping intentions.

Although customers' shopping enjoyment and external social pressure (social value) are important determinants of online shopping intentions, this sector has yet to address the aspects of customers' social matter and perceived enjoyment. Undoubtedly, no previous study has assumed that customers' perceived usefulness, ease of use, attitude, and social value towards online shopping intentions are intervened by perceived enjoyment. However, with the high penetration rate of the internet, wireless network, and Smartphone availability, coupled with the growth of consumer purchasing power, there is some evidence that customers having access to online technologies tend to shop online (Gong, Stump, and Maddox 2013). Thus, this study assumed that customers' perceived usefulness, perceived ease of use, attitude, and social value towards online shopping intentions are mediated by customers' perceived enjoyment.

Literature demonstrated that the technology acceptance model (TAM) was widely used to predict customers' intentions towards online shopping (Chiu, Chao-Min, Hua-Yang Lin, Szu-Yuan Sun, and Meng-Hsiang Hsu 2009; Vijayarathy 2004). Recently, Chiu et al. (2009) applied TAM to measure customers' loyalty and intentions towards online shopping in research. In their study, (Amin, Rezaei, and Abolghasemi 2014) used TAM and identified that perceived usefulness and ease of use influenced customers' intentions. In line with this, Hsu, Lin, and Chiang (2013) measured the influence of attitude on behavioural purposes. Finally, Wu, Wei, Vivian Huang, Xiayu Chen, Robert M. Davison, and Zhongsheng Hua (2018) investigated the impact of social value on online shopping intentions. However, to the best knowledge, no previous study examined TAM including attitude and social value to predict customers' online shopping intentions.

The present study modified TAM, considering the variables explained in recent literature as predictors of online shopping intentions. These variables, including attitude (Zendehdel, Paim, and Osman 2015) (Wu et al. 2018) social value (Chen and Zhang 2021), and perceived enjoyment (Patel et al. 2020), potentially predict online shopping intentions. However, these constructs were tested separately in predicting preferences towards online shopping. Even though the previous studies (Sohn, 2017; Tong, 2010; Brizi et al., 2015; Yoon, 2009) used different combinations of these variables, to the best knowledge, no study incorporated all six variables together with such causal relationship among them to understand online shopping intentions.

Literature review

Customers' acceptance intentions of online purchasing and transactions can be explained through previous research models such as the technology acceptance model (TAM) (Davis, 1989), the theory of planned behaviour (TPB) (Ajzen 1991), and the decomposed TPB model (Taylor and Todd 1995). The technology acceptance model (TAM) based on the theory of reasoned action (TRA) indicates that perceived usefulness and ease of use affect the customers' behavioural intentions. In addition, other constructs such as attitude, subjective norms, perceived behavioural control, and perceived value affect behavioural intentions, mainly online shopping intentions (Yoon, 2009; Hasan, A. A., Chhanda Biswas, Moumita Roy, Sonia Akter, and Bapon Chandra Kuri, 2020). Therefore, although TRA is the prominent model for predicting customers' behavioural preferences, the TAM can be a powerful model for understanding customers' intentions to shop online.

Online shopping intentions

Behavioural intentions, mainly online shopping intentions, refer to predisposed determination to perform a specific performance. It is considered a consequence of customers' attitudes, social value, and perceived ease, usefulness, and enjoyment. Lim, Yi Jin, Abdullah Osman, Shahrul Nizam Salahuddin, Abdul Rahim Romle, and Safizal Abdullah (2016) explained that customers' online shopping intentions outcome of some intrinsic factors such as desires, novelty-seeking, prestige, and entertainment. Hu, Xi, Qian Huang, Xuepan Zhong, Robert M. Davison, and Dingtao Zhao (2016) also demonstrated that customers' shopping intention results from customers' experiences, attitudes, and socialization. In addition, in their research, Cheema, Umair, Muhammad Rizwan, Rizwan Jalal, Faiza Durrani, and Nawal Sohail (2013) claimed that motivations such as freedom of choice, purchasing flexibility, and time-saving attributes determine customers' online shopping intentions.

Perceived usefulness and online shopping intentions

Online shopping provides different advantages such as comparison-shopping, access to necessary information, minimized shopping time, improved life and lifestyle. Perceived usefulness is the degree to which a person believes that using a strategic system would amplify their accomplishment (Davis 1989). Based on these, perceived usefulness is defined as the degree to which a human believes that their task performance would be improved by using a specific system (Davis 1989). Customers' perceived usefulness of online shopping is considered an innovation characteristic that helps to provide more efficient approaches to measure customers' online shopping intentions.

Prior literature demonstrated the effect of perceived usefulness on intentions in several sectors (Purnawirawan, Nathalia, Patrick De Pelsmacker, and Nathalie Dens, 2012). Tandon, Urvashi, Ravi Kiran, and Ash N. Sah (2016) explained that perceived usefulness significantly impacts online shopping intentions. In addition, Lim et al. (2016) identified that perceived improved life and lifestyle determine the online shopping intentions. Moreover, in research, Sohn (2017) found that perceived usefulness is a key to forming preferences towards online shopping. Therefore, it was hypothesized that:

H₁: Perceived Usefulness significantly affects online shopping intentions.

Perceived ease of use and online shopping intentions

"Ease of use" is defined as the individual's belief that taking advantage of new technology is liberated from exertion (Kucukusta, Deniz, Rob Law, Alia Besbes, and Patrick Legohérel, 2015). Ozturk, Ahmet Bulent, Anil Bilgihan, Khaldoon Nusair, and Fevzi Okumus (2016) argued that perceived ease of use represents a mechanism by which a system is perceived to be easy to understand, analyze, or function, leading shoppers to intend online shopping.

Previous studies demonstrated that customers' perceptions of ease of use and flexibility of online shopping influence customers' intentions towards online shopping (Ashraf et al., 2016; Kim & Song (2010) described that customers' perceptions of the easiness of shopping and time-saving criteria strongly determine the customer's online shopping intentions. In addition, Hu et al. (2009) explained that the perceived ease of use is significantly related to online shopping intentions. Moreover, Yoon (2009) found that perceived ease of use is a significant predictor to explain online shopping intentions. Thus, it was hypothesized that:

H₂: Perceived ease of use significantly affects online shopping intentions.

Attitude and online shopping intentions

Attitude discussed in the TAM model defines a positive or negative feeling of performing a specific behaviour (Yoon 2009). Fishbein and Ajzen (1975) developed an attitude in the reasoned action (TRA) model to predict behavioural intentions. Attitude refers to how a person favourably or unfavourably evaluates a particular behaviour. Many studies have proved that a positive attitude induces high

intentions to perform a specific behaviour (Hsu, Chin-Lung, Judy Chuan-Chuan Lin, and Hsiu-Sen Chiang, 2013; Yoon, 2009).

Prior studies showed that attitudes towards online shopping directly affect online shopping intentions (Khare & Rakesh, 2011; Hsu et al., 2013). Abdul-Muhmin, (2010) also explained that attitude is one of the significant factors helping determine customers' behavioural intentions towards online shopping. While evaluating consumer attitudes towards online shopping intentions, some attributes (e.g., online shopping is a good idea, online shopping is enjoyable, and online shopping is fantastic) affect online shopping intentions. In addition, Zendejdel et al. (2015) confirmed that customers' positive attitudes towards online shopping substantially impacted online shopping intentions. This study aims to investigate the relationship between attitude and online shopping intentions based on this literature. Therefore, it was hypothesized that:

H₃: Attitude significantly affects online shopping intentions.

Social value and online shopping intentions

The social value derived from an alternative association with specific social groups is perceived utility. Wu et al. (2018) argued that social value similar to subjective norm construct refers to perceived social pressure to approve or disapprove of a behaviour style. Social value reflects external social pressure from referent groups that consist of family members, friends, neighbours, colleagues, or peers (Hu et al., 2016). Thus, customers' online shopping intention is dominated by referents' opinions.

Previous literature demonstrated that social value is one of the most dominant factors influencing customers' behavioural intentions, mainly online shopping intentions (Chen & Zhang, 2021). Furthermore, Oliver & Lee (2010) explained that referents and social groups seemingly influence customers' online shopping intentions. Moreover, social approval and social acceptance constitute customers' motivations for online shopping (Brizi, Ambra, Mauro Giacomantonio, Birga M. Schumpe, and Lucia Mannetti, 2015). Thus, the current study proposes the following hypothesis:

H₄: Social value significantly affects online shopping intentions.

Perceived enjoyment and online shopping intentions

Perceived enjoyment refers to an individual's intrinsic motivation to use a particular system. Rouibah, Kamel, Paul Benjamin Lowry, and Yujong Hwang (2016) and Hasan, Abdulla Al-Towfiq (2021) explained that most customers accept new technologies and new approaches because they can provide inherent benefits such as entertainment, enjoyments, etc.

Few previous studies examined the relationship between perceived enjoyment and behavioural intentions. More specifically, Cheema et al. (2013) examined the effect of perceived enjoyment on online shopping intentions. Also, Tong (2010) explained that perceived enjoyment aspects such as excitement and fun significantly influence online shopping intentions. Moreover, Patel, Vipul, Kallol Das, Ravi Chatterjee, and Yupal Shukla (2020) found that perceived enjoyment significantly predicts shopping intention. Therefore, it was hypothesized that:

H₅: Perceived enjoyment significantly affects online shopping intentions

Perceived usefulness, perceived ease of use, attitude, social value, and perceived enjoyment

Although no previous study examined the effect of perceived usefulness, perceived ease of use, attitude, and social value on perceived enjoyment, several studies investigated the casual relationship among them in several contexts (Ramayah & Ignatius, 2005; Teo & Noyes, 2011). Abdullah, Ward, and Ahmed (2016) examined the relationship between perceived usefulness, perceived ease of use, attitude, and enjoyment. In a study, Pitafi, Kanwal, and Khan (2020) identified that perceived ease of use and social enjoyment is positively correlated. Ke, Chih-Horng, Huey-Min Sun, Yuan-Chi Yang, and Huey-Min Sun (2012) mentioned that perceived usefulness and enjoyment is significantly correlated. Dickinger, Arami, and Meyer (2008) identified that attitude and perceived happiness is particularly associated. Finally, Jolly, Eshin, Diana I. Tamir, Bethany Burum, and Jason P. Mitchell (2019) described that social value is

positively related to enjoyment. Based on these studies, it can be inferred that perceived usefulness, ease of use, attitude, and social value influence perceived happiness. There, this study proposes the following hypothesis.

H6: *Perceived usefulness significantly affects perceived enjoyment.*

H7: *Perceived ease of use significantly affects perceived enjoyment.*

H8: *Attitude significantly affects perceived enjoyment.*

H9: *Social value significantly affects perceived enjoyment.*

The mediating role of perceived enjoyment

The mediator is the third variable that intervenes in the relationship between the exogenous and endogenous variables. Although no previous study examined the mediating effect of perceived enjoyment in the relationship between perceived usefulness, perceived ease of use, attitude, and social value, and online shopping intentions, [Holdack, Eric, Katja Lurie-Stoyanov, and Harro Fabian Fromme \(2020\)](#) measured the mediating effect of perceived enjoyment in the link between perceived ease of use and attitude. Also, [Wang, Yi-Shun, Hsin-Hui Lin, and Yi-Wen Liao \(2012\)](#) identified that perceived enjoyment significantly mediates the association between personality traits and intentions. In addition, [Jin \(2010\)](#) measured the mediating role of entertainment on educational outcomes. [So, Kim and Oh \(2020\)](#) tested the mediating part of perceived enjoyment. Moreover, [Giao, Vuong, and Quan \(2020\)](#) examined the mediating role of perceived fun on customers 'online shopping loyalty. Thus, it is pertinent to investigate the mediating effect of perceived value in the relationship between perceived usefulness, ease of use, attitude, social value, and online shopping intentions. Therefore, this study proposes the following hypothesis:

H10: *Perceived enjoyment partially mediates the influence of perceived usefulness on online shopping intentions.*

H11: *Perceived enjoyment partially mediates the influence of perceived ease of use on online shopping intentions.*

H12: *Perceived enjoyment partially mediates the influence of attitude on online shopping intentions.*

H13: *Perceived enjoyment partially mediates the influence of social value on online shopping intentions.*

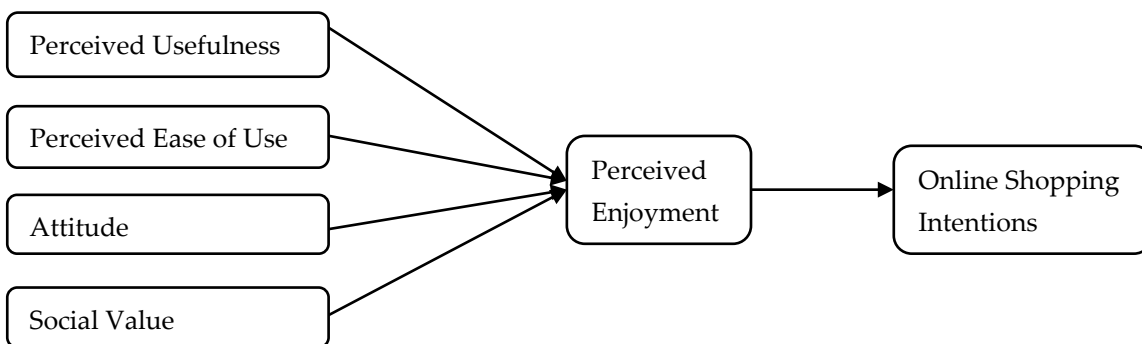


Figure 1. Proposed research framework
Source: Authors

Design and method

Measures

All study constructs were measured using structured questionnaires borrowed from previous studies and modified to fit the current research context. Perceived usefulness was measured using three items adapted from [Manis & Choi \(2019\)](#). Three things suggested by [Manis & Choi \(2019\)](#) also were adapted to measure perceived ease of use. The attitude was measured through three validated scales mentioned by [Manis &](#)

Choi (2019) adapted to the research context. Three measurement scales measured social value and online shopping intentions for each construct, adopted from Lin & Huang (2012) and modified to the current research context. Lastly, three items of perceived enjoyment were borrowed from Kim et al. (2013) and modified to fit this study context.

Sampling and data collection

The survey data was collected using a convenience sampling technique from customers aged between 20 and 60 years. The survey was conducted using previously validated structured questionnaires through 25% personal interviews and 75% online survey sending Google drive links to respondents. A total of 1000 respondents were approached and got 324 responses. Among these responses, 23 were excluded due to extreme value. Consequently, 301 valid responses were used for data analysis supported by Osborne & Costello (2004).

Data analysis

Anderson & Gerbing (1988) suggested the two-step approach was used to examine the confirmatory factor analysis to determine whether the observed variables reflect the latent constructs using the covariance matrix. Consequently, the measurement and structural models were analyzed using Smart PLS 3.3.3. First, the measurement model was analyzed using factor loadings, Cronbach Alpha, composite reliability, average variance extracted (AVE). Subsequently, the structural model was analyzed through bootstrapping with 1000 subsamples. Moreover, cross-validated redundancy (Q2) and effect size (f2) were analyzed to measure the model's predictive relevance.

Findings and discussion

Table 1 shows the demographic profiles of the respondents. 53.48% (161) were male, and 46.52% (140) were female among the valid respondents. Most of the respondents (37.20%) were in the age range between 20 and 30, and their mean age was 35.38 years. In terms of income, most respondents' (61.47%) income was in between BDT (Bangladesh taka) 20000 and BDT 50000. approximately, 42.85% of respondents have 1 to 3 years of online shopping experience.

Table 1: Demographic profile of respondents (n = 301)

Variables	n	Percentage (%)
Gender		
Male	161	53.48
Female	140	46.52
Age (years)		
20 to 30	112	37.20
31 to 40	99	32.89
41 to 50	66	21.93
51to 60	24	7.98
The mean age is 35.38 years		
Monthly income (BDT)		
Below 20000	84	27.90
20000-50000	185	61.47
Above 50000	32	10.63
Online Shopping experience (years)		
Below 1	78	25.92
1-3	129	42.85
Above 2	94	31.23

Measurement model

The measurement model validated the research model, ensuring convergent validity, discriminant validity, and internal consistency. Cronbach Alpha and composite reliability values were calculated to test the constructs' internal consistency. The following statistics of all Cronbach Alpha and composite reliability values were higher than the recommended thresholds (Bagozzi and Yi 1988). All alpha values ranged between 0.773 and 0.882, and composite reliability values were 0.868 to 0.926 (see Table 2). The

average variance extracted (AVE) was calculated to test the convergent validity, and all subsequent AVE values were over 0.5 (see Table 2). Moreover, all the AVE's values exceeded the squared correlation between the corresponding construct and other variables (see Table 3), indicating discriminant validity. Therefore, the convergent and discriminant validity were confirmed before applying the procedures suggested by Fornell & Larcker (1981).

Table 2: Measurement model results

Constructs/Items	Factor loadings	Cronbach's alpha (α)	Composite reliability (CR)	The average variance extracted (AVE)
<i>Perceived usefulness</i>				
Online shopping would be helpful in my life.	0.906	0.882	0.926	0.806
Online shopping would improve my life.	0.929			
Online shopping would enhance my lifestyle.	0.857			
<i>Perceived ease of use</i>				
Online shopping would be easy for me.	0.886	0.865	0.917	0.787
Online shopping makes it easy to get what I want to purchase.	0.906			
Online shopping would be flexible to shop.	0.869			
<i>Attitude</i>				
Online shopping is a good idea.	0.821	0.779	0.872	0.694
I like Online shopping.	0.884			
Online shopping is enjoyable to me.	0.792			
<i>Social value</i>				
Online shopping would help me to feel acceptable.	0.827	0.788	0.877	0.704
Online shopping would make me a good impression on other people.	0.900			
Online shopping would give me social approval.	0.785			
<i>Perceived enjoyment</i>				
Online shopping would be enjoyable.	0.876	0.799	0.882	0.713
Online shopping would be interesting to me.	0.863			
Online shopping would enhance my excitement.	0.793			
<i>Online shopping intentions</i>				
I intend to continue to shop online in the future.	0.835	0.773	0.868	0.687
I intend to purchase from online sellers in the future.	0.808			
I intend to continue online shopping next few years.	0.843			

Structural model

After validating the measurement model, researchers conducted a structural model through a structural equation modelling approach (SEM), testing the proposed hypothesis using Smart PLS 3.3.3. Before testing the hypothesis, the model's fitness measurement is required. Thus, the model's predictive relevance is measured through cross-validated redundancy (Q^2) suggested by Henseler and Sarstedt (2013). Q^2 is measured when the model fitness index is not appropriate due have different characteristics between valid and valid models. Table 4 shows the Q^2 values of PE (perceived enjoyment) and OSI (online shopping intentions) greater than zero suggesting the model's predictive relevance Henseler et al. (2009). The effect size was measured using f^2 . Effect size (f^2) calculates the quantitative effect of independent variable/s on dependent variable/s with the unity of the variation of R^2 . Cohen (1988) suggests the following formula to compute the effect size.

$$\text{Effect size } f^2 = \frac{R^2 \text{ Inclusive} - R^2 \text{ Exclusive}}{1 - R^2 \text{ Inclusive}}$$

Table 3: Results of discriminant validity

	PU	PEOU	ATT	SV	PE	OSI
PU	0.898					
PEOU	0.204	0.887				
ATT	0.259	0.393	0.833			
SV	0.169	0.488	0.283	0.839		
PE	0.385	0.471	0.338	0.364	0.845	
OSI	0.411	0.472	0.402	0.472	0.577	0.829

Notes: PU = perceived usefulness, PEOU = perceived ease of use, ATT = attitude, SV = social value, PE = perceived enjoyment, OSI = online shopping intentions

Table 4: Blindfolding results

Total	SSO	SSE	Q ² (=1-SSE/SSO)
PE	903	700.665	0.224
OSI	903	618.938	0.315

Notes: PE = perceived enjoyment, OSI = online shopping intentions

Table 5 shows the f^2 value of perceived usefulness, perceived ease of use, attitude, social value, and perceived enjoyment on online shopping intentions, respectively 0.05, 0.01, 0.02, 0.07, and 0.13. Table 6 also shows the f^2 value of perceived usefulness, perceived ease of use, attitude, and social value on perceived enjoyment, respectively 0.10, 0.09, 0.01, and 0.02. These reflect a small effect size as Cohen (1988) suggested that the value of 0.02, 0.15, and 0.35 or above represent small, medium, and large effect sizes.

Table 5: Effect size of latent variables on online shopping intentions

Latent variables	f^2	Decision
PU	0.05	Small
PEOU	0.01	Small
ATT	0.02	Small
SV	0.07	Small
PE	0.13	Small

Notes: PU = perceived usefulness, PEOU = perceived ease of use, ATT = attitude, SV = social value, PE = perceived enjoyment

Table 6: Effect size of perceived usefulness, perceived ease of use, attitude, and social value on perceived enjoyment

Latent variables	f^2	Decision
PU	0.10	Small
PEOU	0.09	Small
ATT	0.01	Small
SV	0.02	Small

Notes: PU = perceived usefulness, PEOU = perceived ease of use, ATT = attitude, SV = social value

Table 7 and Figure 2 shows the hypothesis's path coefficients, t-statistics, p-value, and decisions. The relationship between perceived usefulness and online shopping intentions (H1) was found significant ($\beta=0.190, t=3.283, p=0.001$), supporting H1. However, the perceived ease of use was insignificantly related to online shopping intentions (H2) ($\beta=0.118, t=1.814, p=0.070$); thus, it does not support H2. The strength of the relationship between attitude and online shopping intentions (H3) was found significant ($\beta=0.134, t=2.713, p=0.007$), which supports H3. Social value was found significantly related to online shopping intentions (H4) ($\beta=0.229, t=4.283, p=0.000$), supporting H4. The direct impact of perceived enjoyment on online shopping intentions (H5) was found significant ($\beta=0.319, t=5.090, p=0.000$), which supports H5.

In addition, Table 7 revealed that perceived usefulness was significantly related to perceived enjoyment (H6) ($\beta= 0.272, t= 4.902, p = 0.000$), which consequently supports H6. The relationship between perceived ease of use and enjoyment (H7) was significant ($\beta= 0.306, t= 5.252, p = 0.000$), supporting H7. The results also revealed that attitude was significantly related to perceived enjoyment (H8) ($\beta= 0.108, t= 1.993, p = 0.047$), supporting H8. The strength of association between social value and perceived enjoyment (H9) was found significant ($\beta= 0.138, t= 2.698, p = 0.007$); thus, it supports H9. Therefore, all antecedents (exogenous variables) significantly affected online shopping intentions (endogenous variables), implying that customers' online shopping intentions are explained by customers' perceived usefulness, ease of use, attitude, social value, and enjoyment. Moreover, perceived enjoyment is the consequence of customers' perceived effectiveness, ease of use, attitude, and social value.

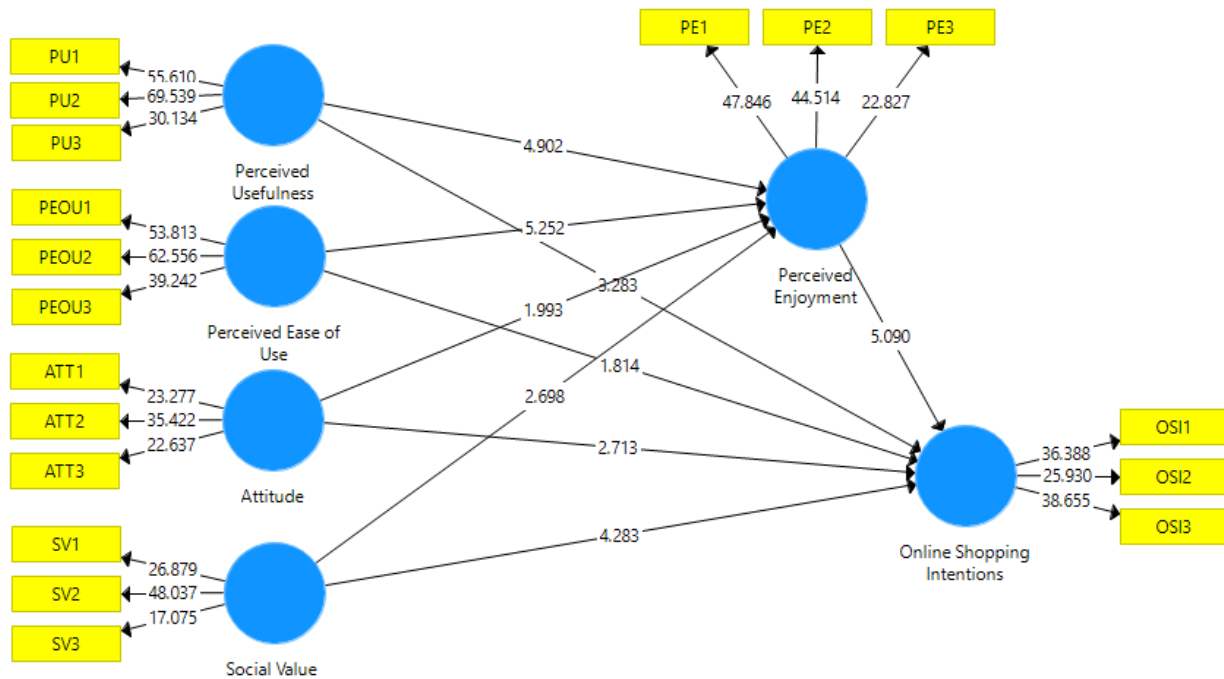


Figure 2: Structural model

Table 7 also shows the results of mediating effect of perceived enjoyment. Perceived usefulness, including perceived enjoyment, affected online shopping intentions (H10), was significant ($\beta= 0.087, t= 3.652, p = 0.000$), indicating the partial mediation. The strength of the relationship between perceived ease of use included perceived enjoyment and online shopping intentions (H11), was found significant ($\beta= 0.098, t= 3.599, p = 0.000$), which indicates the partial mediation. However, the mediating effect of perceived enjoyment in the linkage between attitude and online shopping intentions (H12) was insignificant ($\beta= 0.034, t= 1.715, p = 0.087$), indicating complete mediation. The effect of social value, including perceived enjoyment, on online shopping intentions (H13) was significant ($\beta= 0.044, t= 2.341, p = 0.019$), suggesting a partial mediation. These results imply that customers' online shopping intentions are not only the effect of perceived usefulness, ease of use, attitude, and social value. Instead, customers' shopping intentions are determined by customers' perceived enjoyment.

Table 7: Path coefficients and hypothesis testing

Hypothesis	Relationships	Beta	T-Statistics	P-Values	Decisions
H1	Perceived Usefulness -> Online Shopping Intentions	0.190	3.283	0.001	Supported
H2	Perceived Ease of Use -> Online Shopping Intentions	0.118	1.814	0.070	Not Supported
H3	Attitude -> Online Shopping Intentions	0.134	2.713	0.007	Supported
H4	Social Value -> Online Shopping Intentions	0.229	4.283	0.000	Supported
H5	Perceived Enjoyment -> Online Shopping Intentions	0.319	5.090	0.000	Supported
H6	Perceived Usefulness -> Perceived Enjoyment	0.272	4.902	0.000	Supported
H7	Perceived Ease of Use -> Perceived Enjoyment	0.306	5.252	0.000	Supported
H8	Attitude -> Perceived Enjoyment	0.108	1.993	0.047	Supported
H9	Social Value -> Perceived Enjoyment	0.138	2.698	0.007	Supported
H10	Perceived Usefulness -> Perceived Enjoyment -> Online Shopping Intentions	0.087	3.652	0.000	Supported
H11	Perceived Ease of Use -> Perceived Enjoyment -> Online Shopping Intentions	0.098	3.599	0.000	Supported
H12	Attitude -> Perceived Enjoyment -> Online Shopping Intentions	0.034	1.715	0.087	Not Supported
H13	Social Value -> Perceived Enjoyment -> Online Shopping Intentions	0.044	2.341	0.019	Supported

Conclusion, recommendation and limitations

The present study explored customers' online shopping intentions using TAM and extending it, leaving theoretical and practical implications.

Implications and suggestions

The present study findings revealed that the relationship between perceived usefulness and online shopping intentions was strong, consistent with prior research across multiple contexts (Purnawirawan et al., 2012;Ventre & Kolbe, 2020). This relationship helps practitioners understand how online shopping can be helpful to customers because perceived usefulness primarily determines online shopping intentions. However, the association between perceived ease of use and online shopping intentions shows that perceived ease of use insignificantly impacts online shopping intentions. This association was consistent with previous studies in different contexts (Yoon, 2009; Kim et al., 2010; Biswas, Chhanda, Santus Kumar Deb, Abdulla Al-Towfiq Hasan, and Md Shariful Alam Khandakar, 2020). In addition, the present study finds that customers' attitude is a dominating predictor of online shopping intentions, with a strong positive association between them supported by previous studies (Hsu et al., 2013;Akhlq & Ahmed, 2015). This finding implies that customers' positive shopping intentions are the consequences of customers' attitudes. Thus, the practitioners must evaluate the customers' attitudes before measuring their intentions.

From the study findings, the relationship between social value and online shopping intentions was positively correlated, aligned with prior study (Hu et al. 2016). This positive correlation indicates that social pressure and the opinions of peers, friends, and family are positive predictors of online shopping intentions. Hence, the practitioners should cultivate social activist groups and opinion leaders to make customers positively intend to shop online. Furthermore, the current study finds that customers' perceived enjoyment is a positive and robust predictor of intentions towards online shopping, supported by previous studies (Rouibah et al., 2016;Wen et al., 2011). This finding confirmed that perceived enjoyment emerges as the most potent predictor of online shopping intentions. Thus, practitioners must ensure the customers' enjoyment, including aesthetic and lively features at their shopping.

The present study findings revealed that perceived usefulness, perceived ease of use, attitude, and social value are positive and robust predictors of perceived enjoyment. These findings imply that customers' perceived enjoyment is the consequence of how costumers feel that the thing/object is valid, more accessible, and socially recognized. Interestingly these findings are new to the marketing literature, especially in the online shopping sector. Thus, practitioners must develop an online shopping system that enhances customers' positive attitude, perceived usefulness, perceived ease of use, and social recognition towards perceived enjoyment.

Finally, the study results showed that perceived enjoyment partially mediates between perceived usefulness, ease of use, social value, and online shopping intentions. In contrast, the influence of attitude on online shopping intentions is fully mediated by perceived enjoyment. These findings imply that perceived usefulness, ease of use, attitude, and social value with perceived enjoyment predict customers' online shopping intentions. Interestingly, these findings are new to the marketing literature, mainly online shopping intentions. Thus, practitioners must emphasize customers' perceived enjoyment, leading to online shopping intentions.

Limitations and future research

The present study's research model tested the technology acceptance model (TAM), including two other predictor variables- attitude and social value, and one mediator variable- perceived enjoyment. Thus, it is worth noting that the present study is the first to examine such an extended TAM in the online shopping context, leaving insightful implications in consumer behaviour.

Although this study has vast implications, it has several limitations that need to be addressed, creating opportunities for future research. First, this study collected data at a period, which was a biased data collection method. Thus, future researches could apply a longitudinal approach. Second, the present study has collected data from 20 to 60 years old people, which may result in biased data. This biasness may be avoided by future researchers considering children and older generation as respondents. Third, the current study approached convenience sampling technique, while future researchers should apply random sampling technique. Finally, the present study extended TAM, including attitude, social value, and perceived enjoyment. In contrast, future researches may include subjective norms, social norms, personal norms, and trust to measure customers' online shopping intentions.

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