Affecting of Online Comments on Impulse Buying in E-Distribution

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Abstract

Purpose: This study's purpose is to conduct empirical research on online comments affect Vietnamese consumers' impulsive buying in e-distribution. This study also considers affecting of browsing toward the urge to buy, and the urge to buy toward impulse buying in e-distribution. **Research design, data and methodology:** This study used the non-probability method to assemble data from 273 customers' online buying experiences via a Google Forms online survey. By using SmartPLS, the data were examined for reliability, convergent validity, discriminant validity of the variables, and proposed hypothesis testing. **Results:** The empirical study discovered that internet comments with utilitarian and hedonistic values had a positive effect on browsing, the urge to buy, and impulse purchases in e-distribution. Additionally, the result revealed that browsing had a positive influence on the urge to purchase. Likewise, the findings also disclosed that the urge to buy had a favorable effect on impulse buying. **Conclusions:** This study offered a thorough conceptual model of internet feedback influencing browsing, urge to buy, and impulsive purchases in e-distribution. Also, to increase impulsive buying, this study will assist e-distribution managers in concentrating on developing innovative marketing strategies and action plans that take into consideration consumers' internet reviews, browsing, and urge to buy.

Keywords : Online Comments, E-Distribution, Utilitarian Value, Hedonic Value, Browsing, Ugre to Buy, Impulse Buying

JEL Classification Code: M19, M30, M31

1. Introduction

In recent years, e-distribution has become one of the most significant means of distribution. Technology makes it possible for distributors to create a controlled and reliable supply chain. Using no tangible media, e-distribution enables customers to purchase goods and services from vendors on a site (Hsu, 2017; Mehta, 2008). According to Lim and Shiode (2011), the internet has a significant impact on distribution. When combined with online buying, the distribution system can increase both cost benefits and reliability of service. Furthermore, in the last ten years, e-commerce has grown significantly in all of the major markets, and various traditional businesses are expanding their internet distribution channel to deliver a somewhat more comprehensive selection for consumers (Melacini et al., 2018). The internet has become one of the distribution channels and it influences customers' product purchases (Hsu, 2017). Iftikhar and Iqbal (2021) stated that internet shopping is now a popular consumer trend due to the development of technology, worldwide, and network access. Hence, e-distribution managers are particularly concerned about how online shopping may affect a company's distribution channels. Besides, the internet distribution

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channel has been acknowledged as a crucial component of competitive success and has been seen as a strategic asset of a company (Gallaugher, 2002). Likewise, since it offers a new way to buy anything, online shopping has become increasingly popular throughout the world. By visiting a retailer's website where the products are displayed and information is provided, online customers can now purchase items (Moreno et al., 2022). Various businesses in Vietnam have been impacted as a result of the pandemic's calmer course, which has resulted in many changes and an economy that has had many ups and downs recently. In this environment, it was anticipated that e-distribution companies in particular would go out of business due to volatility, inflation, and constrained spending, but even online shopping did not experience this. Following the outbreak, online use increased. According to a Statista estimate, more than 51 million Vietnamese will shop online in 2022, an increase of 13.5% from the previous year, and the total amount spent will be $12.42 billion. Google and Bain & Company predict that by 2025, Vietnam's digital economy will be larger than the 52 billion USD barrier and rank third in the ASEAN region. Despite the fact that online purchasing has many benefits, many are apprehensive to do it. Because of this, when customers visit a website to make purchases, they are more likely to search for past customer reviews of the goods and services as well as merchants (Hong et al., 2021; Reimer & Benkenstein, 2016). In keeping with the aforementioned opinion, a frequent phenomenon causes customers to lose faith in online purchasing and significantly slows the growth of e-distribution is that when the products don't match the merchants' descriptions of them. Then, the e-distribution platform offers additional services like online comments. These online comments can give customers product information that may have an immediate impact on their purchasing choices (Chen et al., 2022; Fang et al., 2021).

Numerous research on internet comments and impulse purchasing have been conducted in e-distribution. For instance, the empirical study conducted by Fan and Zhang (2015) focuses on online comments and impulsive purchasing intent. Online reviews for browsing, browsing to the want to buy impulsively, and lastly the impulse to buy impulsively to impulsive purchase behavior were researched by Zhang et al. (2018) and Hong et al. (2021). Hewei (2022) researched internet comments and impulsive purchasing behavior. Little study has been done, particularly in Vietnam, on the effects of online comments on browsing, the desire to buy impulsively, and impulsive buying behavior. To fill this knowledge gap, this study's purpose is to conduct empirical research on online comments affect Vietnamese consumers' impulsive buying in e-distribution. This study also considers affecting of browsing toward urge to buy, and urge to buy toward impulse buying in e-distribution.

2. Literature Review

2.1. Online Comments (OC)

OC refers to any favorable or unfavorable customer feedback for retailers or items (Hennig-Thurau et al., 2004). OC describes the content in which customers use an online buying platform to share their personal opinions about the products or services being sold. OC is typical remarks on goods or services. These remarks are sent after customers buy goods or use services; they are typically text-based SMS messages that express personal thoughts, views, or feelings about goods or services (Hewei, 2022). OC, according to Dellarocas (2003), can inform potential customers and lessen uncertainties. Besides, consumers benefit from OC in a number of ways, including a reduction in their level of uncertainty, time savings when looking for a quality product, relief from their discontent, and increased opportunities to discover new items (Hussain et al., 2018). OC is a crucial marketing technique for retailers because they have the potential to attract a sizable audience across the entire internet (Baber et al., 2016). Online retailers often respect customer feedback as a crucial component of their marketing strategy. Consumers' purchasing decisions are influenced by the informational value and presentation of internet ratings, which take into account factors like price, credibility, and informational value, according to studies by Mumuni et al. (2020) and Nagar (2016). E-distribution retailers actively take advantage of positive reviews to create demand and boost sales. Retailers often try to attract customers' attention by responding to their comments with information about recent events and promotional features (Chen & Ku, 2021).

Consumers' OC is divided into two groups: utilitarian value and hedonistic value (Hong et al., 2021; Zhang et al., 2018). Utilitarian value (UV) is consumers' assessment of the amount to which internet feedback can be useful and meet their demands (Zhang et al., 2018). Likewise, UV is also an evaluation of the entire functional advantages and costs. When using internet shopping for a certain task, like considering a buy, UV is essential such as considering the product, service, and price features before the actual purchase (Overby & Lee, 2006). Hedonic value (HV) is defined as customers' assessments of how much value and pleasure they can derive from internet feedback (Zhang et al., 2018). Besides, HV is also described as a holistic assessment of experiencing rewards and costs. Instead of just buying to get a job done, consumers frequently shop to enjoy the experience (Overby & Lee, 2006).

2.2. Browsing (BR)

BR refers to ongoing information seeking lacking particular buying intentions (Bloch et al., 1989). In this

research, BR refers to consumers' information-seeking and scanning behaviors that are not specifically motivated by a desire to buy something. These activities entail looking through all of the content created by marketers as well as user-submitted reviews on shopping websites (Zhang et al., 2018). Hu (2019) stated that consumers frequently pay attention to customer reviews when BR e-commerce websites since they are thought of as valuable and reliable information. UV of information seeking, according to Wang (2010), is positively correlated with customers' inclination to conduct internet information searches. Besides, Zhang et al. (2018) debated that when consumers believe that internet reviews can provide them with important information, they seem to be more inclined to still browse them. According to Pöyry et al. (2013), clients are more inclined to browse if they enjoy it. Similarly, Zang et al. (2018) argued that customers who find feedback enjoyable and pleasurable are more inclined to continue BR them. The prior authors (e.g. Zhang et al., 2018) debated that UV of online comments and HV of online reviews both may affect BR. The following hypotheses are put up in light of the information above:

H1: UVOC and BR are positively related.
H2: HVOC and BR are positively correlated.

2.3. Urge to Buy (UB)

UB is a mood of want brought on by seeing something at a shop, such as a certain brand, model, or product (Badgaiyan & Verma, 2015). UB focuses on the sudden, uncontrollable desire to make a purchase (Zhang et al., 2018). Prior study has revealed that when consumers are exposed to environmental stimuli, they tend to make impulsive purchases (Verhagen & Van Dolen, 2011). People are more susceptible to being influenced by external cues when they are engaged in exploratory BR (Bloch et al., 1989). While perusing a time-consuming buying website, customers could feel pressured to make an impulsive purchase (Hong et al., 2021). Prior studies debated that BR influences UB (Hong et al., 2021; Verhagen & Van Dolen, 2011; Zhang et al., 2018). According to Chen and Ku (2021), through the proper tracking of reviews, consumers are made aware of the features of the product, which encourages impulsive purchases. Kalla and Arora (2011) contented that a consumer's online impulse purchase behavior may be influenced by their cognitive state, such as their perception of usefulness. Moreover, according to Cui et al. (2022) disclosed that shoppers' UV is positively correlated with their urge to make impulsive purchases. On the other side, consumers who have the propensity to buy with fun and happy aim frequently spend a lot of time perusing internet retailers, which results in impulsive purchases tend (Indrawati et al. 2022). The empirical findings of Indrawati

et al. (2022) also stated that shoppers' HV is related positively to impulsive buying tendencies. So, in this study, expecting when customers read online feedback on products, if the OC is helpful and satisfies their needs, they feel UB the item. Additionally, when consumers read reviews and ratings by other customers of items, if the internet reviews create fun and pleasure, consumers incline to UB. Therefore, the following hypotheses are given forth:

H3: BR and UB are positively related.
H4: UVOC and UB are positively related.
H5: HVOC and UB are positively correlated.

2.4. Impulse Buying (IB)

IB describes a sudden, intense, and ongoing want to buy that consumers feel without having a purchase plan or being aware of it (Rook, 1987). According to Beatty and Ferrell (1998), IB is made immediately without having any clear buying objectives in mind, such as fulfilling a demand or purchasing a particular product category. Consumers make IB after experiencing their desire to buy something without giving it much thought. Even though the UB may not always lead to IB because of contextual factors (like period, cash, and self-control) that may disturb the impulsive buying procedure (Lo et al., 2022). Nevertheless, the empirical findings of Moses et al. (2021) indicated that there is a positive association between UB and IB. Keep in line with earlier research on discriminating UB and actual IB behavior (Hong et al., 2021; Moses et al., 2021; Verhagen & Van Dolen, 2011; Zhang et al., 2018). This study also highlights the differences between the two factors. This means the more consumers' UB goods, the more they IB. On the other side, according to Wu et al. (2021), high-quality online feedback content has a significant influence on users' purchasing decisions and can help consumers improve their shopping intentions and behavior (Chen & Ku, 2021). Previous research contented that UV and IB are related (Chauhan et al., 2020). Likewise, prior studies also disclosed that HV and IB are associated (Chauhan et al., 2020; Indrawati et al., 2022; Widagdo & Roz, 2021). Based on previous studies, therefore, the current research suggests that UV and HV in consumers' internet feedback will cause consumers to make IB. As a result, the following hypotheses are developed:

H6: UB and IB are positively related.
H7: UVOC and IB are positively related.
H8: HVOC and IB are positively correlated.

Figure 1 exhibited the suggested conceptual model, which was based on the study's purpose and literature review.
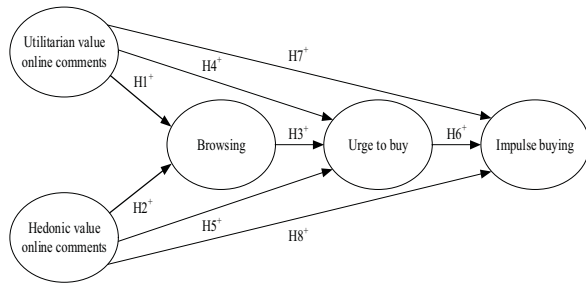
Figure 1: Suggested conceptual model

3. Methodology

3.1. Data Analysis

Analysis of the data, the partial least squared - PLS approach was applied. The benefits of employing the PLS approach include how it may be used with a small number of samples, non-normal data, very complicated models, and a focus on predictive studies (Sarstedt et al., 2022). In this analysis, a two-step process: measurement model and structural model, as advised by Hair et al. (2021).

Step 1: The measurement model was evaluated to test the reliability, convergent validity, and discriminant validity of the variables. The reliability was estimated by Cronbach's alpha (α) and composite reliability (CR). If α and CR index are greater than 0.7, then the reliability is verified. The convergent validity was estimated by outer loading (OL) and average variance extracted (AVE). If OL and AVE are higher than 0.5, the convergent validity is confirmed (Hair et al., 2021; Hair et al., 2014) The discriminant validity was estimated by the heterotrait-monotrait (HTMT) value. If the HTMT value is lower than 0.90, follow the discriminant validity is confirmed (Henseler et al., 2015).

Step 2: The structural model was measured to test hypotheses in the suggested conceptual model. To evaluate the structural model, the bootstrapping method was used and the hypothesis in the study model has statistical significance when the p-value is below 0.05.

3.2. Sampling and Data Gathering

The non-probability method was applied in this research. The key reason for applying the non-probability technique include the convenience of access, location close to the research situation, availability at a specific moment, or respondents' desire to participate (Etikan et al., 2016). Data

on customers' online buying experiences were gathered using Google Forms.

The minimal sample size needed for this study, according to Fan et al. (2016) should be 100 replies or 5 times the amount of items for the variables being studied. With 16 items to evaluate, the smallest sample size is 16 x 5 = 80. When respondents who answered the questionnaire using the same point scale were excluded, a total of 273 respondents were chosen for the study to guarantee the reliability of the sample size. Table 1 summarizes the demographics of the population.

Table 1: Population Summarizes

Profile of the respondents	Group	Percentage	Frequency
Age	18-25	38.8%	106
	26-40	42.1%	115
	> 40	19.1%	52
Gender	Male	48.7%	133
	Female	51.3%	140
Education	High school	5.9%	16
	Intermediate	10.6%	29
	University	66.7%	182
	Postgraduate	16.8%	46
Occupation	Student	45.1%	123
	Office staff	34.8%	95
	Freelance jobs	13.2%	36
	Others	7%	19

Within the useful sample as described in Table 1, in terms of age, there were 106 responses from groups 18-25 (38.8%), 115 responses from groups 26-40 (42.1%), and 52 responses from groups above 40 (19.1%). In terms of gender, there were 133 males (48.7%) and 140 females (51.3%). In terms of education, there were 16 responses at the high school level (5.9%), 29 responses at the intermediate level (10.6%), 182 responses at the university level (66.7%), and 46 responses at the postgraduate level (16.8%). In terms of occupation, there were 123 students (45.1%), 95 office staff (34.8%), 36 freelance jobs (13.2%), and 19 others (7%).

3.3. Measures

To fit the research setting, measurement scales of the variables from earlier research were evaluated. In the current study, we modified three UVOC items from Zhang et al. (2018), four HVOC indicators from Park et al. (2012), two browsing items, three UB indicators, and four IB indicators from Verhagen and Van Dolen (2011). Every item was scored using a Likert scale, with 1 being the strongest disagreement and 5 being the strongest agreement.

4. Results and Discussion

4.1. Results

4.1.1. Measurement Model

The results of the variable measures' reliability and convergent validity of variables were shown in Table 2. As described in Table 2, α value and CR index are greater than 0.7, then the reliability is verified. Likewise, OL and AVE are higher than 0.5; hence, the convergent validity is confirmed.

According to Table 3, for all variables, the HTMT values were below 0.90. As a result, the study's discriminant validity is supported.

Table 2: Reliability and Convergent Validity

Variables and items	OL	CR	AVE	α
Utilitarian value online comments (UVOC)		0.748	0.657	0.741
1. I think reading customers' internet feedback on purchasing websites is helpful	0.785			
2. The internet comments on the purchasing website are satisfactory to me	0.814			
3. While reading customers' internet feedback on the purchasing website, I discover the information I am seeking for	0.832			
Hedonic value online comments (HVOC)		0.873	0.694	0.855
1. I can forget my issues and relax when reading internet reviews left by customers on shopping websites	0.839			
2. I get quite delighted while reading internet reviews from customers on shopping websites	0.862			
3. I don't think it will take much time because I like reading internet reviews from customers on shopping sites	0.783			
4. For amusement, I read internet reviews from customers on shopping sites	0.847			
Browsing (BR)		0.810	0.823	0.787
1. I spend a significant amount of time on the online store's website just browsing	0.888			
2. I'd say the majority of my activity on the internet store is simply browsing	0.926			
Urge to buy (UB)		0.753	0.636	0.722
1. I had several spontaneous urges to make purchases on the online store	0.725			
2. While browsing the purchasing websites, I found a variety of items I wished to purchase despite not having them on my list	0.834			
3. I seemed to have an urgent need to purchase from the online retailer	0.829			
Impulse buying (IB)		0.821	0.623	0.799
1. I bought something unplanned on shopping sites	0.805			
2. I bought something spontaneous on shopping sites	0.830			
3. Before this purchasing site, I had no plans to make the purchase	0.682			
4. I was unable to resist buying on shopping sites	0.830			

Table 3: Discriminant Validity

	BR	HVOC	IB	UB	UVOC
BR					
HVOC	0.153				
IB	0.581	0.602			
UB	0.481	0.265	0.678		
UVOC	0.237	0.112	0.322	0.293	

4.1.2. Structural Model: Testing Hypotheses

To evaluate the structural model, the bootstrapping method was used. 5,000 subsamples were taken to check the hypotheses. Figure 2 depicted the structural model results. The findings disclosed that UVOC (H1: β = 0.187, p = 0.001 < 0.05) and HVOC (H2: β = 0.118, p = 0.045 < 0.05) both had a positively impacted on BR. Hence, H1 and H2 were supported. Likewise, BR (H3: β = 0.319, p = 0.000 < 0.05), UVOC (H4: β = 0.152, p = 0.006 < 0.05), and HVOC (H5: β = 0.189, p = 0.003 < 0.05) all had influenced positively UB. Thus, H3, H4, and H5 were verified. Besides, UB (H6: β = 0.427, p = 0.000 < 0.05), UVOC (H7: β = 0.145, p = 0.001 < 0.05), and HVOC (H8: β = 0.416, p = 0.000 < 0.05). Therefore, H6, H7, and H8 were confirmed (Table 4).

Table 4: Path Coefficients, T values, and P values

Hypotheses: Path	β	T values	P values	Supported
H1: UVOC → BR	0.187	3.302	0.001	Yes
H2: HVOC → BR	0.118	2.006	0.045	Yes
H3: BR → UB	0.319	6.207	0.000	Yes
H4: UVOC → UB	0.152	2.770	0.006	Yes
H5: HVOC → UB	0.189	3.004	0.003	Yes
H6: UB → IB	0.427	10.132	0.000	Yes
H7: UVOC → IB	0.145	3.300	0.001	Yes
H8: HVOC → IB	0.416	6.755	0.000	Yes

On the other side, the coefficient of determination (R^2) was used to assess the overall model fitness (R^2). The findings revealed that the R^2 value for the overall model was 48.8%, lower than 0.67, considered as a moderate influence (Chin, 1998); This means, a 48.8% variance in IB of respondents was explained by UB, UVOC, and HVOC. Next, UVOC, HVOC, and BR explained a 19.5% change in the UB. Besides, UVOC and HVOC described a 5% change in the BR (Figure 2).
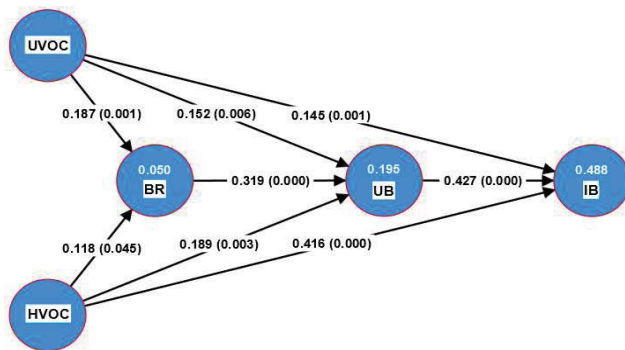

Figure 2: Structural Model Results

4.2. Discussion

The literature study did not address how internet comments affect browsing, shopping urges, and impulsive purchases in e-distribution. Thus, the notable research contributes to add of knowledge on internet reviews affecting browsing, shopping urges, and impulsive purchases in e-distribution. Additionally, through empirical research, this study provided a comprehensive conceptual model for this area.

The findings disclosed that the reliability and validity of variables (UVOC, HVOC, BR, UB, and IB) were verified. Likewise, the results also demonstrated that the eight hypotheses recommended in the research model were confirmed.

Findings unveiled that UVOC had a positive impact on the BR (H1: β = 0.187). Zhang et al. (2018) have verified this conclusion. This means the more consumers read with UVOC the more consumers will BR. Likewise, the findings also revealed that HVOC had a positively affected on the BR (H2: β = 0.118), as confirmed by Hong et al. (2021), and Zhang et al. (2018). This indicates the more consumers read with HVOC the more consumers BR. Moreover, this result also UVOC's impact is higher than HVOC in the BR. This can explain because most of the respondents are students.

The results also unveiled that BR positively impacted UB (H3: β = 0.319). Hong et al. (2021), Verhagen and Van Dolen (2011), and Zhang et al. (2018) all supported this conclusion. Therefore, promoting consumer BR will increase consumers' UB. Furthermore, this finding debated that UVOC affected

favorably UB (H4: β = 0.152). This outcome is consistent with Cui et al. (2022) showed that shoppers buying with UV will increase UB. Additionally, this result suggested that HVOC had a positive influence on UB (H5: β = 0.189). This outcome was consistent with the claim made by Moses et al. (2021) that clients purchasing with HV will boost UB. These results also demonstrated that the most influential element on customers' UB is BR.

These findings also revealed that UB and IB had a significant positively impacted (H6: β = 0.427). Moses et al. (2021), Hong et al. (202), and Verhagen and Van Dolen (2011) all provided evidence for this finding. This implies that the more the customer UB, the greater UB there is. Besides, the findings also debated that UVOC had a positive influence on IB (H7: β = 0.145). This result is consistent with the prediction expressed by Chauhan et al. (2020) that the number of shoppers purchasing with UV will enhance in IB. Moreover, the finding also manifested that HVOC had a positive impact on IB (H8: β = 0.416). This finding was also verified by Chauhan et al. (2020), Indrawati et al. (2022), and Widagdo and Roz (2021) that consumers buying with HV will promote IB. In addition, these results demonstrated that UB had the greatest impact on customers' IB.

5. Conclusions, Implications, and Limitations

5.1. Conclusions

The goal of this study is to carry out empirical research on how online comments influence Vietnamese customers' impulsive purchases in e-distribution. Through literature review, this study provided a comprehensive conceptual model of internet reviews affecting browsing, urge to buy, and impulsive purchases in e-distribution. Furthermore, the empirical study found that browsing, the desire to buy, and impulse purchases were positively influenced by internet comments with utilitarian and hedonistic values in e-distribution. Also, the outcome showed that browsing had a favorable effect on the urge to make a purchase. The results also disclosed that the urge to buy had a positive impact on impulse buying. The findings disclosed that the urge to buy was the most positive impact on impulse buying (H6: β = 0.427), followed by internet comments with hedonistic values (H8: β = 0.416) and utilitarian values (H7: β = 0.145). Likewise, the research revealed that browsing had the most favorable effect on the urge to buy (H3: β = 0.319), next by internet comments with hedonistic values (H5: β = 0.189) and utilitarian values (H4: β = 0.152). Besides, the research addressed that, internet feedback with utilitarian values affected browsing (H1: β = 0.187) more stronger than hedonistic values (H2: β = 0.118) in e-distribution.

5.2. Implications

This study contributes to the understanding of how internet feedback influences consumers' browsing, urge to buy, and impulse buying in e-distribution. Moreover, the study also developed a holistic conceptual model for this field through empirical research. Therefore, e-distribution managers concentrate on creating fresh marketing strategies and action plans that take into account shoppers' internet reviews, browsing, and urge to buy in order to boost impulsive purchasing.

The finding revealed that both UVOC and HVOC were a predictor of BR. Both consumers' UVOC and HVOC affected positively BR. This implies the importance of both consumers' UVOC and HVOC to BR. As a result, to boost consumers' BR, e-distribution managers should provide marketing plans to ensure that customers spend a large amount of time on the online store's website merely browsing and that customers report that browsing is the bulk of their activity there. Besides, the findings also disclosed that BR, UVOC, and HVOC all were an antecedent of UB; and all impacted positively UB. This suggests that BR, UVOC, and HVOC are significant to UB. Therefore, e-distribution managers should offer promotional campaigns to customers so that they have multiple spontaneous wants to make purchases on the internet business. These campaigns also make consumers will discover a range of items when searching shopping websites, even if they aren't on their list of things to buy. These will improve customers' UB. Additionally, it was discovered that UB, UVOC, and HVOC were all precursors to IB; and all impacted positively IB. This implicates the crucial of UB, UVOC, and HVOC to IB. Therefore, e-distribution managers should provide clients with action plans to encourage them to make IB on shopping websites. Action programs also provide the impression to customers are unable to resist buying on online shopping sites even when they have no prior preparations to do so.

5.3. Limitations

This research has some limitations, despite making significant contributions to both the literature and practice in e-distribution. First of all, the current study is limited to looking at clients' internet impulse purchases in Ho Chi Minh City, Vietnam. Therefore, in the future will be testing the proposed conceptual model in other cities in Vietnam. Second, this model has just explained a variation in impulse buys of 48.8%. Future studies should therefore include some other parameters to expand the range of explained variance of impulse purchasing in e-distribution.

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