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## Modeling Precursors of Impulsive Tourist Shopping Behavior: Evidence from Long-haul Chinese Outbound Tourists

Fang Meng <sup>a</sup>, Pei Zhang <sup>b</sup>, Hengyun Li <sup>c\*</sup>, Kevin Kam Fung So <sup>a</sup>

<sup>a</sup> School of Hotel, Restaurant and Tourism Management, University of South Carolina, Columbia, South Carolina, USA

<sup>b</sup> Department of Retailing and Tourism Management, University of Kentucky, Lexington, Kentucky, USA

<sup>c</sup> School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hong Kong SAR, China

\*Corresponding author: Hengyun Li neilhengyun.li@polyu.edu.hk

Fang Meng, Ph.D.

School of Hotel, Restaurant and Tourism Management

University of South Carolina

Columbia, South Carolina, 29208

**United States** 

Address: 701 Assembly Street, Columbia, SC, USA 29208

Tel: 803-777-0631

Email: fmeng@hrsm.sc.edu

Pei Zhang, Ph.D.

Department of Retailing and Tourism Management

University of Kentucky

Lexington, Kentucky

**United States** 

Email: Pei.Zhang@uky.edu

\*Hengyun Li, Ph.D. (Corresponding Author)

School of Hotel and Tourism Management,

The Hong Kong Polytechnic University,

Hong Kong SAR, China

Address: 17 Science Museum Road, TST East, Kowloon, Hong Kong

Tel: +852 3400 2167 Fax: +852 2362 9362

Email: neilhengyun.li@polyu.edu.hk

Kevin Kam Fung So, Ph.D.

School of Hotel, Restaurant and Tourism Management

University of South Carolina

Columbia, South Carolina, 29208

**United States** 

Address: 701 Assembly Street, Columbia, SC, USA 29208

Email: KEVINSO@hrsm.sc.edu

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# Modeling Precursors of Impulsive Tourist Shopping Behavior: Evidence from Long-haul Chinese Outbound Tourists

**Abstract:** Studies have examined tourism shopping in various aspects, but scarce research has specifically focused on impulsive shopping behavior of tourists, which is of particular relevance in the tourism settings. This study addresses this paucity by examining factors influencing impulsive tourist shopping urge and purchase from the aspects of tourist internal attribute, social influence, and product attribute. By examining Chinese long-haul tourists traveled outside Asia, the empirical results suggest that (1) impulsive trait, hedonic and materialistic tendency of tourists lead to impulsive urge and engagement in actual impulsive buying; (2) Shopping companion/social influences from family and relatives, peers (friends/colleagues) and shop assistants also affect the impulsive shopping urge; (3) Product brand variety shows significant effect on impulsive urge, while the influence of product price is insignificant; (4) Traveling with a shopping list or not moderates the relationship between impulsive urge and actual impulsive purchase. The study advances the theoretical understanding of tourist impulsive shopping behavior and provides marketing/managerial insights into Chinese overseas tourism market. **Keywords:** impulsive shopping, internal attribute, social influence, product attribute, shopping list

#### 1. Introduction

Shopping is an important and popular activity in tourism, and represents a vital component of the tourist experience. In 2015, shopping was ranked as the number one leisure/recreational activity for overseas tourists (86.8%) to the United States, with the average expenditure of \$375 per visitor, only lower than the lodging cost (\$465) and even more than the food spending (\$311) (NTTO, 2016). Many researchers argue that shopping is not only a primary motive for travel, but also a common and essential tourist activity (Yüksel, 2007; Lehto, Chen, & Silkes, 2014). As such, shopping has long been considered as an indispensable part of being a tourist, and serves as an important attraction for the destination (Zhang, Zhang, Yang, & Zhou, 2018; Sirakaya-Turk, Ekinci, & Martin, 2015). Similarly, UNWTO launched its first Global Report on Shopping Tourism in 2014, which provides insight into key success factors for destinations aiming to develop the segment of shopping tourism, highlighting the significance of such activity (UNWTO, 2014).

In terms of the specific market in tourism shopping, the Chinese market has experienced tremendous growth and purchase power in recent years. According to the UNWTO, Chinese outbound tourist arrivals reached 129 million with a total spending of US\$257.7 billion in 2017, ranking the first place in international tourism expenditure since 2012 (UNWTO, 2018). China was the largest international tourism market to the U.S. in terms of the spending and the fifth largest in terms of arrivals in 2017 (NTTO, 2017). Shopping was ranked as the number one tourist activity for Chinese tourists to the U.S. in 2015, with 89% of them shopped during their trips. Similarly, the European Travel Commission revealed that a quarter of Chinese travelers reported shopping as their primary expenditure, which accounted for approximately 30% of the

total trip spending (ETC, 2012). Therefore, it is of great importance to examine this fast-growing and vital market on tourist shopping behavior.

Shopping behavior has been widely discussed in the consumer literature as planned or impulsive purchase (Cobb & Hoyer, 1986; Rook & Hoch, 1985). Researchers suggest that shopping without specific intent may be more significant than the actual acquisition of products given that the impulse experience can provide a highly pleasurable involvement (Kesari & Atulkar, 2016; Sherry, 1990). Consequently, leisure shoppers, who experience high hedonic values, are more likely to involve in greater levels of impulse shopping (Chaturvedi, 2015). To a large extent, shopping tourists represent typical leisure shoppers yet in a more relaxing atmosphere away from their daily life, suggesting that impulsive purchase is particularly applicable and meaningful in tourism shopping context. For example, Timothy and Butler (1995) report that tourist shoppers are particularly motivated by hedonic and experiential values, as the desire and necessity for tourist shopping are based on the elements of relaxation and fleeing from mundane routine. On this basis, Meng and Xu (2012) propose a conceptual model that indicates tourist shopping behavior is a mixture of impulsive, planned, and experiential consumption behavior. Yu and Littrell (2005) conclude that impulsive shopping takes a large proportion in tourist shopping context.

However, despite the importance of impulsive shopping behavior, to date, the extant literature has only focused on general tourist shopping behavior. Most existing studies concentrate on: a) economic contribution of shopping generated from tourist spending (Turner & Reisinger, 2001; Chang, Yang, & Yu, 2006; Su, Min, Chen, & Swanger, 2017); b) tourist shopping motivation and values (Correia, Kozak, & Kim, 2018; Choi, Law, & Heo, 2017; Geuens, Vantomme, & Brengman, 2004; Kim, Chung, Lee, & Preis, 2015; Lehto, Cai, O'Leary,

& Huan, 2004); and c) tourist shopping experience and satisfaction/loyalty (Wong & Wan, 2013; Yüksel, 2007; Wong & Law, 2003; Sirakaya-Turk et al., 2015; Zhang et al., 2018). A review of the literature suggests that there is limited research examining the unique and prominent phenomenon of tourist impulsive shopping behavior. Specifically, a clear gap in the literature is the underlying factors triggering impulsive tourist shopping behavior. Therefore, to bridge this gap, this study represents one of the very first attempts to examine the impulsive tourist shopping behavior by modeling the relationship between the precursors and impulsive urge and actual impulsive purchase. The specific research objectives are as follows:

- 1. To examine the impact of tourist internal attributes (e.g., impulsive trait, hedonic tendency, and materialism), product attributes (e.g., brand variety, and price) and travel companions' social influence on tourists' impulsive urge to purchase during the trip;
- 2. To examine the relationship between the impulsive urge and actual impulsive purchase in the tourism shopping context;
- 3. To evaluate the moderating effect of tourists' shopping list on the relationship between impulsive urge and actual impulsive purchase in tourism shopping.
- 4. To provide the shopping behavioral characteristics of Chinese long-haul outbound tourists.

This study makes a unique contribution to the literature by advancing the theoretical and empirical understanding of tourist impulsive shopping behavior, and further extending the boundary of general impulsive buying theory into the tourism context. The particular focus on the Chinese overseas tourism market will also provide insights to academia and industry practitioners to better understand and serve this important tourism market.

## 2. Literature Review and Research Hypotheses

Early marketing literature simply describes impulse buying as unplanned purchasing (Cobb & Hoyer, 1986). However, this definition has been criticized for not capturing the full conceptual domain of the concept because an impulse purchase is not only unplanned, but also involves experiencing an urge to buy, which is felt suddenly and strongly and often irresistible (Beatty & Ferrell, 1998). Rook and Hoch (1985) propose the following five features of impulsive buying:

a) impulsive behavior involves a sudden and spontaneous desire to act, representing a clear departure from the previous ongoing behavior scream; b) impulse buying can cause an individual to feel temporarily out-of-control; c) consumer impulsivity is the psychological conflict and struggle that may ensue; d) impulse buying is that consumers will typically reduce their cognitive evaluation of product attributes; e) people often consume impulsively without regard to the consequences.

Moreover, consumer impulse buying has been pervasively studied in retailing, as well as in marketing and consumer behavior in general. Prior studies tend to model important antecedents, by including a set of situational variables (e.g., time and money availability and shopping list), individual difference variables (e.g., shopping enjoyment and impulsive trait), product variables (e.g., price and brand variety), as well as outcomes (e.g., positive and negative affect, felt urge to buy impulsively) (Beatty & Ferrell, 1998; Coley & Burgess, 2003; Lin & Chuang, 2004; Luo, 2005; Mohan, Sivakumaran, & Sharma, 2013; Peck & Childers, 2006; Stilley, Inman, & Wakefield, 2010; Tendai & Crispen, 2009; Badgaiyan & Verma, 2014). The next section provides a review of the relevant literature, leading to the development of the research framework and hypotheses that guide this investigation.

## 2.1 Impulsive Trait and Tourist Impulsive Shopping Urge

Impulsive trait (or consumer impulsiveness) is basic human trait which, in the shopping context, refers to the shopper's embodied tendency to both think and shop in a spontaneous, unreflective and immediate way (Omar & Kent, 2001). Shoppers with higher impulsiveness are more likely to experience spontaneous buying stimuli; consequently, they are more inclined to act on actual impulsive purchase. Impulsive urge is a construct proceeding actual impulsive purchase behavior. It is defined as a strong, spontaneous feeling to purchase something while in a retail setting (Flight, Rountree, & Beatty, 2012; Sharma, Sivakumaran, Marshall, 2010). Rook and Fisher (1995), in its seminal article, defined buying impulsiveness as "a consumer's tendency to buy spontaneously, unreflectively, immediately, and kinetically". They find significant relationships between buying impulsiveness and impulsive purchasing behavior. Such finding is successfully evidenced by more recent studies (Mihić & Kursan, 2010; Muruganantham & Bhakat, 2013; Peck & Childers, 2006; Wells, Parboteeah, & Valacich, 2011).

Furthermore, to measure impulsiveness from a consumer's perspective, Puri (1996) constructs and validates the Consumer Impulsiveness Scale (CIS) based on people's chronic values toward impulsiveness. Through three experiments, the author reports that urge to buy impulsively is influenced by consumer impulsive trait. Sharma, Sivakumaran, and Marshhall (2010) adopt Puri's CIS to examine the relationship between consumer impulsiveness and purchase decisions. The results demonstrate that consumers with higher scores of impulsiveness are likely to indulge in greater degree of impulse buying. Aggregately, the above evidence suggests:

H1: A tourist's impulsive trait is positively related to his/her impulsive urge on tourism shopping.

# 2.2 Hedonic Tendency and Tourist Impulsive Shopping Urge

Consumer literature suggests that people purchase or consume goods and services for two basic reasons: a) consummatory affective (hedonic) gratification (from sensory attributes), and b) instrumental, utilitarian reasons (Batra & Ahtola, 1991; Kang, Park-Poaps, 2010). Hedonic shopping tendency refers to consumer's leaning for hedonic shopping value which reflects shopping's potential entertainment and emotional worth (Vieira, Santini, & Araujo, 2018). Rather than stemming from task fulfillment, hedonic tendency results from fun and playfulness (Kesari & Atulkar, 2016) and is more subjective and personal than the utilitarian tendency. A tourist's quest for pleasurable shopping experience may be more significant than the acquisition of products (Yüksel, 2007). Tourists may view shopping experiences as entertainment or recreation (Sirakaya-Turk, Ekinci, & Martin, 2015). They often look for excitement and pleasure as well as seeking opportunities to interact with local people when shopping (Jones, 1999).

Research supports such notion that buying impulsively makes them feel a little freer and a little like doing something naughty, but relatively innocent (Muruganantham & Bhakat, 2013). Such feeling involves hedonic reasons of impulsive purchase including fun, fantasy, and social or emotional gratification (Kacen & Lee, 2002). Furthermore, consumer impulse buying is a hedonic need predominantly motivated by achievement of higher-stage needs loosely grouped around Maslow's hierarchy of needs (Hausman, 2000). Beatty and Ferrell (1998) also suggest that one's enjoyment of shopping aids in producing a positive feeling in shopping environment, which in turn influence one's urges to buy impulsively. Therefore, shoppers with strong hedonic desires may tend to be more impulsive when shopping. Accordingly, the following hypothesis is proposed:

H2: A tourist's hedonic tendency is positively related to his/her impulsive urge on tourism shopping.

## 2.3 Materialism and Tourist Impulsive Shopping Urge

The topic of materialism has generated wide academic discussions regarding its links with various social and psychological phenomena. Materialism refers to a devotion to material needs and desires, and "the construction and maintenance of the self through the acquisition and use of products, services, experiences, or relationships that are perceived to provide desirable symbolic value" (Shrum et al., 2013, p. 1180). Richins and Dawson (1992) claim that people holding strong material values place possessions and their acquisition at the center of their lives. They tend to value material possessions as a means of achieving happiness, and use them as indicators of their own and others' success (Moschis, 2017). Materialists have frequently been profiled as excessive consumers who are constantly looking toward their next purchase (Schor, 2014; Goldsmith & Clark, 2012). They repeatedly pursue material wealth and are acquisitive by nature (Podoshen, Li, & Zhang, 2011).

Based on Richins and Dawson's (1992) definition of materialism as a "possession-defined success", materialist people value possessions for the money they cost and their ability to confer status rather than by the satisfaction they yield. Therefore, people with high levels of materialism are prone to be spenders with comparatively higher urgency of numerous wants for consumer goods, as well as for services such as travel and recreation (Watson, 2003). Such tendency implies irrational and unplanned buying intentions, which in turn results in instances of impulse buying (Troisi, Christopher, & Marek, 2006). Consequently, their low inhibition to spend money and highly materialistic orientation could lead to buy-now-pay-later approach

(Omar, Rahim, Wel, & Alam, 2014), which is likely to lead to a more impulse buying. In sum, the following hypothesis is proposed:

H3: A tourist's level of materialism is positively related to his/her impulsive urge on tourism shopping.

## 2.4 Social Influence and Tourist Impulsive Shopping Urge

Shopping is inherently a social experience, and social influence has long been recognized as an important force shaping an individual's consumption behavior (Borges, Chebat, & Babin, 2010). An individual goes shopping either alone or with a companion or companions. Extant research demonstrates that companions change the shopping experience. For example, consumers shopping in groups visit more areas in a store and make more purchases both in volume and sales compared to those shopping alone (Sommer, Wynes, & Brinkley, 1992; Mangleburg, Doney, & Bristol, 2004). Rook's study (1987) on impulse purchasing "in a social environment (group versus solo buying) context" suggests that the presence of other persons in a purchasing situation is likely to have a normative influence on the purchase decision. In other words, when acting on impulse is socially appropriate and rational, consumers tend to have both a greater impulsive urge to buy and a greater likelihood of doing so (Kurt, Inman, & Argo, 2011).

The nature of the social influence depends on perceptions of the normative expectations of different social groups who hold different values and accordingly exert different influence (Luo, 2005). Impacts of different social groups have been discussed previously in both general shopping and impulse shopping literature. Firstly, the presence of family members during shopping may induce a sense of responsibility to both the family and others and consequently may discourage wastefulness and extravagance. To this extent, shoppers may consider impulsive

buying to be socially undesirable to family (Abrams, Marques, Bown, & Henson, 2000). The presence of family members thus may activate the normative value and therefore decreases the impulsive urge (Luo, 2005). Similarly, Wang and Xiao (2009) found that younger adults are more likely to spend impulsively and compulsively with credit indebtedness if they are in lack of social support especially from their families. Therefore, the following hypothesis is proposed:

*H4a:* Social influence of family and relatives is negatively related to tourist impulsive shopping urge.

Secondly, peer pressure is also a strong form of social influence. Peers can influence risky behavior, such as impulsive buying, by encouraging social consensus through minimizing perceptions of risks and maximizing perceptions of benefits (Roberts, Manolis, & Tanner, 2008). Peer group members, including co-workers/colleagues, may encourage spontaneity and the pursuit of immediate goals regardless of their longtime consequences, which may increase the urge to purchase (Luo, 2005). For example, researcher found that when teenagers tended to spend more when shopped with friends (Mangleburg, Doney, & Bristol, 2004). Furthermore, under the pressure of social desirability in workplace, socially anxious adolescents may exhibit greater impulse buying tendencies in order to avoid negative evaluation from peers in terms of the product and brands bought (Lin & Chen, 2012). Therefore, the following hypothesis is proposed:

H4b: Social influence of peers (friends/colleagues) is positively related to tourist impulsive shopping urge.

Thirdly, previous studies indicated that the helpfulness of in-store sales person in assisting shoppers had a positive impact on consumers' willingness to engage in unplanned buying (Mohan, Sivakumaran, & Sharma, 2013). In terms of the social impact of shop assistants

on consumer impulsive buying, Mattila and Wirtz (2008) report that employee assistance moderates the negative relationship between perceived crowding and impulse buying. In other words, the social interaction with the shop assistants conditions the relationship between consumers' perception of store crowdedness and impulsive purchase behaviors. Similarly, studies on the influence of situational factors on impulsive buying revealed that situational social factors such as promotion introduced by in-store sales persons will trigger consumers' urge to buy impulsively (e.g., Mihić & Kursan, 2010; Tendai & Crispen, 2009). Consequently, the following hypothesis is proposed:

H4c: Social influence of shop assistants is positively related to tourist impulsive shopping urge.

## 2.5 Product Attribute and Tourist Impulsive Shopping Urge

Studies suggest that variety seeking has a positive association with consumer impulsive buying behavior (Sharma et al., 2010). Customers who find wider range of products or brands are more likely to make spontaneous buying decisions as they may be attracted to unexpected products which cannot be easily accessed in their normal shopping environment (Park, Kim, Funches, Foxx, 2012). On the other hand, researchers find that international tourists favor a wider selection of products and brands when shopping in the U.S., which leads to unplanned spending on shopping (Xu & McGehee, 2012). Furthermore, increased opportunities of in-store browsing including time, money, and product availability positively influence shopper's intention to buy more (Jeon, 1992). Therefore, we proposed the following hypothesis: *H5a: Product brand variety is positively related to tourist impulsive urge*.

Price induced impulsive buying can be explained by the mental accounting activity proposed by Janakiraman and colleagues (2006), which denotes that the spending on certain essential items on a given shopping trip would influence the perceived amount available to spend on other goods, thus producing a congruent spillover effect. Therefore, perceived low price may lead to more unplanned buying as the budget for unplanned items tend to increase (Tendai & Crispen, 2009). Meanwhile, tourism shopping researchers indicate that competitive price of similar products is one of the strongest motives that tourists tend to engage in excessive buying when they travel to an international shopping destination (Correia, Kozak, & Kim, 2018). There, the following hypothesis is proposed:

H5b: Perceived low product price is positively related to tourist impulsive urge.

#### 2.6 Tourist Impulsive Shopping Urge and Impulsive Purchase

Research indicates that it is viable to consider consumers' decision and actual behavior separately (Amos, Holmes, & Keneson, 2014). For impulsive buying behavior, one of its immediate antecedents is impulsive urge. The concept of impulsive urge is driven from Rook's focus on the sudden, spontaneous urge or impulse felt to buy something (Rook, 1987). Previous researchers argue that preceding the actual impulse action, an individual experiences a felt urge to buy impulsively, which is a spontaneous and sudden state of desire upon encountering an object in the environment (Beatty & Ferrell, 1998; Sharma, Sivakumaran, & Marshall, 2010). With a higher impulsive urge, an individual's buying schedules is more receptive to sudden, unexpected purchasing ideas. His or her buying decision is more likely to be prompted by physical proximity to a desired product, dominated by subjective affect, or driven by immediate gratification (Sultan, Joireman, & Sprott, 2012). Beatty and Ferrell's research (1998) provide

evidence of the distinction between the constructs of impulsive urge and actual impulsive purchase. More importantly, impulsive urge appears to be a crucial intervening variable between an actual impulse purchase and several precursors. Therefore, the following hypothesis suggests:

H6: A tourist's impulsive urge is positively related to his/her act on impulsive purchase during tourism shopping.

## 2.7 The Moderation Effect of Shopping List

Although impulsive urge is powerful and sometimes irresistible, one is not always act upon it (Rook & Fisher, 1995). Actually, engagement in pre-trip activities takes effect on impulsive buying, in that higher engagement in pre-trip activities lead to lower impulsive shopping (Bellini, Cardinali, & Grandi, 2015). Shopping list is a self-regulatory pre-trip activity which not only serves as a memory aid (Block & Morwitz, 1999) but also acts as a self-control on un-necessary buying. Shopping list is usually considered to be a negative-impact antecedent of impulsive buying behavior. Geetha and Bharadhwaj (2016) argue that the presence of shopping list can greatly decrease the chance of impulsive buying. Their result is also consistent with previous studies in which consumers with shopping lists ended up spending less with fewer items than those without lists (Thomas and Garland, 1993; Block & Morwitz, 1999). Similarly, Bell and Colleagues report that shoppers who tend to obtain and collect product information in store are more likely to experience impulsive urge and engage in actual impulsive buying behavior (Bell, Corsten, & Knox, 2011). Therefore, the following hypothesis is suggested:

H7: The presence of shopping list negatively influences the relationship between impulsive urge and actual impulsive purchase in tourism shopping.

All hypotheses are proposed to capture and observe the effect of tourist internal attributes (e.g., impulsive trait, hedonic tendency, and materialism), product attributes (e.g., product brand variety and price), and shopping companions' social influence on impulsive urge, as well as the moderating effect of shopping list between impulsive urge and actual impulsive shopping behavior. The hypotheses are depicted in Figure 1.

#### <Insert Figure 1>

#### 3. Method

#### 3.1 Questionnaire Development

The research took a quantitative approach using a survey questionnaire. Two screening questions were asked at the beginning of the survey to ensure that all respondents have taken a leisure trip of at least three nights outside Asia in the past two years, and have spent 6,000RMB (approximately US\$1,000) on shopping during the trip. The threshold of \$1,000 on tourism shopping is also the average, representative expenditure of Chinese outbound tourists. In 2016, the total consumption by Chinese travelers reached \$109.8 billion, a \$900 average spending per person and represented the top expenditure worldwide (CTA, 2016). In 2016, the average Chinese tourist spent about 6,705 yuan (\$986) on shopping when traveling, down from 8,050 yuan in 2015 (Oliver Wyman Consulting, 2017).

Furthermore, the questionnaire included scales measuring the six theoretical constructs, namely impulsive trait, hedonic tendency, materialism, social influence (from shopping companions), impulsive urge, and actual impulsive purchase behavior. *Impulsive trait* was measured using nine items adopted from Rook and Fisher (1995). The original construct is

unidimensional with a reliability value of 0.88. Measurement of *hedonic tendency* included six items adopted from Hausman (2000). The original scale is also unidimensional with a reliability value of 0.86. The *materialism* scale was a subset of items taken from the Richins and Dawson (1992). The use of such forms of the scale has been justified by Richins (2004) with eight items and a mean alpha of 0.84. Participants were asked to rate the level of agreement or disagreement on a list of items associated with each construct (1 = strongly disagree to 5 = strongly agree). For *social influence (from shopping companion)*, tourist participants were asked to rate how likely their shopping companion would influence their impulsive shopping behavior (1 = very unlikely, to 5 = very likely).

Three companion groups were provided including family and relatives, peers (friends/colleagues), and shop assistant (or in-store sales person). For *product attributes*, tourist participants were asked to indicate the importance of the "product brand variety the stores carry" and "product price" in your impulsive buying decision (1 = not important at all, to 5 = very important). Impulsive urge was measured using a four-item unidimensional scale adopted from Luo (2005) with a reliability value of 0.80. *Actual impulsive purchase behavior* was measured by two items adopted from Mattila and Wirtz (2008). *Shopping list* was measured by asking participants whether they have a shopping list or not, either at hand or in mind (1=yes; 2=no).

## 3.2 Study Sampling

The target population of this study is the Chinese adults who had taken a leisure trip outside Asia for at least three nights in the past two years and have spent 6,000RMB (approximately US\$1,000) on shopping during the trip. The purpose of the trip could include leisure, business and leisure combined, and visiting friends and relatives. Despite the rapid growth of Chinese outbound leisure market, China's outbound business travel is still a major

component (38% business +convention among all purposes of trip to the US in 2014, based on the most updated data in OTTI 2014 U.S. Travel and Tourism Statistics), and majority is group travel accompanied with leisure shopping activities. This study also includes this important business+leisure market segment in the data collection. Actually 20% of the respondents did shop with their colleagues during their most recent outbound trip, which they were asked to refer to when they filled up the survey.

Meanwhile, the current study specifically focuses on the long-haul Chinese outbound tourists. According to previous studies, long-haul destinations to Chinese outbound tourists refer to those outside Asia, Western destinations, such as the U.S. and European countries (Li, Lai, Harrill, Kline, & Wang, 2011; Li, Meng, Uysal, & Mihalik, 2013). The selection of this type of shopping destination lies in the limited research being conducted in Western shopping destinations for Chinese tourists and the need to understand the rapidly growing Chinese outbound tourists who visit destinations outside Asia.

Previous studies indicated that Chinese outbound tourists are primarily non-agricultural adult population in China's major cities due to the population sizes, economic prosperity, and proximity to major transportation hubs (Arlt, 2006; Li et al., 2011). Therefore, eight major cities in China, including four Tier I cities (Beijing, Shanghai, Guangzhou, and Shenzhen) and four Tier II cities (Wuhan, Nanjing, Shenyang, and Chengdu), were selected for the data collection. Tier I cities have been consistently listed as major outbound-tourist-generating areas in China. Tier II cities were selected in this study due to their large urban population and rapid outbound tourism growth (CTA, 2016), as well as their regional representation of China's major geographical zones. To ensure the representativeness of the sample, specific quota of responses

was set for all cities. The data collection procedure was closely monitored to maintain the balanced demographic characteristics of the sample such as gender, age, and income.

#### 3.3 Data Collection

The data collection was conducted by a professional marketing research company in China in April 2014. The electronic link of the questionnaire was originally generated on Qualtrics, and then connected to the company's panel database with the redirecting link on the Confirmit platform.

### 4. Results

## 4.1 Profile of Respondents

The total sample size of this study is 407. Approximately over half of respondents were female (51.4%). Most of the respondents were from the age group of 36-45 (48.9%) and 26-35 (31%), followed by the age groups of 46-55 (9.3%) and 18-25 (9.1%). Almost all respondents were employed full-time/part-time (98.0%) and majority of them were married (80.3%). About 90% of the respondents have relatively high monthly household income (more than ¥10,000RMB, approximately \$1,550US\$), specifically, 31.7% placed themselves in the category of ¥10,001-15,000 (\$1,550-2,330), 30% in ¥15,001-20,000 (\$2,331-3,100), 19.2% in ¥20,001-25,000 (\$3,101-3,880), and 10.6% in ¥25,001-30,000 (\$3,881-4,650). Furthermore, the majority of the respondents held a college degree (66.6%), followed by Associate degree or some college (21.1%) and Graduate work/Master's/Doctoral degree (9.8%), while High school/Vocational/Technical school or below only accounted for 2.5% of the total sample. The demographic characteristics of this sample well represent the overall Chinese overseas tourist market as more female (56%), middle- and upper-class citizens, middle-aged and young adults

(25-45 years old "post-70's" and "post-80's" generations) in China (CTA, 2016; Meng & Zhang, 2016).

Having described the sampling profile, the data were ready for subsequent analysis using structural equation modeling using LISREL 8.70 following a two-step approach, with the assessment of the measurement model followed by the examination of the proposed structural model.

#### **4.2 Measurement Model**

First, confirmatory factor analysis (CFA) was conducted using maximum likelihood estimation to test the convergent and discriminant validity (Kline, 2011). All latent constructs of interest (Impulsive Trait, Hedonic Tendency, Materialism, Impulsive Urge, and Actual Impulsive Purchase Behavior) were included in the CFA analysis. The results showed that the model has a good fit to the data, with  $x^2$ =1132.25 (p<0.01), df = 367, SRMR=0.051, RMSEA=0.076 (90% CI=0.071-0.081), CFI=0.98, and NNFI=0.97.

The construct reliabilities were determined by both composite reliability (CR) and average variance extracted (AVE). Table 1 shows that the CRs of all constructs are greater than 0.70 (ranges from 0.855 to 0.927) and the AVEs of all constructs were well above the 0.50 threshold (Fornell & Larcker, 1981), indicating satisfactory reliability.

#### <Insert Table 1>

Convergent validity is established when all standardized factor loadings are greater than 0.60 (Bagozzi & Yi, 1988) and statistically significant (a< .001). The CFA outputs (see Table 1)

suggested that the standardized factor loadings of all items are higher than 0.60, indicating good convergent validity. According to Bagozzi and Heatherton (1994), the discriminant validity of the latent constructs was tested by assessing whether the construct correlations are significantly smaller than 1. If one is not contained in the two standard errors of the correlation, discriminant validity is reached. According to the results shown in Table 2, none of the associated confidence interval of the correlation coefficients contained the value of 1. Therefore, discriminant validity in this study was reached.

#### <Insert Table 2>

## 4.3 SEM Model with Aggregated Sample

To examine the overall fit of the hypothesized structural model, the proposed relationships with all constructs of interest, including impulsive trait, hedonic tendency, materialism, shopping companion's influence from family and relatives, peers (friends/colleagues), and shop assistants, product brand variety, and product price, impulsive urge, and actual impulsive purchase behavior, were tested. Model fit indices of the estimation results show a generally good model fit, with  $x^2=1474.68$  (p<0.01), df=495, SRMR=0.059, RMSEA=0.076 (90% Confidence Interval=0.072-0.080), CFI=0.97, and NNFI=0.96.

The estimation results in Figure 2 showed that all hypotheses were supported with the exception of Hypothesis Four (partially supported) and Hypothesis Five (partially supported). Regarding the three different types of precursors of tourism impulsive urge, it was found that the internal attributes of tourism shoppers, including impulsive trait, hedonic tendency, and

materialism tendency, demonstrate much stronger influence than social influence and product attribute. Specifically, materialism and impulsive trait had significant and positive effects on tourism shopping impulsive urge with coefficient being equal to 0.38 and 0.32, respectively, while the influence of hedonic tendency on tourism shopping impulsive urge was smaller with coefficient being equal to 0.14. Therefore, the first three hypotheses of this study were supported.

For hypothesis Four, which examines the impact of social influence on impulsive urge, the results showed that the various sources of social influences affect tourist impulsive shopping behavior in different direction and magnitude. Specifically, the social influences from family/ relatives and peers (friends/colleagues) had significant but negative impacts on tourist impulsive urge with coefficients being equal to -0.07 and -0.15, respectively. This indicates that hypothesis 4a was supported while hypothesis 4b was not supported. In contrast, the empirical results revealed that the social influence from shop assistants had significant and positive impacts on visitors' impulsive urge with coefficient being equal to 0.22. Therefore, hypothesis 4c was supported.

Hypothesis Five examines the impact of product attributes on tourist impulsive purchase behavior. Specifically, the estimation results showed that product brand variety had a significant and positive influence on tourist impulsive urge, with the coefficient being equal to 0.11, indicating that hypothesis 5a was supported. However, the influence from product price was non-significant, which indicated that price was not an important precursor for the impulsive shopping for long-haul Chinese outbound tourists. Therefore, hypothesis 5b was not supported.

<Insert Figure 2>

## 4.4 Moderating Effect of Shopping List – MGSEM Analysis with Grouped Data

The influence of the moderating variable, i.e. shopping list, on the structural relationship from impulsive urge to actual impulsive purchase behavior was performed by using Multi-group SEM analysis. Respondents were divided into two groups: with and without shopping list.

Before doing the MGSEM analysis, the Multiple Groups CFA (MGCFA) analysis was conducted across these two groups. All constructs of interest were included in the MGCFA analysis, and the estimation results showed a general acceptable goodness of model fit with  $x^2$ = 1621.41 (p<0.01), df= 734, SRMR=0.053 (group with shopping list)/0.090 (group without shopping list), RMSEA=0.081, CFI=0.97, and NNFI=0.97, and a good convergent and discriminant validity. Then the MGSEM was tested across these two groups to determine whether the structural path performed differently across the two groups. We began with a model (Model 1 in Table 3), where all parameters were freely estimated across the two groups. This model was used as a baseline model to compare to the following increasingly constraint models: (1) invariant factor loadings (Model 2), and then (2) invariant structural path from impulsive urge to impulsive purchase behavior (Model 3).

Since the above models follow a sequence of increasing constraints, change in the chisquare difference was tested to determine if significant differences exist between two models.

First, Model 1 (baseline model) was compared to Model 2 (Invariant factor loadings). The results shown in Table 3 suggested that there was an insignificant change in chi-square (M2-M1= $\Delta\chi^2$  =35.68 <  $\chi^2_{(24)}$  (0.05) = 36.42), indicating that the measurements for all the factors used in this study were equivalent across groups with and without shopping list. Second, Model 2 was compared to the Model 3 (Invariant structural path from impulsive urge to impulsive purchase

behavior). The results showed that there was a significant change in chi-square (M3-M2= $\Delta\chi^2$  =  $2.83^+ > \chi^2_{(1)}$  (0.10) = 2.71), suggesting that the goodness of fit of Model 3 is significantly poorer (at the 10% significance level) than that of Model 2. Therefore, the equality of the structural path from impulsive urge to impulsive purchase behavior across the two groups is rejected. Thus, Hypothesis 7 is supported, i.e., the influence of impulsive urge on actual impulsive purchase behavior is different across tourist shoppers with and without shopping list.

The fit indices of all the MGSEM models in each step are summarized in Table 3, and it shows that all the proposed models above have acceptable goodness of fit. Importantly, it is found that compared with group with shopping list, the effect of impulsive urge on actual impulsive purchase behavior was much weaker for the group with shopping list (group with shopping list=0.62; group without shopping list=0.82). This means the impulsive urge is more likely to be realized into action for the tourists without shopping list.

#### <Insert Table 3>

On this basis, the summary of all the hypotheses and the empirical support for each is presented in Table 4.

#### <Insert Table 4>

# 4.5 Clusters based on Respondents' Shopping Behavioral Characteristics

A TwoStep cluster analysis with the log likelihood measure was used to reveal natural groupings in the dataset. TwoStep cluster analysis is considered most appropriate for this

research to produce solutions based on a mixture of both categorical variables and continuous variables. Two categorical variables ("How many times have you shopped over 6,000 RMB while traveling to an overseas destination" and "Did you have a shopping list either in hand or in mind during this overseas trip?") and two continuous variables ("percentage of impulsive shopping expenditure out of total shopping expenditure" and "factor scores of impulsive trait"). The analysis revealed three clusters at which the Schwarz Bayesian Criterion (SBC) becomes the smallest and the change in SBC between adjacent numbers of cluster is the smallest (Kass & Wasserman, 1995). Furthermore, the goodness of the three-cluster solution was evaluated using silhouette measure of cohesion and separation (Li, Lomov, Yan, & Carvelli, 2014).

Most of the respondents in cluster 1 were full-time employed (99.5%), married (74.0%), males (53.5%), at the age between 36 to 45 years old (39.1%), and with college degree (70.2%) and annual household income between US\$1,600 - 3,200 (61.4%). They live in both first-tier cities (49.8%) and second-tier cities (50.2%) in China. Respondents from cluster 2 were mostly married (94.0%) females (57%) having college degree (61%) and annual household income between US\$1,600 - 3,200 (62.0%). Most of them are at the age between 36 to 45 years old (70%), full-time employed (100%), and live in first-tier cities (57%). Cluster 3 contains a greater number of full-time employed (92.0%), married (79.5%) females (56.8%) who are from first-tier cities (51.1%) with college degree (65.9%). Most of them are 36 to 45 years old (50.0%) having annual household income between US\$1,550 - 3,100 (62.5%). Further, a Chi-Square test showed no significant differences among the three clusters in the demographic variables except education  $(\chi^2 = 0.098, p \le 0.05)$  and employment status  $(\chi^2 = 0.173, p < 0.01)$ . Specifically, the education level in cluster 1 is generally higher than that of cluster 2 and 3, and cluster 2 has the biggest number of full-time employed tourist shoppers.

The overseas travel/shopping profiles of each cluster rendered a more detailed picture of the different tourist shoppers. A series of Chi-Square tests showed the three clusters differ significantly in terms of having shopping list before trip ( $\chi^2 = 0.85$ , p < 0.01), overseas travel experience ( $\chi^2 = 0.22$ , p < 0.01), overseas shopping experience ( $\chi^2 = 0.46$ , p < 0.01), shopping expenditure ( $\chi^2 = 0.10$ , p < 0.05), length of stay ( $\chi^2 = 0.26$ , p < 0.01), impulsive shopping expenditure out of total shopping expenditure in percentage ( $\chi^2 = 0.29$ , p < 0.01). Overall, tourist shoppers in cluster 1 made shopping lists before the trip (Yes = 100.0%). Most of them had little experience in overseas travel (1 time = 74.9%) as well as overseas shopping (1 time = 100.0%). In addition, they spent comparatively less on shopping and least on impulsive shopping (0-24% = 96.3%). They also stayed at the destination for shortest length (1-10 days = 74.0%). Thus we labeled cluster 1 as "Amateurs". Tourist shoppers in cluster 2 made shopping lists before the trip (Yes = 100.0%).

In contrast with cluster 1, most of them were experienced in overseas travel (2-3 times = 83%) and overseas shopping (2-3 = 100.0%). Their total shopping expenditure was the highest but not the impulsive shopping expenditure. Furthermore, they stayed at the destination for the longest period of time (11-20 days = 77%). Therefore, we named cluster 2 as "Veterans". Interestingly, tourist shoppers in cluster 3 did not make shopping list (No = 98.1%). Not surprisingly, they are the group of shoppers who had comparatively the highest percentage of impulsive shopping out of total shopping (25-49% = 12.5%). Their overseas travel and shopping experience is at the middle between cluster 1 and cluster 2, so does their total shopping expenditure and length of stay. Moreover, cluster 3 has the biggest number of Full Independent Tour tourists (59.1%). Therefore, we named cluster 3 as "Free-spirits".

Furthermore, a series of psychographic variables were examined among the three clusters. MANOVA with post-hoc Tukey tests were used to determine if there were significant differences among the three clusters in terms of tourist shopper's impulsive trait, hedonic tendency, materialism, and impulsive urge. The results of MANOVA showed that impulsive trait (F = 6.17, p < 0.01) was significantly different among the three clusters. Specifically, the post-hoc test showed that the impulsive trait score of "Veterans" was significantly higher than "Amateurs" (p < 0.01), indicating that tourist shoppers in "Veterans" group had the highest level of impulsive trait whereas those in "Amateurs" had the lowest.

<Insert Table 5>

## 5. Discussion and Conclusion

Consumers behave differently in the tourism setting and their everyday world. Tourists tend to escape from their daily routine to pursue pleasure and excitement, and thus tourism shopping as an important activity during travel is more hedonic and enjoyment oriented. Beatty and Ferrell (1998) suggest hedonic consumption and sensory stimulation are closely connected to impulse purchasing. Therefore, impulsive shopping behavior is more prominent in tourism than in everyday life. Moreover, consumers usually prepare for their travel and vacation with higher budget than they would normally do in daily life, so they are more likely to shop impulsively during the trip. This study takes an initial attempt to supplement the literature by investigating the precursors of impulsive tourist shopping behavior, including tourist internal attributes (e.g., impulsive trait, hedonic tendency, and materialism), social influence, product attributes, tourist

impulsive shopping urge, and shopping list.

This study will not only contribute to extending the theoretical boundary of tourist impulsive buying behavior, but also to the social influence theory by examining them in the long-haul tourism shopping context. Moreover, unlike the majority of the existing tourism shopping literature which mainly focuses on tourists' general shopping behavior and in Asian destinations such as Hong Kong, the findings will provide insightful implications to the long-haul overseas shopping destinations for Chinese travelers, who represented a tremendously fast-growing market in the last decade. By applying the MGSEM technique, this study reaches the following specific conclusions and implications:

First, impulsive trait emerged as a powerful predictor in the general model. Impulsive individuals are more likely to experience impulsive urges, which in turn, are more likely to engage in actual impulse purchase. This result is consistent with earlier studies that personality trait is one of the strongest factors causing behavior in the general impulsive buying literature (e. g., Puri, 1996; Rook & Fisher, 1995). Moreover, previous literature shows that shoppers with higher impulsive traits are more likely to experience spontaneous buying stimuli, such as the situational stimuli of physical proximity to a desired product, attractive advertising, and efficient sales personnel.

It is important to understand that the overseas shopping market is not a homogeneous one but can be distinctive in impulsive traits and shopping behavioral characteristics. The three clusters of Chinese outbound tourist shoppers "Amateurs", "Veterans", and "Free-spirits" showed distinctive impulsive traits. Cluster 1 "Amateurs" had the lowest impulsive traits. They represent young tourist shoppers who are at their mid-30s, highly educated and may just started their career and marriage for a few years. To most of them, overseas travel and shopping is a new

experience, yet all of them did some homework and prepared shopping lists before traveling overseas. They are the least impulsive group and they spend the least on impulsive shopping and had the lowest score of impulsivity, partly due to the short length of stay comparing to the other clusters.

In contrast, "Veterans" demonstrated highest impulsive trait and they are most experienced and skillful tourist shoppers. They are in mid-40s, living in first-tier cities and having had career and family for years. They are the group who may have a comparatively higher level of saving and disposable income. To most of them, overseas travel as well as overseas shopping is not new as they have been travelled and shopped overseas in the past for 2 to 3 times and know the products and brands well. In addition, this group had the highest total shopping expenditure, possibly because they stayed at the destination for the longest period of time and had more chances to shop. However, with highest impulsive traits, their impulsive shopping expenditure was not the highest though due to their experience and pre-planned shopping list in hand or in mind.

Among all the three clusters, "Free-spirits", who are in their late 30s and early 40s, married, employed and living in first-tier cities in China, were the most impulsive tourist shoppers as they spend the highest proportion of total expenditure out of impulsivity. None of them make shopping list before travel and their impulsive traits ranked the second highest following "Veterans". With the detailed and in-depth understanding of overseas tourist market, tourism destination marketers and retailers could accurate target the Chinese overseas travelers based on their specific shopping characteristics and preferences. The findings suggest that different marketing strategies and promotions should be used to tailor the shopping characteristics and needs of various segments.

Second, tourists who have hedonic tendency in shopping are more likely to feel impulsive urges, and consequently are more likely to engage in actual impulse buying. Compared to utilitarian shopping value, which reflects the acquisition of products in an efficient manner, people with hedonic tendency in shopping very much value the novelty, entertaining, and new experience from multisensory, fantasy and emotive aspects of the shopping experience (Babin et al., 1994; Holbrook & Hirschman, 1982). Rather than shopping with a specific purpose, hedonictendency shoppers make decisions based on how enjoyable and "high" they are with the shopping experience, and attempts to fulfill their curiosity and exploring needs. Moreover, compared to general shoppers, the significant effect of hedonic tendency is particularly meaningful in the tourism context, and tourism shoppers are more likely to be driven by hedonic tendencies, as their desire and necessity for shopping is based on elements of relaxation, fleeing from mundane routine, and excitement that are associated with shopping (Timothy & Butler, 1995). Destination retailers therefore should create a shopping environment that prompt pleasure, curiosity, entertaining, and exploration. Except for the situational elements, another recommendation for destination retailers would be the improvement of friendly service, which facilitates enjoyable shopping experience and meet the needs of hedonic tendency of tourist shoppers.

Thirdly, materialistic tourists are more likely to feel impulsivity to make unplanned buying decisions, which in turn tend to engage in actual impulse buying behavior. This is because that their materialistic value drive them to "possess the goods" in order to feel happy and successful. Compared to hedonic oriented individuals, who value the shopping experience as a source of happiness, materialistic individuals focus on the goods themselves, the attributes of the goods and the monetary value of the goods. The significant finding is particularly applicable to

the target population of this study. China has experienced strong economic development in recent years, averaging about 10% growth per year over the past 15 years (Xie, Baglzzi, & Yang, 2013). Chinese citizens are becoming more affluent and have wide accessibility to branded products, and consequently desire for more material possessions. In the meantime, the perceived higher quality, genuine brand, and high monetary value embedded in branded products drive materialistic Chinese consumers to go off with their shopping list and engage in more sudden, spontaneous buying decisions during their long-haul travel destinations such as the United States.

The materialism value, which emphasis more on possession of high quality, high monetary value, and well-known brand goods motivate Chinese tourists take advantage of better shopping opportunities in overseas countries. Moreover, a wealth of research suggests that materialism is associated with lower levels of subjective well-being (Ahuvia & Wong, 2002; Sirgy, 1998), which is shown by recent series of product counterfeits and scandals (i.e. infant formula causes a death of baby). These issues provoked the increasingly intense trustworthy issue of consumer goods in China, reinforcing the materialism value of Chinese people and thus the motivation of oversea shopping activities among Chinese tourists.

Fourth, it is not surprising that the results showed positive impact of product brand variety on impulsive urge, which is consistent with previous studies indicating that people's tendency of variety seeking is positively associated with their buying impulse (Punj, 2011; Sharma, Sivakumaran, & Marshall, 2010). If presented with a broader selection of products and/or brands, tourists are more likely to find some of the unplanned items attractive and grasp the buying opportunity which may not be concurrently available in their own country. However, price was not found to significantly influence tourist impulsive urge based on the current study's

results. It is reasonably believed that price may not be a prominent factor affecting overseas Chinese tourists' shopping decisions because of their striking spending power on shopping (Simpson, 2016).

Fifth, social influence of family and relatives was found to have a negative impact on tourist impulsive shopping urge. The result was consistent with previous study, in which the presence of family members was found to increase the sense of responsibility and rationale thinking among shoppers, thus reducing their buying impulse. Additionally, social influence of shop assistants was found to be positively related to tourist impulsive shopping urge. The finding was in line with previous studies on social situational factors, in that positive interaction with store employees would increase shoppers' impulsive urge. Furthermore, social influence of peers (friends/colleagues) was found to be negatively related to tourism impulsive shopping urge. The finding contradicts with previous studies in which the presence of peers was found to alleviate one's sense of risk and encourage impulsive buying intention. One explanation of this result is based on the effect of age in this study. Most of the respondents were at their 30s and 40s, which indicates a level of maturity. As most of the previous findings on the positive impact of peers on impulsive urge focused on the behavior of teenagers and adolescents, the negative impact revealed in our study may be attributed to the comparatively mature sample.

Moreover, the social influence of peers in the current context particularly depicts an impact that occurred in the long-haul, overseas tourism shopping, which is comparatively new and non-prevalent in China. Many Chinese tourists consider it as an important and valuable chance to shop and bring back branded goods that are much more expensively sold in China. Therefore, peers who shop with them would make thoughtful recommendations, which in turn would most likely to be taken seriously, especially by many "first-time" overseas travelers.

Consequently, it is reasonable for them to be engaged in less impulsive urge on shopping when taking their peers' opinions into consideration.

Last, our findings show that a tourist's shopping list plays as a moderator between impulsive urge and actual impulse buying. For people without shopping lists in hand or in mind, the relationship between impulsive urge and impulsive purchase becomes stronger, whereas for people with shopping lists, the relationship becomes less strong. The finding is consistent with previous studies which argue that pre-trip engagement (i.e., shopping list preparation) acts as a facilitator/inhibitor to allow certain behavior occur or not occur from intention (Vohs & Faber, 2007). Intention for splurging shopping impulsivity or lack of pre-planned shopping list facilitates tourist to act on the impulsive urge experience. Oppositely, prior engagement in shopping list preparation is considered barrier of actual impulsive buying behavior even though the shopper has an urge of impulsivity.

The present study also has some limitations. First, although the sampling procedure covered eight cities in various geographic locations with an appropriate sample size for the required statistical analyses, it is still a small sample size based on the population of Chinese outbound tourists. Therefore, it may not be fully representable of the whole Chinese outbound tourism market. Future study should employ a bigger sample size which includes more cities, especially more second-tier, third-tier cities with increasing economic development and consumer spending power. Second, the current study only focuses on long-haul shopping destinations for Chinese tourists. With the comparison between shopping behaviors in long-haul and short-haul destinations, tourism marketers and retailers in different regions could further extend the understanding of tourist shoppers. Therefore, future studies could examine if significant differences exist between short-haul and long-haul shopping destinations for tourist

shoppers, or between Asia and Western shopping destinations for Chinese outbound tourists. Different profiles of shopping destinations could also be developed consequently. Third, the current study particularly focuses on variables including impulsive traits, hedonic tendency, and materialism, shopping companion, product brand variety and price, and shopping list. Additional variables including emotion (positive/negative affect), mood, social status, and conspicuous consumption could be explored under a more comprehensive framework. Fourth, the particular implication of materialism on Chinese tourists may be different from other tourist market, in which product quality, monetary value, and brand name might be less important to consider for consumers. Further study may employ cross-cultural data to examine the difference between international markets. Fifth, the insignificant impact of shopping companions may be partially attributed to participants' demographic and psychographic characteristics such as age and social status, as well as unconscious falsification effect (to admit peers' influence on their shopping behavior) and the specific measurement of shopping companion effect. This particular result may not be generalizable to the entire Chinese overseas market. Future study may refine the scale and re-test the current finding for validation or falsification purpose to better understand the effect of tourism shopping companions.

#### References

- Abrams, D., Marques, J. M., Bown, N., & Henson, M. (2000). Pro-norm and anti-norm deviance within and between groups. *Journal of Personality and Social Psychology*, 78(5), 906-912.
- Ahuvia, A. C., & Wong, N. Y. (2002). Personality and values based materialism: Their relationship and origins. *Journal of Consumer Psychology*, 12(4). 398-402.
- Amos, C., Holmes, G. R., & Keneson, W. C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21(2), 86-97.
- Arlt, W. G. (2006). China's outbound tourism. London and New York: Routledge.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644-656.
- Badgaiyan, A. J., & Verma, A. (2014). Intrinsic factors affecting impulsive buying behaviour— Evidence from India. *Journal of Retailing and Consumer Services*, 21(4), 537-549.
- Bagozzi, R. P., & Heatherton, T. F. (1994). A general approach to representing multifaceted personality constructs: Application to state self-esteem. *Structural Equation Modeling: A Multidisciplinary Journal*, *1*(1), 35-67.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159-170.
- Beatty, S. E., & Ferrell, E. M. (1998). Impulse buying: modeling its precursors. *Journal of Retailing*, 74(2), 169-191.

- Bell, D. R., Corsten, D., & Knox, G. (2011). From point of purchase to path to purchase: How preshopping factors drive unplanned buying. *Journal of Marketing*, 75(1), 31-45.
- Bellini, S., Cardinali, M.G., Grandi, B. (2015). *Impulse or planning buying: an empirical analysis in grocery retailing*. In: Proceedings of the 17th International conferences on Economics and Social Sciences (ICESS) Dubai, UAE December 5th, 2015.
- Block, L. G., & Morwitz, V. G. (1999). Shopping lists as an external memory aid for grocery shopping: Influences on list writing and list fulfillment. *Journal of Consumer Psychology*, 8(4), 343-375.
- Borges, A., Chebat, J. & Babin, B. J. (2010). Does a companion always enhance the shopping experience? *Journal of Retailing and Consumer Service*, 17(4), 294-299.
- Chang, J., Yang, B., & Yu, C. (2006). The moderating effect of salespersons' selling behavior on shopping motivation and satisfaction: Taiwan tourists in China. *Tourism Management*, 27(5), 934-942.
- Chaturvedi, R. K. (2015). The influence of availability of shopping time on impulse purchase tendency. *IUP Journal of Marketing Management*, 14(2), 47.
- China Tourism Academy (CTA, 2016). 2016 Annual report of Chinese outbound tourism development. Beijing: Tourism Education Publishing.
- Choi, M., Law, R., & Heo, C. Y. (2017). An Investigation of the Perceived Value of Shopping Tourism. *Journal of Travel Research*, DOI: 10.1177/0047287517726170.
- Cobb, C. J., & Hoyer, W. D. (1986). Planned versus impulse purchase behavior. *Journal of Retailing*, 62(4), 384-409.

- Coley, A., & Burgess, B. (2003). Gender differences in cognitive and affective impulse buying.

  \*Journal of Fashion Marketing and Management: An International Journal, 7(3), 282-295.
- Correia, A., Kozak, M., & Kim, S. (2018). Luxury shopping orientations of mainland Chinese tourists in Hong Kong: Their shopping destination. *Tourism Economics*, 24(1), 92-108.
- European Travel Commission (ETC, 2012). The Chinese Outbound Travel Market. Retrieved from <a href="http://www.etc-corporate.org/reports/the-chinese-outbound-travel-market">http://www.etc-corporate.org/reports/the-chinese-outbound-travel-market</a> on December 27, 2016.
- Flight, R. L., Rountree, M. M., & Beatty, S. E. (2012). Feeling the urge: Affect in impulsive and compulsive buying. *Journal of Marketing Theory and Practice*, 20(4), 453-466.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39-50.
- Geetha, M. & Bharadhwaj, S. (2016). Impulse buying behavior in India An overview. Asian *Journal of Business Research*, 6(1), 49-66.
- Geuens, M., Vantomme, D., & Brengman, M. (2004). Developing a typology of airport shoppers. *Tourism Management*, 25(5), 615–622.
- Goldsmith, R. E., & Clark, R. A. (2012). Materialism, status consumption, and consumer independence. *The Journal of Social Psychology*, *152*(1), 43-60.
- Hausman, A. (2000). A multi-method investigation of consumer motivation in impulse buying behavior. *Journal of Consumer Marketing*, 17(5), 403-426.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption:

  Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132-140.

- Janakiraman, N., Meyer, R. J., & Morales, A. C. (2006). Spillover effects: How consumers respond to unexpected changes in price and quality. *Journal of Consumer Research*, 33(3), 361-369.
- Jeon, J. (1992). An empirical investigation of the relationship between affective states, in-store browsing, and impulse buying. Unpublished Ph. D. Dissertation. Tuscaloosa, AL: The University of Alabama.
- Jones, M. A. (1999). Entertaining shopping experiences: An exploratory investigation. *Journal of Retailing and Consumer Services*, 6(3), 129–139.
- Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Psychology*, *12*(2), 163-176.
- Kang, J., & Park-Poaps, H. (2010). Hedonic and utilitarian shopping motivations of fashion leadership. *Journal of Fashion Marketing and Management: An International Journal*, 14(2), 312-328.
- Kass, R. E., & Wasserman, L. (1995). A reference Bayesian test for nested hypotheses and its relationship to the Schwarz criterion. *Journal of the American Statistical Association*, 90(431), 928-934.
- Kesari, B., & Atulkar, S. (2016). Satisfaction of mall shoppers: A study on perceived utilitarian and hedonic shopping values. *Journal of Retailing and Consumer Services*, *31*, 22-31.
- Kim, M. J., Chung, N., Lee, C. K., & Preis, M. W. (2015). Motivations and use context in mobile tourism shopping: Applying contingency and task–technology fit theories. *International Journal of Tourism Research*, 17(1), 13-24.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3nd ed.). New York, NY: The Guilford Press.

- Kurt, D., Inman, J. J., & Argo, J. J. (2011). The influence of friends on consumer spending: The role of agency–communion orientation and self-monitoring. *Journal of Marketing Research*, 48(4), 741-754.
- Lehto, X. Y., Cai, L. A., O'Leary, J. T., & Huan, T. (2004). Tourist shopping preferences and expenditure behaviours: The case of the Taiwanese outbound market. *Journal of Vacation Marketing*, 10(4), 320-332.
- Lehto, X. Y., Chen, S. Y., & Silkes, C. (2014). Tourist shopping style preferences. *Journal of Vacation Marketing*, 20(1), 3-15.
- Li, L., Lomov, S. V., Yan, X., & Carvelli, V. (2014). Cluster analysis of acoustic emission signals for 2D and 3D woven glass/epoxy composites. *Composite Structures*, 116, 286-299.
- Li, X. R., Lai, C., Harrill, R., Kline, S., & Wang, L. (2011). When east meets west: An exploratory study on Chinese outbound tourists' travel expectations. *Tourism Management*, 32(4), 741-749.
- Li, X. R., Meng, F., Uysal, M., & Mihalik, B. (2013). Understanding China's long-haul outbound travel market: An overlapped segmentation approach. *Journal of Business*\*Research, 66(6), 786-793.
- Lin, C. H., & Chuang, S. C. (2004). The effect of individual differences on adolescents' impulsive buying behavior. *Adolescence*, 40(159), 551-558.
- Lin, Y. H., & Chen, C. Y. (2012). Adolescents' impulse buying: susceptibility to interpersonal influence and fear of negative evaluation. *Social Behavior and Personality: An International Journal*, 40(3), 353-358.

- Luo, X. (2005). How does shopping with others influence impulsive purchasing? *Journal of Consumer Psychology*, 15(4), 288-294.
- Mangleburg, T. F., Doney, P. M., & Bristol, T. (2004). Shopping with friends and teens' susceptibility to peer influence. *Journal of Retailing*, 80(2), 101-116.
- Mattila, A.S. & Wirtz, J. (2008). The role of store environmental stimulation and social factors on impulse purchasing. *Journal of Services Marketing*, 22(7), 562-567.
- Meng, F., & Xu, Y. (2012). Tourism shopping behavior: planned, impulsive, or experiential. International Journal of Culture, *Tourism and Hospitality Research*, 6(3), 250-265.
- Meng, F., & Zhang, P. (2016). Chinese outbound tourists' shopping behavior. In X. Li (Ed.), Chinese Outbound Tourism 2.0 (pp. 229-243). Point Pleasant: Apple Academic Press.
- Mihić, M., & Kursan, I. (2010). Assessing the situational factors and impulsive buying behavior:

  Market segmentation approach. *Management: Journal of Contemporary Management*Issues, 15(2), 47-66.
- Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711-1732.
- Moschis, G. P. (2017). Research frontiers on the dark side of consumer behavior: The case of materialism and compulsive buying. *Journal of Marketing Management*, 33(15-16), 1384-1401.
- Muruganantham, G., & Bhakat, R. S. (2013). A review of impulse buying behavior. International *Journal of Marketing Studies*, *5*(3), 149-160.
- National Travel and Tourism Office (NTTO, 2016). Profile of Overseas Travelers to the United States: 2015 Inbound. Retrieved from

- http://tinet.ita.doc.gov/outreachpages/download\_data\_table/2015\_Overseas\_Visitor\_Profile.pdf on December 26, 2016.
- National Travel and Tourism Office (NTTO, 2017). Fast Facts 2017. Retrieved from <a href="http://tinet.ita.doc.gov/outreachpages/download\_data\_table/Fast\_Facts\_2017.pdf">http://tinet.ita.doc.gov/outreachpages/download\_data\_table/Fast\_Facts\_2017.pdf</a> on October 9, 2018.
- Oliver Wyman Consulting (2017). Prepare for turbulence. The Chinese traveler for today and tomorrow. Retrived from <a href="http://www.oliverwyman.com/our-expertise/insights/2017/jul/prepare-for-turbulence---the-chinese-traveler-of-today-and-tomor.html">http://www.oliverwyman.com/our-expertise/insights/2017/jul/prepare-for-turbulence---the-chinese-traveler-of-today-and-tomor.html</a>
- Omar, N. A., Rahim, R. A., Wel, C. A. C., & Alam, S. S. (2014). Compulsive buying and credit card misuse among credit card holders: The roles of self-esteem, materialism, impulsive buying and budget constraint. *Intangible Capital*, 10(1), 52-74.
- Omar, O., & Kent, A. (2001). International airport influences on impulsive shopping: trait and normative approach. *International Journal of Retail & Distribution Management*, 29(5), 226-235.
- Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, 65(11), 1583-1589.
- Peck, J., & Childers, T. L. (2006). If I touch it I have to have it: Individual and environmental influences on impulse purchasing. *Journal of Business Research*, 59(6), 765-769.
- Podoshen, J. S., Li, L., & Zhang, J. (2011). Materialism and conspicuous consumption in China: A cross-cultural examination. *International Journal of Consumer Studies*, 35(1), 17-25.

- Punj, G. (2011). Impulse buying and variety seeking: Similarities and differences. *Journal of Business Research*, 64(7), 745-748.
- Puri, R. (1996). Measuring and modifying consumer impulsiveness: a cost-benefit accessibility framework. *Journal of Consumer Psychology*, *5*(2), 87–113.
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, *31*(1), 209-219.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303-316.
- Roberts, J. A., Manolis, C., & Tanner Jr, J. F. (2008). Interpersonal influence and adolescent materialism and compulsive buying. *Social Influence*, *3*(2), 114-131.
- Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, 14(2), 189-199.
- Rook, D. W., & Fisher, R. J. (1995). Normative influence on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305-313.
- Rook, D. W., & Hoch, S. J. (1985). Consuming impulses. *Advances in Consumer Research*, 12, 23-27.
- Schor, J. B. (2014). *Born to buy: The commercialized child and the new consumer cult.* Simon and Schuster.
- Sharma, P., Sivakumaran, B., & Marshall, R. (2010). Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, 63(3), 276-283.
- Sherry, J. F., Jr. (1990). A sociocultural analysis of a Midwestern flea market. *Journal of Consumer Research*, 17(1), 13-30.

- Shrum, L. J., Wong, N., Arif, F., Chugani, S. K., Gunz, A., Lowrey, T. M., ... & Scott, K. (2013).

  Reconceptualizing materialism as identity goal pursuits: Functions, processes, and consequences. *Journal of Business Research*, 66(8), 1179-1185.
- Simpson, D. (2016). Shopping tourism: UNWTO conference. UNWTO Press release. Retrieved from https://www.cabi.org/leisuretourism/news/24800
- Sirakaya-Turk, E., Ekinci, Y., & Martin, D. (2015). The efficacy of shopping value in predicting destination loyalty. *Journal of Business Research*, 68(9), 1878-1885.
- Sirgy, M. J. (1998). Materialism and quality of life. Social Indication Research, 43(3), 227-260.
- Sommer, R., Wynes, M., & Brinkley, G. (1992). Social facilitation effects in shopping behavior. *Environment & Behavior*, 24(3), 285-297.
- Stilley, K. M., Inman, J. J., & Wakefield, K. L. (2010). Planning to make unplanned purchases?

  The role of in-store slack in budget deviation. *Journal of Consumer Research*, 37(2), 264-278.
- Su, N., Min, H., Chen, M. H., & Swanger, N. (2017). Cultural Characteristics and Tourist Shopping Spending. *Journal of Hospitality & Tourism Research*, DOI: 1096348017731131.
- Sultan, A. J., Joireman, J., & Sprott, D. E. (2012). Building consumer self-control: The effect of self-control exercises on impulse buying urges. *Marketing Letters*, 23(1), 61-72.
- Tendai, M., & Crispen, C. (2009). In-store shopping environment and impulsive buying. *African Journal of Marketing Management*, 1(4), 102-108.
- Thomas, A., & Garland, R. (1993). Supermarket shopping lists: their effect on consumer expenditure. *International Journal of Retail & Distribution Management*, 21(2), 8-14.

- Timothy, D. J., & Butler, R. W. (1995). Cross-border shopping: A North American perspective. *Annals of Tourism Research*, 22(1), 16-34.
- Troisi, J. D., Christopher, A. N., & Marek, P. (2006). Materialism and money spending disposition as predictors of economic and personality variables. *North American Journal of Psychology*, 8(3), 421-436.
- Turner, L. W., & Reisinger, Y. (2001). Shopping satisfaction for domestic tourists. *Journal of Retailing and Consumer Services*, 8(1), 15-27.
- United Nations World Tourism Organization (UNWTO, 2014), AM Reports, Volume eight Global Report on Shopping Tourism. Retrieved from
  http://cf.cdn.unwto.org/sites/all/files/pdf/am9-shopping-report\_v2.pdf on December 27, 2016.
- United Nations World Tourism Organization (UNWTO, 2018). UNWTO Tourism Highlights 2018 Edition. Retrieved from <a href="https://www.e-unwto.org/doi/pdf/10.18111/9789284419876">https://www.e-unwto.org/doi/pdf/10.18111/9789284419876</a> on October 9, 2018.
- Vieira, V., Santini, F. O., & Araujo, C. F. (2018). A meta-analytic review of hedonic and utilitarian shopping values. *Journal of Consumer Marketing*, (just-accepted), 00-00.
- Vohs, K. D., & Faber, R. J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. *Journal of Consumer Research*, 33(4), 57-547.
- Wang, J., & Xiao, J. J. (2009). Buying behavior, social support and credit card indebtedness of college students. *International Journal of Consumer Studies*, 33(1), 2-10.
- Watson, J. J. (2003). The relationship of materialism to spending tendencies, saving, and debt. *Journal of Economic Psychology*, 24(6), 723-739.

- Wells, J. D., Parboteeah, V., & Valacich, J. S. (2011). Online impulse buying: understanding the interplay between consumer impulsiveness and website quality. *Journal of the Association for Information Systems*, 12(1), 32-56.
- Wong, I. A., & Wan, Y. K. P (2013). A systematic approach to scale development in tourist shopping satisfaction: Liking destination attributes and shopping experience. *Journal of Travel Research*, 52(1), 29-41.
- Wong, J., & Law, R. (2003). Difference in shopping satisfaction levels: a study of tourists in Hong Kong. *Tourism Management*, 24(4), 401-410.
- Xie, C., Bagozzi, R. P., & Yang, Z. (2013). Emerging materialism in China: Qualitative and quantitative insights. *Journal of International Consumer Marketing*, 20(3), 127-151.
- Xu, Y., & McGehee, N. G. (2012). Shopping behavior of Chinese tourists visiting the United States: Letting the shoppers do the talking. *Tourism Management*, *33*(2), 427-430.
- Yu, H., & Littrell, M. A. (2005). Tourists' shopping orientations for handcrafts. *Journal of Travel and Tourism Marketing*, 18(4), 1-19.
- Yüksel, A. (2007). Tourist shopping habitat: Effects on emotions, shopping value and behaviours. *Tourism Management*, 28(1), 58-69.
- Zhang, H., Zhang, J., Yang, Y., & Zhou, Q. (2018). Bargaining power in tourist shopping. *Journal of Travel Research*, *57*(7), 947-961.

**Table 1. Results of Confirmatory Factor Analysis** 

Impulsive Trait (IT) I often buy things spontaneously I carefully plan most of my purchases* "Just do it" describes the way I buy things "I see it, I buy it" describes me	0.927	0.82* 0.76* 0.79* 0.79* 0.79*	0.587	3.54 3.44 3.43 3.66	0.919 1.081 0.862
I often buy things spontaneously I carefully plan most of my purchases* "Just do it" describes the way I buy things		0.76* 0.79* 0.79*		3.44 3.43	1.081
"Just do it" describes the way I buy things		0.79* 0.79*		3.43	
		0.79*			0.862
"I see it, I buy it" describes me				3 66	
		0.79*		5.00	1.098
"Buy now, think about it later" describes me				3.46	0.979
Sometimes I feel like buying things on the spur-of-the-moment		0.80*		3.47	0.938
I buy things according to how I feel at the moment		0.68*		3.59	0.929
I often buy things without thinking		0.78*		3.31	0.989
Sometimes I am bit reckless about what I buy		0.67*		3.09	0.934
Hedonic Tendency (HT)	0.860		0.506		
I like to shop for the novelty of it		0.67*		3.47	0.778
Shopping satisfies my sense of curiosity		0.67*		3.37	0.950
Shopping offers new experiences		0.73*		3.51	0.957
I feel like I'm exploring new worlds when I shop		0.66*		3.32	0.960
I go shopping to be entertained		0.74*		3.48	0.944
I get real "high" from shopping		0.79*		3.63	1.006
Materialism (MT)	0.905		0.546		
I admire people who own expensive homes, cars, and clothes		0.81*		4.63	0.922
The things I own say a lot about how well I'm doing in life*		0.75*		2.59	0.904
I like to own things that impress people		0.62*		4.75	0.792
My life would be better if I owned certain things I don't have		0.74*		4.78	0.999
Buying things gives me a lot of pleasure		0.79*		4.74	0.965
I like a lot of luxury in my life		0.65*		4.77	0.927
I try to keep my life simple, as far as possessions are concerned		0.75*		4.54	0.996
I'd be happier if I could afford to buy more things		0.78*		4.71	0.892
Impulsive urge (IU)	0.877		0.640		
I experienced a number of sudden urges to buy during the trip		0.79*		3.63	0.831
I wanted to buy things even though I had not planned to purchase them on this trip		0.80*		3.62	1.143
I had strong urges to make impulsive purchases during the trip		0.82*		3.49	0.992
I felt a sudden urge to buy during the trip		0.79*		3.67	0.897
Actual impulsive purchase behavior (IPB)	0.855		0.750		
I ended up spending more money than I originally set out to spend		0.76*		3.67	0.753
I bought more than I had planned to buy Social Influence (SI)		0.96*		3.87	0.852
Family & Relatives (F & R)		N/A		4.20	0.600

Peers (Friends/Colleagues) (PEER)	N/A	3.65	0.766
Shop assistants (SA)	N/A	2.35	0.754

Note: \*significant at p<.05 level

Table 2. Discriminant Validity Analysis from Confirmatory Factor Analysis

Table 2. Discill	mmant vandity	Analysis Irom C	John matory ra	ictor Anarysis	
·	Impulsive	Hedonic Trait	Materialism	Impulsive	Actual
	Trait			Urge	Impulsive
					Purchase
					Behavior
Impulsive	1.00				
Trait					
Hedonic Trait	0.66	1.00			
	(0.59 - 0.73)				
3.6		0.72	1.00		
Materialism	0.72	0.73	1.00		
	(0.56 - 0.78)	(0.67 - 0.79)			
Impulsive	0.67	0.64	0.68	1.00	
Urge	(0.61-0.73)	(0.57-0.71)	(0.61-0.75)	2000	
•		,	,		
Impulsive	0.63	0.52	0.56	0.62	1.00
Purchase	(0.56 - 0.70)	(0.43-0.61)	(0.48 - 0.64)	(0.54-0.70)	
Behavior					

Note. (1) Elements are the correlations between constructs; (2) Values in the brackets are 2 standard errors below or above the correlation; (3) "Shopping list" variable is not included as it is used as categorical moderating variable; (4) Three social influence variables, namely family and relatives, peers, and shopping assistants, are not included as they are not latent variables.

**Table 3. Results of MGSEM** 

	Model 1: Baseline Model	Model 2: Invariant factor loadings	Model 3a: Invariant structural path from Impulsive Urge to Actual Impulsive Purchase Behavior
$\chi^2$	2214.98  (P = 0.00)	2250.66 (P = 0.00)	2253.49 (P=0.00)
Df	996	1020	1021
SRMR	0.064 (H) 0.092 (L)	0.065 (H) 0.100 (L)	0.064 (H) 0.11 (L)
CFI	0.96	0.96	0.96
RMSEA	0.080	0.080	0.080
NNFI	0.96	0.96	0.96
$\Delta \chi^2$		M2-M1=35.68 $< \chi^2_{(24)}$ (0.05)=36.42	M3-M2= $2.83^+$ > $\chi^2_{(1)}(0.10)$ =2.71

IU: impulsive urge; IPB: impulsive purchase behavior; H: with shopping list; L: without shopping list. \*p<=0.05.

**Table 4. Summary of Hypotheses Testing Results** 

Hypotheses	Regression paths coefficient	Support of hypotheses
H1	Impulsive Trait → Impulsive Urge	Supported
H2	Hedonic Trait→Impulsive Urge	Supported
Н3	Materialism → Impulsive Urge	Supported
H4a	Family & Relatives → Impulsive Urge	Supported
H4b	Peers → Impulsive Urge	Not Supported
H4b	Shop Assistants → Impulsive Urge	Supported
Н5а	Variety → Impulsive Urge	Supported
H5b	Price → Impulsive Urge	Not Supported
Н6	Impulsive Urge → Actual Impulsive Purchase Behavior	Supported
Н7	The moderating effect of shopping list for Impulsive Urge → Actual Impulsive Purchase Behavior	Supported

Table 5. Clusters based on shopping behavioral characteristics

Table 5. Clusters based on snop	Cluster 1	Cluster 2	Cluster 3
	Amateurs	Veterans	(Free-spirits)
	(53.3%)	(24.8%)	(21.8%)
Shopping list** ( $\chi^2 = 0.85, p < 0$	\ /	(= :::3:::)	(=====)
Yes	100.0	100.0	1.1
No	0.0	0.0	98.1
Overseas travel experience** (x	$y^2 = 0.22, p < 0.01$		
1 time	74.9	17.0	60.2
2-3 times	25.1	83.0	39.8
Overseas shopping experience*	* $(\chi^2 = 0.46, p < 0.0)$	1)	
1 time	100.0	0.0	68.2
2-3 times	0.0	100.0	27.3
4 and more	0.0	0.0	4.6
Shopping expenditure in that tr	$rip* (\chi^2 = \overline{0.10, p < 0})$	0.05)	
6,000-10,000	34.0	12.0	29.5
10,001-20,000	44.7	65.0	40.9
20,001-30,000	17.2	17.0	20.5
30,001-40,000	2.8	3.0	8.0
40,001-50,000	0.9	1.0	0.0
50,001 and above	0.5	2.0	1.1
Length of stay** ( $\chi^2 = 0.26$ , $p <$			
1-10 days	74.0	19.0	53.4
11-20 days	24.2	77.0	39.8
21-30 days	0.9	4.0	1.1
31 and above	0.9	0.0	5.7
Tour type $(\chi^2 = 0.07, p > 0.05)$			
Packaged tour	49.3	54.0	39.8
Full Independent Tour (FIT)	50.7	45.0	59.1
Shopping expenditure percenta			
0-24%	0.5	2.0	1.1
25-49%	25.6	22.2	24.1
50-74%	73.5	75.8	71.3
75% and above	0.5	0.0	3.4
Impulsive shopping percentage	**		<b>-</b> c 4
0-24%	96.3	89.0	76.1
25-49%	3.3	10.0	12.5
50-74%	0.5	1.0	5.7
75% and above	0.0	0.0	5.7

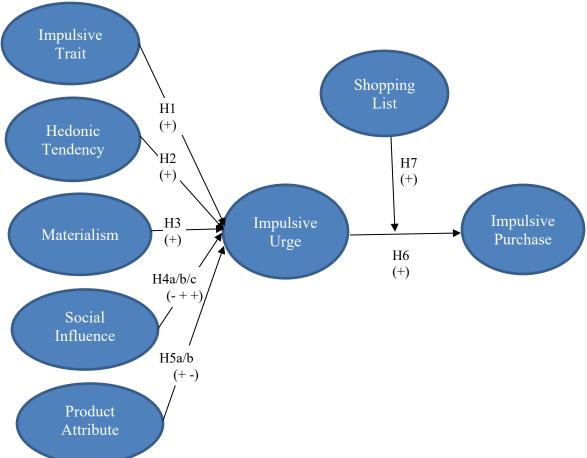


Figure 1. Theoretical Framework

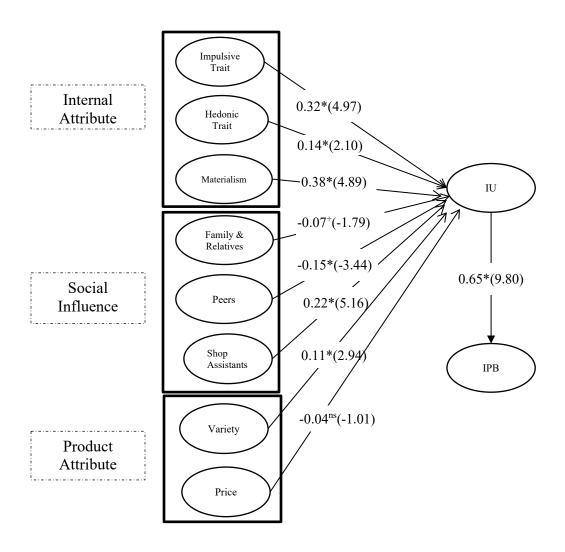


Figure 2. SEM completely standardized parameter estimates

Note: \*significant at p<.05 level; +significant at p<.10 level; values in the brackets are T values.