

Is Perceived Value a Mediator of Technology Acceptance Model?

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ABSTRACT

The purpose of this research is to explore the intention to purchase beauty and personal care products online of Cambodian consumers and to examine whether perceived value is a mediator of the technology acceptance model. 385 samples (after cutting off the outliers) were ready to analyze through SPSS AMOS 23. Confirmatory factor analysis (CFA) was applied to analyze the research hypothesis. Bootstrap method and mediation analysis method were applied and compared to find a mediator. The result showed that perceived value was a mediator of perceived ease of use and online trust. This research helps Cambodian consumers, marketers, vendors to understand behavioral intention to purchase beauty and personal care products online.

Keywords

technology acceptance model (TAM), online trust, perceived value, intention to purchase.

Introduction

The innovative technology makes purchase habits dramatic change. Online shopping is a multi-billion-dollar business around the world. Nowadays, consumers prefer mobile phones to purchase online products (Coppola, 2021). 60% of the purchase was categorized as retailing. For instance, there were 1.92 billion people who purchased products online in 2019 (Coppola, 2021). The whole population was 7.7 billion people around the world in mid-2019 (*World Population Prospects*, 2019). Therefore, the number of online shopping was about 24% of the world population.

Beauty and personal care products online stand number 4 around the world after fashion, toys, hobby, and DIY, and electronic and media and it stands number 5 in the USA after a fashion, electronic and media, toys, hobby and DIY and furniture and appliances. (*Top Online Shopping Categories*, 2021). Furthermore, the key product categories in Southeast Asia were fashion, cosmetics, household items, mother & baby products, and electronics (Price, 2020).

In Cambodia, The beauty and personal care products online are about US \$16 million (13%) (*Food & Personal Care*, 2021). The report predicted that sale revenue will be reached US \$ 24 million in 2025. In addition, the data showed

that beauty and personal care products online in Cambodia were in number 2 after machinery (Zhao et al., 2018). Beauty and personal care products have become very popular on social media in Cambodia. For example, Facebook, Instagram are considered as the online platforms that allow them to purchase products online. However, there are many factors encouraging consumers to purchase beauty and personal care products online.

Beauty and personal care products included skincare products, face creams and lotions, nail care products, cosmetic products (Zhao et al., 2018). Scholars researched certain parts of beauty and personal care products. E.g. a study on intention to purchase organic personal care products based on the value of the products (Ghazali et al., 2017). Prior study researched on cosmetic products for men only in China studied the hedonic and utilitarian value (Ho et al., 2019), luxury brand loyalty (Ungarala, 2021). As beauty and personal care products become a trend in Cambodia, thus this research was a new gap to conduct research. Moreover, this sector is a new thing in Cambodia, this study aims to research intention to purchase beauty and personal care products online. To understand the intention to purchase via technology adoption, the technology acceptance model was adapted to explain consumer behavior.

In addition, this research aims to study paths such as perceived usefulness has a positive effect on (1) intention to purchase, (2) perceived value. Perceived ease has a positive effect on (3) perceived usefulness, (4) perceived value, and (5) online trust. Online trust has a positive effect on (6) perceived value and (7) intention to purchase. Then, Perceived value has a positive effect on (8) intention to purchase beauty and personal care products online. Second, the research also aimed to question whether perceived value was a mediation of the conceptual framework.

This research was organized into 6 sections as follow:

section (1) introduction was about general information related to online shopping around the world, the beauty and personal care products online in Cambodian, and the purpose of the research. (2) literature review was about theoretical foundation and hypotheses development. (3) methodology was about methods to analyze the data. (4) data analysis was about the result of the data, (5) discussion and implication, and (6) Conclusion.

Literature Review

2.1. Perceived value

The perceived value is essential to study the relationship between consumers and products or services. There is no universal definition of “value” because value depending on an individual’s perception. However, the researcher defined perceived value following the circumstance. For instance, value was “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml, 1988). Perceived value was based on the experience of individual judgment (Holbrook, 1994). Value was the exchange benefits (value of products or services) and sacrifices (pay the price) (Dodds & Monroe, 1985).

Previous study researched the conceptualization of perceived value. The unidimensional perceived value dimension was about quality and price, and means-end chain theory (Gutman, 1982; Zeithaml,

1988). Means-end chain theory had two steps: “(1) the value plays a dominant role in guiding choice patterns and (2) people reduce product choice by their potential satisfaction”. Multi-dimensional theory of perceived value was derived from various theories such as customer value hierarchy (means-end theory), utilitarian and hedonic value (functional, entertainment, and rational), axiology or value theory (emotional, practical, logical), and consumption-values theory (functional, social, emotional, epistemic and conditional) (Sánchez-Fernández & Iniesta-Bonillo, 2007).

Similarly, a study on consumer perceived value derived many studied and categorized perceived value in three stages: “unidimensional, multidimensional, higher-order dimensional conceptualization” (Sánchez-Fernández & Iniesta-Bonillo, 2007; Zauner et al., 2015). Unidimensional conceptualization of perceived value was about the individual experiences toward products or services. A multidimensional conceptualization of perceived value comprehensively studied the attribute of perceived value reflected consumer emotional value toward products or services. Higher-order dimensional conceptualization of perceived value was about finding the reflective dimension of perceived value on first-order and second-order dimensions (Zeithaml et al., 2020).

In conclusion, perceived value is defined as “functional, personal, subjective, efficiency, convenience, price base, and entertainment” (Holbrook, 1999).

2.2. Technology Acceptance Model

The previous study researched purchase intention based on theories such as the of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), the Theory of Planned Behavior (TPB) (Ajzen, 1985), the Technology Acceptance Model (TAM) (Davis, 1989), Motivation Model (MM) (Davis et al., 1992), Innovation Diffusion Theory (IDT) (Moore & Basurto, 1991), Social Cognitive Theory (SCT) (Compeau et al., 1999) and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003).

The technology acceptance model was chosen for this research because the construct (perceived usefulness and perceived ease of use) was matched with perceived value (functional, efficiency, and convenience). TAM was a good theory to explain behavioral intention to use innovative technology (Dachyar & Banjarnahor, 2017; Huang et al., 2019; Kim et al., 2017; Rafique et al., 2020; Taherdoost, 2018).

2.2.1. Perceived usefulness

Perceived usefulness was “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989). Davis (1989) believed that understanding the usefulness of a particular system encouraged users to have behavior intention to use technology or adopt the technology. His finding confirmed that perceived usefulness was significant with behavioral intention to use the technology (Davis, 1989). In the beauty and personal care products context, perceived usefulness means that consumers understand the online shopping’s benefit to search the products. Furthermore, prior studies proposed perceived usefulness for their studies. E.g. a study on mobile shopping adoption with 310 samples in Taiwan found the significant between perceived usefulness and intention to use mobile as a tool (Chen et al., 2018). Another study on intention to purchase cloth online in China found the significant result as Davis (1989) (Wei et al., 2018). Furthermore, other fields such as online grocery shop (Shukla & Sharma, 2018), e-learning (Salloum et al., 2019), e-banking (Ahmad et al., 2020), and mobile library (Rafique et al., 2020). Therefore, this research proposed:

H1: The perceived usefulness has a positive influence on intention to purchase beauty and personal care products online.

Perceived value depended on an individual’s perception (Zeithaml, 1988). The perceived value is defined as functionality, subjective norm (Holbrook, 1999). When consumers find that online shopping is useful to find beauty and personal product information, consumers will understand the value of online shopping. Prior study researched the relationship between perceived usefulness and perceived value (El-

Haddadeh et al., 2019). Other fields showed the positive influence between perceived usefulness and perceived value such as smartphones (Haba et al., 2017) and social commerce (Chen et al., 2018). Therefore, this research proposed:

H2: The perceived usefulness has a positive influence on perceived value on beauty and personal care products online.

2.2.2. Perceived ease of use

Perceived ease of use was “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). The result indicated that the positive relationship between perceived ease of use and perceived usefulness predicted behavioral intention to adopt innovative technology (Davis, 1989). In the beauty and personal care products context, consumers find that it is easy to use online shopping to purchase the products. Prior study researched different fields such as booking app for the flight in Malaysia (M. M. Suki & Suki, 2017), online shopping via mobile phone and (Agrebi & Jallais, 2015; Alzubi et al., 2018; Y. M. Chen et al., 2018; Vahdat et al., 2020). Therefore, this research proposed:

H3: The perceived ease of use has a positive influence on the perceived usefulness of beauty and personal care products online.

A study of e-learning adoption proposed the dimension of perceived ease of use as “subjective norm, experience, enjoyment, computer anxiety and self-efficacy” (Chang et al., 2017). Another study proposed dimension of perceived value was convivence and entertainment (Holbrook, 1999). Thus, there are similarities between perceived ease of use and perceived value dimensions. Similar to perceived usefulness, consumers find that it is convenient to find beauty and personal care products online as well as the useful information as described the online, consumers believe that it is valuable. Therefore, this research proposed:

H4: The perceived ease of use has a positive influence on the perceived value of beauty and personal care products online.

The convenient online platform allows consumers to understand better about the platform. Thus,

perceived ease of use is essential for online trust for technology adoption (Hegner et al., 2019). Hegner et al. (2019) studied the adoption of autonomous found the significance between perceived ease of use and online trust. The subsequent study from different fields agreed such mobile commerce adoption (Sarkar et al., 2020), online shopping through websites (Eneizan et al., 2020), and online purchase intention among students (Primanda et al., 2020). Therefore, this research proposed:

H5: The perceived ease of use has a positive influence on online trust in beauty and personal care products online.

2.3. Online trust

Trust means “to believe that someone is good and honest and will not harm you, or that something is safe and reliable; to hope and expect that something is true” (Cambridge Dictionary, 2021). Trust also can define as an implicit contract between parties (Arrow, 1974). Trust was a perception toward something. A study on cross-discipline of trust urged that “trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998). Rousseau et al. (1998) observed that many scholars research on trust dimensions as “multilevel trust (individual group, firm and institutional), trust within and between organizations, multidisciplinary trust, the multiple causal roles of trust (trust as cause, outcome, and moderator), trust as impacted by organizational change, and emerging forms of trust”.

Online trust was inspired by trust. Online trust means consumers believed that vendors will follow obligations as set in the system (Wandoko et al., 2017). Online trust also referred to the relationship between trustor (consumer) and trustee (vendor or e-commerce platform) (Wang & Emurian, 2005). The trustor believed the trustee and decided to make a transaction to the trustee to purchase the products or services. A study on consumer trust analyzed that two factors lead to online trust, such as social factors and technological factors (Bauman & Bachmann, 2017). Social factors included word-of-mouth,

social presence, culture and trust, and green trust. Social factors stimulated the consumer's perception toward products or services. Technological factors included e-commerce acceptance privacy, website design, and trust signals. Technological factors made consumers believe the system and made a transaction (Bauman & Bachmann, 2017).

Consumers trust online because they understand the value of products or services. A study on e-CRM in Chinese restaurants found online trust was essential for perceived value (Zhang, 2020). Another study on mobile social network service showed that the more consumer perceived value of mobile social network, the more consumer trust online (N. M. Suki & Suki, 2019). Prior study showed that online trust had a relationship with perceived value such as organic private label food (Konuk, 2018), sustainable shipping practice (Fai et al., 2018) and perceived value of Wechat marketing (Jia, 2020). Therefore, this research proposed:

H6: Online trust has a positive influence on perceived value on beauty and personal care products online.

Consumers have the intention to purchase products or services when they trust the vendor's website or e-commerce. A study on e-government adoption showed that trustworthy (trust government and trust internet) encouraged consumers to use e-government service (Lallmahomed et al., 2017). Prior studies showed that online trust had a relationship with intention to purchase such as “determinant of online purchase intention” (Rishi & Khasawneh, 2017; Windiarti et al., 2020), a case of online movie ticket (Fu et al., 2018), a peer to peer accommodation (Ye et al., 2020), organic private label food (Konuk, 2018). Therefore, this research proposed:

H7: Online trust has a positive influence on intention to purchase beauty and personal care products online.

2.4. Intention to purchase

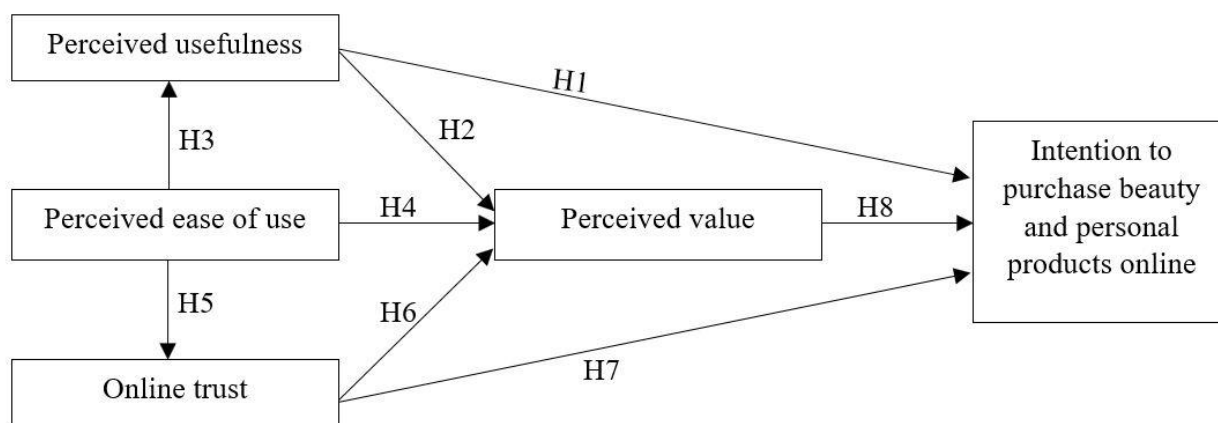
Intention to purchase was the main topic for marketers to develop the strategy. However, the intention to purchase depends on the context of

the countries. Therefore, many researchers tried to find the cause of intention to purchase. Previous research from various fields showed the dimension of intention to purchase or use. For instance, a study on online purchase intention in China functional experience and emotional experiences were the determinant of purchase intention (Y. P. Chang et al., 2014). A study on intention to purchase of Emirati consumers found that prior purchase experience, impulse purchase orientation, quality orientation, and online trust were the determinant (Rishi & Khasawneh, 2017). Consumers who perceived value of products of services tend to have intention to purchase. Prior study proved that perceived price value had a positive influence on intention to use (Lallmahomed et al., 2017). Similarly, study on

store brand in Spain, perceived value on low price product lead to having purchase intention (Calvo-porrall & Lévy-mangin, 2017). Another study on e-commerce sale promotion in China showed perceived value plus with time pressure lead to having more purchase intention (Peng et al., 2018). Furthermore, other fields were interested in perceived value to intention to purchase such as organic private label food (Konuk, 2018), social awareness (Chen et al., 2018), mobile commerce (Shaw & Sergueeva, 2019), e-commerce (Lakhan et al., 2021), and a perceived value of freemium game (Hamari et al., 2020). Therefore, this research proposed:

H8: Perceived value has a positive influence on intention to purchase beauty and personal care products online.

Figure 1: Proposed research model



Methods

3.1. Sampling

The research aimed to study the intention to purchase beauty and personal care products online in Phnom Penh, Cambodia because it was a capital city that has a strong economic and power of purchase. The population's sampling was 385 respondents. The respondents must have criteria as follows: (1) respondents must have experiences in purchasing beauty and personal care products online at least one time, (2) respondents must live in Phnom Penh city, (3) respondents must have aged at least 18 years old.

3.2. Research instruments

The questionnaire was adopted from previous studies (Davis, 1989; Gefen et al., 2003; K. O. M. Lee & Turban, 2001; Lee et al., 2020; Ponte et al., 2015; Shapiro et al., 2019; Xiao et al., 2019). The construct framework consisted of perceived usefulness, perceived ease of use, online trust, perceived value, and intention to purchase. All constructs used 7 Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree).

The original questionnaire was in English version. The researcher translated in Cambodian (Khmer). The experts in the field examined the questionnaire using Item-Objective Congruence (IOC) to check the questionnaire's validity. Then, researchers tested a pilot test (n=39) to find the

reliability of the questionnaire. Cronbach's Alpha Coefficient (α) indicated range as follows: 0.6 to 0.7 (fair reliability), 0.7 to 0.8 (reliable), and 0.81 to 0.95 (very good). The result found that perceived usefulness ($\alpha= 0.85$ very good), perceived ease of use ($\alpha= 0.82$ very good), perceived value ($\alpha=0.76$ good), online trust ($\alpha=0.91$ very good), intention to purchase ($\alpha=0.87$ very good).

3.3. Data collection

Data collection was collected online. Therefore, the researcher used Google Forms to distribute the questionnaire. Then, the questionnaire was posted on social media such as Facebook page, Facebook messenger, Telegram, and direct message to respondents. The total collected data was 513 cases (including qualified and qualified data). Then, the researcher selected only the qualified data and got 419 cases. Afterward, Univariate analysis and multivariate analysis were applied to find outliers of the data. The Z score (-3.29 and 3.29) was considered as an outlier in univariate analysis (Tabachnick & Fidell, 2013). The p-value less than 0.001 was considered as an outlier in multivariate analysis. Finally, the data was clean and got 385 cases of healthy data.

3.4. Statistical technique

The questionnaire was analyzed with SPSS 23 using CFA to analyze the data. First, the researcher tested the maximum likelihood to find the model fit of the construct. Then, hypothesis testing was applied to find the significance of the hypotheses. Finally, the researcher tested the perceived value using bootstrap analysis to test the mediator effect.

Data Analysis results

4.1. Demographic backgrounds

Table 1 showed the frequency and percent of respondents who experienced purchase beauty and personal care products online in Phnom Penh. The total data was 385 cases. The result showed that males were 33.5% and females were 66.5%. The age between 23 to 26 (45.7%) were the most popular in purchasing beauty and personal care products online. Then, the age was described as follows 19 to 22 years old (24.4%), 27 to 30 years old (16.6%), 31 to 34 years old (5.7%), above 35 years old (4.2), and at least 18 years old (3.4%). The frequency of purchase showed that respondents experiences in purchase beauty and personal products online were between 3 to 5 times (31.2%), 1 to 2 time(s) (30.4%), more than 11 times (20.3%), 6 to 8 times (14.2%), and 9 to 11 times (3.9%).

Table 1: demographic background of the respondents

Items	Types	Frequency (n=385)	Percent
Gender	Male	129	33.5
	Female	256	66.5
	Total	385	100
Age	At least 18 years old	13	3.4
	19-22-year-old	94	24.4
	23-26-year-old	176	45.7
	27-30-year-old	64	16.6
	31-34-year-old	22	5.7
	Above 35-year-old	16	4.2
	Total	385	100
Frequency of purchase	1-2 time(s)	117	30.4
	3-5 times	120	31.2
	6-8 times	55	14.2
	9-11 times	15	3.9
	More than 11 times	78	20.3

Total	385	100

4.2. Reliability analysis and convergent validity

Cronbach's Alpha Coefficient (α) and Composite Reliability (CR) show that construct is reliable and internal measurements are consistent with each other. The Cronbach's Alpha Coefficient (α) and composite reliability must exceed 0.7 (J. Hair et al., 2010). **Table 2** showed that the constructs (perceived usefulness, perceived ease of use, online trust, perceived value, and intention to purchase) have Cronbach's Alpha Coefficient (α), and composite reliability exceeds 0.7. Therefore, the constructs were reliable.

Convergent validity showed the validity of the construct. Convergent validity has three criteria that need to fulfill such as Cronbach's alpha, Composite reliability, factors loading are great that 0.7 and average variance extracted (AVE) is great than 0.5 (J. F. Hair et al., 2011). **Table 2** showed that Cronbach's Alpha Coefficient (α), Composite reliability, factors loading are greater than 0.7 and average variance extracted (AVE) is great than 0.5. Therefore, constructs were valid.

Table 2: Construct reliability and convergent validity

Construct	Item	Factor loading	Cronbach's alpha	Composite reliability	Average variance extracted
Perceived usefulness	PU1	0.71	0.85	0.89	0.62
	PU2	0.80			
	PU3	0.84			
	PU4	0.80			
	PU5	0.79			
Perceived ease of use	PEOU1	0.72	0.83	0.88	0.59
	PEOU2	0.78			
	PEOU3	0.77			
	PEOU4	0.78			
	PEOU5	0.80			
Online trust	OT1	0.72	0.91	0.85	0.54
	OT2	0.78			
	OT3	0.72			
	OT4	0.77			
	OT5	0.68			
Perceived value	PV1	0.76	0.86	0.90	0.64
	PV2	0.78			
	PV3	0.85			
	PV4	0.81			
	PV5	0.81			
Intention to purchase	IP1	0.79	0.91	0.86	0.55
	IP2	0.80			
	IP3	0.78			
	IP4	0.59			
	IP5	0.74			

4.3. Discriminant validity

Discriminant validity was used to analyze the inter-construct correlation between constructs. Discriminant validity was examined by average variance extracted (AVE). AVE must be greater than off-diagonal square correlation, which means that correlation between constructs is acceptable (Fornell & Larcker, 1981).

Table 3 showed that AVE was greater than the off-diagonal square correlation. Therefore, discriminant validity was valid.

Table 3: Inter-construct correlation

Constructs	PV	PU	PEOU	OT	IP
PV	0.743				
PU	0.690	0.728			
PEOU	0.790	0.740	0.700		
OT	0.720	0.440	0.520	0.821	
IP	0.750	0.520	0.540	0.820	0.826

4.4. Model fit

The recommend model fit to construct was Goodness of fit index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI) are greater than 0.9 (Browne & Cudeck, 1992; Cangur & Ercan, 2015; J. Hair et al., 2010), Root Mean Square Residual (RMSEA)

is less than 0.08 (Browne & Cudeck, 1992; Hu & Bentler, 1999), Adjusted Goodness of Fit Index (AGFI) is less than 0.8 (Zikmund et al., 2013). **Table 4** showed that GFI, NFI, CFI, TLI were greater than 0.9 (satisfactory fit). RMSEA was 0.05 (good fit). AGFI was 0.89 (good fit).

Table 4: Model fit of the constructs.

<i>Fit indices</i>	<i>Result value</i>	<i>Recommend value</i>
GFI	0.91	>0.9
AGFI	0.89	>0.8
NFI	0.93	>0.9
TLI	0.96	>0.9
CFI	0.97	>0.9
RMSEA	0.05	<0.08

4.5. Hypothesis testing

The hypothesis was considered significant when *p*-value (*p*) is less than or equal to 0.05. The result showed as follows:

Table 5 showed Perceived usefulness did not have a positive influence on intention to purchase ($\beta=0.08$, *t*-value=1.20, $p>0.05$). Thus, H1 was not supported. Perceived usefulness has positive influence on perceived value ($\beta=0.17$, *t*-

value=2.33, $p <0.05$). Consequently, H2 was supported. Perceived ease of use has a positive influence on perceived usefulness ($\beta=0.76$, *t*-value=8.78, $p <0.05$). As a result, H3 was supported. Likewise, Perceived ease of use has a positive influence on perceived value ($\beta=0.48$, *t*-value=5.38, $p <0.05$). Therefore, H4 was supported. Perceived ease of use has a positive influence on online trust ($\beta=0.55$, *t*-value=9.08, $p <0.05$). Thus, H5 was supported. Online trust has positive influence on perceived value ($\beta=0.43$, *t*-

value=7.84, $p < 0.05$). Thus, H6 was supported. Likewise, Online trust has positive influence on intention to purchase ($\beta=0.59$, t -value=7.79, $p < 0.05$). Hence, H7 was supported. Finally, Perceived value has positive influence on intention to purchase ($\beta=0.27$, t -value=2.55, $p < 0.05$). Thus, H8 was supported.

Table 5: Hypothesis testing

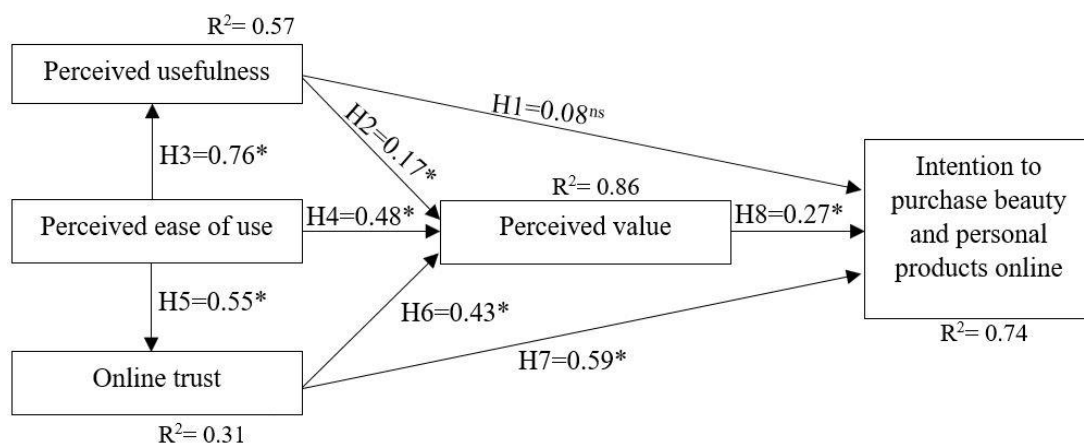
	Estimate (β)	S.E.	C.R.	P	Result
PU→IP	0.08	0.13	1.20	0.23	Not supported
PU→PV	0.17	0.1	2.33	0.02	Supported
PEOU→PU	0.76	0.06	8.78	***	Supported
PEOU→PV	0.48	0.09	5.38	***	Supported
PEOU→OT	0.55	0.09	9.08	***	Supported
OT→PV	0.43	0.04	7.84	***	Supported
OT→IP	0.59	0.07	7.79	***	Supported
PV→IP	0.27	0.14	2.55	0.01	Supported

4.6. Mediator testing

Bootstrap was applied to find a direct effect and indirect of the constructs. The number of bootstraps was 5000 samples with 95% confidence interval to find an accurate result (Preacher & Hyes, 2004). The result found that the indirect effect of perceived usefulness on intention to purchase was not significant ($p > 0.05$). Therefore, perceived value was not a mediation between perceived usefulness and

intention to purchase. on the other hand, the result indicated that perceived value was a full mediation between perceived ease of use and intention to purchase because the direct effect of p value was larger than 0.05 ($p = 0.1621$) and the indirect effect was less than 0.05 ($p = 0.0015$). Likewise, perceived value was a partial mediation between online trust and intention to purchase because the direct effect and indirect were less than 0.05.

Table 6: Mediator effect



Test groups	Direct effect	Indirect effect	Total effect	Mediator of perceived value

PU>PV>IP	0.1832	0.0628	0.0093	Not a mediation
PEOU>PV>IP	0.1621	0.0015	0.0004	Full mediation
OT>PV>IP	0.0098	0.0318	0.0002	Partial mediation

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Figure 2: Summaries of the result from CFA

Notes: * $P < 0.05$, ns= not significant

Discussions and implication

5.1. Discussion

The present research showed eight hypotheses in the conceptual framework. Seven hypotheses were significant, and one was not significant. The finding showed that the construct of technology acceptance model (perceived usefulness and perceived ease of use) can apply in the beauty and personal care products online to predict intention to purchase. The H2, and H4 were confirmed with the original study of the technology acceptance model (Davis, 1989; Venkatesh & Davis, 2000). The H2, H3, and H4 also confirmed previous studies that perceived usefulness and perceived ease of use played an important role to inform consumers to understand the value of technology (Chen et al., 2018; El-Haddadeh et al., 2019; Haba et al., 2017). The measure of the constructs can explain that consumers using online shopping made them save time, find products more quickly, get more information about beauty and personal care products. It also implied that consumers thought using online shopping was convenient and easy to interact with vendors. However, the result found H1 was contrast with the theory that perceived usefulness was directly influenced intention to purchase (Davis, 1989).

Hypothesis 5 found that perceived ease of use was significant with online trust. The result confirmed with previous studies that consumers who have knowledge about online platforms or experience in purchasing online were trust online (Eneizan et al., 2020; Primanda et al., 2020; Sarkar et al., 2020).

H6 H7 and H8 were significant. The result implied that online trust was an extension of technology acceptance model. The result implied that consumers trust online because they perceived value of beauty and personal products

as well as online shopping. The result also found that online trust had a direct effect on the intention to purchase. The result complied with previous studies that claimed that online trust was the predictor of perceived value and intention to purchase for online shopping, ecommerce (Islam et al., 2021; Servera-Francés & Piqueras-Tomás, 2019; Ying et al., 2021).

The research urged question whether perceived value was a mediator of perceived usefulness, perceived ease of use, and online trust. The bootstrap method was applied to find direct effect and indirect effect between a predictor variable and dependent variables (Preacher & Hyes, 2004). The result showed that perceived value was a mediator of perceived ease of use (full mediation) and online trust (partial mediation). The result implied that perceived value plays an important role to convey a message between the independent variable (perceived ease of use and online trust) and the dependent variable (intention to purchase) in the case of beauty and personal care products online.

5.2. Implication

5.2.1. Theoretical implication

The variable of the technology acceptance model (perceived usefulness and perceived ease of use) had a direct effect on attitude (Davis, 1989). This research derived previous studies and replaced attitude with perceived value. The finding showed that it was significant. Moreover, the perceived value was fit with the conceptual framework to find behavioral intention to purchase beauty and personal care products online. Furthermore, scholars added online trust as an extension variable of the technology acceptance model. The finding was significant. Therefore, this research contributed to the new framework for technology

adoption in the case of beauty and personal care products online.

5.2.2. Practical implication

This research contributed to beauty and personal care products online sector even better. E.g. the researchers or practitioners such as marketers, vendors should inform more about the value of products such as price, quality, time, and services of beauty and personal care products. Likewise, a convenient platform should have a price comparison between shops in online shopping. Thus, consumers will perceive that the platform is useful and convenient. Online shopping has many ways to increase intention to purchase beauty and personal care products. For instance, to increase value and trust of skin, nail, hair products, online vendors need to show detail information as well as online review from customers.

Limitations and Future Studies

The present research worked very well; however, there are still some limitations. First, it is about the scope of the research. This research was conducted in Phnom Penh city only. Therefore, it cannot generalize in other parts of Cambodia as well as other countries due to people's knowledge in different areas, the perception toward beauty and personal care products online. Second, it was about time. This research was conducted during Covid-19, which is a new normal situation. Therefore, the answer maybe not the same as the normal situation. Finally, the research was conducted for only the case of beauty and personal care products online. Therefore, there are many categories in e-commerce that require future research conducts more research. Moreover, it would be better for future research if scholars do more research on variables of perceived usefulness, perceived ease of use, online trust, and online trust.

Conclusion

The present research which entitled beauty and personal care products online were essential for online shopping. Previous studies from related fields inspired the conceptual framework of this research. The technology acceptance model

(perceived usefulness and perceived ease of use) was used as a determinant of perceived value, and perceived value was determinant of intention to purchase. The scope of the research was limited to Phnom Penh City only. Furthermore, the qualification of the respondents must follow previous studies such as (1) having age at 18 years old, (2) living in Phnom Penh city, and (3) having experiences in purchase beauty and personal products online. The researcher used SPSS and Amos 23 to analyze the data. The result found that females were the majority in this sector, and most of them aged between 23 to 26 years old and had experienced purchasing beauty and personal products online 3 to 5 times. The finding also found that perceived usefulness, perceived ease of use and online trust were significant with perceived value, and perceived value was significant with intention to purchase. However, that does not mean that perceived value was a mediator of the conceptual framework. Therefore, the researcher used bootstrap method to find indirect effect. The result found that perceived value was the mediator of perceived ease of use and online trust. Finally, the researcher concluded that the variables of technology acceptance model, online trust, and perceived value could apply in beauty and personal care products online to predict the behavioral intention of the consumers.

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