Drivers of Attitudes toward Luxury Brands: A Cross-National Investigation into the Roles of Interpersonal Influence and Brand Consciousness

Mark Yi-Cheon Yim, Richard J. Wehle School of Business, Canisius College
Paul L. Sauer, Richard J. Wehle School of Business, Canisius College
Jerome Williams, Management and Global Business Dept. Rutgers University
Se-Jin Lee, School of Communication, Kookmin University
Iain Macrury, Media School, Bournemouth University

Key words:
Consumer behavior, Cross-cultural study, Cross-national study, Luxury brand, Brand consciousness, Interpersonal influence

Citation Info:

Introduction

In the realm of consumer research, interpersonal influence has been found to affect consumer purchase-process activities: information processing; value formation; and, decision-making (Bearden et al., 1989; Stafford and Cocanougher, 1977). It is suggested that individuals tend to imitate consumption patterns specific to their social reference groups consistent with processes of identification and differentiation through direct and indirect learning (Bandura, 2001; Childers and Rao, 1992). In a similar way social comparison theory suggests that individuals evaluate themselves in various ways by comparing themselves to other individuals when reflecting on behavior (Festinger, 1954).

The importance of interpersonal influence has been also recognized in understanding consumers’ favorability of luxuries. Specifically, because luxury goods are perceived as one of the most visible forms of conspicuous consumption (Chen et al., 2008; Vigneron and Johnson 2004), luxury good consumers are highly sensitive to others’ evaluations of them and interpersonal influence, and thus the motivations for consumption of luxury brands are primarily based on concern with others’ perspectives of the self (Bushman, 1993). It is also known that the degree to which consumers consider others’ views of themselves is influenced by consumers’ cultural characteristic (Wong and Ahuvia, 1998). Specifically, it appears that Asian consumers’ love for luxuries are greater than consumers in Western countries, given that Asian consumers are more susceptible to interpersonal influence, relative to Western consumers (Shukla, 2011; Yim and Kim, 2008). China’s luxury consumption recently surpassed the United States, which was second to Japan (Jin, 2010). The Asian luxury market, the world’s largest, accounts for 37 percent of global luxury brand consumption and shows continuous growth, even though the global economy has recently experienced an economic breakdown (Wassener, 2011). Thus it can
be theorized that there is a sequential relationship leading from cultural characteristics to interpersonal influence to consumer attitudes toward luxury brands. The objective of this paper is to extend past empirical research by empirically testing this sequential relationship using sample data from one Western country (i.e. the UK) and from one Asian country (i.e. Taiwan).

Our first objective is to address how and why cultural characteristics affect interpersonal influence and whether to expect differences in this effect between the UK and Taiwan, where there is past significant evidence of a culturally different level of individualism, as evidenced by the individual index score for the UK and Taiwan being 89 and 17, respectively (Hofstede and Bond, 1984; Hofstede and Hofstede, 2004). This expected difference forms the basis for some of the hypothesized effects of cultural characteristics on interpersonal influence. Prior scholars found that individualistic people are negatively susceptible to normative interpersonal influence (Mourali et al., 2005). Our study extends this work by empirically specifying reliable and valid cultural predictors that integrate both the individualistic-collectivistic and the horizontal-vertical distinctions by including horizontal individualism (HI), vertical individualism (VI), horizontal collectivism (HC), and vertical collectivism (VC) as unique constructs (Triandis and Gelfand, 1998) that serve as antecedents of interpersonal influence in our model.

Secondly we address the relationship between interpersonal influence and attitudes toward luxury brands (LUX). Past scholars have expected that the more consumers are concerned with how others view them, the more they will tend to exhibit more favorable LUX (Sirgy, 1982; Shukla, 2011), in part because one of the roles of luxury goods is to display individual and social values (Shukla, 2010; Wiedmann et al., 2009) by decorating the consumer with luxury brands so as to achieve recognition from others (Goldsmith et al., 1999; Lurie, 1981). However, that relationship does not fully explain why consumers who are less likely to be
influenced by others can still be favorable towards luxury brands. To address this, we incorporate a brand consciousness (BCO) construct in our model that indicates to what extent a consumer is oriented toward purchasing well-known brands (Nan and Heo, 2007). Indeed, in a survey of 448 consumers from 45 countries approximately 60 percent of each gender who strongly favored luxury brands considered themselves to be brand-conscious (Wright, 2010).

Our proposed model unifies these two objectives by clarifying the ways in which cultural characteristics affect the interpersonal influence which in turn, through BCO, determines LUX. The findings from this current study are expected to make significant contributions to the literature by empirically identifying how more finely defined cultural variables can explain consumers’ susceptibility to interpersonal influence and presenting a more articulated and more integrated model that can cover a broader range of consumers, such as those low in the susceptibility to interpersonal influence but high in the favorability to luxury brands.

1. Theoretical background and hypotheses development

It has been empirically verified that susceptibility to normative interpersonal influence (SNII) is significantly affected by the individualistic orientation of the culture. Shukla (2011) found that on average consumers in a country with a low-individualistic culture, such as India (individual index = 48) are more susceptible to normative interpersonal influence than those in a country with a high-individualistic culture, such as the UK (individual index = 89). This is also consistent with the findings based on English and French Canadian subjects, revealing that French Canadians (less individualistic) are more susceptible to interpersonal influence than English Canadians (more individualistic), mainly due to the distinctive level of individualism (Hofstede, 2001; Mourali et al., 2005). While they successfully verified the significant role as an antecedent indicating SNII, prior studies have the limitation of employing a single individualism
cultural dimension value as a valid predictor across a limited number of countries. To identify a
variety of cultural orientations that can explain SNII, we discuss more diverse cultural
orientations in addition to individualism.

2.1 Individualism-collectivism (IND-COL) and interpersonal influence

The concept of IND-COL is central to clarifying the dynamics of interpersonal influence
when understood from a viewpoint alert to broad cultural differences (Markus and Kitayama,
1991; Triandis, 1995). In individualist cultures value is placed more readily on support of
individuals’ uniqueness, freedom, and self-expression. Each member of such groups tends to
express independence and autonomy, striving, at times to demonstrate identities distinguishable
from others (Markus and Kitayama, 1991; Triandis, 1995) both within and across groups. In
addition, individualists do not make such sharp distinctions between in-groups and out-groups
(Triandis, 1990, 1995). Western countries are often described as individualistic cultures. The
essential perspective in this type of culture views the self as autonomous, with the independent
self conceived as separable from, yet within, the social in-group. This conception also considers
personal uniqueness and private goals as more important than, and possibly in explicit tension
with, group objectives (Markus and Kitayama, 1991). The individualists in these countries are
often motivated to engage in actions that allow for self-definition of inner attributes via personal
success, creativity, hardy independence and personal charisma.

Conversely, in collectivist cultures, individuals tend to emphasize conformity, obedience,
and cooperation within in-groups. They are motivated by the norms and duties of the in-group:
the tribe; the nation; the work group; the family; or, friends (Markus and Kitayama, 1991;
Triandis, 1990, 1995). Eastern countries are primarily seen as collectivist cultures. The
perception of self is not so readily considered as separated from the individual social
relationships within which an individual is embedded and feels or seeks belonging. An individual in these cultures often has an interdependent self and tends to be less focused on personal self-enhancement, for instance, more readily accepting criticism from others so as to balance harmonious relationships (Heine et al., 1999; Singelis, 1994). A collectivistic individual observes social relationships, responsibility, and duties, with an emphasis on cooperation, harmony, and unity (Triandis, 1995).

It is important to note that though individualists are more likely to be susceptible to interpersonal influence from more diverse types of in-groups than are collectivists, the power of interpersonal influence is relatively weaker, since the demands that each in-group places on individualists are more varied (Triandis et al., 1988b) than those made on collectivists. Each individualist is more likely to belong to a greater number of in-groups than each collectivist because individualists’ in-groups are more varied in purpose, encompassing a wider array of opportunities, with each in-group consisting of a smaller number of people who have similar values, attitudes, and tastes (Laroche et al., 2005). They often maintain some minimum requirement to retain membership in each in-group. Accordingly, individualists’ perceived interpersonal influence within a group (e.g., in-line skating club, film society) is weaker than in the more concretely embedded and embedding in-groups characteristics of collectivistic cultures (e.g., family, friends, and other people who care about their welfare) (Triandis, 1972). Collectivists’ concerns are mostly limited to members within their in-group relationships, ignoring the out-groups and thus, for collectivists, interpersonal influence is strongly influential among in-group members.
2.2 Horizontalism-verticalism (HOR-VER) and interpersonal influence

One of the major aspects of the HOR-VER distinction pertains to power differences across cultures (Shavitt et al., 2006). In horizontal cultures people tend to consider others as equal to themselves and place emphasis on the assertion of uniqueness (Triandis and Singelis, 1998) and interdependence with others (Erez and Earley, 1987). On the contrary, in vertical cultures, people consider hierarchy important, focusing on achievement, obligation, and duty (Triandis, 1995). They focus on improving their individual status via competition and achievement and tend to follow authority, more assertively respecting distinctions between in-group and out-group members (Shavitt et al., 2006).

The impact of HOR-VER on interpersonal influence has been studied less often than that of IND-COL. The previous literature implies that individuals in vertical cultures tend to be more susceptible to interpersonal influence than those in horizontal cultures (Hofstede, 1980; Markus and Kitayama, 1991; Triandis, 1995; Triandis et al., 1988a). Because those in vertical cultures are highly concerned with inequalities resulting from socially and institutionally grounded competition and often confirm their social status within these terms (Singelis et al., 1995), they are more sensitive to others’ evaluations, suggesting that interpersonal influence is likely to be greater. Conversely, those in horizontal cultures are less likely to be susceptible to interpersonal influence and its effect on attitudes and behavior, as they consider each person autonomous, thereby reducing the leverage of collective, instituted evaluations. It has been accepted that most collectivist cultures are vertical and most individualist cultures are horizontal (Hofstede, 1980; Triandis, 1995; Markus and Kitayama, 1991) implying a clear distinction between HI-VC.

Given this distinction, we would expect that the construct combining HOR and IND (i.e. HI) is likely to be negatively related to SNII, while the construct combining VER and COL (i.e. VC).
VC) is likely to be positively related to SNII, and both will have stronger, more significant effects on SNII than the other two constructs, HC and VI. The detailed descriptions about four dimensions of cultural orientations would be discussed in the next section.

2.3 Combining HOR-VER and IND-COL

While the IND-COL distinction pertains specifically to each individual person and may vary from individual to individual, the HOR-VER distinction applies to the culture or subculture at large and includes large numbers of people. Thus it is reasonable to assume that these two distinctions can be jointly used to distinguish cultures and that each will have a unique relationship with interpersonal influences. As Oyserman et al. (2002) observe, although the concepts of IND and COL are frequently used in cross-cultural studies, further refinements in the cultural typology have often been required, due to the complexity of cultural orientations. For example, it is comparatively clear that the US is a more highly individualistic culture when compared to Korea, but the distinction between Japan (a moderately individualistic culture) and Korea (a highly collectivistic and low individualistic culture) is somewhat vague (Gudykunst et al., 1987). Thus distinctions based on IND-COL alone have some limitations, especially when the concepts invoke the topics of hierarchy and competition (Oyserman, 2006).

To this end Triandis (1995) re-conceptualized the IND-COL categories by introducing the concepts of HI, VI, HC, and VC. Triandis and Gelfand (1998) subsequently empirically validated these four constructs. Triandis and Gelfand (1998) offer the following profiles of individuals in each of the resulting four cultural groupings: people in HI want to be unique, distinctive from groups, and highly self-reliant, but are not interested in having high status; people in VI want to be distinguished and acquire status through competition; people in HC want to position themselves as similar to others, have common goals with others, and be
interdependent; and, people in VC place emphasis on the integrity of the in-group and are willing to sacrifice their goals for the group to which they belong. In addition, in the perception of values, individuals in each cultural dimension show some differences. Oishi et al. (1998) examined this distinction in values with respect to HI, VI, HC, and VC and found that HI is positively related to self-direction, VI to power and achievement, HC to benevolence, and VC to conformity and security.

Additional guidance as to the effect of each of the four cultural constructs on SNII is offered by past findings that people in either vertical category, VI or VC, consider the sense of belonging to a group and their status within a group important, whereas people in either horizontal category, HI or HC, do not. For this reason we assume that vertically-oriented constructs (VI and VC) would be positively related to SNII, whereas horizontally-related constructs (HI and HC) would be negatively related to SNII. Supporting this, Winter (1973, 1988) found that status appeals are more effective in persuading the individuals with a vertical orientation, being eager for power within a group. We therefore assume that HI and HC will have a negative effect on SNII and VI and VC will have a positive effect.

**H1.** The greater the consumers’ horizontal individualistic cultural orientation, the less the susceptibility to normative interpersonal influence (HI- → SNII).

**H2.** The greater the consumers’ vertical individualistic cultural orientation, the greater the susceptibility to normative interpersonal influence (VI+ → SNII).

**H3.** The greater the consumers’ horizontal collectivistic cultural orientation, the less the susceptibility to normative interpersonal influence (HC- → SNII).

**H4.** The greater the consumers’ vertical collectivistic cultural orientation, the greater the susceptibility to normative interpersonal influence (VC+ → SNII).
2.4 Interpersonal influence as a motivator for luxury consumption

A desire to engage others’ attention often motivates luxury goods consumption. Bourne (1957, p. 218) proposed that luxury brands exhibit product conspicuousness that can be primarily identified by two product characteristics: “not owned by everybody”; and, “consumed in public”. His categorization explicitly describes the role of interpersonal influence in motivating people to possess luxury goods; ostensive consumption and use of goods being a function of the motive to demonstrate social superiority to others (i.e. status seeking) (O’Cass and Frost, 2002; Tsai, 2005). More specifically, conspicuousness is created through other people’s more or less active apprehension and valuation of the good at hand (Bourne, 1957; Vigneron and Johnson, 2004), in the degree to which goods are observed by others, and in the degree to which they are discussed with other people (Bearden and Etzel, 1982). In this sense they are related to the level of “social demonstrance” afforded by a brand (Fischer et al., 2010).

One noticeable thing is that most of the factors found in the characteristics of luxury brands are related to rarity. Vigneron and Johnson’s (2004) summary of the factors making a brand luxurious includes uniqueness and high quality, and emphasizes the importance of rarity. Similarly, Leibenstein’s (1950) interpretation of the relationship between luxury and rarity reveals an economic phenomenon, notably, the Veblen effect, in which a higher rather than a lower price can induce an increase in demand for a good in some markets. High price, which makes possession of a good rare, can attract people to purchase it. Thus the high price serves as a contributory factor in defining the perceived value of the good. This is especially true when the quality of the good cannot readily be evaluated by the consumer (Keller, 2013).

To affirm status successfully, a consumer-object needs to exhibit rarity, with ownership of the object, and the object itself, conveying aspects of the difficulty in obtaining it (Kemp,
The rarity of luxury serves a role in impressing others, because in a consumer society, rarity and price can amplify one another, and so also, the value of the good on social display. This makes attention from others central to the value of luxury consumption (Csikszentmihalyi and Rochberg-Halton, 1981). Hence, given that the motivations for luxury brands are primarily created by one’s concerns with others’ perspectives with respect to self, one’s attitude towards luxury brands is linked to the degree to which one is influenced by others.

2.5 Susceptibility to normative interpersonal influence (SNII)

Reflecting on McGuire’s concept (1968) that individuals tend to respond differently to social influence, Bearden et al. (1989) defined susceptibility to interpersonal influence as follows:

“… the need to identify or enhance one’s image with significant others through the acquisition and use of products and brands, the willingness to conform to the expectations of others regarding purchase decision, and/or the tendency to learn about products and services by observing others and/or seeking information from others.” (p. 474)

While the definition indicates diverse directions of interpersonal influences, such influences can be distinguished by different motivational factors. For example, consumers lacking in product knowledge are likely to rely on perceived experts’ opinions regarding economic and utilitarian characteristics of products, that is, “informational influence,” and to follow their opinion. Other consumers are motivated to comply with opinions consistent with their reference groups that have a social connotation (Batra et al., 2001; Netemeyer et al., 1992), thus forming an influential factor labeled “normative influence” (Bearden et al., 1989). In short, normative influence indicates consumer’s willingness to conform to others’ expectations, whereas informative influence refers to consumers’ tendency to seek information from others to improve brand choice from more of a utilitarian perspective.

Prior research seems to have focused more on how SNII is affected by diverse socio-psychological constructs, in part because normative interpersonal influence is relatively isolated
from the influence of economic variables, such as the level of market growth (Erdem et al., 2006; Shukla, 2011). For example, it was found that SNII is significantly related to social values, such as belonging, being well-respected, and having warm feelings (Batra et al., 2001). Thus the more collectivistic the society is, the more SNII directly affects consumer attitudes toward sales promotions (Huff and Alden, 1998). SNII is also known to be directly connected with an individual’s status and conspicuous consumption tendencies for image portrayal (O’Cass and McEwen, 2004).

2.6 Brand consciousness (BCO)

Many prior studies have revealed that consumers who are more highly susceptible to interpersonal influence are more likely to be favorable towards luxury brands, which stimulate consumers’ desire for status consumption (e.g., O’Cass and McEwen, 2004; Wiedmann et al., 2009; Wong and Ahuvia, 1998). That direct relationship between normative interpersonal influence and attitude toward luxury brands (SNII → LUX), however, does not explain why consumers who care little about how others view them also have a positive attitude toward luxury brands (i.e. high LUX). To account for this positive attitude we propose that BCO mediates the relationship between SNII and LUX. This section focuses on whether the mediating role is significant in that the direct effect of SNII on LUX should become non-significant when brand consciousness is added as a mediating variable to our model.

BCO is defined as “an individual trait characterized by the degree to which a consumer is oriented toward buying well-known branded products” (Nan and Heo, 2007, p. 66). BCO often has been employed in research studies to explain the consumer socialization process (LaChance et al., 2003; Shim et al., 1995) and identify consumer traits that relate to expressions of self-concepts (Sirgy, 1982). Specifically, a desire to express a self-concept is understood as one of the
primary motivations behind acquiring branded goods whereby consumption of such contributes to the construction of consumers’ self-concepts (Solomon, 1983) by using brand identity to help to structure it (Keller, 1993). Therefore, consumers who are sensitive to a need to articulate a consistent self-concept have a tendency to be more conscious of brand identity, whereas consumers who are less sensitive in this regard (or who derive self conceptions from other resources) tend to ignore brands in their decision-making process (Nan and Heo, 2007; Sirgy, 1982). That is, the degree of brand consciousness depends on the level of interpersonal relationships as a fundamental basis for establishing one’s self-concept through others’ personal perceptions (Kinch, 1963). Therefore we hypothesize that:

\[ H5. \text{The greater consumers’ levels of susceptibility to normative interpersonal influence, the greater their brand consciousness (SNII+ } \rightarrow \text{ BCO).} \]

In situations where the quality of a product is very difficult to evaluate, the construct of BCO may be based on a consumers’ belief that a higher priced brand acts as a signal of higher quality (Keller, 2013), thus better attracting others’ attention representing a market-price dynamic related to Veblen effects (Nelson and McLeod, 2005; Sproles and Kendall, 1986). Luxury brands are usually more highly priced, making ownership of luxury brands rare enough so as to attract others’ attention and therefore enhance the self-concepts essential to many interpersonal relationships (Sirgy, 1982). Thus, the more brand-conscious consumers are, the more likely they would be to form more highly favorable attitudes toward luxury brands, and so we hypothesize:

\[ H6. \text{The greater the consumers’ levels of brand consciousness, the more positive their attitudes toward luxury brands (BCO+ } \rightarrow \text{ LUX).} \]

Combining all the proposed hypotheses, we constructed a model as shown in Figure 1 and the following section explains how we tested the model.
2. Methodology

While model complexity enriches the understanding of intricate processes of consumer decision-making, if too complex it hinders the empirical validation of the model and the establishment of invariance across countries. This complexity is further compounded by the influence of subcultures within countries (Ter Hofsted et al., 2002; Towns, 2013). Increasing the number of countries or cultures sampled plus adding more detailed constructs to the model adds to the complexity of the model and increases the difficulty of achieving measurement invariance (Steenkamp and Baumgartner, 1998). This dilemma was encountered in our current study both in terms of the number of constructs in our model and the number of countries in which sample data was collected. One possible approach is to increase the homogeneity of the samples and reduce the complexity by sampling similar groups across countries, such we have done by using student samples. Students are likely to be more similar across countries (Dubois et al., 2005), especially given the increased emphasis on and availability of student exchange programs and ease of international electronic communications (Zhang and Shavitt, 2003). Particularly, their socio-economic variables, such as educational level, monthly spending, and consumption patterns are presumably similar among college students in general (compared to among a broader age groups of consumers), while keeping the cultural distinctiveness in both countries (e.g., HI, VI, HC, VC, and SNII) (Vigneron and Johnson, 1999; Wood, 1998). Thus, their understanding about luxury brands will be accordingly relatively similar and it can be beneficial to obtain internal validity (e.g., LUX).
Therefore we administered a paper-pencil survey instrument to students in universities in the United Kingdom (UK) (individual index score = 89) and Taiwan (individual index score = 17); two countries that are historically, geographically and culturally different from each other.

3.1. Sample profile

Respondents who indicated a different nationality than that of the country in which the sample was derived were removed from the data set. After this data cleaning, we had a sample of 174 college students from the UK and 209 from Taiwan in our analysis pool (see Table 1). The sample from the UK (\(M = 24.09, SD = 7.59\)) was nearly four years older than that from Taiwan (\(M = 20.19, SD = 2.26\)). In both countries the gender ratio was female-skewed. The majority of British respondents were Caucasian, followed by British Africans, while Taiwanese respondents only consisted of Asians whose nationality was Taiwanese-Chinese. With respect to annual household income, the majority of respondents were in the ‘$30,000-$74,999’ category.

3.2. Measures

The first section of the questionnaire included items measuring LUX derived from a five-item, seven-point, semantic differential scale developed by Spears and Singh (2004). Due to a linguistic issue in the translation process, only four items were adopted: “unappealing/appealing”, “bad/good”, “unpleasant/pleasant”, and “unfavorable/favorable.” Examples of luxury brands including Armani, Burberry, Chanel, Gucci, Louis Vuitton, Prada, and Ralph Lauren as identified as such in the literature (Brioschi, 2006; Silverstein and Fiske, 2003) were used as the basis for the LUX scale. Those brand names are displayed on a variety of fashion products including clothes (e.g. suits, coats, dresses), bags, watches, shoes, and various fashion accessories that appeal to both genders. Jackson (2004) largely classified luxury goods into four
principal categories: fashion, perfumes and cosmetics, wines and spirits and watches and jewelry. Among those, it is known that fashion constitutes the largest proportion of luxury goods sales and shows the strongest growth (Bain & Company, 2012; Economist, 2002). Providing these well-known luxury fashion brand names as cues provides equivalent anchors that give a sense of what constitutes luxury goods to college students who participated in our study. By confining the product category to fashion brands, it was also possible to better clarify the meaning of luxuries. For example, fashion clothing products and accessories offer more relevant and significant luxury stimuli than wines, watches, and jewelry to college students.

The second section of the questionnaire contained items measuring respondents’ cultural orientations (HI, VI, HC and VC) and SNII. The scale measuring the four cultural dimensions (Triandis and Gelfand, 1998) consisted of a sixteen item, seven-point, Likert scale ranging from “strongly disagree” to “strongly agree”. Each of the four dimensions was indicated by four items. The scale for SNII consisted of an eight-item, seven-point, Likert scale, ranging from “strongly disagree” and “strongly agree.” The next section of the questionnaire measured BCO using a three-item, seven-point Likert-type scale, ranging from “strongly disagree” to “strongly agree”. developed by Nan and Heo (2007), that included statements: “I pay attention to the brand names of the products I buy,” “Sometimes I am willing to pay more money for a product because of its brand name,” and “I believe that the brands I buy are a reflection of who I am.” The final section of the questionnaire ended with basic demographic questions.

The questionnaire was initially written in English then translated into Chinese using a translation-back translation process (Marin and Marin, 1991; McGorry, 2000). Two Chinese-English bilingual graduate student s were involved in this translation process. They translated all the survey questions liberally rather than literally so as to best retain the original meaning of each
item, thereby taking into account the unique social and cultural contexts in Taiwan (Douglas and Nijssen, 2003; Sears, 1961). After two Chinese-English bilingual graduate students performed a translation-back translation of the survey instrument items, they resolved differences concerning items for which their translation differed so as to best retain the original meaning of each item and thus finalize the best, most equivalent wording for the survey instrument.

3. Results

4.1 Scale reliability and validity

An exploratory factor analysis (EFA) was first conducted and we removed any indicators that had a factor loading less than 0.4. Through this process we removed one indicator from HI (My personal identity, independent of others, is very important to me), two from VI (Competition is the law of nature, when another person does better than I do; I get tense and aroused), two from HC (To me, pleasure is spending time with others; I feel good when I cooperate with others), one from VC (It is important to me that I respect the decisions made by my groups), and three from SNII (I rarely purchase the latest fashion styles until I am sure my friends approve of them; If I want to be like someone, I often try to buy the same brands that they buy; I often identify with other people by purchasing the same products and brands they purchase).

Though Cronbach’s alpha is more commonly used to assess reliability, it has been shown that alpha tends to underestimate the true construct reliability (Bollen, 1989) therefore composite reliability is considered a more accurate measure of reliability for latent variables (Bacon et al., 1995). A confirmatory factory analysis (CFA) was run to assess the reliability of the constructs using a composite reliability test of the remaining indicator variables, thus confirming each latent construct’s reliability. All but one of the composite reliability scores exceeded the suggested
guideline of .70, namely VI in Taiwan ($\alpha = .67$) (Hancock and Mueller, 2001). Furthermore, it is therefore reasonable to use these final sets of adapted indicators as reported in Table.

**Insert Table 2 here**

Scale validity was confirmed using convergent and discriminant validity tests. Factor loadings of all the indicators on each latent construct were significant (Anderson and Gerbing, 1988) and each construct’s average variance extracted (AVE) was 0.50 or greater except for HI in the UK (AVE = .45) and VI and VC in Taiwan (AVE = .49 both), confirming convergent validity (Fornell and Larcker, 1981). Discriminant validity was tested by comparing the AVE for each construct with the squared correlation between that construct and each of the other constructs (Fornell and Larcker, 1981; Lichtenstein et al., 1990). As shown in Table 2, the AVE exceeded these squared correlations for all constructs, thus discriminant validity was confirmed for all constructs. In summary, results showed that all the constructs generally met the acceptable criteria for measurement reliability and validity.

4.2 Issues in measuring and accessing measurement invariance of cultural dimensions

There is evidence that it may be difficult to replicate the clear four-factor HI-VI- HC-VC distinction that Triandis and Gelfand (1998) achieved, especially if applied to a domain-specific situation such as the purchase of luxury brands that differs from the context in which these four dimensions were initially validated. For example, Li and Aksoy (2007) had found difficulty in establishing discriminant validity with respect to the HOR-VER dimensions, while Shavitt et al. (2006) found that COL was highly correlated with the vertical dimension.

In the literature on cultural differences, there appears to be varied consistency in the dimensionality and sub-dimensionality of IND-COL and similar measures of cultural characteristics. This is especially true when one goes from a country level to an individual level
of analysis. In their meta-analysis Oyserman et al. (2002) used the four sets of items designed by Triandis and Gelfand (1998) to evaluate the validity of the HI, VI, HC, and VC constructs. Using both empirical testing and item content wording evaluations, however, they were unable to support the validity of four unique constructs noting that:

“… The two COL subscales were correlated; hence, they were combined into one COL score. However, Triandis designed the vertical and horizontal IND scales to be orthogonal, raising questions as to whether we could treat combined group differences on the two scales as reflections of the same underlying concept. Further, the vertical IND subscale focused exclusively on competition, content that is atypical for all of the other IND scales we found. Therefore, we selected only the horizontal, not the vertical, IND subscale for the six international comparison studies and the nine within-United States studies that used both IND subscales.” (Oyserman et al., 2002, p. 11)

The fact that these scales were sufficiently correlated to enable them to be collapsed from four into two dimensions, namely COL (with combined HOR and VER) and HI, raises questions as to whether the scales should be collapsed into the two dimensions of IND-COL, or whether it would also be possible to collapse them into the two dimensions of HOR-VER or some other two-dimensional or even three-dimensional combination. Others have similarly addressed the inconsistency of dimensionality and sub-dimensionality findings within the IND-COL domain (Brewer and Chen, 2007; Kagitecibasi, 2005; Schimmack et al., 2005; Tsui et al., 2007). Thus the inclusion of the four constructs in the design and implementation in models of consumer behavior differs to some degree based on the unique characteristics of the sample in each study and requires evaluating both item wording with respect to the specific domain of each study and statistical properties of the sample data. Empirically testing the fit of our model by specifying different IND-COL or HOR-VER combined configurations makes it possible to determine, within the context of our study, whether the four dimensions are valid and if not which set of dimensions best fits our model.
Because a primary goal of our study was to establish the validity of our model across two countries, we followed Steenkamp and Baumgartner’s (1998) recommendation by testing model parameters for configural, metric and scalar invariance. In this process, a series of multi-group CFAs using AMOS 19.0 were conducted and, as expected, it was not easy to establish measurement invariance across the two countries in our study (Steenkamp and Baumgartner, 1998). Configural invariance tests showed a consistent indicator variable loading pattern across the two countries with RMSEA = .042, SRMR = .064 and other fit measures that attained the acceptable guideline of .9 or above (Kelloway, 1998) (see Table 3), thereby confirming configural invariance (M1) across two countries.

Next, metric invariance was assessed, but full metric invariance could not be achieved. By freeing the invariance constraints on two indicator variables, one reflecting SNII (I like to know what brands and products make good impressions on others) and the other reflecting LUX (unpleasant – pleasant) (see model M2 in Table 3) partial metric invariance was achieved as evidenced by the non-significant result of the chi-square difference test ($\Delta\chi^2(13) = 16.783, p = .209$), thus allowing us to directly compare the structural path parameter values across the two countries in our study. As for scalar invariance, we could not achieve either full or partial scalar invariance.

To further confirm metric invariance, the change in model fit using alternative fit measures was observed. A decrease of .01 or less in the CFI is interpreted as further evidence of invariance (Cheung and Rensvold, 2002). As shown in Table 3, $\Delta$CFI ranged from .001 to .002. The failure of establishing scalar invariance caused one limitation of the current study, that is, it made it impossible to directly compare the mean differences of latent variables across the two countries (Dimitrov, 2006).
4.3 Hypotheses tests

Having established partial metric invariance of our measurement model, we proceeded to test invariance of structural path parameter values across the two countries using multi-group SEM. A chi-square difference test comparing the base model to a cross-national, parameter-constrained model (Byrne and Campbell, 1999; Kline, 1998) revealed no significant differences in the structural parameters between the UK and Taiwan ($\Delta \chi^2 = 5.382, \Delta df = 6, p = .496$) (see Table 4). Therefore, it is concluded that the proposed model is equally applicable in both countries.

To test our proposed hypotheses, we conducted a structural equation analysis in which the overall model fit was tested separately for each of the two countries. The model for each of the two countries was found to have acceptable fit (UK: $\chi^2(197) = 276.873$, CFI = .955, NNFI = .947, SRMR = .077, RMSEA = .048, $\chi^2/df = 1.405$; Taiwan: $\chi^2(197) = 384.412$, CFI = .905, NNFI = .888, SRMR = .071, RMSEA = .068, $\chi^2/df = 1.951$) (Hancock and Mueller, 2006) (see Table 5). H1 to H4 predicted the relationships between each of the four cultural characteristics and SNII. The analysis results for all four hypotheses indicated that the parameters were significant and in the correct direction across the two countries, except for H2, the path of VI → SNII in Taiwan which was not significant ($p = .403$). Recall that VI in Taiwan had the lowest level of reliability of any construct in either country. Thus, H1, H3, and H4 were supported, while H2 was supported only for the UK. That is, regardless of cultural dominance or geographically different locations of countries, horizontal-individualistic consumers and horizontal collectivistic consumers are unwilling to be influenced by others (H1: HI → SNII; H3:
HC → SNII), whereas vertical collectivistic consumers are more likely to be influenced by others (H4: VC → SNII). Thus the HOR-VER distinction seems to have a more pronounced discriminant effect on SNII than does the IND-COL distinction.

In testing H5 and H6, we found significant, positive relationships between SNII and BOC (H5) and between BCO and LUX (H6) across both countries. In other words, consumers who are more susceptible to normative interpersonal influence tend to be more positively sensitive toward luxury brands. To verify the mediating role of BCO, we conducted a chi-square difference test of two model specifications: one the model without the mediator construct BCO, that is, only a direct relationship of SNII → LUX, and the other the model with BCO added as the mediator, namely, SNII → BCO → LUX while retaining the direct relationship of SNII → LUX. Interestingly the results showed a difference between two countries. Specifically, in the case of Taiwanese consumers, there was a highly significant difference between two models ($\Delta df = 56$, $\Delta \chi^2 = 134.276, p < .001$), indicating that for Taiwanese respondents the interpersonal influences are mediated by luxury brand consciousness in the formation of attitudes toward luxury goods. In contrast, only a marginally significant ($\Delta df = 56$, $\Delta \chi^2 = 72.592, p = .067$) difference was observed between the two models for UK consumers, indicating that the mediating role of BCO on the relationship between SNII and LUX is supplemented by a significant direct relationship.

4. Discussion

Given that relatively little research about luxury brands has provided an integrative cultural approach shown to be valid across two countries, our study advances this area of research by using a richer, more detailed set of cultural influence constructs as antecedents of interpersonal influences leading to the formation of consumer attitudes toward luxury brands.
Though much cross-cultural consumer research has focused on differences as opposed to similarities among cultures (Sojka and Tansuhaj, 1995), the current study found a mix of both common and different psychological paths to attitude formation across two different countries (Cadogan, 2010).

The proposed model in this study has focused on two specific areas of the process. First, the simultaneous relationship between four cultural characteristics and SNII was examined. Only a limited number of studies have tested the relationship between culture and interpersonal influence at the individual level, while a majority of studies have focused on the effect of either individualism or collectivism on SNII (Liu and Wu, 2007; Mourali et al., 2005; Shukla, 2011). One possible reason for prior researchers’ focus on a single cultural characteristic may be related to the difficulty of achieving measurement invariance across countries (Vandenberg and Lance, 2000). Indeed, prior cross-national studies (e.g. Davidov, 2008; Schaffer and Riordan, 2003) have failed to establish measurement invariance and were thus forced to reduce the number of countries included in their analysis. In the same way the current study failed to achieve the scalar invariance across only two countries. Yet, by generally passing the metric invariance test of the measurement model, we were able to compare the structural path parameter values defining the antecedent relationship of the four cultural characteristics with SNII between two countries, the UK and Taiwan (Hofstede and Bond, 1984; Hofstede and Hofstede, 2004).

Specifically, it was found that the HOR-VER distinction is a more useful distinction to use as antecedents of SNII than is the IND-COL distinction for both countries in our study. This was revealed by the result that regardless of whether HOR is combined with either IND or COL, it consistently exhibits negative path values, whereas VER when combined with either IND or COL (except for IND in Taiwan) consistently shows positive path values in both countries. This
finding implies that power-difference, the primary basis for the HOR-VER distinction (Shavitt et al., 2006) varies more with SNII than does individual levels of equality and freedom that are the basis for the IND-COL distinction (Triandis and Gelfand, 1998). Also it should be noted that the HOR-VER designation tends to apply to the more general cultural characteristics of a country while IND-COL tends to vary from one individual to another and may co-exist in each person. In this sense it may be wise to explore the possibility of subgroups of individuals with similar combinations of IND-COL within a larger grouping with respect to HOR–VER.

At this point it is necessary to highlight the importance of avoiding the “ecological fallacy” (Sharma, 2010) in applying Hofstede’s (1980) nationally-defined cultural categories to individual-level analyses. For each person in any country there is the possibility that that person may possess varying degrees of IND and COL as IND and COL do not lie on a single dimension, but are negatively related. Furthermore forms of IND and COL may vary from country to country or subculture to subculture (Triandis, 1995). Triandis and Gelfand (1998) convincingly argue that the HOR-VER dimensions are key to identifying the various forms of IND-COL then proceed to empirically verify this four construct representation consisting of HI, VI, HC and VC.

Given our empirical evidence, it seems that HI and VC are the more stable predictors of SNII, as both had a significant and consistent relationship with SNII with the same valence across two countries. This is further verified by the results showing that, though the constructs of VI and HC were significant in opposite directions in predicting SNII, VI was not significant in Taiwan. In addition, HI and VC seem to be less problematic from a measurement perspective, considering that the number of observed indicators were greater after EFA than for HC and VI (Jöreskog and Sörbom, 1993). Specifically, HI and VC each had three reliable indicators, while VI and HC had only two, even after model modifications based on EFA. Thus, it is
recommended that to specify a more parsimonious model, future researchers adopt these two constructs, HI and VC, over HC and VI as antecedents of SNII as they are found to be theoretically and statistically stable measurement tools in cross-cultural studies. Additional analysis revealed that the model solely using HI and VC to predict SNII showed their generally consistent roles as antecedents across two countries (VC: \( \beta_{UK} = .274, p < .01; \beta_{Taiwan} = .165, p = .057 \), HI: \( \beta_{UK} = -.260, p < .05; \beta_{Taiwan} = -.228, p < .01 \)), whereas the model solely adopting VI and HC did not (VI: \( \beta_{UK} = .100, p < .01; \beta_{Taiwan} = -.024, \text{n.s.} \), HC: \( \beta_{UK} = -.083, \text{n.s.}; \beta_{Taiwan} = -.189, p < .05 \)). Further testing, however, across different cultures, plus development of additional indicators may mitigate the problem with specifying HC and VI.

The second part of our analysis dealt with the relationship among SNII, BCO, and LUX. Recall that as shown in Table 5, when BCO was added as a mediator of the relationship between SNII and LUX, it was found to be significant, while the direct relationship of SNII → BCO became insignificant in both countries, though only marginally so in the UK, providing evidence that BCO functions as a fully mediating variable (Baron and Kenny, 1986). It is important to note that this marginal significance is not intended to imply that BCO does not mediate the relationship between SNII and LUX in the UK, but merely that the explanatory power of the fully mediated model is only marginally not greater than the explanatory power of the non-mediated SNII → LUX model in the UK. It may be inferred from these results that Taiwanese consumers living in a low individualistic cultural environment (with assumed high SNII) used luxury brands in order to express their values and decorate themselves so as to be more socially acceptable by others in their society (Park et al., 2008). UK consumers, however, living in a highly individualistic cultural environment (with assumed lower SNII) appear to have more diverse motivations than simply the brand name values that luxury brands hold in forming
positive attitudes towards luxury brands, including such characteristics as product quality, self-achievement, self-pleasantness, and self-concept (Dubois et al., 2005; Sirgy, 1982; Tsai, 2005; Vigneron and Johnson, 1999). In some sense, this finding is consistent with Wong and Ahuvia’s (1998) postulations that Asian consumers perceive publicly visible and meaningful possession of luxury items as more important than do Western consumers because the dominant influence of collectivist cultures makes them more susceptible to opinions of other consumers; therefore, they construct their identity based on public perceptions of them, which results in more attention being given to brand names of luxury goods (Belk, 1988). Prior scholars assert that this cultural distinction is well explained by the concept of “face” that is defined as a desire to be respected by others and to be more socially valuated, compared to others (Ting-Toomey and Kurogi, 1998). Face is linked to brand consciousness and functions as a significant motivator for Asian consumers, motivating them to purchase brand name products, though they may lack sufficient knowledge of them (Liao and Wang, 2009; Monkhouse et al., 2012).

5. Managerial implication

Our findings have important implications for marketers and advertisers. A majority of research studies have suggested that a group of consumers with similar cultural characteristics behaves in a similar manner (Shavitt et al., 2006), and thus, an individual level of cultural orientation rather than traditionally adopted geographically-based cultural criteria (e.g. collectivistic Asian consumers vs. individualistic Western consumers) should be investigated as a basis for a more accurate application of market segmentation in selecting target markets to serve (e.g. Dubois et al., 2005). Diverse social and technological factors are believed to serve the primary roles in the sharing of cultural orientation effects among geographically different countries; for example, the increasingly frequent international communications via the Internet,
global advertising campaigns, and direct cultural experiences through travel or language training programs (Time Asia, 2000; Zhang and Shavitt, 2003). These effects of globalization reduce the domestic cultural salience in each country (Zhang, 2010), thus, segmenting a market based on culture in international business is getting tougher or more problematic to achieve.

Understanding consumers from an individual perspective, rather than from a country-based perspective, seems more reasonable, assuming that many people with diverse cultural orientations dwell together within each country (Vargas and Kemmelmeier, 2012). From this perspective, we propose that the HOR-VER distinction rather than the IND-COL distinction is more applicable across multiple countries and would be a more valid and reliable segmentation tool for international business in assessing attitudes toward luxury brands.

Our findings are believed to benefit advertisers as well. Culturally-specific advertising messages are more effective than more general ones based on models that assert global-universal assumptions about consumer characteristics in local-national markets (cultural congruency effect; see Han and Shavitt, 1994; Zhang, 2010). Therefore, to stimulate consumers’ attitudes toward and willingness to purchase luxury brands, appealing vertically-oriented messages, for example, messages accentuating power, status, authority, obedience, and conformity, would be more persuasive and effective when directed toward consumers who possess this vertical orientation. In contrast, appealing horizontally-oriented messages would only serve a de-marketing role in inducing vertically-oriented consumers to avoid luxury brands.

The finding of the difference between the UK and Taiwan in the significance of the mediating role of BCO has another important implication for marketers. Specifically, the strength of the mediating role of BCO in the UK sample was diminished relative to the role in Taiwan. We assume that the UK represents Western countries relatively high in individualism
and Taiwan those countries relatively low in individualism, and thus this will be linked to different levels of SNII (Mourali et al., 2005). That is, Asian consumers high in SNII are motivated to enhance their social image through the use of brands and are more likely to display brands others admire, so that luxury brands whose values have been shared among social members will receive their attention (SNII → BCO → LUX). However, this is not the case for Western consumers and it appears that other diverse characteristics of luxury brands encourage their favoring, such as product quality, self-concept, and self-pleasantness, as previously discussed. It also explains the frequently observed bandwagon effect in Asian markets. The bandwagon effect takes place where there is a high demand for a particular brand or product that can fulfill the function of making consumers fit in with a particular group and thus the brand becomes socially accepted within a group serves as a symbolic sign of group membership (Leibenstein, 1950). For example, Korean consumers are more likely to purchase BMW or Mercedes that have a stronger ability to represent one’s social status that would Jaguar or Audi, because the former brands carry more publicly agreed upon social and symbolic meanings to upper class members in Korean society (Silverstein and Fiske, 2003). Thus, brand managers in the business of selling luxury goods are encouraged to put greater efforts into strengthening brand equity with a focus on building shared values among social members, particularly when targeting Asian markets.

6. Limitations and suggestions for future research

While this study presented many useful findings, it was not immune from some limitations. First of all, there were some issues related to the sample respondents’ age and gender. Although many sources report that younger consumers are entering luxury markets (Business Wire, 2007; Kallmeyer, 2007) and our results focus on their attitudes rather than their purchase
intention, some sample respondents may have been too young to have the resources to think of and consider luxury brands as objects of possessions, resulting in a pronounced rejection of luxury. In addition, the fact that each individual may have a different definition of luxury would be problematic (Vigneron and Johnson, 2004). Luxury brands have been introduced in numerous product (e.g., wine, fashion, yachts) and services (e.g., cruises, flights, hotels) domains. Given that we attempted to narrow the broad range of luxury product categories so as to avoid the numerous and diverse attributes associated with them, we selected the relatively most affordable product category of fashion goods and presented brand names in that category as an example of luxury brands. While we may have succeeded in narrowing the range of luxury items, the examples presented in the survey nevertheless may have resulted in more biased ideas about each individual’s own definition of luxury brands. Also, the fact that a majority of respondents were females may have resulted in gender bias relative to the brand names provided. For females more so than for males, fashion brands are perceived as a symbolic display as a way of expressing their status and who they are (O’Cass, 2001). Future research should use a broader range of age groups with a more balanced gender representation.

Another issue in this study is related to our inability to include six of the 16 items measuring the four cultural constructs defined by Triandis and Gelfand (1998). This lack of a sufficient number and wording of statistically valid indicators, possibly compounded by the need to translate the survey instrument into a second language, likely contributes to our inability to find satisfactory statistical fit and measurement invariance in our model (Hancock and Mueller 2006). Future researchers may consider other cultural and psychological constructs that can better explain SNII, such as independent vs. interdependent self-construal, self-monitoring, and self-confidence.
Finally, the findings from the current study are limited to the UK and Taiwan. We encourage future researchers to replicate and confirm the suggested model based on more extensive samples from countries with more diverse cultural dimensions. Similarly, rather than having a cross-national cross-cultural study, it is also recommended that future research focus on sub-cultural investigations, since people with a variety of cultural backgrounds often dwell within the same country (Vargas and Kemmelmeier, 2012).
References


Table 1  
Summary of demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Demographic characteristic</th>
<th>UK (%) $n = 174$</th>
<th>Taiwan (%) $n = 209$</th>
<th>Pearson $\chi^2$</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>35.6</td>
<td>69.9</td>
<td>$\chi^2(4) = 60.96$</td>
<td>$p &lt; .001$</td>
</tr>
<tr>
<td>21-23</td>
<td>36.8</td>
<td>19.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-26</td>
<td>9.2</td>
<td>8.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27-29</td>
<td>5.7</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 and above</td>
<td>12.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>24.09 (7.59)</td>
<td>20.17 (2.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>36.2</td>
<td>22.5</td>
<td>$\chi^2(1) = 9.73$</td>
<td>$p = .003$</td>
</tr>
<tr>
<td>Female</td>
<td>63.8</td>
<td>77.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>33.9</td>
<td></td>
<td>$\chi^2(5) = 323.05$</td>
<td>$p &lt; .001$</td>
</tr>
<tr>
<td>British African</td>
<td>23.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>9.2</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>25.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below $30,000</td>
<td>33.9</td>
<td>40.7</td>
<td>$\chi^2(9) = 71.72$</td>
<td>$p &lt; .001$</td>
</tr>
<tr>
<td>$30,000-$74,999</td>
<td>43.7</td>
<td>53.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$75,000-$149,999</td>
<td>17.8</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$150,000 and above</td>
<td>4.6</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Parenthesis in average age indicates standard deviation.
Table 2
Factor loadings, reliability and convergent and discriminant validity of constructs

<table>
<thead>
<tr>
<th>Scale items</th>
<th>UK</th>
<th>Taiwan</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Horizontal individualism (HI)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’d rather depend on myself than others.</td>
<td>.55</td>
<td>.72</td>
<td>.68</td>
</tr>
<tr>
<td>I rely on myself most of the time; I rarely rely on others.</td>
<td>.74</td>
<td>.88</td>
<td>.66</td>
</tr>
<tr>
<td>I often do “my own thing.”</td>
<td>.71</td>
<td>.59</td>
<td>.55</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.70</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.73</td>
<td>.83</td>
<td>.67</td>
</tr>
<tr>
<td>Average variance extracted</td>
<td>.45</td>
<td>.55</td>
<td>.40</td>
</tr>
<tr>
<td>Squared correlation</td>
<td>.00-09</td>
<td>.00-19</td>
<td></td>
</tr>
<tr>
<td><strong>Vertical individualism (VI)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important that I do my job better than others.</td>
<td>.63</td>
<td>.76</td>
<td>.59</td>
</tr>
<tr>
<td>Winning is everything.</td>
<td>.79</td>
<td>.64</td>
<td>.56</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.66</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.70</td>
<td>.67</td>
<td>.50</td>
</tr>
<tr>
<td>Average variance extracted</td>
<td>.51</td>
<td>.49</td>
<td>.33</td>
</tr>
<tr>
<td>Squared correlation</td>
<td>.00-08</td>
<td>.00-08</td>
<td></td>
</tr>
<tr>
<td><strong>Horizontal collectivism (HC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a coworker gets a prize, I would feel proud.</td>
<td>.75</td>
<td>.69</td>
<td>.67</td>
</tr>
<tr>
<td>The well-being of my coworkers is important to me.</td>
<td>.85</td>
<td>.99</td>
<td>.64</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.77</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.80</td>
<td>.98</td>
<td>.60</td>
</tr>
<tr>
<td>Average variance extracted</td>
<td>.64</td>
<td>.73</td>
<td>.43</td>
</tr>
<tr>
<td>Squared correlation</td>
<td>.00-11</td>
<td>.00-08</td>
<td></td>
</tr>
<tr>
<td><strong>Vertical collectivism (VC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents and children must stay together as much as possible.</td>
<td>.70</td>
<td>.63</td>
<td>.61</td>
</tr>
<tr>
<td>It is my duty to take care of my family, even when I have to sacrifice what I want.</td>
<td>.86</td>
<td>.66</td>
<td>.60</td>
</tr>
</tbody>
</table>
Family members should stick together, no matter what sacrifices are required.  
- Cronbach’s alpha: .81  .80  .52  
- Composite reliability: .83  .74  
- Average variance extracted: .85  .76  .60  
- Squared correlation: .63  .49  .33  

<table>
<thead>
<tr>
<th>Susceptibility to normative interpersonal influence (SNII)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important that others like the products and brands I buy.</td>
</tr>
<tr>
<td>Cronbach’s alpha: .68  .75  .81</td>
</tr>
<tr>
<td>Composite reliability: .85  .82  .86</td>
</tr>
<tr>
<td>Average variance extracted: .79  .70  .69</td>
</tr>
<tr>
<td>Squared correlation: .80 -11  .00 -08</td>
</tr>
<tr>
<td>If other people can see me using a product, I often purchase the brand they expect me to buy.</td>
</tr>
<tr>
<td>Cronbach’s alpha: .71  .57  .73</td>
</tr>
<tr>
<td>Composite reliability: .88  .86</td>
</tr>
<tr>
<td>Average variance extracted: .89  .87  .89</td>
</tr>
<tr>
<td>Squared correlation: .87 -17  .00 -23</td>
</tr>
<tr>
<td>I like to know what brands and products make good impressions on others.</td>
</tr>
<tr>
<td>Cronbach’s alpha: .79  .58</td>
</tr>
<tr>
<td>Composite reliability: .86  .58</td>
</tr>
<tr>
<td>Average variance extracted: .86  .63  .77</td>
</tr>
<tr>
<td>Squared correlation: .87 -17  .00 -23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand consciousness (BCO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I pay attention to the brand names of the products I buy.</td>
</tr>
<tr>
<td>Cronbach’s alpha: .83  .78</td>
</tr>
<tr>
<td>Composite reliability: .79  .86</td>
</tr>
<tr>
<td>Average variance extracted: .75  .63</td>
</tr>
<tr>
<td>Squared correlation: .74  .84  .83</td>
</tr>
<tr>
<td>Sometimes I am willing to pay more money for a product because of its brand name.</td>
</tr>
<tr>
<td>Cronbach’s alpha: .63  .58</td>
</tr>
<tr>
<td>Composite reliability: .86  .63</td>
</tr>
<tr>
<td>Average variance extracted: .79  .86</td>
</tr>
<tr>
<td>Squared correlation: .80 -22  .00 -24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudes toward luxury brands (LUX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unappealing – Appealing</td>
</tr>
<tr>
<td>Cronbach’s alpha: .87  .75  .95</td>
</tr>
<tr>
<td>Composite reliability: .85  .69  .91</td>
</tr>
<tr>
<td>Average variance extracted: .86  .90</td>
</tr>
<tr>
<td>Squared correlation: .86 -22  .00 -24</td>
</tr>
<tr>
<td>Bad – Good</td>
</tr>
<tr>
<td>Unpleasant – Pleasant</td>
</tr>
<tr>
<td>Cronbach’s alpha: .86  .90  .91</td>
</tr>
<tr>
<td>Composite reliability: .86  .90</td>
</tr>
<tr>
<td>Average variance extracted: .86  .90</td>
</tr>
<tr>
<td>Squared correlation: .86 -22  .00 -24</td>
</tr>
</tbody>
</table>

42
<table>
<thead>
<tr>
<th></th>
<th>.86</th>
<th>.88</th>
<th>.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
<td>.92</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.92</td>
<td>.91</td>
<td>.97</td>
</tr>
<tr>
<td>Average variance extracted</td>
<td>.74</td>
<td>.66</td>
<td>.87</td>
</tr>
<tr>
<td>Squared correlation</td>
<td>.00-.22</td>
<td>.00-.24</td>
<td></td>
</tr>
</tbody>
</table>

Note. All the coefficients are significant at $p < .001$. Squared correlation in this table refers to squared correlations between a construct and other constructs.

UK: $\chi^2(188) = 254.26, p < .001, \chi^2/df = 1.35$, CFI = .96, NNFI = .95, SRMR = .05, RMSEA = .05.

Taiwan: $\chi^2(188) = 372.40, p < .001, \chi^2/df = 1.98$, CFI = .91, NNFI = .88, SRMR = .06, RMSEA = .07.
Table 3
Fit measures for assessment of measurement invariance

<table>
<thead>
<tr>
<th>Invariance</th>
<th>$\Delta \chi^2$ ($\Delta df$)</th>
<th>$\chi^2$ ($df$)</th>
<th>Sig.</th>
<th>$\chi^2/df$</th>
<th>$\Delta$CFI</th>
<th>CFI</th>
<th>NNFI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configural invariance model</td>
<td></td>
<td>626.633 (376)</td>
<td></td>
<td>1.667</td>
<td>.933</td>
<td>.917</td>
<td>.064</td>
<td>.042</td>
<td></td>
</tr>
<tr>
<td>(M1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial metric invariance model</td>
<td>16.783 (13)</td>
<td>643.416 (389)</td>
<td>$p = .209$</td>
<td>1.654</td>
<td>.001</td>
<td>.932</td>
<td>.919</td>
<td>.063</td>
<td>.041</td>
</tr>
</tbody>
</table>

44
Table 4
Goodness-of-fit measures for multi-group structural model invariance tests of parameters between the UK and Taiwan

<table>
<thead>
<tr>
<th>Model description</th>
<th>$\Delta \chi^2 (\Delta df)$</th>
<th>$\chi^2 (df)$</th>
<th>Sig.</th>
<th>$\chi^2/df$</th>
<th>CFI</th>
<th>NNFI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconstrained model</td>
<td>694.458 (409)</td>
<td>1.698</td>
<td>.924</td>
<td>.914</td>
<td>.080</td>
<td></td>
<td>.043</td>
<td></td>
</tr>
<tr>
<td>(Partial metric model)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constrained model</td>
<td>5.382 (6)</td>
<td>699.840 (415)</td>
<td>.496</td>
<td>1.686</td>
<td>.924</td>
<td>.915</td>
<td>.087</td>
<td>.042</td>
</tr>
<tr>
<td>(Model with equality constraint imposed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 5

*Standardized path coefficients in structural model between the UK and Taiwan*

<table>
<thead>
<tr>
<th>Hyp.</th>
<th>Path coefficients</th>
<th>UK</th>
<th></th>
<th>Taiwan</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Estimate</td>
<td>p-Value</td>
<td>Estimate</td>
<td>p-Value</td>
</tr>
<tr>
<td>H1-</td>
<td>HI → SNII</td>
<td>-.300*</td>
<td>.010</td>
<td>-.313*</td>
<td>.031</td>
</tr>
<tr>
<td>H2+</td>
<td>VI → SNII</td>
<td>.272**</td>
<td>.009</td>
<td>.138</td>
<td>.403</td>
</tr>
<tr>
<td>H3-</td>
<td>HC → SNII</td>
<td>-.193*</td>
<td>.048</td>
<td>-.283**</td>
<td>.002</td>
</tr>
<tr>
<td>H4+</td>
<td>VC → SNII</td>
<td>.281*</td>
<td>.017</td>
<td>.223*</td>
<td>.019</td>
</tr>
<tr>
<td>H5+</td>
<td>SNII → BCO</td>
<td>.582***</td>
<td>&lt; .001</td>
<td>.415***</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>H6+</td>
<td>BCO → LUX</td>
<td>.526***</td>
<td>&lt; .001</td>
<td>.523***</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

**Note.**

HI = horizontal individualism, VI = vertical individualism, HC = horizontal collectivism, VC = vertical collectivism, BCO = brand consciousness, SNII = Susceptibility to normative interpersonal influence, LUX = attitudes toward luxury brands.

UK: $\chi^2(197) = 276.873$, CFI = .955, NNFI = .947, SRMR = .077, RMSEA = .048, $\chi^2/df = 1.405$

Taiwan: $\chi^2(197) = 384.412$, CFI = .905, NNFI = .888, SRMR = .071, RMSEA = .068, $\chi^2/df = 1.951$.

* $p < .05$, ** $p < .01$, *** $p < .001$. 


Figure 1

Hypothesized path relationships

Note:
HI = horizontal individualism, VI = vertical individualism, HC = horizontal collectivism, VC = vertical collectivism, BCO = brand consciousness, SNII = Susceptibility to normative interpersonal influence, LUX = attitudes toward luxury brands.