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THE IMPACTS OF CONSUMPTION VALUE AND CONSUMERS' INNOVATIVENESS TOWARD NEW PRODUCT ADOPTION BEHAVIOR - THE CASE OF PERSONAL ELECTRONICS PRODUCTS IN HO CHI MINH CITY MARKET

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Publications on International journals:

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2. Du Thi Chung, Ngo Thi Thu, Tran Van Thi & Nguyen Ngoc Bich Tram (2021). Consumption Value, Consumer Innovativeness and New Product Adoption: Empirical Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 8(3), 1275–1286.

Publications on Vietnamese national journals:

1. Du Thi Chung (2020). A Comparision of Using CB-SEM and PLS-SEM for Testing Measurement Model of Consumer Innovativeness in Ho Chi Minh City. *Can Tho University Journal of Science.* 56(4), 178-189.

2. Du Thi Chung, Ngo Thi Thu, Tran Van Thi (2020). Consumer innovativeness and purchasing intention of new products: a study of personal electronic products in Ho Chi Minh City market. *Journal of Finance - Marketing, 58,* 1-12.

3. Du Thi Chung, Ngo Thi Thu, Tran Van Thi (2020). The effects of consumption values on new product adoption intention: a study of personal electronic industry in Ho Chi Minh City market. *Ho Chi Minh City Open University Journal of Science*, 15(8), 73-84.

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Du Thi Chung (2018). *The effect of consumption value on new smartphone adoption: An empirical evidence in Viet Nam*. Conference Proceedings 1st International Conference on Contemporary Issues In Econnomics, Management and Business (CIEMB), Ha Noi, 2018, p.2332-2347. Ha Noi: Labor-Social Publishing House.

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CHAPTER 1. OVERALL INTRODUCTION

1.1. The necessity of research problems

1.1.1. Practical context

The rapid development of science and technology makes the product life cycle shorter and shorter, so businesses had tried to improve their competitive advantage through developing new products (Beard & Easingwood, 1996). Steenkamp and Gielens (2003) also claim that launching a new product to the market is one of the most important marketing activities of a business. Firms rely on the success of new products for their profitability and survival in the competitive market (Singh, 2006). Many researchers also confirm that new product development is important for business, but it is a challenging, risky, and costly process (Golder & Tellis, 1993; Gielens & Steenkamp, 2007). Gourville (2006) confirms that the failure rate of a new product is up to 40% -90% while Schnurr (2005) found this rate is 50% or higher. The key reason behind the failure of new product launches is the lack of understanding of new product adoption behavior (Kaushik & Rahman, 2014). A vast stream of studies on the adoption of new products by consumers because the success of new products ultimately depends on the target market's adoption (Hauser, Tellis, & Griffin, 2006). Several studies found consumers in different countries have different responses to consumption value, consumer innovativeness and new product adoption behavior. For this purpose, it is recommended that firms should consider introducing new products for each country separately with different strategies. Therefore, the research of new product adoption behavior in Ho Chi Minh City, one of the biggest markets in Vietnam country has a practical meaningfulness and necessity.

1.1.2. Theoretical context

Consumer value-driven decision-making has been one of the major themes in consumer behavior research (Sheth et al., 1991). Prior studies also have paid much attention to the concept of consumer innovativeness because it

was considered as an important variable in the adoption of new products (Wood & Swait, 2002; Bartels & Reinders, 2011). Several previous studies tried to discover the relationship between consumption value, consumer innovativeness, and new product adoption however, however the results of these relationships as well as among levels of consumer innovativeness lack a degree of clarity and consensus. Further, as most new product diffusion studies are mainly conducted in the USA and Europe, a lack of studies in the Asian context, especially in emerging markets (Kaushik & Rahman, 2014). To date, no academic research appears to have considered simultaneously relationship among consumption value, consumer innate innovativeness, product-specific innovativeness, new product adoption intention, and new product adoption behavior. The results of the thesis are expected not only to have practical significance but also to contribute theoretically to supplement and enrich the research results related to the topic.

1.1.3. Determining research gaps

First, the research gap is the necessity to shed light on the measurement method of the consumption value in the context of new products. Although previous studies confirmed that the concept of consumer value is complex and should be measured as a high-order multi-dimensional concept, few studies argue about how to form the concept and measure it in the context of the new product research. Therefore, this is a theoretical gap that will be filled in this study.

Second, the literature review revealed a lack of research within the field of consumer innovativeness in the Asian context, as the majority of the studies were conducted in the developed countries' market (Chao et al., 2012). Further research must emphasize the development of new scales with key constructs that can be a good and strong predictor of new product adoption in Asian emerging markets.

Third, there is a gap in studies evaluating the relationship between to intention adopt new products and behavior to adopt new products. Previous

studies also only focused on a single factor such as new product adoption intention or adoption behavior, very few studies clarified the relationship between these two concepts (Art et al., 2011), so there is a theoretical gap to clarify the results of the empirical impact of adoption intention on new product adoption behavior (Kaushik and Rahman, 2014).

Fourth, there is a theoretical gap about the lack of studies that simultaneously evaluate the direct and indirect effects of consumption value, consumer innovativeness on new product adoption behavior.

1.2. Research objectives

As a result, this research addresses the key objectives as followings:

First, developing the measure of scales: consumption value, innate innovativeness, product-specific innovativeness, new product adoption intention, and adoption behavior, the case of personal electronic products in Ho Chi Minh City market.

Second, building a structural model of relationships among constructs, including consumption value, innate innovativeness, product-specific innovativeness, new product adoption intention, and adoption behavior, the case of personal electronics products in the Ho Chi Minh City market.

Third, testing and evaluating the direct and indirect impacts among constructs in the research model, including consumption value, innate innovativeness, product-specific innovativeness, new product adoption intention, and adoption behavior, the case of personal electronics products in Ho Chi Minh City market.

Fourth, as a result, suggesting some managerial implications for marketing managers to enhance new product adoption, both intention and actual adoption.

1.3. Research object

The main research object is the impacts of consumption value, innate innovativeness, product-specific innovativeness toward new product adoption intention and adoption behavior.

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The experts in qualitative research: senior researchers, practical experts in the field of marketing, communication; scientists, and lecturers.

The key informants are individuals who purchase personal electronic devices on his/her own. The key informants of the study were individuals above the age of 18 who are considered to have an independent financial status for purchasing new products.

1.4. Scope of research

Scope of research time: The idea of the research topic was formed in 2017 and the research report was completed in December 2020.

Scope of survey location: This study focuses on surveying consumers who are living/ working in Ho Chi Minh city

Scope of the product category: The research model has tested consumers of new products within a specific product category of personal electronic devices such as smartphones, wearable devices, and notebooks because of rapid changes of new technology, high-tech electronic products have been frequently shortened product life cycles and more new products are launched to the market more than other product lines.

1.5. Research Methodology

The mixed research approach will be adopted in this work through a combination of qualitative and quantitative research. Qualitative research was conducted through in-depth interviews with 8 experts, 2 focus group discussions with 16 consumers in total. For quantitative methods, the study will be conducted through 2 steps: preliminary and conclusive quantitative research, using a data set collected through face-to-face interviews with respondents. Cronbach's Alpha test and EFA were analyzed in the preliminary quantitative research by using SPSS. In the conclusive study, the final sample was 915 usable questionnaires for analysis by the partial least square structural equation model (PLS-SEM) which was suitable technique to test measurement model, structural equation model, multi-group analysis.

1.6. Contribution of the research

1.6.1. Academic contribution

First, this study identified that consumption value of new products was taken as a second-order multi-dimensions construct with five components, namely functional value, epistemic value, economic value, unique value, and emotional value. This scale is satisfied with reliability and validity.

Second, the research found the importance of product-specific innovativeness (PSI) in new product adoption. In other words, PSI is a better and stronger predictor of new product adoption behavior than consumer innate innovativeness. Product-specific innovativeness is found to fully mediate relationship between consumer innate innovativeness and toward new product adoption behavior.

Third, this research measures two stages of new product adoption including adoption intention and adoption behavior, instead of measuring behavior per se such as buying intention.

Fourth, this study fills the gaps in exploring the simultaneous influence of consumption value, consumer innovativeness toward new product adoption behavior. Consumption value has a positive effect on both consumer innate innovativeness, product-specific innovativeness as well as new product adoption intention and new product adoption behavior. This study goes a further step to confirm mediation roles of product-specific innovativeness between consumption value and new product adoption behavior. The results confirm that consumption value is a factor that promotes product-specific innovativeness and thereby increases new product adoption behavior. This result supports theoretical models related to the causal relationships between value - attitude - behavior or cognitive - attitude - behavior model.

1.6.2. Practical contributions

This study investigates the effect of consumption value and consumer innovativeness on consumer adoption of new personal technology devices. The study showed consumption value and consumer innovativeness are important predictors in new product adoption. Thereby, the managerial implications of improving activities to increase new product adoption of target marketing when launching a new product.

1.7. Research structure

This study's structure includes five chapters: (1) Overall introduction, (2) Literature review and research model, (3) Research design, (4) Results and discussion, and (5) Conclusions and management implications.

CHAPTER 2. LITERATURE REVIEW AND RESEARCH MODEL

2.1. Theoretical Background

2.1.1. Theories related to consumption value

2.1.1.1. Value-based marketing theory

Marketing activities are the entire business activities of a business oriented towards customers (Kotler et al., 2010). Gallarza et al. (2011) confirmed that the concept of value is the foundation for marketing theories and consumer behavior. Marketing 3.0 era takes the value perspective as the core concept to build value-based marketing strategies. In the field of marketing, the concept of value is considered as customer value (Sánchez-Fernández and Iniesta-Bonillo, 2007). While previous studies have focused the context of organizational behavior, customer value and consumer value studies are still limited in number (Morar, 2015). Lobasenko (2017) argues that the main research directions related to consumer behavior or individual customers) should focus on studies

on consumption value because this is an important foundation for marketing decisions if businesses' target are individual customers (consumers).

2.1.1.2. Utilitarian and hedonic value theory

Babin et al. (1994) developed a value scale that assessed consumers' evaluations of a shopping experience along the dimensions: (1) *utilitarian value:* instrumental, task-related, rational, functional, cognitive, and a means to an end; and (2) *hedonic value:* reflecting the entertainment and emotional worth of shopping; non-instrumental, experiential, and affective. These studies of the utilitarian and hedonic dimensions of value served as a basis for further research into the multi-dimensional nature of the concept.

2.1.1.3. Consumption-value theory

The theory of consumption value (Sheth et al.,1991) states that the multifaceted consumer choice - to buy or not to buy, to choose one type of product or service over another, and to choose one brand over another - entails a variety of forms of value. These forms of value can be categorized as functional, social, emotional, epistemic, and conditional. According to Sheth et al. (1991), this theory rests on three fundamental propositions: (i) that market choice is a function of multiple values; (ii) that these forms of value make differential contributions in any given choice situation; and (iii) that the forms of value are independent. This theory provides the foundation for creating a comprehensive model of multiple consumption values.

2.1.2. Theories related to consumer innovativeness

2.1.2.1. The Big Five Model

This model is widely used both in the fields of psychology and behavioral sciences (Barrick & Mount, 1991). The big-five personality traits consist of five dimensions: 1) extraversion, 2) agreeableness, 3) conscientiousness, 4)

emotional stability, and 5) openness to experience, and open-minded personality with an interest in new things, people with this personality are sensitive, responsive, creative, and curious (Costa & McCrae, 1992). Many scholars treat consumer innovativeness as a personality trait or characteristic of any individual that differentiates them from others. According to this perspective, consumer innovativeness simply refers to individual personality traits (Goldsmith & Hofacker, 1991).

2.1.2.2. Diffusion of Innovation Theory

Diffusion of innovation refers to the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 2003, p 11). Rogers (2003) suggests four aspects influencing individuals' adoption decisions, including characteristics of innovations, communication channels, consumer innovativeness, and social system. Basing on consumer innovativeness, adopters of an innovation are divided into five categories: innovators, early adopters, early majority, late majority, and laggards. Consumer innovativeness is seen as a stimulus to market dynamism (Hirschman, 1980). The new product adoption of innovative consumers will promote the behavior of other consumer groups (Jeong et al., 2016).

2.1.3. Theories related to consumer behavior

2.1.3.1. Theory of Reasoned Action - TRA

The basic content of TRA shows that an individual's actual behavior is determined by their intention to perform the behavior, where behavioral intention is influenced by attitude towards the behavior and subjective norm (Fishbein and Ajzen, 1975). Attitudes towards behavior are expressed in beliefs and judgments about the results of that behavior, while subjective

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norms are understood as perceptions of others or social pressures about whether the individual should perform the behavior (Ajzen, 1991).

2.1.3.2. Theory of Planned Behaviour - TPB

Similar to TRA theory, the central factor of TPB is still intention to perform or behavioral intention. Behavioral intention is the key factor that motivates behavior that demonstrates efforts to overcome any difficulties and has a clear plan to perform the behavior (Ajzen, 1991). In addition to the two predictors of behavioral intention, attitude toward behavior and subjective norm, Ajzen (1991) added the concept of perceived behavioral control. According to TPB theory, the attitude towards the behavior has positive effect on subjective norm and perception of behavioral control. As a general rule, the more certain the intention to perform the behavior, the higher the chance that the behavior will be performed.

2.1.3.3. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) Davis (1985) explains the acceptance behavior of technology/computer/information systems. Based on the TRA theory, the TAM model examines exogenous variables such as perceived ease of use and perceived usefulness and their impact on attitudes and intentions to use the technology. However, the starting point of TAM theory is to explain the acceptance and application of technology by organizations to achieve better performance in business.

2.1.3.4. Value-Attitude-Behavior Theory

According to Homer and Kahle (1988), values influence behaviors both directly and indirectly through attitudes. However, the main feature of this model is its emphasis on the mediating role of attitudes on the values and behaviors relationship. Hence, this model can be visually depicted as a causal sequence:

value - attitude - behavior. Value-attitude-model (VAB) was adopted in this work by examining how consumers' perception of new product (value) affects their attitudes towards the new product (attitudes), which in turn influence consumers' new product adoption (behavior).

2.2. Research's constructs

2.2.1. Consumption value

The question of why we buy what we buy is a fundamental issue in consumer behavior, marketing, and economics literature. Consumption value perceptions capture consumer utilities along several dimensions, such as emotional value, value-for-money, and quality. Consumption value is viewed as a multi-dimensional construct and is the aggregation of perceptions of various consumption values. Consumption value is understood as the total assessment of an individual based on the perceived values through the purchase, possession and use of new products to satisfy personal goals or values that he or she desires. want to achieve.

2.2.2. Consumer innate innovativeness

Consumer innate innovativeness (CII) is defined in this study as a personality trait that may be interpreted as a willingness to change and openness to new experiences in life (Hurt et al., 1977). This concept is widely acknowledged and applied in previous studies (Chao et al., 2013).

2.2.3. Product-specific innovativeness

Prior research suggests that considering consumer innovativeness to be general across domains can be problematic (Labay & Kinnear, 1981). Product-specific innovativeness was adopted in this study, refers to the propensity of consumer innovativeness of within a certain product.

2.2.4. New product adoption intention

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The intention to perform the behavior is typically a predecessor of actual behavior (Fishbein & Ajzen, 2010). Adoption intention refers to a consumers' desire to purchase/adopt a new product soon. It relates to the consumer's state of mind before actual behavior has occurred and is based on the information and perceptions of the consumer at that time.

2.2.5. New product adoption behavior

Although this definition implies the consumer's purchase behavior, both purchase intentions and actual purchase behavior have been used interchangeably to reflect adoption (Jamieson and Bass, 1989). Adoption behavior also refers to the purchase of an innovation and making full use of new products. (Rogers, 2003). Adoption behavior of new products is often measured in two main ways: level of ownership and relative time of adoption.

2.3. Other concepts used in this work

2.3.1. Personal electronics products

A piece of electronic equipment that is small and easy to carry. Mobile device types are diversifying into classes such as smartphones, tablet PCs, and wearable devices (Yang et al., 2016). Because of rapid technology development, high-tech electronic products have more new products introduced to the market each year.

2.3.2. New product

This study focuses on incremental innovation products. Incremental innovation products cover the rest 5 categories of innovative products and services by Booz and Hamilton (1982).

2.4. Some empirical studies

2.4.1. Effects of consumption value on new product adoption

The studies on the consumption value of new products and the impact of the consumption value on the acceptance of new products are limited in number. In previous studies (Hur et al., 2012, Wu and Chang, 2016), consumption value is a complex and multi-directional concept, but all studies consider the components of consumption value as antecedent variables that have direct influences on new product adoption. When the consumption value components are used to test the model, the conclusion for the overall consumption value factor is a paradox in the study (Spiteri and Dion, 2004). Therefore, the research results will not be convincing when confirms the impact of consumption value on the behavioral outcomes.

2.4.2. Effects of consumer innovativeness on new product adoption

Due to the complexity and conceptual richness, recent studies have attempted to clarify the role of consumer innovativeness levels/types in explaining new product adoption behavior. new by consumers. The experimental results show an unclear impact between innate innovativeness, domain-specific innovativeness on the intention to accept new products and the behavior to adopt new products (Goldsmith, Freiden, & Eastman, 1995; Im, Bayus, & Mason, 2003).

2.4.3. Effect of consumption value, consumer innovativeness on new product adoption

Some previous studies tried to discover the relationship between consumption value, consumer innovativeness and new product adoption however, the results of this relationship as well as among levels of consumer innovativeness lack a degree of clarity and consensus. To date, no academic research appears to have considered simultaneously effects of consumption

value, consumer innate innovativeness, product-specific innovativeness on both new product adoption intention and new product adoption behavior.

2.4.4. Previous studies on measuring new product adoption

Previous research mostly measured new product adoption in main three ways: the relative time adoption; the number of new products owned and purchase intention. There have not been many studies investigating simultaneously relationship between new product adoption intention and new product adoption behavior.

2.5. Hypotheses Development

Basing on the theoretical background and some related empirical studies, research hypotheses and are proposed as follows:

H1: Consumption value has a positive influence on consumer innate innovativeness

H2: Consumption value has a positive influence on product-specific innovativeness

H3: Consumer innate innovativeness has a positive influence on product-specific innovativeness

H4: Consumer innate innovativeness has a positive influence on new product adoption intention

H5: Consumer innate innovativeness has a positive influence on new product adoption behavior

H6: Product-specific innovativeness has a positive influence on new product adoption intention

H7: Product-specific innovativeness has a positive influence on new product adoption behavior

H8: Consumption value has a positive influence on new product adoption intention

H9: Consumption value has a positive influence on new product adoption behavior

H10: new product adoption intention has a positive influence on new product adoption behavior

2.6. Research Model
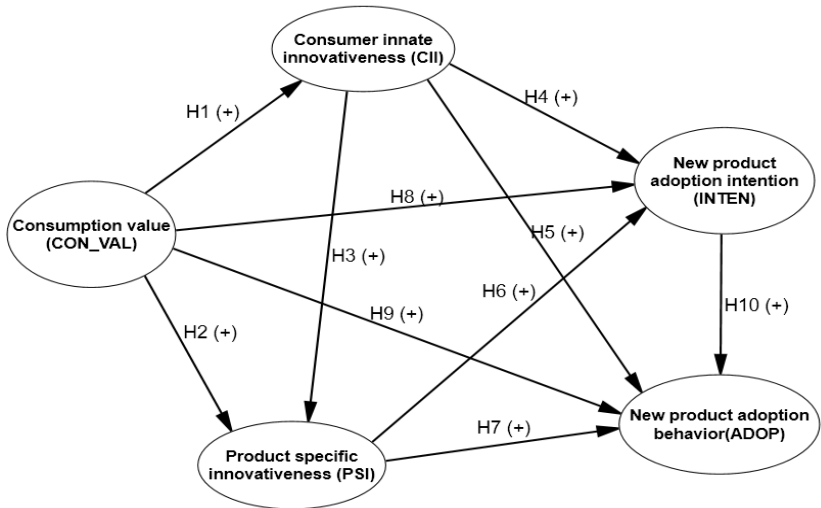
Figure 2.5: Proposed research model

CHƯƠNG 3. RESEARCH DESIGN

3.1. Research procedure

The overall research process is done through three main steps: qualitative research, preliminary quantitative, and formative quantitative research.
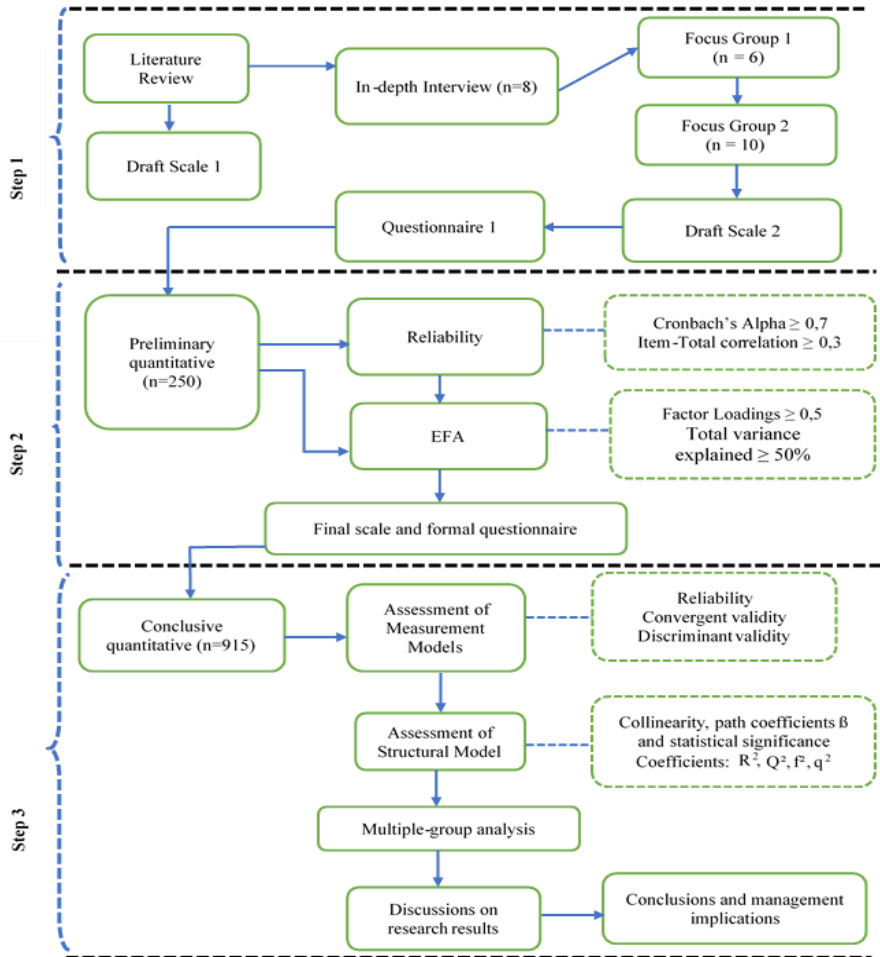
Figure 3.1: Proposed research process

3.2. Qualitative research

Qualitative research aims to explore and identify dimensions of consumption value, develop other constructs: consumer innate innovativeness,

product-specific innovativeness, and new product adoption, the case of personal electronic devices in Ho Chi Minh City market.

Qualitative research was conducted through in-depth interviews with 8 experts (lecturers, directors, managers) and two focus group discussions with 16 consumers in total.

The results of qualitative research: Results of group discussions and in-depth interviews have given out ideas that overlap with the content building scale. A total of 45 observed variables were used to measure 10 constructs. These scales were also justified for the specific domain as personal electronics product context and modified to better fit with the Vietnamese style.

3.3. Preliminary quantitative research

Preliminary quantitative research will be conducted to evaluate the scale which used in formal research. The data was collected from 250 respondents in Ho Chi Minh city (over 18 years old). All constructs are tested reliability through Cronbach's Alpha analysis and EFA.

Preliminary results: From 45 observed variables used to measure 10 constructs, the testing results show 10 items were rejected because Cronbach's Alpha coefficients are not satisfied. All constructs have Cronbach's Alpha of was greater than 0.7 and all corrected item-total correlations were greater than 0.3 and satisfy the criteria in the EFA are used in formal quantitative research.

3.4. Conclusive quantitative research

Quantitative research methodology is presented in detail, including objectives, data collection, data analysis. A data set of 915 consumers was collected through mall intercept interviewing at some big shopping malls in Ho Chi Minh City.

The measurement and structural models were evaluated using partial least squares SEM (PLS-SEM). PLS-SEM was chosen because when compared to covariance-based SEM (CB-SEM), it can work efficiently with a much smaller sample size, non-normality of data, and increased model complexity, such as modeling higher-order constructs, and can incorporate formative and reflective constructs (Hair et al., 2017). SmartPLS 3.0 software was used as a tool for PLS-SEM analysis to assess the reliability and validity (internal consistency, convergent, and discriminant validity) of the constructs. It was further used to test the proposed hypotheses, mediating effects, and multiple group analysis.

CHƯƠNG 4. RESEARCH RESULTS AND DISCUSSION

4.1. Sample characteristics

Demographic Variables		Frequency	Percent (%)
Gender	Male	478	52.2
	Female	437	47.8
Age	18 - 25	234	25.6
	26 - 35	359	39.2
	36 - 45	252	27.5
	>= 45	70	7.7
Occupation	Student	258	28.2
	Officer worker	380	41.5
	Trader	115	12.6
	Business Founder/Owner	44	4.8
	Other	118	12.9
Education Level	High school graduate	121	13.2
	College graduate	269	29.4
	University graduate	353	38.6
	Post - graduate	172	18.8

4.2. Checking Common Method Variance (CMV)

Harman's one-factor test approach and the VIF are used to check common

method variance test bias. Results indicated that CMV is not problematic in this study. Therefore, common method variance does not exist in this study

4.3. Evaluation of the measurement model

4.3.1. Reflective - formative second-order construct

Results present the reliability, convergent validity and discriminant validity of FUNC, EPIS, UNIQ, ECO, EMOT, SOC were acceptable.

Multicollinearity among the six dimensions of consumption values has not occurred because VIF values of all components were lower than 5. However, the SOC dimension finally was eliminated from the measurement model because the findings show that SOC did not have significant weights in the model of the consumption value.

4.3.2. First-order reflective constructs

The rest first-order reflective constructs including CII, PSI, INTEN as well as ADOP. The findings of the measurement model provided adequate evidence of reliability, convergent validity, and discriminant validity for 4 constructs.

4.3.3. All first-order reflective constructs

The analysis confirmed that all constructs had acceptable measurement properties on both reliability and validity. The results demonstrated that all outer loadings exceeded the threshold value of 0.7, indicating that the variance in each indicator was mostly explained by its underlying latent variable. Furthermore, all latent constructs had composite reliability greater than the recommended value of 0.7. The convergent validity was supported by the AVE values of all latent constructs, which were well above the required minimum level of 0.50. The square root of the AVE for each construct was higher than the corresponding inter-construct correlations, confirming the discriminant validity.

4.4. Results of structural equation model evaluation

4.4.1. Collinearity assessment

According to the results of the study, the VIF between predictive variables and VIF of items are all less than 5, so results of the collinearity test show all the endogenous constructs in the model are not a serious problem.

4.4.2. Structural model path coefficients

Seven hypotheses are supported (p-value <=0,01), including H1, H2, H3, H7, H8, H9, H10, one hypothesis (H6) is accepted at a significance of 0.1 and 2 hypotheses are rejected, including H4, H5. Thus, CON_VAL has a positive effect on CII, PSI, INTEN, and ADOP. CII has a positive effect on PSI. PSI has a positive effect on both INTEN and ADOP. INTEN has a positive relationship with ADOP. These findings provide the confidence to confirm 8 the hypothesized relationships of the structural model.

Table 4.15: Results of testing hypotheses

Hypotheses	Sample Coefficient	Boostraps Coefficient	P Values	Conclusion
H1: CON_VAL→CII	0.409	0.409	0.000	Supported
H2: CON_VAL→PSI	0.328	0.328	0.000	Supported
H3: CII→PSI	0.108	0.109	0.001	Supported
H6: PSI→INTEN	0.048	0.048	0.082	Supported
H7: PSI → ADOP	0.235	0.235	0.000	Supported
H8:CON_VAL→INTEN	0.607	0.608	0.000	Supported
H9:CON_VAL→ADOP	0.476	0.476	0.000	Supported
H10: INTEN→ADOP	0.133	0.133	0.001	Supported

4.4.3. Coefficient of determination

Chin (1998) suggests that R² values of 0.67, 0.33, and 0.19 are substantial, moderate, and weak respectively R^2 and. The R^2 results show that the proposed model has moderate predictive relevance.

4.4.4. Effect size f^2

According to Cohen (1988), f² values of 0.35, 0.15, and 0.02 are considered large, medium, and small respectively. Thus, the f² index of consumption value is considered large and medium, while the f² of CII. PSI and INTEN are small.

4.4.5. Predictive relevance Q^2

Q^2 of CON_VAL, CII, PSI, INTEN are all greater than 0, indicating the predicted correlation of the path model for the dependable variables.

4.4.6. Effect size q^2

The results indicate that the CON_VAL, CII, PSI, and INTEN ($Q^2 > 0$), thus can moderately predict behavior to adopt the new product.

4.5. Results of mediation role

Product-specific innovativeness has a full mediation role between consumer innate innovativeness and new product adoption behavior.

Product-specific innovativeness has a partial mediation role between consumption value and new product adoption behavior.

New product adoption intention has a partial mediation role between consumption value and new product adoption behavior.

4.6. Multi-group analysis

Effect of consumption value on consumer innate innovativeness (Male < Female); Effect of consumption value on product-specific innovativeness (Male < Female); Effect of consumption value on new product adoption behavior (Male > Female); Effect of consumption value on new product adoption intention (High income > Low income); Effect of consumption value on new product adoption behavior (High income > Low income).

4.7. Discussion

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4.7.1. Measurement scale

The findings suggest that consumption value is referred to as a second-order construct with five components as formative indicators, including functional value, unique value, epistemic value, economical value, emotional value. Consumer innate innovativeness: Modified from Hurt et al.'s (1977) scale, the final scale result was measured with 4 items. Product-specific innovativeness: Modified from DSI scale (Goldsmith & Hofacker, 1991). New product adoption intention and new product adoption behavior are distinguished constructs.

4.7.2. Results of effect relationship among constructs

H1 and H2 are supported, it means consumption value has a positive effect on both the consumer innate innovativeness and the product-specific innovativeness. The result also confirms there is a positive impact of the consumption value on both the new product adoption intention and adoption behavior. These findings support the V-A-B theory (Homer & Kahle, 1988).

H3 is supported, it means consumer innate innovativeness has a positive effect on product-specific innovativeness. The results suggest that consumer innate innovativeness is the best predictor of product-specific innovativeness. Roehrich et al. (2003) report that consumer innate innovativeness is highly related to domain-specific innovativeness, that is, consumers who have a high level of consumer innate innovativeness tend to have a high level of domain-specific innovativeness as well, and the results of the study support this suggestion. The product-specific innovativeness has a fully mediating role in the relationship between consumption value and new product adoption behavior. This result is consistent with the theory of the V-A-B model.

Hypotheses H4 and H5 are not accepted. This result also reflects the psychology of Vietnamese consumers in new product adoption. This is relatively consistent with previous studies of consumer innate innovativeness does not affect both new product adoption intention and behavior (Im et al., 2007; Chao et al., 2012).

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H6 and H7 are supported, it means product-specific innovativeness was found to have a positive relationship with both new product adoption intention and behavior. The major contribution of this study is to clarify the theoretical relationship between consumer innate innovativeness and new product adoption behavior through product-specific innovativeness. This study provides evidence that consumer innate innovativeness is not the appropriate predictor of new product adoption. This research adds to the body of knowledge on the conceptualization of consumer innovativeness and understanding of know-how consumer innovativeness influences new product adoption. At the same time, the results are similar to the V-A-B model when the consumption value is seen as a factor affecting new product adoption behavior through product-specific innovativeness.

H8 and H9 are supported, it means consumption value has a positive effect on new product adoption intention and new product adoption behavior. These results conform to previous studies that the hedonic and utilitarian functions of products are important to consumers (Hirschman & Holbrook, 1982; Holbrook, 2006). This finding support with the consumption value theories (Sheth et al., 1991; Sweeney & Soutar, 2001) and V-A-B model.

H10 is accepted, it means new product adoption intention has a positive impact on the new product adoption behaviors. This result is similar to the background theories of TRA, TPB, TAM.

CHAPTER 5. CONCLUSIONS AND MANAGERIAL IMPLICATIONS
5.1. Conclusion

The scales of consumer innate innovativeness, product-specific innovativeness, intention to adopt new products, and new product adoption behavior all satisfy the requirements for reliability and validity of the scale.

The structural model test results show that 8 hypotheses of the proposed model are 8 accepted, in which 7 hypotheses are statistically significant at 1% (p-value < 0.01), including H1, H2, H3, H7, H8, H9, H10, and hypothesis H6 is

accepted at the statistical significance level 0,1 (p-value< 0.1). Two hypotheses are not supported in this study are hypothesis H4 and H5.

5.2. Managerial implications

5.2.1. Implications from testing effects of consumption value

To provide/create correctly and increase consumption value for new products, businesses need to rely on the components that create/contribute to consumption value. According to the research results, the component with the strongest contribution is the functional value ($\beta = 0.402$); next is epistemic value ($\beta = 0.332$); unique value ($\beta = 0.315$), economic value ($\beta = 0.314$) and emotional value ($\beta = 0.227$).

5.2.2. Implications from testing effects of consumers' innovativeness

Firms should try to identify innovators at a time when launching new products. For introducing new products, marketers should use product-specific innovativeness to best predict consumers' adoption behavior in a specific product category.

5.2.3. Implications from multi-group analysis for gender and income variables

The results of the multi-group analysis show that marketers should focus on the group of high-income men to create and communicate the consumption value of new products because this group tends to adopt the new products sooner if the perception of the consumption value is higher.

5.3. The limitations and research directions

Firstly, due to the limitation of research resources, the thesis only collects data at the same time on the intention to accept and the behavior of accepting new products (cross-sectional study) while there is much disagreement about how to measure behavioral intention and actual behavior. This study recommends that further research take a longitudinal approach, which would enable the examination of the effect of adoptive intention on adoption behavior. Further studies may continue to look at another measure or step in new product adoption such as post-adoption.

Second, this study only collects consumer's data in Ho Chi Minh City urban areas, so people in these areas can easily access new products. Therefore, future researchers enroll subjects from a statistical population that accurately represents the entire population.

Third, the study only examines the new product adoption but has not mentioned new products that are launched by new enterprises that consumer had bought other products before or those who did not or not. This means this study ignores the factor related to brand as brand love, brand trust and brand loyalty.

Fourth, this study based on the main theory of Sheth et al. (1991) to develop the components of consumption value. Further studies may consider other theories or add appropriate, such as after-sales component.

Fifth, consumer innovation is also a complex concept, the following studies can continue to follow integrating model to determine the most suitable consumer innovativeness dimension that predicts new product adoption behavior.