EMPIRICAL ARTICLE

# Gender differences in the linkage of online patronage behavior with TV-and-online shopping values

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**Abstract** The main purpose of this study is to investigate gender differences in the linkage of online patronage behavior with multi-channel shopping values in context of TV-and-online retailing. Data collected from 226 respondents in Taiwan are tested against the research model using the partial least squares (PLS) approach. The empirical result shows that utilitarian and hedonic TV shopping values have indirect positive effects on consumer online patronage intention through their associated online counterparts. Additionally, both utilitarian and hedonic TV shopping values are found to influence their associated online counterparts more strongly for men than for women. The findings of this study provide several important implications for the research and practice of multi-channel retail service.

**Keywords** Online purchase behavior · TV-and-online retailing · Utilitarian shopping value · Hedonic shopping value

# 1 Introduction

One of the most dramatic trends in the shopping environment during the last decade concerns the proliferation of channels that customers can use to interact with retailers (Neslin et al. 2006). Since the mid-1990s, multi-channel retailing has dramatically increased because of traditional retailers selling over the Internet (Metters and Walton 2007). In the context of multi-channel retailing, retailers provide consumers with purchase opportunities through various channels, such as traditional brick-and-mortar stores, catalogs, online storefronts, kiosks, wireless channels, and TV shopping channels. As Schröder and Zaharia (2008) noted,

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multi-channel retailers can expand the scope of their sales market in geographical, time-related, and goods-related terms. However, the key issue for multi-channel retailers concerns optimal satisfaction of customer needs by simultaneously offering customers multiple channels for alternative utilization (Alba et al. 1997; Mathwick et al. 2002; Dholakia et al. 2005; Schröder and Zaharia 2008). As such, practitioners and academics must strive to understand the factors that affect customer purchase behaviors within a multi-channel retail context.

The proliferation of broadband communication, cable TV, and interactive TV have encouraged many retailers in Taiwan and many other countries to take advantage of both TV shopping channels and virtual storefronts to market their products. TV-commerce is expected to change individual purchasing styles and create new business opportunities for providers (Yu et al. 2005). In recent years, the Taiwan TV shopping market has dramatically grown, and continues to expand with yearly growth rate of 20%; an increase in the number of shopping channels available to consumers and changing consumer attitudes toward shopping channels contributed to the strong growth (Market Update 2009). Taiwan's TV shopping channels have also shown greater flexibility and creativity than their foreign counterparts and are developing beyond simple retail sales by offering a broad range of services (Taiwan Review 2005). Almost all the TV shopping channel operators in Taiwan offer online shopping services. Namely, they adopt a TV-and-online retailing model.

In the TV-and-online retail context, consumer purchase behaviors will be affected by both TV-commerce and online channels in terms of shopping values. For example, consumers can gather information about the products such as price and style information from the Internet and/or TV, and then purchase the products from either of the two retail channels. Considering that TV-and-online retailing is going to prosper in Taiwan and many other countries and that consumer purchase behaviors in a single retailing may be different from those in a multi-channel retailing, there is a need for research to develop and validate a model of consumer online patronage behaviors in the TV-and-online retail context.

Although prior studies have investigated consumer behaviors in the context of brick-and-mortar retailing (Carpenter 2008), online retailing (e.g., Gefen et al. 2003; Koo 2006; O'Brien 2010; Huarng et al. 2010), brick-and-click retailing (e.g., Schröder and Zaharia 2008; Van Baal and Dach 2005; Balasubramanian et al. 2005), and online-and-mobile retailing (Lin 2011), few studies have explored the factors influencing consumer patronage behaviors in TV-and-online retailing from the perspective of shopping values. Clark (1997) classified two dominant multichannel retailers in the current online market: click-and-mortars and catalog-andonline retailers, implying that the prosperous phenomenon of TV-and-online retailing has rarely been researched in recent years. Furthermore, as Noble et al. (2005) noted, researchers have examined both utilitarian and hedonic values in single-channel studies, but little multi-channel utilization behavior research on these values has been undertaken. In addition, few studies have been conducted to examine the gender differences in the influence of multi-channel shopping values on online patronage behavior. Therefore, a research question arises about how gender difference moderates the influence of TV-and-online shopping values on consumer online patronage intention in a TV-and-online retail context.

According to the research question, the main objective of this study is to investigate if gender differences can moderate the influence of TV-and-online shopping values on online patronage intention in the multi-channel retailing context. This empirical study will be useful to researchers in developing and testing theories relating to TV-and-online retailing, as well as to practitioners in understanding TV-and-online retailing strategies. The remainder of this article is organized as follows. First, the literature on hedonic and utilitarian shopping values is reviewed, followed by elaboration on the research model and hypotheses. Finally, this study discusses the hypotheses testing results and the theoretical and practical implications of the findings for multi-channel retailing.

#### 2 Theoretical foundation

Motivation theorists suggest that motivation is the driving force by which humans achieve their goals. Motivation includes intrinsic and extrinsic motivations. Extrinsic motivation refers to motivation that comes from outside an individual. Specifically, extrinsic motivation drives an individual to do things for external rewards (such as money, grades, or prizes) or pressures (such as threat of punishment), rather than for the fun of it. In contrast, intrinsic motivation refers to motivation that is driven by an interest or enjoyment in the task itself, and comes from inside an individual rather than from any external or outside rewards. That is, intrinsic motivation drives an individual to do things just for the fun of it, or because he or she believes it is a good or right thing to do. Some prior studies have found that intrinsic and extrinsic motivations are determinants of IT use (e.g., Teo et al. 1999; Shin 2009).

Similarly, previous research also contends that both utilitarian and hedonic motivations influence the decision-making behavior of consumers (e.g., Dhar and Wertenbroch 2000; To et al. 2007; Childers et al. 2001). Utilitarian motivation is defined as mission critical, rational, decision effective, and goal-oriented (Hirschman and Holbrook 1982; Batra and Ahtola 1991; Engel et al. 1993; To et al. 2007), whereas hedonic motivation refers to consumption behaviors related to the search for happiness, fantasy, awakening, sensuality, and enjoyment (Hirschman and Holbrook 1982). Hence, utilitarian motivation is a form of extrinsic motivation and hedonic motivation is a form of intrinsic motivation.

Previous research suggests that the shopping experience provides consumers with a combination of utilitarian and hedonic shopping values (e.g., Babin et al. 1994; Babin and Darden 1995; Chandon et al. 2000; Holbrook 1994; Klein and Ford 2003; Carpenter and Moore 2009; Jones et al. 2006). Consumers perceive utilitarian value through acquiring the product that necessitated the shopping trip, and can simultaneously perceive hedonic value associated with enjoyment of the shopping experience itself (Carpenter 2008; Carpenter and Moore 2009). Utilitarian shopping values reflect the acquisition of products and/or information in an efficient manner, that is, the value received from the useful, high-information-quality, easy-to-use, and convenient aspects of the shopping experience, and therefore, it can be viewed as a more task-oriented, cognitive, and non-emotional shopping characteristic. However, hedonic shopping values reflect the value received from the multisensory, fantasy, and emotive aspects of the shopping experience (Babin et al. 1994; Holbrook and Hirschman 1982; Jones et al. 2006). As such, consumers may choose to shop online because of the convenience of locating and comparing merchants, evaluating price/quality ratios, and conserving temporal and psychological resources (Grewal et al. 2003; Mathwick et al. 2001); they may also choose to shop for entertainment purposes rather than simply for task completion (Babin et al. 1994; Kim 2002; Mathwick et al. 2001). Based on previous literature, utilitarian TV-and-online shopping value in this study is defined as the extent to which a consumer believes that using a particular TV-and-online shopping channel would enhance his or her shopping performance in terms of the acquisition of products and/or information, whereas hedonic TV-and-online shopping value is conceptualized as the degree to which a consumer perceives that using a particular TV-andonline shopping channel would be enjoyable, apart from any shopping performance consequences that may be anticipated.

Shopping values have been used as part of a theoretical framework in understanding consumer behaviors (e.g., Babin et al. 1994; Holbrook 1994, 1999; Noble et al. 2005; Jones et al. 2006; Carpenter 2008). Previous research has also supported the relationships between shopping value and important business outcomes, including satisfaction, word of mouth communication, patronage intention, and loyalty (e.g., Babin et al. 2005; Jones et al. 2006; Lin and Wang 2006; Wang 2008; Chiou 2004). A multi-channel retailer, which takes advantage of both TV and online channels, can provide consumers with a combination of utilitarian and hedonic shopping values on each of the individual channels. As such, both TV and online shopping values are expected to influence online patronage intention. Although the influence of utilitarian and hedonic shopping values on patronage/repatronage intention within a single-channel retail context has been well explored (e.g., Jones et al. 2006; Carpenter 2008; To et al. 2007; Wang 2008), the effect of these shopping values on online patronage intention within the TV-and-online retail environment has rarely been investigated. Furthermore, prior research suggests that there are gender differences in consumers' shopping motivations and behaviors (Huang and Yang 2010; McMahan et al. 2009; Dittmar et al. 2004; Yang and Wu 2006; Alreck and Settle 2002). This implies that gender difference may play a crucial role in influencing consumers' motivations and behaviors in the multi-channel retail context. However, previous research has not yet addressed the gender difference in the effect of multichannel shopping value on online patronage intention. Thus, this study is to investigate the gender differences in the influence of TV-and-online shopping values on online patronage intention in the multi-channel retail context. The following sections elaborate on the theory base and derive the hypotheses.

#### **3** Research model and hypotheses

### 3.1 Research model

The research model used to guide this study is shown in Fig. 1; it suggests that the TV-and-online shopping values of a multi-channel retailer affect its customers'

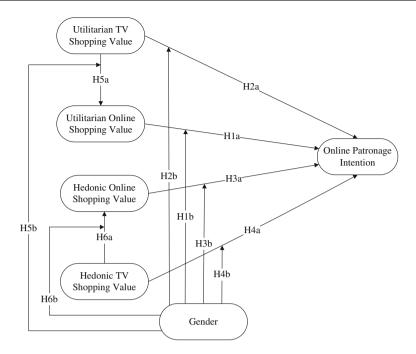


Fig. 1 Research model

online patronage intention. Within the traditional unidirectional TV shopping environment, many TV shoppers find it inconvenient to make purchases because of the fact that they are required to make a phone call to complete the purchase. In addition, searching for and/or buying products on the Internet often provides consumers with additional product information and even better prices. Hence, some consumers watch TV shopping programs to gather initial product information, and then move online to evaluate alternatives and make their purchase. Furthermore, given the seamless convenient customer purchasing services available on the Internet, customers may be less likely to gather product information online and then make their purchase through the call center of a TV shopping value perceptions on online patronage intention. This does not mean that online-shopping value will not affect TV patronage intentions in the long term. Instead, the main purpose of this study is to investigate the influence of TV-and-online shopping values on online patronage intention.

#### 3.2 Research hypotheses

Prior research suggests a link between utilitarian and hedonic shopping values, patronage intention, and loyalty (Jones et al. 2006). Babin et al. (1994) contend that consumers who perceive utilitarian value from their shopping experience are likely to have accomplished the shopping task of product acquisition. Empirical studies

also support the relationship between utilitarian shopping values and purchase intentions (e.g., Babin et al. 2005; Jones et al. 2006; Overby and Lee 2006). Thus, it is expected that utilitarian online shopping values will have a positive influence on online patronage intention. The following hypothesis is proposed.

**H1a** Utilitarian online shopping value has a positive influence on online patronage intention.

Furthermore, this study argues that in the TV-and-online retail context, the utilitarian shopping value provided by a retailer's TV shopping channel can positively influence its consumers' online patronage intentions—consumers who perceive high usefulness from various aspects of a retailer's TV shopping channel are more likely to search for, evaluate, and purchase products/services from the same retailer's Website than are those who perceive low usefulness from the same stimulus. Taking into account the fact that online shopping channels can provide sufficient product information and convenient product comparison mechanisms, some consumers may initially search for product information on TV shopping channels, and then move online to evaluate alternatives and make their purchase. Previous research also suggests that offline store images may influence online purchase intention in the click-and-mortar retail context (Verhagen and van Dolen 2009). This implies that consumers may transfer their utilitarian TV shopping experience or perception into online purchase intention in the TV-and-online retail setting. Thus, the following hypothesis is presented.

**H2a** Utilitarian TV shopping value has a positive influence on online patronage intention.

Additionally, prior research suggests that there are significant gender differences in online consumers' shopping motivations and behaviors (Huang and Yang 2010; McMahan et al. 2009). Huang and Yang (2010) found that male consumers tend to think more of the utilitarian values (e.g., convenience, lack of sociality, and cost savings) when shopping online than female peers. Alreck and Settle (2002) also found a similar result that male consumers are comparatively more motivated by functional factors than female peers. These results may imply that utilitarian onlineand-TV shopping value more strongly influences online patronage intention for men than for women in the context of online-and-TV retailing. Therefore, the following hypotheses are posited.

**H1b** Utilitarian online shopping value more strongly influences online patronage intention for men than for women.

**H2b** Utilitarian TV shopping value more strongly influences online patronage intention for men than for women.

Hedonic value is also associated with patronage intention because affective experiences within a store can be important antecedents of approach or avoidance motivations, such as patronage intentions (Donovan and Rossiter 1982). Previous research also provided empirical support for the positive relationship between hedonic shopping value and patronage intention (Wakefield and Barnes 1996;

Overby and Lee 2006). Thus, hedonic online shopping value is expected to have a positive influence on online patronage intention. The following hypothesis is proposed.

**H3a** Hedonic online shopping value has a positive influence on online patronage intention.

In addition, this study contends that in the TV-and-online retail context, the hedonic shopping value rendered by a retailer's TV shopping channel can positively affect its consumers' online patronage intention. That is, consumers who perceive high enjoyment from a retailer's TV shopping channels are more likely to purchase from the same retailer's electronic storefront than are those who perceive low enjoyment from the same stimulus. As noted earlier, previous research contends that offline store images may affect online purchase intention in the context of click-and-mortar retailing (Verhagen and van Dolen 2009). It is thus expected that consumers may also transfer their hedonic TV shopping experience or perception into online purchase intention in the context of TV-and-online retailing. The following hypothesis is presented.

**H4a** Hedonic TV shopping value has a positive influence on online patronage intention.

As noted earlier, prior studies contend that there are significant gender differences in online consumers' shopping motivations and behaviors (Huang and Yang 2010; McMahan et al. 2009). Huang and Yang (2010) found that female consumers tend to think more of the hedonic values (e.g., adventure, sociality, and fashion) when shopping online than male counterparts. Other studies also found a similar result that female consumers are comparatively more motivated by emotional factors than male peers (Dittmar et al. 2004; Yang and Wu 2006). These results may imply that hedonic online-and-TV shopping value more strongly influences online patronage intention for women than for men in an online-and-TV retail context. Based on the above reasoning, this study posits the following hypotheses:

**H3b** Hedonic online shopping value more strongly influences online patronage intention for women than for men.

**H4b** Hedonic TV shopping value more strongly influences online patronage intention for women than for men.

In addition to the direct influence of TV-and-online shopping values on online patronage intention, this study suggests that TV shopping value can indirectly influence online patronage intention through the mediation of online shopping values. Because TV shopping programs usually introduce few products at one time, the variety of product information provided during the programs is limited. As such, TV shoppers are likely to seek out additional information online to further evaluate alternatives and make purchase decisions. If consumers find the product information and shopping functions offered by a retailer's TV shopping channel attractive and useful, they may expect that the same retailer's online storefront will also provide similar utilitarian shopping values. Similarly, if consumers find the programs

rendered by a retailer's TV shopping channel enjoyable and interesting, they may tend to believe that the same retailer's Website will also provide similar hedonic shopping values.

Kim and Park (2005) suggest that consumer attitude toward the brick-and-mortar can be shifted to the online format of the retailer, and thus customers who had a shopping experience with the traditional retailer and gained more knowledge about product quality and service may trust the online store operated by the traditional retailer. Balabanis and Reynolds (2001) also empirically found the effect of a prior attitude toward the traditional retailer on the attitude toward the online version of the retailer. Thus, based on the above, this study hypothesizes that within the TV-and-online retail context, consumers who perceive high (low) utilitarian and hedonic values from the TV shopping channel of a retailer may expect that the online storefront of the same retailer will also provide high (low) utilitarian and hedonic values. The study presents the following hypotheses:

**H5a** Utilitarian TV shopping value has a positive influence on utilitarian online shopping value.

**H6a** Hedonic TV shopping value has a positive influence on hedonic online shopping value.

As to the gender difference, previous studies suggest that when shopping online, male consumers are more likely to emphasize the utilitarian values than female peers, whereas female consumers are more likely to focus on the hedonic values than male counterparts (Huang and Yang 2010). It is inferred that gender difference exists in the effect of TV shopping value on online shopping value. Therefore, the following hypotheses are proposed:

**H5b** Utilitarian TV shopping value more strongly influences utilitarian online shopping value for men than for women.

**H6b** Hedonic TV shopping value more strongly influences hedonic online shopping value for women than for men.

# 4 Methods

4.1 Measures of the constructs

Selected measurement items must represent the concept about which generalizations are to be made to ensure the content validity of the measurement (Bohmstedt 1970). The measures of the online-and-TV shopping values (i.e., utilitarian online shopping value, hedonic online shopping value, utilitarian TV shopping value, and hedonic TV shopping value) were adapted from previous shopping value scales (e.g., Babin et al. 1994; Griffin et al. 2000; Jones et al. 2006). Furthermore, items adapted from Venkatesh and Davis (2000) were used to measure online patronage intention. Likert scales (ranging from 1 to 7), with anchors ranging from *strongly disagree* to *strongly agree* were used for all construct items. Gender was measured as 1 (*female*) and 0

(*male*). To confirm the face validity of the measures used in this study, the survey items were pre-tested by a small number of shopping experts and were modified to fit the multi-channel retailing context studied. Furthermore, this study used 100 consumers of multi-channel retailers as the judging panel and they were then asked to respond to the following question for each construct scale: "Is this scale looks like a good measure of the construct that it is supposed to measure?" More than 95% of the panelists all agree that each scale used in this study looks like a good measure of the construct that it is supposed to measure. Thus, the face validity of the measures has been confirmed. The survey items are listed in the Appendix.

### 4.2 Data collection

The purpose of this study focuses on the influence of multi-channel shopping values on online patronage intention. However, the theoretical development of multichannel consumer behavior is still in its infancy and there lacks of a sampling frame of TV-and-online channel consumers for random sampling. Thus, data used to test the research model were gathered from an online convenience sample of 226 consumers in Taiwan. Respondents were first asked whether they had ever used a specific multi-channel retailer's TV-and-online shopping channels. The item is "Do you ever used both TV and online shopping channels of a specific multi-channel retailer, such as ETMall TV shopping channel and its Website channel (www. etmall.com.tw), mono TV shopping channel and its Website channel (www. momoshop.com.tw), or viva TV shopping channel and its Website channel (www.vivatv.com.tw)?" If they replied in the affirmative, they were invited to participate in the survey. Respondents were asked to write down the name of the TV-and-online retailer they had used to search for product information and/or make a purchase. The respondents were also instructed to answer all questions by assessing the retailer they had identified. Because the measures for online shopping values and TV shopping values (i.e., utilitarian/hedonic online shopping value and utilitarian/hedonic TV shopping value) were adapted from the same previous shopping value scales (e.g., Babin et al. 1994; Griffin et al. 2000; Jones et al. 2006), the two measures were inevitably similar to each other. However, to alleviate respondent confusion regarding these similarities, all respondents were specifically advised of the differences between the two measures prior to completing the questionnaire. For each question, respondents were asked to circle the response that best described their degree of agreement. Respondents ranged from 18 to 52 years of age. Of the respondents, 102 (45.1%) were male and 124 (54.9%) were female, 105 (46.5%) had completed one college or university degree. Most of the respondents had more than 5 years of Internet usage experience (71.5%).

#### 5 Data analysis and results

The empirical data were analyzed using the partial least squares (PLS) with bootstrapping as re-sampling method. Previous research has suggested that PLS with bootstrapping does not require the data to have a multivariate normal distribution, is less demanding in terms of sample size (e.g., Bhattacherjee and Sanford 2006; Hsieh et al. 2008; Wakefield et al. 2008), and is more appropriate when the research model is in an early stage of development and has not been tested extensively (e.g., Zhu and Kraemer 2005; Zhu et al. 2006). Given the early stage of the development of multi-channel consumer behavior theory and the medium sample size, PLS with bootstrapping was the preferred technique for data analysis in this study. SmartPLS software was used for the data analysis of this study, which contained two steps. In the first step, all measurement models were examined for their psychometric properties, whereas the second step focused on testing the research model and hypotheses.

# 5.1 Measurement model

Assessment of the measurement model involved evaluations of reliability, convergent validity, and discriminant validity of the construct measures. As shown in Table 1, composite reliability exceeded 0.9 for each of the five construct measures. Convergent validity of the construct measures was examined using average variance extracted (AVE) and factor loadings. As shown in Table 1, the AVE for each construct exceeded the recommended level of 0.50, which means that more than one half of the variances observed in the items were accounted for by their hypothesized constructs. Furthermore, all of the item factor loadings were higher than the recommended level of 0.70, demonstrating convergent validity. To examine discriminant validity, this study compared the shared variances between factors with the AVE of the individual factors (Fornell and Larcker 1981). This analysis indicated that the shared variances between factors were lower than the AVE of the individual factors, confirming discriminant validity (see Table 1). Thus, the measurement model demonstrates adequate reliability, convergent validity, and discriminant validity.

# 5.2 Structural model

This study proceeded to test the path significances using a bootstrapping resampling technique with 300 sub-samples. Properties of the causal paths, including path

	Construct Composite reliability HOSV LIOSV OPI HTSV LITSV							
Construct	Composite reliability	HOSV	UOSV	OPI	HTSV	UTSV		
HOSV	0.95	0.74						
UOSV	0.96	0.47	0.86					
OPI	0.94	0.55	0.56	0.90				
HTSV	0.94	0.62	0.29	0.36	0.71			
UTSV	0.97	0.41	0.44	0.39	0.43	0.88		

Table 1 Reliability, convergent validity, and discriminant validity

Diagonal elements show the AVE for that construct; off-diagonal elements are the shared variance *HOSV* hedonic online shopping value, *UOSV* utilitarian online shopping value, *OPI* online patronage intention, *HTSV* hedonic TV shopping value, *UTSV* utilitarian TV shopping value

Dependent variable	Independent variable	Path coefficient	$R^2$	
Online patronage	(H1a) Utilitarian online shopping value	0.453*	0.671	
intention	(H2a) Utilitarian TV shopping value	0.065		
	(H3a) Hedonic online shopping value	0.358*		
	(H4a) Hedonic TV shopping value	0.017		
	(H1b) Utilitarian online shopping value × Gender	-0.135		
	(H2b) Utilitarian TV shopping value × Gender	0.111		
	(H3b) Hedonic online shopping value × Gender	-0.011		
	(H4b) Hedonic TV shopping value × Gender	0.012		
Utilitarian online	(H5a) Utilitarian TV shopping value	0.634*	0.469	
shopping value	(H5b) Utilitarian TV shopping value $\times$ Gender	-0.157*		
Hedonic online	(H6a) Hedonic TV shopping value	0.765*	0.636	
shopping value	(H6b) Hedonic TV shopping value $\times$ Gender	-0.129*		

Table 2 Statistical results of the structural model

\* p < 0.05

coefficients and *p*-values, are shown in Table 2. Both utilitarian online shopping value and hedonic online shopping value had a significant positive influence on online patronage intention ( $\beta = 0.453$ , p < 0.05 and  $\beta = 0.358$ , p < 0.05, respectively). Thus, H1a and H3a were supported. Utilitarian TV shopping value had a significant positive effect on utilitarian online shopping value ( $\beta = 0.634$ , p < 0.05), providing support for H5a. Also, hedonic TV shopping value was found to have a significant positive effect on hedonic online shopping value ( $\beta = 0.765$ , p < 0.05), supporting H6a. Unexpectedly, both utilitarian TV shopping value and hedonic TV shopping value had an insignificant influence on online patronage intention ( $\beta = 0.065$  and  $\beta = 0.017$ , respectively). Thus, H2a and H4a were not supported.

Additionally, gender difference was found to moderate the effect of utilitarian TV shopping value on utilitarian online shopping value ( $\beta = -0.157$ ); that is, utilitarian TV shopping value more strongly influences utilitarian online shopping value for men than for women. Therefore, H5b was supported. On the other hand, gender difference was also observed to moderate the influence of hedonic TV shopping value on hedonic online shopping value ( $\beta = -0.129$ ). However, the negative path coefficient means that hedonic TV shopping value more strongly affects hedonic online shopping value for men than for women. Thus, H6b was not supported. Unexpectedly, gender difference was found not to moderate the effects of utilitarian online shopping value, utilitarian TV shopping value, hedonic online shopping value, and hedonic TV shopping value on online patronage intention ( $\beta = -0.135$ ,  $\beta = 0.111$ ,  $\beta = -0.011$ , and  $\beta = 0.012$ , respectively). Thus, H1b, H2b, H3b, and H4b were not supported. Altogether, 67.1% of the variance in online shopping value, and 63.6% of the variance in hedonic online shopping value were accounted for by the

research model. The results also indicate that hedonic online shopping value exerted the strongest total effect on online patronage intention among the four predictors.

#### 6 Discussion and implications

This study presents and validates a model of consumer online patronage behavior for the context of TV-and-online retailing from the perspective of shopping values. The model explains how TV-and-online shopping values affect consumer online patronage intention, and how gender differences moderate the effect of utilitarian and hedonic shopping values on online patronage intentions in a TV-and-online retail setting. The validated model provides several important implications for the research and practice of multi-channel retail service. The results indicate that both utilitarian and hedonic TV shopping values have an indirect positive effect on patronage intention through their associated online counterparts (i.e., utilitarian online shopping value and hedonic online shopping value, respectively). The findings are similar to prior studies that have found that consumers' attitude toward one channel of the retailer positively predicts attitude toward another version of the retailer (Kim and Park 2005; Balabanis and Reynolds 2001). Additionally, the results also indicate that utilitarian TV shopping value more strongly influences utilitarian online shopping value for men than for women, and that hedonic TV shopping value also more strongly influences hedonic online shopping value for men than for women.

This study found that utilitarian TV shopping value has a significant positive influence on utilitarian online shopping value, which, in turn, saliently affects online patronage intention. To increase customers' online purchase intentions through the TV-and-online retailer, the retailer should provide useful, convenient, and trustworthy shopping functions on its TV-and-online shopping channels, such as the offer of high-quality product and service information, popular product categories, and convenient and secure ordering process. On the other hand, this study also found that hedonic TV shopping value has a positive influence on hedonic online shopping value, which, in turn, significantly influences online patronage intention. Thus, a TV-and-online retailer should not only provide customers with utilitarian shopping functions but it should also offer customers with enjoyment and entertainment functions on its TV-and-online shopping channels. For example, TV-and-online retailers could hire interesting TV show hosts and enhance the playful elements in their TV shopping programs rather than just using famous show host's explanation or a beautiful model's demonstration. Once customers perceive high hedonic shopping values from a TV-and-online retailer, they will tend to believe that the online storefront of the same retailer can also provide high hedonic shopping values for them, and thus increase their intention to purchase through the retailer's online storefront.

As Kim and Park (2005) note, building positive attitude toward online and offline channels is important for the multi-channel retailers to increase online sales. The findings of this study imply that benefits and values of the existing reputation/image of the TV shopping channel can be transferred to the online channel. Thus, bringing

existing customers from TV channel to online channel is an important marketing approach for the TV-and-online retailers who have established positive reputation in the TV shopping market. TV-and-online retailers could use TV shopping channels as a marketing opportunity to increase the shopping value and brand awareness associated with their online storefronts, as well as to enhance their online sales. Given that the TV channel and online storefront appear as part of the same multi-channel retailing experience, TV-and-online retailers can introduce the most popular products with special discounts on their TV shopping channels to attract new customers. Once customers become accustomed to purchasing from the TV shopping channel of a multi-channel retailer, they may be inclined to seek out additional product information and make purchase orders through the same retailer's online storefront.

In addition to enhancing TV shopping values, TV-and-online retailers could also increase the utilitarian and hedonic shopping features of their online storefronts by improving their Websites' information quality (e.g., usefulness, timeliness, relevance, and accuracy), system quality (e.g., availability, ease of use, user-friendliness, and response time), service quality (e.g., tangibility, reliability, responsiveness, assurance, and empathy), playfulness (e.g., enjoyment, curiosity, and concentration) (DeLone and McLean 2003, 2004; Wang 2008; Moon and Kim 2001), store atmosphere (Verhagen and van Dolen 2009). These approaches can directly stimulate consumer online purchase intentions.

As expected, utilitarian TV shopping value was found to more strongly affect utilitarian online shopping value for men than for women in a TV-and-online retail context. However, hedonic TV shopping value was unexpectedly found to influence hedonic online shopping value more strongly for men than for women. These results confirm that there exists a gender difference in the influence of TV shopping value on online shopping value, which also represents a new finding in the field of multichannel retailing. The phenomenon may be because women tend to be impulse buyers in a TV-and-online retail setting. Namely, when watching TV shopping programs, women usually like to make instant purchase decisions, and are thus less eager to enjoy hedonic online shopping experiences and search for more information to make informed purchasing assessment through online shopping channels. This may be why both utilitarian and hedonic TV shopping values influence their associated online counterparts less strongly for women than for men.

Although both utilitarian and hedonic TV shopping values were found to have no direct impact on online patronage intention, they were found to have an indirect positive effect on online patronage intention through the respective mediation of utilitarian and hedonic online shopping values. This result implies that customers consider a TV-and-online retailer as an integrated system, and thus there may exist a cross-channel synergy between TV and online shopping channels in terms of shopping values. Based on the conceptualization of cross-channel synergy defined by Verhoef et al. (2007), cross-channel synergy in this study means that higher value perceptions toward search or purchase on a retailer's TV channel translate into higher value perceptions toward search or purchase on the same retailer's online channel. The results suggest that higher shopping value perceptions toward the

online channel shifted from value perceptions toward the TV channel can lead customers to use both TV and online channels for searching product and service information and use such information to confirm purchase in the online channel. As mentioned earlier, searching for and/or buying products on the Internet often provides consumers with additional product information and even better prices. Hence, some consumers watch TV shopping programs to gather initial product information, and then move online to evaluate alternatives and make their purchase. The co-existence of TV-and-online channels may create a synergy based on their complementary functions to effectively enhance consumer online shopping experience. Future research could investigate the synergy between TV and online shopping channels.

# 7 Conclusions and limitations

This study develops and validates a model to explain online patronage intention in the TV-and-online retail context from the perspective of shopping values. This study is also a pioneering effort to examine the gender differences in the linkage of online patronage behavior with multi-channel shopping values in the context of TV-andonline retailing. The study contributes to the relatively unexplored field of the effect of TV-and-online operations on online purchasing intentions. The contributions of this study to multi-channel retailing research are threefold. First, this study has successfully developed a model to explain the synergy between TV and online shopping channels, which has rarely been investigated in previous multi-channel retailing research. Second, both hedonic and utilitarian TV shopping values were found to have an indirect positive effect on online patronage intention through the medication of their associated online counterparts (i.e., hedonic online shopping value and utilitarian online shopping value, respectively). Third, utilitarian TV shopping value is observed to affect utilitarian online shopping value more strongly for men than for women, and hedonic TV shopping value is also found to influence hedonic online shopping value more strongly for men than for women. Finally, hedonic and utilitarian TV shopping values were found to have no direct effect on online patronage intention within the TV-and-online retail environment. The empirically validated model provides a useful framework for TV-and-online retailers to enact their marketing strategies and take advantage of the synergy between TV and online shopping channels.

Although this study has been conducted with methodological rigor, there are still some limitations that could be addressed in future studies. First, the findings and their implications refer to one single study in Taiwan. Caution must be exercised when attempting to generalize our findings and discussion to other geographical areas. As such, cross-cultural validation is needed to compare the findings of this study to other cultural groups. Second, this study did not explore the influence of online shopping value on TV channel sales. As noted earlier, the shopper exposed to the TV shopping venue will move online to purchase, but consumers exposed to the online shopping venue seldom make purchases through the TV venue. However, this may be true in the short term, but in the longer term exposure to a particular retailer (either through the TV venue or online venue) would affect the shopper's value perceptions of the retailer which could then influence patronage intention in either venue. Thus, future research could investigate how the synergy between TV and online shopping channels influences TV channel patronage intentions. Finally, the proposed model is cross-sectional; that is, it measures perceptions and intentions at a single time point. However, perceptions change over time as individuals gain experience (Venkatesh and Davis 1996; Venkatesh et al. 2003). Additional research efforts are needed to validate the proposed model within a longitudinal environment so as to enhance our understanding of the causality and the interrelationships between variables that are important to online patronage intention within the multichannel retailing context.

# Appendix

Measuring items used in this study

# Hedonic TV shopping value

- 1. This TV shopping experience was truly a joy.
- 2. I continued to shop on TV not because I had to, but because I wanted to.
- 3. Compared to other things I could have done, the time spent on this TV shopping was truly enjoyable.
- 4. I enjoyed this TV shopping experience for its own sake, not just for the items I may have purchased.
- 5. During the TV shopping experience, I felt the excitement of the hunt.
- 6. While shopping on TV, I felt a sense of adventure.
- 7. This TV shopping experience was not a very nice time out. (Reversed)

# Utilitarian TV shopping value

- 1. I accomplished just what I wanted to on this TV shopping experience.
- 2. I could not buy what I really needed on this TV shopping experience. (Reversed)
- 3. While shopping on TV, I found just the item (s) I was looking for.
- 4. I was disappointed with this TV shopping experience because I had to go to another store(s)/channel(s) to complete my shopping. (Reversed)

# Hedonic online shopping value

- 1. This online shopping experience was truly a joy.
- 2. I continued to shop online not because I had to, but because I wanted to.
- 3. Compared to other things I could have done, the time spent on this online shopping was truly enjoyable.

- 4. I enjoyed this online shopping experience for its own sake, not just for the items I may have purchased.
- 5. During the online shopping experience, I felt the excitement of the hunt.
- 6. While shopping online, I felt a sense of adventure.
- 7. This online shopping experience was not a very nice time out. (Reversed)

#### Utilitarian online shopping value

- 1. I accomplished just what I wanted to on this online shopping experience.
- 2. I could not buy what I really needed on this online shopping experience. (Reversed)
- 3. While shopping online, I found just the item (s) I was looking for.
- 4. I was disappointed with this online shopping experience because I had to go to another store(s)/channel(s) to complete my shopping. (Reversed)

#### Online patronage intention

- 1. I intend to purchase on this online storefront in the near future.
- 2. I predict that I would purchase on this online storefront in the near future.

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