

City Research Online

City, University of London Institutional Repository

Citation: Balabanis, G. & Karpova, A. (2022). Cultural antecedents and consequences of luxury brand personalities. European Journal of Marketing, 56(8), pp. 2423-2454. doi: 10.1108/ejm-03-2021-0215

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/29263/

Link to published version: https://doi.org/10.1108/ejm-03-2021-0215

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.
 City Research Online:
 http://openaccess.city.ac.uk/
 publications@city.ac.uk

Cultural Antecedents and Consequences of Luxury Brand Personalities Introduction

Brand personality (BP) influences customer reactions and acceptability of brands (Eisend and Stokburger-Sauer, 2013). Brands, especially luxury ones, are filled with culturespecific meanings, as their symbolic attributes show considerable differences across various cultural contexts (Aaker et al., 2001; Fiske et al., 1998). Meta-analytical evidence by Eisend and Stokburger-Sauer (2013) confirms that culture is a contributing factor in shaping a brand's personality. However, there are two differing perspectives on the influences of culture on BP. One body of research suggests that BPs are influenced from the brand's country of origin culture (see Maehle and Supphellen 2011; Eisend and Stokburger-Sauer, 2013), whereas another body of research suggest that BPs are influenced by the culture of the country where the brand is consumed (see Aaker et al., 2001; Sung and Tinkham, 2005 and Foscht et al., 2008). Both streams of research suggest that there is a transfer of associations from a country's culture to the BP, they only differ in the source of cultural associations transferred (Batra, 2019). Furthermore, each stream of research maintains that one of the two country's cultures is more influential than the other in shaping a BP. As the transfer of a culture's associations to the BP does not necessarily precludes transfers from another culture, there is a research gap that this study comes to address. Specifically, the study will assess what is the relative influence of each of the two cultures on a BP.

One of the shortcomings of past research of cultural association transfers to brands is that it focuses on brand image differences across countries or cultural grouping (see literature review of De Mooij and Hofstede, 2011). Typically, this stream of research compares the images of various brands across different countries or cultural groupings and attributes any identified brand image differences to the characteristics of the country. These attributions may involve the level of economic development, national culture or institutional factors. In many cases such attributions are not free of error as it is difficult to isolate the effects of one country characteristic (not necessarily related to culture) from another on a brand's image. This type of research (also known as country-of-origin research) fails to directly measure and evaluate which attributes of a country's culture are transferred (or are transferable) to brand image. One of the reasons for the limited research in this field, according to Torreli et al. (2012), is the conceptual and metric incompatibility of the cultural frameworks commonly used (e.g., Hofstede's, 2001 and Schwartz's, 1994 framework) with the brand constructs. This incompatibility makes it difficult to identify which associations are transferred from a culture to the brand. The present study addresses this limitation by focusing on the construct of BP. The use of the BP construct resolves the compatibility between cultural frameworks and BP construct problem which was identified by Torreli et al. (2012). Specifically, the use of McCrae and Terracciano's (2005) personality of culture framework allows the estimation of "like for like" association transfers from the culture to the BP. Both the BP construct and the personality of culture framework are rooted on the five-factor model of human personality traits (McCrae and Costa, 1999). Despite its narrower scope in relation to brand image, the BP construct is critical for academics and practitioners because it influences a number of important brand metrics. Eisend and Stokburger-Sauer (2013) provide metaanalytical evidence that BP has a strong effect on brand image, brand attitudes, brand relationship strength and purchase intentions. Besides, Batra's (2019) synthesis of the brand association literature suggests that BP is one of the most prominent associations that consumers attach to a brand.

Based on the above, the key research question of this paper is to determine the extent to which the personality of a culture influences the personality of brands and how beneficial is such influence on the affected brands. The present study uses the personality of culture as a cultural framework (McCrae and Terracciano, 2005) to examine whether brands coming from the same culture share the same BPs. It also examines whether brands derive their personalities from the personality of the culture of their country of origin or the personality of the culture of the country of consumption. Additionally, it examines which of a culture's personality traits are more transferable to BP. Finally, it assesses the consequences of the cultural associations transferred to the brand's personality. The hypothesized relationships are examined within the context of luxury brands for reasons that are explained in the methodology section.

The intended contributions of the study are multi-fold. First, it will explain how much latitude is left for companies to differentiate their BPs, beyond the isomorphic effects of the culture of the brand's country of origin and country of consumption. This will allow brand managers to determine the strategic repertoire to differentiate their brands' personalities. Second, the study will determine the extent to which BPs embody the brands' country of origin cultures (Torreli et al., 2010) or reflect consumers' culture (Aaker et al., 2001; Aguirre-Rodriguez, 2014). This will help brands managers to assess the potency of different sources of cultural influences on BPs and better allocate their resources on managing the cultural element of their brands. Theoretically, it will provide some answers on the academic debate between two different schools of thought. One school of thought claims that BPs are influenced from the brand's country of origin culture (see Maehle and Supphellen 2011; Eisend and Stokburger-Sauer, 2013) and the other that BPs are influenced by the culture of the country of consumption (see Aaker et al., 2001; Sung and Tinkham, 2005 and Foscht et al., 2008). Third, the present study for the first time employs the personality of culture framework (McCrae and Terracciano, 2005) which is culturally compatible to Aaker's (1997) BP scale. The use of this framework allows us to examine the direct transfer of cultural meanings from the culture to the BP and to avoid making speculative attributions on sources of identified BP differences which are common in country-of-origin research. Finally, the

study examines for the first time the effects of culture-BP similarity on consumer's attachment to the brands and the clarity of the BP to the consumer. This will allow managers to evaluate the importance of BPs' cultural fit for consumers and adjust their cultural branding strategies accordingly.

The paper is structured as follows. First, we explain the key concepts of brand personality and the personality of culture framework. Next, we review the extant literature that examines the effects of culture on brand personality and the underlying processes of meaning transfer from culture to the brand. On that basis, a set of hypotheses is developed and formally stated. We then explain the methodological and analytical approaches we used to test the hypotheses and present the empirical results. At the end of the paper, we provide a discussion of theoretical and practical implications, including suggestions for future research.

Conceptual Background and Research Hypotheses

Brand Personality

The concept of brand personality captures the symbolic and expressive meanings that consumers perceive in commercial brands and typically refers to "the set of human characteristics associated with a brand" (Aaker, 1997, p. 347). Research has demonstrated that consumers are able to spontaneously associate different brands with distinct human personality traits (Aaker, 1997; Fournier and Alvarez, 2012). Aaker's (1997) scale development study indicates that brand peronality has five key dimensions—sincerity, excitement, competence, sophistication, and ruggedness. As will be explained in detail later, Aaker's (1997) dimensions are analogous to the five-factor model (FFM) of human personality traits (McCrae and Costa, 1999).

Aaker's (1997) operationalization of BP is the most cited and the most widely accepted BP scale in academia. As of the end of 2020, the scale registered 11,930 citations in Google Scholar. The scale has also been adopted by practitioners. Twenty items of the BP scale are used in Young and Rubicam's brand asset valuator (BAV) to assess image attributes of 60,000 brands across 50 countries (see Batra et al., 2017, p.920). According to Batra's (2019) recent review of the branding literature, BP is one of the most salient meanings that consumers add to a brand. Despite its popularity as a concept, there is very little on how BPs are developed and what is the role of culture. Aaker (1997) suggested that BPs arise from associations of the brand with users of the brand and/or other humans connected with the brand (e.g., founders, employees, endorsers). A more focused to the topic study by Maehle and Supphellen (2011) identified three broad sources of BPs: company level sources; consumer-based sources; and symbolic sources (e.g., the endorser, typical brand user, brand name/logo and advertising). Culture is identified as one of the sources of BP in Maehle and Supphellen's (2011) company level category. Evidence suggests that associations are transferred to a BP from the brand's country of origin culture (Torelli et al., 2012) or BP is a reflection of consumer's culture (Aaker et al., 2001; Sung and Tinkham, 2005 and Foscht et al., 2008). To understand the culture's contributions to a brand's personality, a compatible to BP cultural framework is needed as per Torelli et al. (2012). The personality of a culture framework of McCrae an Terracciano (2005) is the only cultural framework available that meets Torelli et al.'s (2012) compatibility preconditions for the BP construct.

Personality of a Culture

The personality of culture is a relatively new framework and has its roots on human personality research and the FFM model of personality (McCrae and Terracciano, 2005). The FFM postulates that human personality can be adequately described by five broad factors: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (McCrae and Costa, 1999). Relevant literature suggests that human personality is shaped by the interplay of genetic and cultural influences (see McCrae and Costa, 1999, Saucier and Goldberg, 1996). Hofstede and McCrae (2004) found a relationship between the FFM personality traits and cultural values, suggesting that human personality traits are not randomly distributed across cultures. They explained this phenomenon as national differences in genetic factors responsible for the FFM traits and cultural differences in the socialization process during childhood.

McCrae and Terracciano (2005) analyzed human personality data from 79 countries and proposed a new construct—the distinctive "personality of a culture." They proposed three different ways to conceptualize the personality of a culture: ethos, aggregate personality, and national character. Ethos is independent of and superior to the individual members of a social group and represents the institutions and customs of a culture. Aggregate personality of a culture is the mean personality trait of its members. National character or national stereotypes focus on the personality traits are perceived to be prototypical of members of a culture. As the term "national stereotype" is broad and goes beyond personality traits (e.g., include beliefs about other characteristics of a culture), the term "national character" is used with a specific focus on personality stereotypes. National character represents the views of knowledgeable observers both within and outside the culture about the typical members of that culture (McCrae and Terracciano, 2005). In this study, the aggregate personality and national character (i.e., personality stereotypes) aspects of McCrae and Terracciano's (2005) framework of a culture's personality will be used. The ethos aspect from the same framework is not used as there are no quantitative measures of this aspect (see McCrae, 2009).

Brand Personality and Culture

By definition, BP is a derivative of human personality (Aaker, 1997) in the sense that BPs arise from associations of the brand with users of the brand and/or other humans connected with the brand (e.g., founders, employees, endorsers). BP traits tend to be inferred through any direct and indirect interaction of consumers with a brand (Plummer, 1985). Ordinary

brand users, company employees, and product advocates serve as major direct sources of BP traits (Batra et al., 1993).

Unlike the country-of-origin stream of research, which is based on categorical cognition theory (see Balabanis et al., 2019), the present study's focus is on personality association transfers from a culture to a BP and it is embedded on McCracken's (1986) "meaning transfer" model. McCracken's (1986) model is the most legitimate and more influential model in the field of branding according to a recent synthesis of the relevant literature by Batra (2019). According to McCracken (1986, p. 73) "goods are an opportunity to make culture material". His model identifies two cultural association transfer processes: (1) transfer from the culture to consumer goods and (2) from the goods to the individual consumer. McCracken (1986, p.80) asserts that "one of the ways individuals satisfy the freedom and fulfill responsibility of self-definition is through the systematic appropriation of the meaningful properties of goods". This implies that the cultural associations transferred to brands pass on to consumers and influence consumers' reactions to the brand. The current study addresses the implications of the second part of McCracken's (1986) transfer process by assessing how the congruence of the cultural associations attached to a brand's personality with the consumer's culture influence his/her attachment to the brand.

McCracken (1986) explained that the transfer of association process is facilitated through different instrument like advertising, fashion systems and consumption rituals. However, Batra's (2019) review of the literature explain that association transfers from the culture to the brand are also facilitated by the co-occurrence or pairing of a brand with a culture or culture related stimuli (i.e., conditioning). While the culture's effects apply to all types of brands, the current study focuses on luxury brands for the reasons explained in the introduction. The higher symbolic and emotional meanings of emotional brands (Aaker, 1997; Monga and John, 2010) may generate stronger transfer of cultural associations to the

brand. Batra (2019) relying on McCracken's (1986) model explained that association transfer is facilitated when there is a "suggested similarity" between the co-occurring stimuli The correspondence between the FFM-based cultural framework and the BP dimensions favors such transfers. Most BP inventories are to a certain extent explicitly based on the FFM model (see Aaker, 1997).

Before we test the direct transfer of personality association from the culture to the BP, it is important to establish that brands originating from the same culture share similar BPs (over and above brand difference) and that such BPs are distinct to the BPs of brands originating from other cultures. This will allow us to group BPs according to the cultures they originate. In all cultural frameworks (e.g., Hofstede, 2001; Schwartz, 1994, McCrae and Terracciano, 2005) culture is measured at a country level. Following McCracken's (1986) and Batra's (2019) work, chronical exposure of brands from the same country of origin to culturally similar human portrayals (or co-occurrence of the brand with culturally similar characters), is expected to make those brands' BPs more similar to each other compared to brands from other countries. Surprisingly, there is limited empirical testing of that hypothesis although a brand's country of origin (COO) is identified as one of the sources of BP (Maehle & Supphellen, 2011; Eisend and Stokburger-Sauer, 2013). Fetscherin and Toncar (2009) tested country differences in BPs but their study relied on a fictional automobile brand where COO was the only condition that was experimentally manipulated. Research suggests that personalities are unstable at a young age as there is a maturation period for personalities to stabilize (McCrae and Costa, 1999). A long tradition in human personality research (see Cronbach and Gleser, 1953; Magnusson and Torestäd, 1993, Allik et al., 2015) suggests that personality differences should be examined from both trait-by-trait and personality profile perspectives. Personality profiles allow researchers to consider the holistic character of the functioning of personality and their totality (Magnusson and Torestäd, 1993 and Allik et al.,

2015). Following (Magnusson and Torestäd, 1993; and Allik et al., 2015) recommendations, both the trait-by-trait and the personality profile-level approaches are used in this study. On the basis of the above, we expect that the personality of luxury brands originating from one country are different from the personality of luxury brands originating from other countries.

Cultural Inheritance and Cultural Stereotyping

If brands originating from the same culture share similar BPs, then it is important to examine in which way their BPs are similar. Following the discussion of the formation of BP through its association with culturally similar human or human portrayals, we argue that BPs will be instilled with the personalities of the humans associated with the brand or evoked by the brand (Batra, 2019).

An important question here is whether consumers base their perceptions of the BPs of a country on stereotypical views of the personality of the country (i.e., cultural stereotyping) or whether BP characteristics are unconsciously imprinted on the brands from aggregate personality traits of the country (cultural inheritance). For clarification purposes, cultural inheritance here refers to the transfer of the personality traits of the brand's COO culture to the brand's BP. Transfer occurs through a shared environment and the chronic or recurring association of the brands with prototypical users, founders and employees of their COO (see McCracken, 1986 and Batra, 2019). Cultural stereotyping of a BP refers to the transfer of personality stereotypical associations of the brand's COO to the brand's BP. The examination of both aggregate personality of a culture and stereotypes of a culture is necessary as there is inconsistency between the two. Recent evidence suggests that stereotypes of a culture are different to the aggregate personality of that culture (McCrae et al., 2013). Hence, how accurately an individual judges the personalities of the people of a brand's COO culture will determine whether they will transfer stereotypical or actual traits of a culture's personality to the brand (Jussim et al., 2016). In other words, accuracy of judgements depends on the extent beliefs about the personality of the citizens of a country are based on cultural myths or reality. Available theories on stereotypes maintain that when people make judgments about other people, they use both stereotypes and individuating information. Some research evidence suggests prevalence of the stereotypical information (Brewer, 2014; Fiske and Neuberg, 1990), whereas other studies show the dominance of individuating information (Jussim, 1991; Kunda and Thagard, 1996). Given the anthropomorphic nature of BP, we expect that to varying degrees people use both stereotypical information about the brand's COO and individuating information about the brand to make BP judgments.

The extent to which country stereotypes are used in BP inferences depends on the extent the COO of the brand is activated. In studies where the COO of the brand is used as the main priming cue and no individuating information is provided about the brand then BP is more likely to rely on COO stereotypes. Crisp and Turner (2014, p. 57) suggest "once a category is activated, we tend to see members as possessing all the traits associated with the stereotype" of the category. BP inferences can also derive, from human portrayals of the brand (in its communication campaigns) or from humans seen to be associated with the brand (Aaker, 1997) where consumer's knowledge of a brand's COO is not necessary. In such cases, the accuracy of personality judgements of the characters associated with the brand is the key factor.

According to Realistic Accuracy Model (RAM), personality judgement accuracy of those characters will depend on the character assessed, the trait that is judged, the quality and quantity of information upon which the judgment is based and the individual making the judgment (see Funder, 1995; Funder, 2012). According to Funder (2012) some characters are easier to judge (i.e., more "judgeable") than others. "Judgeable" characters tend to behave more consistently across different situations. The "judgeability" of the people connected with the brand will influence the accuracy of BP inferences.

The RAM model (Funder, 2012) also suggests that the more visible and the less evaluative (i.e., the degree to which the trait is desirable or favourable) a personality trait, the more accurately it will be judged compared to other traits. A visible trait is a trait that can be externally expressed through behaviour or other cues. The judgement accuracy of evaluative traits tends to be low because they are traits that people try to hide from others (if undesirable) or to magnify them, if desirable (Funder, 2012). In the FFM model, "extraversion" is the most visible trait as it is linked to expressive social behaviour and "agreeableness" is the most evaluative traits (John and Robbins, 1993).

Finally, the more information or the longer someone is acquainted with the people associated with the brand (i.e., the longer the consumer is exposed to them), the more accurate the personality judgement. As multiple humans may be connected to or used to portray a brand, the consistency and regularity of the personalities projected by them is important for inferences made to BPs. A common thread that connects human personalities which may be used to infer a BP is the shared cultural background of the associated humans to the brand. Given the genotypic (McCrae and Costa, 1999) and phenotypic (Saucier and Goldberg, 1996) explanations of personality examined earlier, one could expect these individuals will exude, through their behavior or other visible cues, culturally similar personalities (see McCrae and Terracciano, 2005).

On the basis of the above, both cultural inheritance and cultural stereotyping processes influence a BP. The processes may involve the transfer of the most visible and least evaluative traits (Funder, 2012) or may involve transfer of all BP traits as a configuration (i.e., the personality profile) from the humans connected to the brand. By design, BP traits (Aaker, 1997) correspond to the FFM factors which makes it easier to examine the extent to which BPs inherit the corresponding traits from their COOs. Thus, in the matching (between FFM and brand) of personality traits, we can propose a cultural inheritance and a cultural stereotyping hypothesis for BP traits and profiles, respectively.

- H1a: The personality traits of a country's luxury brands are positively related to the country's aggregated personality traits (cultural inheritance of traits).
- H1b: The personality traits of a country's luxury brands are positively related to the country's national character personality traits (cultural stereotyping of traits).
- H2a: The personality profiles of a country's luxury brands are positively related to the country's aggregated personality profile (cultural inheritance of BP profile).

H2b: The personality profiles of a country's luxury brands are positively related to the country's national character personality profiles (cultural stereotyping of BP profile).

Aaker et al. (2001) suggested that the culture of the perceiver's country influences BP effectively proposing a BP acculturation hypothesis (see Figure 1). BP acculturation here refers to the transfer of the personality of the culture of the consumer to the personality of the brand. Foscht et al. (2008) study reinforced this point of view by showing that an Austrian brand that uses identical positioning and advertising messages is perceived differently across six different cultures.

Aaker et al. (2001) agreed that brands' symbolic and expressive functions are dependent on consumers' needs and self-perceptions. That is, people's culture-specific needs influence the meaning they attach to a brand. This process is facilitated by a brand's assimilation to the local culture and communication strategy used. Aaker et al. (2001) also showed that BP traits align themselves with values in the perceiver's culture. For example, they suggested that sincerity is associated with conservatism of the perceiver's culture, excitement with affective autonomy needs, and sophistication with hierarchy needs. According to that view, a perceiver's cultural values affect the perceptions of BP by influencing the centrality of values for the consumers in the process of brand perception.

"Insert Figure 1 about here"

Linking Hofstede and McCrae's (2004) and Aaker et al.'s (2001) arguments, we propose that the human personality traits of the perceiver's country (through their effect on cultural values) influence the personality of brands. This argument may be related to self-congruity theory and the endeavor of consumers to achieve consistency by adjusting their perceptions. Thus, we propose a brand acculturation hypothesis for BP:

H3: The personality profiles of luxury brands are positively related to the personality profile of the culture of the perceiver's country (brand personality acculturation).

Consequences of brand personality cultural inheritance, stereotyping, and acculturation

McCracken's (1986) "meaning transfer" model is that certain associations transferred or attached to the brand may be appropriated by consumers and influence their self-concept. Hence, personality traits transferred from the culture to the brand will influence consumers reactions to the brand. Traditional cognitive consistency theories (Gawronski and Strack, 2012) and their principles explain the consequences of how much a BP comes to resemble the culture of its COO or the culture of the consumer. According to those theories (Gawronski and Strack, 2012), people want to maintain consistency in their cognitions as cognitive inconsistency creates dissonance and discomfort that needs to be resolved. The basic need of people to have a logical and consistent view of the world refers to the "effectance motive" (Montoya and Horton, 2013). The "effectance motive" is one of the reasons that people anthropomorphize nonhuman agents like brands (Waytz et al., 2010). According to Montoya and Horton's (2013) meta-analysis, individuals prefer stimuli that reinforce "the logic and consistency of their world". Byrne (1997) suggests the existence of a similarity effect where our attraction to a target increases when similarity to the target increases as they reinforce the "effectance motive". The opposite occurs to stimuli that are dissimilar to our views. Based on the above theories, we will examine the consequences of a BP's similarity to the personality

of the brand's culture (aggregate personality and stereotypical one) and the personality of the consumer's culture.

The study examines the effects of culture-BP similarity, and it is different from other approaches that measured the congruence of BP to the self-concept (e.g., Malär et al., 2011; Stokburger-Sauer et al., 2012) or congruence between the individual personality and nation brand personality (e.g., Rojas-Méndez, et al., 2015). The approach taken here is conceptually similar to that of Klein et al. (2019) (brand image -country image similarity index (BICI) approach. This approach avoids "preconceived opinions about the fit" and rationalizing bias (e.g., tendency to rate as more similar or more congruent to ourselves stimuli that we like, see Collisson & Howell, 2014) that are evidenced to direct measures. An improved approach is adopted here, that overcomes the limitations of BICI index (e.g., reliance on binary measures of the BP traits). The culture-BP similarity assessment adopted here is based on continuous measures of personality traits and it is assessed on Cattell's (1969) pattern similarity coefficient (r_p) which emerged as a better index in several studies (see Carroll and Field, 1974; McCrae, 1993 evaluations of alternative similarity indices).

Following this theoretical approach, a BP that is consistent to the personality of its culture will satisfy the "effectance motive" and it will reinforce intelligibility and clearness of the brand in the mind of consumers. Keller (1993, p. 7) noted that "congruence among brand associations determines the 'cohesiveness' of the brand image—that is, the extent to which the brand image is characterized by associations or subsets of associations that share meaning."

According to him, congruence in brand associations can lead to holistic reactions to the brand whereas incongruence can lead to confused perceptions of the brand, greater vulnerability to competitors' communications and under-appreciation or discounting of relevant brand associations. Confused perception of a brand's image is one of the side-effects of the inconsistency in brand associations and this includes associations deriving from the brand's culture. BP clarity makes brand more appealing to consumers as it is an aspect of Freling, et al.'s (2011) BP appeal construct. BP clarity is formally defined as the extent to which a brand's personality "is apparent and recognizable to consumers" (Freling, et al., 2011, p.394). Based on the above, we propose the following:

- H4a: Controlling for brand differences, the similarity of a brand's personality to the personality of the culture of the brand (e.g., level of BP inheritance) is positively related to the clarity of the brand's personality.
- H4b: Controlling for brand differences, the similarity of a brand's personality to the stereotypical personality (national character) of the culture of the brand (e.g., level of BP stereotyping) is positively related to the clarity of the brand's personality.

An offshoot of cognitive consistency theory is the similarity effect (Byrne,1997) according to which we are attracted to target stimuli similar to us. Such similarity reinforces the "effectance motive". The focus here is on the fit between a BP and the personality of a consumer's culture. This is similar to the approach used by Klein et al. (2019). The argument put forward by Klein et al. (2019, p.518) is "...that it should be easier for consumers to identify with (more proximal) local values, attitudes, and lifestyles...." And, as a consequence, with brands that mirror those elements. MacInnis et al. (2019, p.557) reinforced the same point by suggesting that "brands that are "like me" are those that are also congruent with the cultural values, and cultural categories which consumers are a part".

Following MacInnis et al.'s (2019) premise and similarity effects model (Byrne,1997), we expect that consumers will feel closer or more connected to brands that are similar to their culture. To represent consumers attraction to culturally similar brands, we use Thomson et al. (2005), emotional brand attachment construct. According to Fournier (1998), brand relationships resemble interpersonal relationships. This suggests that the process underlying which brands consumers choose to connect with may be similar to the choice of partners. Evidence suggests that both personality similarity (Youyou et al., 2017) and cultural matching (e.g., people prefer someone of a similar culture, see Kalmijn, 1994) are important in long-term mate selection or when the consequences of mate choice are significant. Choosing the right partner involves higher than usual cognitive effort and elaboration of information to verify similarity and cultural matching and other desirable attributes. In the case of brands, such motivation and willingness to expend the required cognitive effort is more likely to occur when product involvement is high (see Malär et al., 2011). When the product is not important for the consumer (low involvement), the effort they will put for choosing the brand as a suitable relationship partner will be minimal. The moderating effect of involvement was included as a control variable. The above sets of arguments lead to the following hypotheses:

H5: Controlling for brand differences, the similarity between a BP and personality of consumer's culture (e.g., BP acculturation), is positively related to the emotional attachment to the brand.

Methodology

We tested the hypotheses through survey data. Two surveys were administered to a screened sample of U.S. luxury consumers using the Qualtrics consumer panel. The hypothesized relationships are examined within the context of luxury brands. Compared to regular brands, BP is more important to self-expressive and status-signifying products like luxury brands (Eisend and Stokburger-Sauer, 2013), which often rely more on hedonic and aspirational qualities to woo customers. BP captures the symbolic, motivational, and emotional meanings that brands possess (Aaker, 1997; Monga and John, 2010), which are more crucial for luxury brands than regular brands (Heine, 2009). The use of luxury brands

makes empirical research more manageable as we can have a better representation of the effects of culture on the countries that brands originate. This is because only a restricted number of countries produces and markets globally branded luxury products. Recent evidence shows that more than 60% of the top 100 luxury companies originate from only five countries (Italy, France, United States, Britain, and Germany) (Deloitte, 2015).

The list of brands assessed included 23 luxury brands originating from France, the United States, Britain, Italy and Germany (i.e., Burberry's, Bentley, Graff, Rolls-Royce, Baccarat, Hermes, Dom Perignon, Balenciaga, Lancôme, Dior, Louis Vuitton, Ritz Carlton, Kiehl's, Tiffany & Co, Ray-Ban, Harry Winston, Lamborghini, Gucci, Versace, Dolce & Gabbana, Montblanc, Meissen and Mercedes-Benz). Brands were selected from an initial pool of 80 luxury brands compiled primarily using consulting reports on luxury brands from the World Luxury Association directory (worldluxuryassociation.org) the online World Luxury Brand Directory (upmarkit.com). Pre-selected brands reflected variation in luxury product/service categories and levels of luxuriousness. 42 raters (divided into 4 groups) were used to rate the brands in terms of salience and level of luxuriousness. Inter-rater agreement levels were acceptable (e.g., the ICCs for the 4 groups of raters, were .826, .791, .845 and .783). On the basis of the raters' average scores, the 23 most salient brands (accounting for product category, COO and variety in the level of luxuriousness) that were identified as luxury brands were selected.

Respondents had to qualify as luxury consumers (past purchases of luxury goods) and to indicate that they were familiar with the brand they were randomly assigned to assess. A screening procedure was used to ensure high consumer familiarity of the brands assessed. Respondents were asked to tick which of the 23 brands they have bought at least once at any time in the past. Only participants that had purchased at least one of the 23 luxury brands in the list were allowed to complete the survey. A none of the above option was provided. A second screener was used to establish participants' familiarity with the brand they were assigned with. Respondents were asked to indicate which of the 23 brands they are familiar with in a yes/no format. A "none of the above" option was provided and used to screen out respondents. Based on their responses, respondents were randomly allocated (using Qualtrics randomizer function) to assess any of the brands that they indicate that they were familiar with. A number of attention and completion time filters were used to screen out careless respondents as recommended by Meade and Craig (2012). Randomization of the order of brands and questions was used to minimize order effects. To avoid activation of country stereotypes, respondents were not given any cues or asked any questions about the COO of the brand (see earlier discussion).

We measured Aaker's (1997) personality dimensions in a survey of U.S. consumers and collected 1,116 responses. The sample included U.S. respondents of different age groups, gender, and educational levels. 9.3% of respondents were 18 to 24 years old; 17.6% were 25 to 34 years old; 14.7% were 35 to 44 years old, 15.1% were 45 to 54 years old; 19.9% were 55 to 65 years old and 23.3% were older than 65 years. 27.5% of the respondents were male. Regarding the educational level, 28.8% of the respondents had a postgraduate degree and 39.1% of the respondents had a bachelor's degree.

Measurement

Brand personality measures. We assessed the personalities of 23 luxury brands on Aaker's (1997) scale. Respondents were asked to rate the extent to which they believed that Aaker's (1997) list of BP inventory traits described the specific brand on a 7-point scale (1=not all descriptive of the brand to 7=extremely descriptive of the brand). Aaker's (1997) scale was validated through confirmatory factor analysis (CFA) using the robust maximum likelihood method. After purification, the model fit of the scale was at acceptable levels (15 items: $\chi^2(94) = 454.434$ p < .001; TLI = .908, CFI = .930, RMSEA = .060, SRMR = .050).

Fornell and Larcker's (1981) discriminant validity test and the constrained model method were satisfactory. Average variance extracted (AVE) and construct validity estimates were also at acceptable levels. AVE values for Aaker's scale dimensions (sincerity, excitement, competence, sophistication, and ruggedness) were .555, 640, .467, .504, and .532. The respective construct reliability estimates were .789, .899, .723, .702, and .781.

Brand personality clarity. We measured BP clarity with three items through Frelling et al.'s (2011) brand personality appeal scale dimensions. CFA indicated good model fit $(\chi^2(11) = 48.646, p < .001; GFI = .974, TLI = .960, CFI = .979, RMSEA = .080, SRMR =$.028) and AVE and reliability were satisfactory (AVE = .574, construct reliability $\rho = .729$).

Product involvement. We measured this construct with the 4-item scale taken from Van Trijp et al. (1996) and Malär et al. (2011). Model fit ($\chi^2(2) = 1.806$, p = .405; GFI = .998, TLI = .999, CFI = .999, RMSEA = .001, SRMR = .005) and statistical validity and reliability (AVE = .807, construct reliability $\rho = .943$) were good.

Emotional brand attachment. We used four items from Thomson et al. (2005) scale to measure this construct. Model fit ($\chi^2(2) = 5.679$, p = .058; GFI = .995, TLI = .994, CFI = .998, RMSEA = .058, SRMR = .008) and statistical validity and reliability (AVE = .789, construct reliability $\rho = .937$) were acceptable.

To check common method variance, we used the CFA marker technique (Williams, et al. 2010). As an ideal marker, we used three items from the Marlowe-Crowne social desirability scale assessed on a 7-point Likert scale. First, the full measurement model including the common factor was calculated (fit statistics $\chi 2[341] = 616.815$, p < .001, CFI = .962; TLI = .955; RMSEA = .039; SRMR = .044). Using the estimations from this model, the baseline model and the noncongeneric (unequal marker variable effects) CFA marker model was estimated. In a model comparison proposed by Williams et al. (2010), the noncongeneric (unequal marker variable effects) CFA marker model (with $\chi 2[375] = 1479.676$, p < .001]

performed worse in terms of fit than the baseline model [with $\chi 2(354) = 630.108$, p < .001]. The Satorra-Bentler Scaled chi square difference ($\Delta \chi 2(21) = 856.162$, p < 0.001) showed a significantly better fit for the baseline model. This suggests that common method variance is not a problem for these data.

Analytical Methods

To check the expectation of cultural differences in luxury BPs, we carried out two analyses. In the first analysis, we tested the differences in the luxury BP traits and in the second we assessed differences in the personality profiles of brands of different countries of origin.

Brand personality trait differences. First, given the correlated nature of BPs coming from the same country, we used hierarchical lineal model analysis to check country differences of BP traits. We could not use analysis of variance because the assessed brands were nested within the countries from which they come (they are not independent of each other). We used the linear mixed-effects model of SPSS to perform the analysis to account for brand and country effects. This model performs better (SPSS, 2015) than alternative models (e.g., generalized linear and variance component models in unbalanced designs, such as ours, in which the number of brands is not equally distributed to the different countries). We added product category as a control variable.

Cultural differences of brand personality profiles. The second analysis examined differences not at a specific personality dimension level but at a BP profile level (i.e., the constellation of BP traits). As there is no summary statistic to represent a single brand profile in isolation, each profile dimension was examined separately. The trait-by-trait analysis of BP profiles across countries, as explained in the previous section, provides a good indication of the differences in profile shape.

Testing cultural inheritance, stereotyping and acculturation hypotheses. To examine

cultural inheritance, stereotyping and acculturation, we needed to establish the conceptual equivalence between the FFM model traits and Aaker's (1997) scale's traits first. From Aaker's (1997) BP operationalization, only three traits (sincerity, excitement, and competence) were equivalent to the FFM human personality factors. According to Aaker (1997), the sincerity trait is equivalent to agreeableness from the FFM, excitement to extraversion and competence to conscientiousness.

The hypotheses represent two levels of analysis: (1) personality trait level and (2) personality profile level. At the trait level, respondents' scores on the relevant personality traits for each brand were correlated to the corresponding scores of the brand's COO traits as measured in the FFM scale. For example, a brand's score in sincerity was correlated to the brand's COO score in agreeableness from the FFM inventory. We took the country scores for each trait from McCrae and Terracciano (2005) and Terracciano (2005), respectively.

To assess the similarity between the brand and country personality profiles, we used Cattell's (1969) pattern similarity coefficient (r_p). In a comparison of 13 profile similarity indices, Carroll and Field (1974) found that Cattell's r_p provides the most accurate pattern similarity estimations. In addition, r_p is less sensitive to changes in the number of profile components than other indices (McCrae, 1993), which makes it more appropriate for our study in which we compare profiles of varying numbers of components. Horn (1961) provided estimates of the statistical significance levels of r_p for different values in the number of the profile components compared. As the profile comparison of BP profiles has a fixed criterion (country personality profiles), we use the corresponding index (formula 7 in Cattell, 1969, p. 139) herein.

Additionally, we used surface response analysis (see Schönbrodt, 2016) to test H4a and H4b at a BP trait level. Specifically, surface response analysis was used to test how cultural inheritance or stereotyping of specific traits influence luxury BP clarity.

Results

Respondents' Consensus on Brand Personality Traits

We first examined the extent to which respondents' judgments of brand personality traits for each brand agreed with one another using intraclass correlation coefficients (ICC). We calculated the ICC values of each BP traits using the "multilevel R package" (Bliese, 2016). The consistency of respondents' ratings is assessed via two estimates, ICC1 and ICC2. ICC1 accounts for the amount of variance in a BP trait that can be attributed to the brand assessed. ICC1 also refers to the extent to which the rating of any rater of the specific brand can be used as a reliable estimate of the aggregated personality traits. ICC2, on the other hand, is an estimate of the reliability of the personality trait average scores of each brand within our sample. Finding high agreement among respondents is an important condition to use multi-level analysis (Chan, 1998). ICC coefficients for the five personality traits (within brands) were as follows: sincerity (ICC1=0.069, ICC2= 0.777), excitement (ICC1=0.056, ICC2=0.739), competence (ICC1=0.072, ICC2=0.786), sophistication (ICC1=0.148, ICC2=0.891) and rugged-ness (ICC1=0.078, ICC2= 0.800). The values exceed the recommended cutoff points (see Woehr et al., 2015) suggesting that the brand averages of the traits can be used in our analysis. Following the advice of Woehr et al. (2015) the level of inter-rater agreement regarding the personality traits of each brand was assessed on the rwg(J) index. The mean $r_{wg(J)}$ agreement score for all BP items (for the 23 brands assessed) was 0.894. the lowest rwg_(J) score was for the Meissen brand (0.763) above the acceptable level recommended by Woehr et al. (2015). Respondent agreement allows the aggregation and estimation of personality traits of different brands.

Cultural Differences of Brand Personality Traits

As explained previously, we performed hierarchical model analysis using the linear mixed effects models in SPSS for each BP dimension separately. As each brand is nested

within a different COO and product category, we used a nested effect term in the model brand (Country x Product) together with the country of luxury brand's origin (country) term and the product category (product) that is nested within country of origin. Brand fall into eight luxury product categories (accessories, apparel, jewelry, cosmetics, furniture, champaign, hotels and cars). Table 1 reports the results of the fixed-effect model test. The results suggests that most of the personalities of a country's luxury brands differ from the luxury brands of another country. The exceptions were the traits of ruggedness and sincerity where there were no significant country differences. Overall, most luxury BP dimensions varied across countries (see Table 1).

"Insert Table 1 about here"

Pairwise post hoc analysis indicates that respondents perceived the personalities of the British luxury brands as more rugged than the American and the French luxury brands (see figure 2). They also perceived British luxury brands as more competent than the Italian and French ones. Furthermore, they viewed American luxury brands as less sophisticated and less exciting than those of France, Britain and Italy (see figure 2).

Cultural Differences of Brand Personality Profiles

Before we test the cultural differences of the BP profiles, it is important to check whether there is agreement in personality profiles of the luxury brands coming from the same country. Following a similar process as in the previous section we calculated the ICCs of BP trait agreement at a country level. ICC coefficients for the five personality traits (within countries) were as follows: sincerity (ICC1=0.029, ICC2= 0.867), excitement (ICC1=0.056, ICC2=0.739), competence (ICC1=0.072, ICC2=0.786), sophistication (ICC1=0.148, ICC2=0.891) and ruggedness (ICC1=0.078, ICC2= 0.801). ICC estimates exceed the recommended cutoff points (see Woehr et al., 2015) suggesting that the country averages of the traits can be used in our analysis. The degree of inter-rater agreement regarding the combined personality traits of each country was assessed on the rwg(J) index. The mean rwg(J) agreement score for all BP items (for the 5 countries assessed) was 0.886. Raters' rwg(J) scores for each country were as follows: Germany (0.887), Italy (0.919), USA (0.876), France (0.894) and Britain (0.851). All $r_{wg(J)}$ were above the acceptable levels (Woehr et al., 2015). The results suggest that luxury brands from the same country share similar personalities.

The ICC scores indicate strong agreement in the personality profiles of the different countries. Thus, we can estimate the aggregate luxury BP of each country by averaging individual BP scores. To test dissimilarities of personality profiles, a different type of analysis is necessary as there is no absolute measure of profile shape. Shape can be assessed only in relation to other profile shapes. Therefore, we calculated Cattell's (1969) profile similarity coefficients for all the personality pairs of luxury brands of different counties (Table 2). The results indicate that the profiles of personalities of luxury brands from different countries are not correlated to each other. As expected, the personality profiles of a country's luxury brands are found to be distinct.

The personality research compares personality shapes by converting personality values to t-scores (where the average is 50 and standard deviation is 10). Conventionally, t-scores between 45 and 55 in a personality are considered medium, while t-scores above 55 are high and below 45 are low. As the t-score in Figure 2 shows, respondents perceived German luxury brands as competent but not exciting or sophisticated. By contrast, they perceived Italian luxury brands as exciting but also insincere and not competent. The respondents also perceived U.S. luxury brands as sincere but unexciting, unsophisticated and less rugged. By contrast, they viewed French luxury brands as insincere, not competent and not rugged. Finally, they perceived British luxury brands as sophisticated and rugged.

"Insert Table 2 and Figure 2 about here"

Cultural Inheritance and Cultural Stereotyping of Brand personality

As mentioned previously, we test H1a and H1b through personality trait similarity analysis. H1a postulates that a luxury BP's traits are related to the corresponding personality traits of their country of origin. Whereas H1b posits that a luxury BP's traits are influenced by the corresponding personality stereotypes of the brand's country of origin. The BP-FFM personality trait correspondence is as follows: BP's sincerity corresponds to FFM's agreeableness, BP's competence corresponds to FFM's conscientiousness and BP's excitement corresponds to FFM's extraversion. H1a and H1b postulate a relationship between each corresponding pair of traits. Table 3 provides the trait-level analysis (H1a and H1b) results. Looking at the third column of Table 3 correlation coefficients (r=.091), one of stereotypical culture trait (conscientiousness) seems to pass from the countries to the luxury brand personality (competence trait). Two other relationships were identified. A weak negative correlation (r=-.069) between BP excitement and culture's personality extraversion as well as between BP's sincerity and stereotypical trait of agreeableness of a culture (r=-.072) were identified. It appears that a country's BPs can break away from national heritage (in regard to extraversion) and national stereotyping (in regard to agreeableness). These results provide limited support for H1b (for competence stereotyping) but not H1a (inheritance).

"Insert Table 3 about here"

We tested H2a, H2b and H3 by using Cattell's r_p and we take the corresponding statistical significance levels for r_p from Horn (1961). H2a postulates that the BP profile of a luxury brand is influenced by the profile of personality stereotypes of the brand's COO e.g., (cultural stereotyping of BP profiles). Whereas H2b posits that the BP profile of a luxury brand is influenced the personality profile of the brand's COO e.g., (cultural inheritance of BP profile). H3 hypothesize the BP profile of a luxury brand is influenced by the personality profile of the perceiver's country (i.e., brand personality profile acculturation). The results reported in Table 4 provide partial support for H2a, H2b and H3 for two of the five countries. As the table shows, cultural inheritance is strong for German luxury brands which show strong cultural inheritance effects (significant Cattell's rp =0.810) and no cultural stereotyping (national character) effects. Thus, the results provide limited support for the cultural inheritance(H2a) and no support for cultural stereotyping hypotheses (H2b).

"Insert Table 4 about here"

Brand Personality Acculturation

The second part of Table 4 tests H3. We collected data from one country—the United States—so we test H3 on luxury brands' personality acculturation to that country (similarity to the U.S. aggregate personality). The results in Table 4 indicate that the French luxury BP profiles are the only ones to acculturate to the United States (Cattell's $r_p = 0.898$). We find no evidence of BP acculturation when using the other two measures of BP. As we used brands from only one of the four countries in this study, BP acculturation, at least in the United States, is not common. This provides little credence to the arguments of Aaker et al. (2001) that BP to some extent mirrors the culture of the perceiver. However, results show that H3 is supported only in the case of French luxury brands. Domestic (American) brands' personality profiles do not show any evidence of cultural inheritance or stereotyping.

Consequences of Cultural Inheritance and Stereotyping of Luxury Brand Personalities

Preliminary analysis of variance showed brand differences in both the levels of BP clarity and levels of brand–country personality profile similarity measured with Cattell's r_p . To test H4a and H4b, we used a fixed effect mixed linear model as in the previous section. As individual Cattell r_p measures of similarity varied by brand (i.e., were not independent of the brands), we needed to nest it within the respective brands to account for intra-brand correlations. H4a postulates that the magnitude of luxury BP's cultural inheritance influences

positively the clarity of the BP. The magnitude a BP's cultural inheritance is assessed by the degree of similarity between a BP's and the respective culture's personality profiles, and it is assessed by Cattell's profile similarity coefficient, r_p. H4b posits that the magnitude of a luxury BP's cultural stereotyping influences positively the clarity of the BP. The magnitude a BP's cultural stereotyping is assessed by the degree of similarity between a BP's and the respective culture's personality stereotype profiles.

The results reported in Table 5 indicate that there are brand differences in BP clarity. The level of cultural inheritance (i.e., similarity of the brand to the aggregate country personality profile) in BP had a statistically significant effect (F(18,414)=2.664, p<.001) on BP clarity. Similarly, the level of cultural stereotyping (similarity of the BP profile to the stereotypical country personality profile) had a significant effect (F(18,414)=1.951, p<.011) on brand clarity. Thus, H4a and H4b are supported. The results indicate that cultural inheritance is slightly more important than cultural stereotyping when it comes to BP clarity.

"Insert Table 5 about here"

H4a and H4b examine the consequences of cultural inheritance and stereotyping on brand personality clarity at a personality profile level. As a post hoc analysis we used Response Surface Analysis to examine the same effects at a specific personality trait level. Analysis was performed on the R package "RSA". Response surface analyses can determine the three-dimensional relationships among individual brand personality traits, personality traits of culture, and brand personality clarity.

The analysis involves the use of polynomial regressions that include regression coefficients for two linear terms (i.e., brand personality trait, personality of culture trait), their multiplicative interaction, and their quadratic terms, as predictors of brand personality clarity. This involved the following polynomial regression model: BP clarity = $b_0 + b_1BT + b_2CPT + b_3BT^2 + b_4BTxCPT + b_5CPT^2$. Where the outcome variable was brand personality, BT and CPT represented a BP trait and Cultural personality trait, respectively; BT^2 and CPT^2 represent their respective squared terms; BTxCPT represents their interaction; and b_0 represented the overall intercept. We ran three polynomial regression analyses for each hypothesis to test the congruence effects of the sincerity-agreeableness, competence-conscientiousness and excitementextraversion congruence on BP clarity based on the full model, respectively. To evaluate model fit of the full models we used the comparative and fit index (CFI), and corrected Akaike information criterion (AICc). A good model fit needs a CFI value higher than 0.95 evidence of a good model fit (Schönbrodt, 2016). Another criterion is that the difference in AICc (i.e., Δ AICc) between the full model and the model with the smallest AICc) should be below 7, for the full model to be acceptable (Schönbrodt, 2016). Finally, the adj. R^2 was used as an indicator of the effect size. Results are reported in Table 6.

We produced three plots for the three aggregate personality traits of the culture we examined (pertaining to H4a), and three plots for the stereotypes of the same traits (pertaining to H4b) (see figure 3). Following response surface analysis protocols, we examined the statistical significance of four surface parameters (a1–a4) generated for each plot. The effects of congruence and incongruence were analyzed in order to test the effects of personality congruence.

To test the effects of H4a and H4b we used the criteria set by Humberg, et al. (2019). They focus on three elements of the plot: the first principal axis, the line of congruence (LOC), and the line of incongruence (LOIC) and they identify four conditions to test congruence effects like the ones described in H4a and H4b. LOC is depicted as a blue line running from the front corner to the back corner of the cube in Figure 3. The LOIC is the blue line that is perpendicular to the LOC. It ranges from incongruent (but equal in magnitude) low PT – high CPT combinations (the left corner of the cube in figure 3) to the PT=CPT=0 combination (the origin) to incongruent high PT –low CPT combinations (right corner of the cube in figure 3).

The first two conditions that apply to model shaped like a dome or a saddle and refer to the intercept p_{10} or the slope p_{11} of the first principal axis. Specifically, p_{10} should not be significantly different from zero (Condition 1), and p_{11} should not be significantly different from one (condition 1).

Additionally, "for a congruence effect to occur, two conditions that must be met are that the surface above the LOIC must have an inverted U-shape and the results must not contradict the assumption that this inverted U is maximized at the congruent predictor combination (0,0)." (Humberg, et al., 2019, p. 414). This suggest that the quadratic term coefficient a4 should be significantly negative (condition 3) and that a3 should not be significantly different from zero (condition 4). Where: $a_3=b_1-b_2$ and $a_4=b_3-b_4+b_5$. If the first four condition apply, then one examines the statistical significance of a_1 and a_2 for strict congruence effects. Specifically, a_2 and a_1 must not be significantly different from zero (Conditions 5 and 6) in order to have strict congruence. If any of the first four conditions is violated, the congruence hypothesis is rejected. As the respective plots in figure 3 do not have a dome or a saddle shape, the first two conditions (conditions 1 and 2) are not relevant in this analysis (see Humberg, et al., 2019). Accordingly, a_4 must be significantly negative (condition 3), and a_3 must not be significantly different from zero (Conditions 4).

Results in table 3 indicate that condition 3 (that a₄ should be significantly negative) is not fulfilled in any of the surface response plots in figure 3. As condition 3 is not fulfilled, there is no point of looking at the other conditions. Based on the results we can conclude that there is no congruence effect of that BP clarity cannot be determined by individual BP trait inheritance (e.g., the similarity of a BP trait to the corresponding culture personality trait) or BP trait stereotyping (e.g., the similarity of a BP trait to the corresponding culture personality trait stereotype). It appears that personality profile (the whole constellation of traits) is required to achieve BP clarity.

"Insert Table 6 and Figure 3 about here"

Consequences of Brand Personality Acculturation

Table 7 displays the results from testing H5. H5 postulates that H5 that the magnitude of a luxury BP's acculturation increases consumers' emotional attachment to the brand. The magnitude of BP acculturation was assessed by the degree of similarity between a luxury BP's profile and the personality profile of the consumer's country using Cattel's profile similarity coefficient. We used the same statistical analysis as that in the testing of H4a and H4b and included involvement as a covariate and moderator to control for involvement's influence. The results in Table 7 (F(18,413)=1.278, p=.198) do not provide empirical support for the H5. Thus, BP acculturation is not a major determinant of consumers' emotional attachment to a luxury brand. Individuating information about the brand's personality is more important than the personality of the country where the brand is consumed.

"Insert Table 7 about here"

Discussion

The primary focus of this study was to better understand how the personality of a culture is transmitted to the brand personality of luxury brands and what the consequences of this are. The study uses McCracken (1986) "meaning transfer model" and addresses the "brand personality -cultural framework compatibility" issue identified by Torelli et al.'s (2012) as a precondition to examine cultural association transfers to a brand. The current study employed for the first time McCrae and Terracciano's (2005) personality of a culture framework as its basis of analysis. The study has several conceptual and methodological advantages over the approaches used in prior research.

First, it recognizes that brand owners do not have full control in shaping their brand's personalities through communication strategies as has been assumed in some studies (see Batra et al., 2017). Maehle and Supphellen (2011) found that company-controlled factors are just one of several factors that influence BP. Malär, et al. (2012, p.739) went further and provided empirical evidence that "in many cases, consumers did not perceive the brand's personality as it was intended by managers".

Second, evidence suggest that culture of a brand's country of origin is not the only cultural influence on BPs (Aaker, et al., 2001; Sung and Tinkham, 2005 and Foscht et al., 2008). The host culture (e.g., consumer's culture) also influences BP. As put by De Mooij and Hofstede's (2011, p.185) literature review "consumers attribute personalities to brands that fit their own cultural values, not the values of the producer of the brand". Both types of cultural influence (home and host culture) on BP have been considered in this study.

Third, the use of McCrae and Terracciano (2005) personality of a culture framework offers certain advantages over the studies that rely on Hofstede's (2001) and Schwartz's (1994) cultural frameworks. Hofstede's (2001) and Schwartz's (1994) frameworks are based on aggregates of self-reported human value scores provided by the culture-carriers. They represent measures of the culture of a nation as measured through the aggregated perceptions of the people of that nation. However, research suggests that no person can be an accurate judge of him/herself (see Funder, 1995 and Connelly & Ones, 2010). Recent empirical evidence by Dobewall et al. (2014) shows that Schwartz's (1994) cultural values' self-report ratings are different from other-report ratings. They (p.8) suggest "that researchers draw more often on other-report measures of values to complement self-report measures". The McCrae and Terracciano (2005) personality of a culture framework addressed this discrepancy as it provides self- and other- reporting measures of a culture's personality.

Fourth, the majority of studies on the effects of culture on BP (Aaker et al, 2001;

Fetscherin and Toncar, 2009; Torreli et al, 2012; Batra et al, 2017) take a trait-by-trait approach to examine BP's influence. These approaches ignore how the traits are aligned with each other and how they jointly, as a configuration, differentiate one culture from other cultures as well as one brand from the others. This study has addressed this limitation by using both the trait-by-trait approach and configurational approach (or personality profile analysis). The advantage of including a configurational approach in the analysis is that it assessed the "holistic character of the functioning of personality and its totality" (Magnusson, and Torestäd, 1993, p.430).

The study has several theoretical and practical implications.

Theoretical Implications

Culture, a crucial factor in international branding and international business (Chabowsk et al., 2013), has been dominated by the cultural value frameworks (Kirkman, et al. 2017; Beugelsdijk et al., 2017). Recent reviews (Beugelsdijk et al., 2017) recommend looking beyond existing cultural value frameworks. Hofstede, the originator of one of the most popular cultural value frameworks (Hofstede, 2001), recognized that personality traits can be effectively used to characterise cultures (Hofstede and McCrae, 2004). However, despite the acknowledgement of personality traits as an alternative and more stable way to characterize culture, their use remains limited in international business literature. To our knowledge, this is the first study in the field that employs personality traits and national character traits within the context of cultural influence on BP.

Despite the importance of culture on BP, research has paid little attention to the culture meaning transfer processes involved. As one of the few available studies in the field, Aaker et al. (2001) proposed an acculturation hypothesis in which BPs are a projection of the target country's core cultural values. However, their research design did not directly associate specific cultural values with any BP dimensions. Rather, the empirical focus was on (target)

country differences of BP perceptions which the authors interpreted, in a post hoc manner, as having their sources in the underlying country differences of cultural values. We extended that work by showing that BP acculturation is one of three possible types of relationships between BP and culture. Apart from BP acculturation, this is the first study in the field of BP to examine the cultural inheritance and cultural stereotyping processes, providing a more comprehensive explanation of cultural influence. Our study may theoretically inform and better explain the attributions made to the link between national stereotypes and BP.

During the past years, researchers (e.g., Hofstede and McCrae, 2004; McCrae, 2004) have emphasized the interconnectedness of aggregate personality and culture and how this affects the perception and behavior of individuals. While research has introduced the concepts of aggregate personality and national character to characterize cultures (McCrae and Terracciano, 2005; McCrae et al., 2005 and Terracciano, 2005) and underscore basic cultural values (Hofstede and McCrae, 2004), the extent to which these are inheritable or communicated to the personalities of brands has not been the subject of academic research.

Thus, our study is the first to examine that possibility in a comprehensive conceptual framework on the cultural aspects of human personality and BP and to explore the effects of prototypical users, stereotyped users and current users of the brand aggregate personalities on the personality traits and profiles of a brand. Our study is also the first to examine BPs not only from a personality trait perspective, which is the common approach, but also from a personality profile approach. Such an approach provides a more holistic view of BPs and the configuration, spread and level of individual personality traits.

The results confirm that culture may be an important influencer of BPs, evidenced by the cultural differences in most of the personality traits and profiles of luxury brands. However, some of the findings are surprising and go against established theoretical views. For example, contrary to ethnocentric and nationalistic theories that argue that people generally perceive domestic brands as superior to foreign brands, we show that people perceive domestic American luxury brands as less sophisticated and less exciting (both evaluative traits) than their European counterparts. This implies that domestic brand superiority theories may not be valid when measures are at a specific BP trait level. Furthermore, we find no evidence that local cultural influences are stronger for domestic luxury BPs than for foreign brands.

The results on non-domestic brands are quite enlightening. Each country appears to have its own distinct luxury BP profile. Some countries seem to have more noticeable BP traits than others. For example, the respondents perceived Italian brands as more exciting and less competent than other country brands and German luxury brands as the "sincerest" of all luxury brands. While these findings seem to coincide with some of the common stereotypes of the respective countries, until now no systematic analysis has assessed the extent to which such BPs are the product of mere cultural stereotyping.

The one cultural human personality trait that is consistently transmitted to luxury BPs is conscientiousness. Conscientious countries produce luxury brands that are perceived as competent. Conscientiousness, after extraversion is the most "visible" trait in the FFM framework (John and Robbins, 1993) and the findings conform with RAM theory's (Funder, 1995) predictions. Connelly and Ones' (2010) meta-analytical study indicate that personal object cues are used as indicators of a person's conscientiousness. Connelly and Ones (2010, p.1102) concluded that the visibility in "conscientiousness may not occur as much in direct behavior but rather in how an individual creates his or her environment". It appears that reverse inference (from the culture to the brand) applies here. It appears that some of RAM theory's (Funder, 1995) predictions are valid here as one of the most "visible" traits. Conscientiousness is the most culturally transferable to BPs.

Both cultural stereotyping and cultural inheritance transfer of meaning processes are in place for some countries, such that one process reinforces the other, though the stereotyping effects are slightly stronger. The two processes do not apply equally to all countries. For example, both cultural inheritance and stereotyping are evidence in French brands' personality profiles, while for the German brands, only cultural inheritance processes are evidenced and in other countries, no effects are observed. Thus, some cultures are more congenial than others in terms of cultural inheritance and stereotyping, though these may be negative or positive for brands. On the one hand, brands from congenial countries may find it more difficult to avoid stereotyping and the associations imprinted on them by country associations. These brands may find it easier to leverage associations with their heritage and to proliferate positive stereotypes. Extending RAM theory's (Funder, 2012) argument that some people are easier to judge (i.e., more "judgeable") than others, we can argue that some countries' brands are more "judgeable" than others (i.e., to be more transparent and to behave more consistently across different situations). This may explain why French brands are more consistent to their culture and culture stereotypes. The evidence in support of BP acculturation process is limited. Only French luxury brands were to some degree acculturated to the American personality.

The findings suggest that the brands of certain countries (e.g., France) are culturally more versatile than others. This versatility is related to the broader concept of cultural resonance of a brand proposed by Fournier et al. (2008); cultural resonance is the extent to which "a brand's claimed meanings reflect, echo, reinforce and reshape the meanings from the collective social space that consumers access" (Fournier et al., 2008, p. 43). This may involve the influence of enduring values of a culture and the product category within that culture. French luxury brands tend to be closely connected with the meanings (real or

stereotyped) of their culture and, at the same time, resonate the culture of the place in which they are consumed.

In general, we find that cultural stereotyping is stronger than cultural inheritance and acculturation. Cultural transmission processes of personality seem to operate better at a personality trait level than a profile one. Prominent and visible personality traits (e.g., conscientiousness) are easier to pass on to a luxury brand than the full personality profiles of a culture. With the exception of the conscientiousness trait, the three cultural meaning transfer processes are not deterministic and depend on brand, culture and the BP measurement used. Thus, a brand has the flexibility to select which personality traits it wishes to attach to its image.

The results confirm the hypotheses that BP similarity to the real or stereotyped personality of the culture (from which the brand comes from) improves BP clarity. This finding corroborates the congruence theories of brand associations (Keller, 1993). That is, this study shows that brand–cultural stereotype similarity in a luxury brand setting improves BP clarity as cognitive consistency theory implies. Cultural branding appears to have an effect on BP clarity.

The congruity hypothesis of BP that applies at a construal level (e.g., Malär et al., 2011) does not apply at a cultural level (i.e., culture-brand personality similarity). Brands that have congruent personalities to the personality of the consumer's culture do not generate more emotional attachment than other brands. This applies equally to consumers with low and high product involvement. As Malär et al. (2011) explained, emotional attachment might not be attained in some cases as social comparison processes involved in the consumption of products with idealistic BPs are "out of reach." According to them, social comparison may generate negative emotions (e.g., inferiority, envy) that may reduce emotional attachment.

Thus, cultural adaptation of luxury brands may not be effective in generating emotional attachment and loyal brand relationships.

Managerial Implications

Our findings have important practical implications. First, results suggest that although the culture of a brand's COO influences luxury brands' personalities. First, marketers are increasingly interested in identifying strategies to develop brands with cultural resonance which can lead to stronger brand performance (Fournier et al., 2008). We identify three important implications when luxury brand managers consider using cultural association for their brands: (1) leverage of a culture's personality into branding considerations, (2) achievement of BP clarity and (3) reconsideration of cultural adaptation strategies as a means to increase attachment. Managers wishing to take advantage of the associations of a culture on their brands must realize that such associations are not automatically transferred to the brand. With the exception of conscientiousness, traits of culture that seem to travel well to a brand are not automatically inherited or transmitted. Cultural stereotypes find their way into luxury BPs easier than real personality traits.

Thus, it would be more effective for managers to use cultural stereotypes rather than actual traits. However, overplaying on cultural stereotypes may be damaging for a brand if it is at the expense of other cultures. The 2018 Dolce & Gabbana campaign tried to emphasize Italian sophistication (over other cultures) by displaying a Chinese woman in a sparkly Western-style dress struggling to eat spaghetti with chopsticks. The ad backfired and D & G's sales in China went down, and the company still struggles to win Chinese customers back.

Second, to increase the clarity of their brands' image and, more specifically, their brands' personality, luxury brand managers should promote their brands in a manner

compatible to the culture from which the brand comes. Our findings show that clarity is consistently related to the degree of similarity between a brand's personality and a culture's personality. The same applies to BP matching with the stereotypical personalities of culture.

Thus, managers can select the cultural associations they wish to attach to their brands to improve its clarity. Cultural heritage is leveraged in luxury brand through storytelling. For example, Louis Vuitton's 2020 exhibition "Voyagez", displayed iconic pieces and detailing the cultural heritage of the brand in places like Paris, Tokyo, Seoul and New York. When the exhibition went to Shanghai, Louis Vuitton added a cultural connection. Louis Vuitton found that cultural heritage and promoting where the product was made is important to global consumers, as cultural heritage illuminates and crystalizes LV's uniqueness and value.

Third, the degree to which a luxury BP has come to resemble the collective personalities of customers does not guarantee emotional attachment to the brand. Customization of brands to the local culture and specifically local culture personality is not an effective strategy to elicit local consumers' attachment to the brand. A more targeted approach to specific consumers groups of different personality traits would be a more effective strategy. The Chinese luxury brand Cha Ling realized that could not succeed in China by relying only on Chinese cultural heritage. The brand successfully fused Chinese heritage with French heritage through a partnership with LMVH to appeal to the Chinese consumers of luxury products.

Limitations and Future Research

Some limitations of the study that affect the generalizability of the results need to be recognized. First, the focus of the study is on luxury brands and on the perceptions of American consumers. Maehle and Supphellen (2011) indicate there is a cross-country and cross-product variance in the perceptions of BP. Future research should examine the generalizability of our findings in different types of brands and product categories, using

evidence from culturally distinct consumer samples. Such an approach will allow researchers to examine the inter-product and inter-cultural differences in the three cultural meaning transfer processes.

The study indicated that the three cultural meaning transfer processes depend on brand, culture and the BP measurement used. However, the study has not examined the factors that regulate such transfers of meaning (see Batra, 2019). Future research should examine the conditions under which each of the three processes of cultural meaning transfer is more prominent.

Finally, to enable robust testing of the proposed hypotheses, we needed to use brands for which there was agreement among respondents on their personalities. Human personality research (Roberts and DelVecchio, 2000) suggests that personality traits stop changing and become more consistent as people grow older. The question of BP stability and consistency in consumer perceptions of a brand's personality has not been examined. Thus, further research should examine these elements of BPs as well as the mechanisms that regulate them. Reliance on average trait scores while examining the level of respondent agreement may produce non-generalizable results.

References

- Aaker, J. L., Benet-Martínez, V., & Garolera, J. (2001). Consumption symbols as carriers of culture: A study of Japanese and Spanish brand personality constructs. *Journal of Personality and Social Psychology*, 81(3), 492–508.
- Aaker, J.L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, 34(3), 347–356.
- Aguirre-Rodriguez, A. (2014). Cultural Factors That Impact Brand Personification Strategy Effectiveness: Cultural Factors That Impact Brand Personification. *Psychology & Marketing*, *31*(1), 70–83.
- Allik, J., Borkenau, P., Hřebíčková, M., Kuppens, P., & Realo, A. (2015). How are personality trait and profile agreement related? *Frontiers in Psychology*, 6.

- Balabanis, G., Stathopoulou, A., & Qiao, J. (2019). Favoritism toward foreign and domestic brands: a comparison of different theoretical explanations. *Journal of International Marketing*, 27(2), 38-55.
- Batra, R. (2019). Creating Brand Meaning: A Review and Research Agenda. *Journal of Consumer Psychology*, 29(3), 535–546.
- Batra, R., Lehmann, D. R., & Singh, D. (1993). The Brand Personality Component of Brand Goodwill: Some Antecedents and Consequences. In D. A. Aaker & A. L. Biel (Eds.), *Brand Equity & Advertising: Advertising's Role in Building Strong Brands* (pp. 83– 96). Laurence Erlbaum Associates.
- Batra, R., Zhang, Y. C., Aydinoğlu, N. Z., & Feinberg, F. M. (2017). Positioning Multicountry Brands: The Impact of Variation in Cultural Values and Competitive Set. *Journal of Marketing Research*, 54(6), 914–931.
- Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers: Statistical Control in Correlational Studies. *Journal of Organizational Behavior*, 37(2), 157–167.
- Beugelsdijk, S., Kostova, T., & Roth, K. (2017). An overview of Hofstede-inspired countrylevel culture research in international business since 2006. *Journal of International Business Studies*, 48(1), 30–47.
- Bliese, P. (2016), *Multilevel R package* (2.6) [Computer software]. https://cran.rproject.org/web/packages/multilevel/multilevel.pdf
- Brewer, M. B. (2014). A dual process model of impression formation. In T. K. Srull & R. S.J. Wyer (Eds.), *Advances in social cognition* (Vol. 1, pp. 1–36). Psychology Press.
- Byrne, D. (1997). An Overview (and Underview) of Research and Theory within the Attraction Paradigm. *Journal of Social and Personal Relationships*, *14*(3), 417–431.
- Carroll, R. M., & Field, J. (1974). A Comparison of the Classification Accuracy of Profile Similarity Measures. *Multivariate Behavioral Research*, *9*(3), 373–380.
- Cattell, R. B. (1969). The Profile Similarity Coefficient, Rp, in Vocational Guidance and Diagnostic Classification. *British Journal of Educational Psychology*, *39*(2), 131– 142.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83(2), 234–246.

Collisson, B., & Howell, J. L. (2014). The Liking-Similarity Effect: Perceptions of Similarity

as a Function of Liking. *The Journal of Social Psychology*, 154(5), 384–400.

- Connelly, B. S., & Ones, D. S. (2010). Another perspective on personality: Meta-analytic integration of observers' accuracy and predictive validity. *Psychological Bulletin*, 136(6), 1092–1122.
- Crisp, R. J., & Turner, R. N. (2014). Essential social psychology (3rd ed.). Sage.
- Cronbach, L. J., & Gleser, G. C. (1953). Assessing similarity between profiles. *Psychological Bulletin*, *50*(6), 456–473.
- De Mooij, M. E., & Hofstede, G. (2011). Cross-cultural consumer behavior: A review of research findings. *Journal of International Consumer Marketing*, 23(3–4), 181–192.
- Deloitte. (2015). *Global Powers of Luxury Goods, Engaging the Future Luxury Consumer*. <u>https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Consumer-</u> <u>Business/gx- cb-global-power-of-luxury-infographics.pdf</u>.
- Dobewall, H., Aavik, T., Konstabel, K., Schwartz, S. H., & Realo, A. (2014). A comparison of self-other agreement in personal values versus the Big Five personality traits. *Journal of Research in Personality*, 50, 1–10
- Eisend, M., & Stokburger-Sauer, N. E. (2013). Brand personality: A meta-analytic review of antecedents and consequences. *Marketing Letters*, 24(3), 205–216.
- Fetscherin, M., & Toncar, M. (2009). Country of Origin Effect on U.S. Consumers' Brand Personality Perception of Automobiles from China and India. *Multinational Business Review*, 17(2), 111–128.
- Fiske, A., P., Kitayama, S., M., Hazel R., and Nisbett, R. (1998). The cultural matrix of social psychology. In D.T. Gillbert & S. Fiske (Eds.), *The Handbook of Social Psychology*. Boston: McGraw-Hill.: pp.915-981
- Fiske, S. T., & Neuberg, S. L. (1990). A Continuum of Impression Formation, from Category-Based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation. In *Advances in Experimental Social Psychology* (Vol. 23, pp. 1–74). Elsevier. https://doi.org/10.1016/S0065-2601(08)60317-2
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18(3), 382.
- Foscht, T., Maloles, C., Swoboda, B., Morschett, D., & Sinha, I. (2008). The impact of culture on brand perceptions: A six-nation study. *Journal of Product & Brand Management*, 17(3), 131–142.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer

research. Journal of Consumer Research, 24(4), 343-373.

- Fournier, S., & Alvarez, C. (2012). Brands as relationship partners: Warmth, competence, and in-between. *Journal of Consumer Psychology*, 22(2), 177–185.
- Fournier, S., Solomon, M. R., & Englis, B. G. (2008). When brands resonate. In Schmitt, B.H., & Rogers, D. L. (Eds). Handbook on Brand and Experience Management. (pp. 35-57). Edward Elgar.
- Freling, T. H., Crosno, J. L., & Henard, D. H. (2011). Brand personality appeal: Conceptualization and empirical validation. *Journal of the Academy of Marketing Science*, 39(3), 392–406.
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, *102*(4), 652–670.
- Funder, D. C. (2012). Accurate Personality Judgment. Current Directions in Psychological Science, 21(3), 177–182.
- Gawronski, B., & Strack, F. (2012). Cognitive consistency as a basic principle of social information processing. In B. Gawronski & F. Strack (Eds.), Cognitive consistency: A fundamental principle in social cognition (p. 1–16). Guilford Press
- Heine, K. (2009). Using personal and online repertory grid methods for the development of a luxury brand personality. *Electronic Journal of Business Research Methods*, 7(1), 25-38.
- Hofstede, G. (2001). *Culture's consequences; comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies*, *41*(8), 1339–1346.
- Hofstede, G., & McCrae, R. R. (2004). Personality and Culture Revisited: Linking Traits and Dimensions of Culture. *Cross-Cultural Research*, *38*(1), 52–88.
- Horn, J. L. (1961). Significance Tests for Use With r_p and Related Profile Statistics. *Educational and Psychological Measurement*, *21*(2), 363–370.
- Hřebíčková, M., & Graf, S (2014). Accuracy of National Stereotypes in Central Europe:
 Outgroups are not Better than Ingroup in considering Personality Traits of Real
 People. *European Journal of Personality*, 28(1), 60–72.
- Humberg, S., Nestler, S., & Back, M. D. (2019). Response surface analysis in personality and social psychology: Checklist and clarifications for the case of congruence hypotheses. *Social Psychological and Personality Science*, 10(3), 409-419.

John, O. P., & Robins, R. W. (1993). Determinants of Interjudge Agreement on Personality

Traits: The Big Five Domains, Observability, Evaluativeness, and the Unique Perspective of the Self. *Journal of Personality*, *61*(4), 521–551.

- Jussim, L. (1991). Social perception and social reality: A reflection-construction model. *Psychological Review*, 98(1), 54–73.
- Jussim, L., Crawford, J. T., Anglin, S. M., Chambers, J. R., Stevens, S. T., & Cohen, F. (2016). Stereotype accuracy: One of the largest and most replicable effects in all of social psychology. To appear in T. Nelson (Ed.), Handbook of prejudice, stereotyping, and discrimination. Hillsdale, NJ: Erlbaum., pp.31-64.
- Kalmijn, M. (1994). Assortative Mating by Cultural and Economic Occupational Status. *American Journal of Sociology*, *100*(2), 422–452.
- Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, *57*(1), 1–22.
- Klein, K., Völckner, F., Bruno, H. A., Sattler, H., & Bruno, P. (2019). Brand Positioning Based on Brand Image–Country Image Fit. *Marketing Science*, 38(3), 516–538.
- Kunda, Z., & Thagard, P. (1996). Forming impressions from stereotypes, traits, and behaviors: A parallel-constraint-satisfaction theory. *Psychological Review*, 103(2), 284–308.
- MacInnis, D. J., & Folkes, V. S. (2017). Humanizing brands: When brands seem to be like me, part of me, and in a relationship with me. *Journal of Consumer Psychology*, 27(3), 355-374.
- Maehle, N., & Supphellen, M. (2011). In Search of the Sources of Brand Personality. International Journal of Market Research, 53(1), 95–114.
- Magnusson, D., & Torestad, B. (1993). A Holistic View of Personality: A Model Revisited. Annual Review of Psychology, 44(1), 427–452.
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self. *Journal of Marketing*, 75(4), 35–52.
- Malär, L., Nyffenegger, B., Krohmer, H., & Hoyer, W. D. (2012). Implementing an intended brand personality: A dyadic perspective. *Journal of the Academy of Marketing Science*, 40(5), 728–744.
- McCracken, G. (1986). Culture and consumption: A theoretical account of the structure and movement of the cultural meaning of consumer goods. *Journal of Consumer Research*, 13(1), 71-84.
- McCrae, R. R. (1993). Agreement of Personality Profiles Across Observers. Multivariate

Behavioral Research, 28(1), 25–40.

- McCrae, R. R. (2004). Human nature and culture: A trait perspective. *Journal of Research in Personality*, 38(1), 3–14.
- McCrae, R. R. (2009). Personality profiles of cultures: Patterns of ethos. *European Journal of Personality*, 23(3), 205–227.
- McCrae, R. R., & Costa, P. T. (1999) A five-factor theory of personality. In L. Pervin & O. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). New York: Guilford Press.
- McCrae, R. R., & Terracciano, A. (2006). National Character and Personality. *Current Directions in Psychological Science*, *15*(4), 156–161.
- McCrae, R. R., Chan, W., Jussim, L., De Fruyt, F., Löckenhoff, C. E.,., ... Terracciano, A. (2013). The inaccuracy of national character stereotypes. *Journal of Research in Personality*, 47(6), 831–842.
- McCrae, R. R., Terracciano, A. (2005). Personality profiles of cultures: Aggregate personality traits. *Journal of Personality and Social Psychology*, 89(3), 407–425.
- McCrae, R. R., Terracciano, A., & 78 Members of the Personality Profiles of Cultures Project. (2005). Universal Features of Personality Traits from the Observer's Perspective: Data From 50 Cultures. *Journal of Personality and Social Psychology*, 88(3), 547–561.
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. Psychological methods, 17(3), 437-455
- Monga, A. B., & John, D. R. (2010). What Makes Brands Elastic? The Influence of Brand Concept and Styles of Thinking on Brand Extension Evaluation. *Journal of Marketing*, 74(3), 80–92.
- Montoya, R. M., & Horton, R. S. (2013). A meta-analytic investigation of the processes underlying the similarity-attraction effect. *Journal of Social and Personal Relationships*, 30(1), 64–94.
- Pervin, L. A., Cervone, D., & John, O. P. (2005). *Personality: Theory and Research* (9th ed.).Hoboken, NJ: John Wiley & Sons.
- Plummer, J.,T. (1985), Brand Personality: A Strategic Concept for Multinational Advertising.In *Marketing Educators' Conference*: pp.1-31. New York: Young & Rubicam.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, 126(1), 3–25.

- Rojas-Méndez, J. I., Papadopoulos, N., & Alwan, M. (2015). Testing self-congruity theory in the context of nation brand personality. *Journal of Product & Brand Management*, 24(1), 18–27.
- Saucier, G., & Goldberg, L. R. (1996). The language of personality: Lexical perspectives on the five-factor model". In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives*. (pp. 21-50). New York: Guilford.
- Schacter, D., Gilbert, D., Wegner, D., & Hood, B. (2016). *Psychology: Second European Edition*. Macmillan Education UK.
- Schönbrodt, F. D. (2016). *Testing fit patterns with polynomial regression models* (No. ndggf). Center for Open Science. https://osf.io/3889z/
- Schwartz, S. H. (1994). Are There Universal Aspects in the Structure and Contents of Human Values? *Journal of Social Issues*, *50*(4), 19–45.
- SPSS. (2015). Linear mixed effects modelling in SPSS -Technical report. retrieved March 20, 2020 <u>http://www.spss.ch/upload/1107355943</u> LinearMixedEffectsModelling.pdf
- Sung, Y., & Tinkham, S. F. (2005). Brand Personality Structures in the United States and Korea: Common and Culture-Specific Factors. *Journal of Consumer Psychology*, 15(4), 334–350.
- Terracciano, A. (2005). National Character Does Not Reflect Mean Personality Trait Levels in 49 Cultures. *Science*, *310*(5745), 96–100. https://doi.org/10.1126/science.1117199
- Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands. *Journal of Consumer Psychology*, 15(1), 77–91.
- Torelli, C. J., Özsomer, A., Carvalho, S. W., Keh, H. T., & Maehle, N. (2012). Brand Concepts as Representations of Human Values: Do Cultural Congruity and Compatibility between values Matter? *Journal of Marketing*, 76(4), 92–108.
- Van Trijp, H. C., Hoyer, W. D., & Inman, J. J. (1996). Why switch? product category–level explanations for true variety-seeking behavior. Journal of marketing research, 33(3), 281-292.
- Waytz, A., Morewedge, C. K., Epley, N., Monteleone, G., Gao, J.-H., & Cacioppo, J. T. (2010). Making sense by making sentient: Effectance motivation increases anthropomorphism. *Journal of Personality and Social Psychology*, 99(3), 410–435.
- Williams, L. J., Hartman, N., & Cavazotte, F. (2010). Method Variance and Marker Variables: A Review and Comprehensive CFA Marker Technique. *Organizational Research Methods*, 13(3), 477–514. https://doi.org/10.1177/1094428110366036

- Woehr, D. J., Loignon, A. C., Schmidt, P. B., Loughry, M. L., & Ohland, M. W. (2015). Justifying Aggregation With Consensus-Based Constructs: A Review and Examination of Cutoff Values for Common Aggregation Indices. *Organizational Research Methods*, 18(4), 704–737.
- Youyou, W., Stillwell, D., Schwartz, H. A., & Kosinski, M. (2017). Birds of a Feather Do Flock Together: Behavior-Based Personality-Assessment Method Reveals Personality Similarity Among Couples and Friends. *Psychological Science*, 28(3), 276–284.

Table 1

Cultural difference of luxury brand personalities at trait level (hierarchical linear model analysis) with brands nested within the countries.

			Ruggedness		Competence		Sincerity		Sophistication		Excitement	
Source	Num df	Denom df	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
Intercept	1	982	1804.0	0.000	7512.7	0.000	5785.7	0.000	866.371	0.000	5592.256	0.000
Country	4	982	1.304	0.267	2.800	0.025	1.269	0.280	10.212	0.000	3.663	0.006
Product (Country)	11	982	6.862	0.000	3.302	0.000	1.383	0.175	12.499	0.000	2.048	0.022
Brand (Country x Product)	6	982	1.129	0.343	0.573	0.752	1.686	0.121	0.277	0.948	1.424	0.202

Table 2

Profile shape similarity: Cattell's profile similarity coefficient (r_p) of the personalities of luxury brands from different countries

			United		
	Germany	Italy	States	France	Britain
Germany	1.000	-0.368	-0.204	-0.165	0.277
Italy	-0.368	1.000	-0.373	0.578+	-0.201
U.S.	-0.204	-0.373	1.000	-0.204	-0.402+
France	-0.165	0.578 +	-0.204	1.000	0.048
Britain	0.277	-0.201	-0.402+	0.048	1.000

Table 3.

Cultural inheritance and stereotyping at trait level (correlation analysis between brand personality traits and corresponding aggregate personality traits and stereotypical personality of national character traits of the brand's country of origin)

	Trait inheritance: Correlation coefficients of	Trait stereotyping: Correlation
	corresponding traits of BP and aggregate	coefficients of the corresponding BP
	personality of culture	national character (stereotypical country
		personality) traits from
BP Excitement ~ FFM Extraversion	069*	020
BP Competence~ FFM Conscientiousness	.049	.091**
BP Sincerity ~ FFM Agreeableness	.016	072*

Note: Correspondence of BP traits to FFM traits: Sincerity-Agreeableness; Competence-Conscientiousness and Excitement-Extraversion

Table 6.

Response Surface Analysis Results

	Estimat	ed Regre	ssion Mo	del: BP cl	larity = b_0	$+ b_1BT$	Positi	on of	Shape o	f Surface	e Along Lines Fit statistics			tistics		
	+	$b_2CPT +$	$b_3BT^2 + b_3BT^2$	₄ BTxCP	Γ+ b ₅ CPT	2	First Pr	rincipal	LC	DC	LOIC					
							Ах	kis								
Inheritance	b_0	b 1	b ₂	b 3	b 4	b 5	p ₁₀	p11	a 1	a ₂	a ₃	a 4	AICc	ΔAIC	CFI	adj.R2
Sincerity	5.497	0.370	-0.045	0.190	0.042	-0.045	-0.743	0.116	0.345	0.133	0.440	0.037	1318.2	3.920	0.980	0.143
p-value	0.000	0.000	0.363	0.000	0.316	0.379	0.400	0.300	0.000	0.118	0.000	0.670				0.000
Competence	5.533	0.573	0.070	0.159	-0.023	-0.143	1.461	-0.097	0.681	0.021	0.534	0.074	1254.3	4.553	0.939	0.252
p-value	0.000	0.000	0.582	0.013	0.715	0.268	0.352	0.711	0.000	0.839	0.000	0.349				0.000
Excitement	5.435	0.414	0.064	0.218	-0.054	-0.010	3.195	-0.154	0.506	0.089	0.372	0.201	1318.6	2.950	1.000	0.142
p-value	0.000	0.000	0.163	0.000	0.221	0.831	0.788	0.265	0.000	0.396	0.000	0.034				0.000
Stereotypin																
g																
Sincerity	5.424	0.375	0.001	0.190	-0.022	0.016	-1.545	-0.095	0.399	0.134	0.396	0.185	1319.9	5.701	0.970	0.140
p-value	0.000	0.000	0.980	0.000	0.630	0.733	0.826	0.630	0.000	0.124	0.000	0.003				0.000
Competence	5.510	0.584	-0.044	0.175	-0.109	-0.035	2.440	-0.436	0.572	-0.045	0.665	0.211	1312.4	0.988	0.956	0.154
p-value	0.000	0.000	0.344	0.004	0.054	0.484	0.150	0.015	0.000	0.604	0.000	0.004				0.000
Excitement	5.445	0.413	0.039	0.263	0.128	-0.033	-0.550	0.260	0.479	0.283	0.397	0.011	1312.4	0.988	0.956	0.154
p-value	0.000	0.000	0.385	0.000	0.001	0.468	0.557	0.008	0.000	0.000	0.000	0.900				0.000

Note. The position of the first principal axis in the BT-CPT-plane is given by $CPT = p_{10} + p_{11}BT$. The shape of the surface above the LOC is described by "BP clarity" = $b_0 + a_1BT + a_2BT^2$, and the shape above the LOIC is "BP clarity" = $b_0 + a_3BT + a_4BT^2$. BT= brand personality trait and CPT= culture personality trait. LOC= line of congruence; LOIC= line of incongruence. For bowl-shaped surfaces in figure 3, the first principal axis is of no interest when considering congruence effects.

Table 4

Cultural inheritance, stereotyping, and acculturation at profile level: profile agreement of brands' personality (aggregates at country level) with aggregate human personality and national character using Cattell's r_p

Profile Agreement	Germany	Italy	United States	France	Britain
Country the brand comes from					
Aggregate Personality of a culture (cultural inheritance)	0.810*	0.036	-0.139	0.296	0.161
Stereotypical personality of a culture (cultural stereotyping)	0.340	0.153	-0.169	0.516	0.418
Perceivers' country (United			Perceiver		
States)			country		
Aggregate Personality (acculturation)	-0.123	0.433		0.898*	0.377

Table 5

Effects of brand personality profile similarity to the aggregate and stereotypical country personality profiles on perceived clarity of brand personality

Source	Num df	Denom df	F	Sig.
Intercept	1	414	5458.5	.000
Brand	17	414	2.559	.001
Similarity_aggr (brand)	18	414	2.664	.000
Similarity_nc (brand)	18	414	1.951	.011

Note. "Similarity_aggr (brand)" refers to level of cultural inheritance (measured with Cattell's r_p between BP's and country's personality profiles) which nested within brands and "Similarity_nc (brand) "refers to level of cultural stereotyping (measured with Cattell's r_p between BP's and culture's stereotypical personality profiles) nested within brands.

Table 7

Effects of brand personality profile similarity to the aggregate country personality profiles of perceiver country on emotional attachment to the brand

Source	Num df	Denom df	F	Sig.
Intercept	1	413	8.733	.003
Brand	17	413	1.114	.337
Similarity_evaluator_aggr (brand)	18	413	1.278	.198
Product involvement	1	413	649.9	.000
Product involvement × Similarity_evaluator_aggr (brand)	18	413	.894	.587

Note. "Similarity_evaluator_aggr (brand) refers to level of BP profile acculturation (measured with Cattell's r_p of BP profile and US personality profile) which nested within brands

Appendix

Construct	Definition	Measurement/ assessment			
Consumer	"Personality refers to those characteristics of	Five factor model			
personality	the person that account for consistent patterns	NEO-PI-R using either self-			
	of feelings, thinking, and behaving" (Pervin,	reports or observer ratings			
	Cervone & John, 2005, p. 6)	from knowledgeable			
		informants (Costa & McCrae,			
		1992).			
Personality of a	"The set of human characteristics associated	Aaker's (1997) brand			
brand (BP)	with a brand" (Aaker, 1997, p. 347)	personality inventory			
Aggregate	"The assessed mean personality trait levels of	McCrae and Terracciano's			
personality of a	culture members" (McCrae & Terracciano,	(2005b) mean personality			
culture	2005, p.409).	scores of (aggregated) self-			
		reports of people living in a			
		certain country measured on			
		FFM			
Stereotypical	The shared perceptions about the personality	McCrae and Terracciano's			
personality of a	characteristics of the typical member of a	(2005b) the mean scores of			
culture (or	culture. "The personality traits that are	observer ratings for the			
National	perceived to be prototypical of members of a	personality of people of a			
Character of a	culture" It focus on personality stereotypes.	certain country measured on			
culture)	(McCrae & Terracciano, 2005, p.408).	FFM			
Personality traits	A distinguishing quality in the personality	Single trait score from			
	of a culture or brand (e.g., extroversion in the	Aaker's (1997) BP inventory			
	personality of a culture and sincerity in the	and McCrae and			
	personality of brand	Terracciano's (2005b)			
		measurements.			
Personality	Pattern of the personality trait scores. A	The vector of the relevant			
profile	personality profile combines all the relevant	personality trait scores			
	personality traits and how they are configured				
	with each within a culture or a brand.				
BP -FFM trait	BP FFM	see Aaker (1997			
correspondence	sincerity				
	excitement \triangleq extraversion				
	competence				
Personality trait	the similarity of a specific brand personality	Correlation coefficient of the			
inheritance	trait (e.g., sincerity) to the corresponding	corresponding BP-FFM			
	(aggregate) personality trait of the people	personality traits			
	living in the country the brand comes from				
	(e.g., agreeableness)				
Personality	The similarity in the personality pattern of	Cattell's (1969) pattern			
profile	peaks and valleys between the profiles	similarity coefficient (rp) of			
inheritance	(constellations) of brand personality and that	the respective BP-FFM			
	of aggregate personality of the culture of the	personality profiles			
	country the brand comes from				

 Table A1. Definition and measurement of key constructs

Personality Trait stereotyping	the similarity of a specific brand personality traits (e.g., sincerity) to the corresponding stereotypical personality trait of the country the brand comes from (e.g., agreeableness)	Correlation coefficient of the corresponding BP-FFM personality traits
Personality profile stereotyping	the similarity in the personality pattern of peaks and valleys between the profiles (constellations) of the brand personality traits and that of stereotypical personality traits of the culture of the country the brand comes from	Cattell's (1969) pattern similarity coefficient (r _p) of the respective BP-FFM personality profiles
Acculturation of BP traits	The similarity of a specific brand personality traits (e.g., sincerity) to a corresponding aggregate personality trait of the culture of the country of the consumer (e.g., agreeableness).	Correlation coefficient of the corresponding BP-FFM personality traits
Acculturation of the BP personality profiles	Similarity in the personality pattern of peaks and valleys between the profiles (constellations) of brand personality of the culture of the country of the consumer	Cattell's (1969) pattern similarity coefficient (r _p) of the respective BP-FFM personality profiles
Clarity of the brand's personality.	The extent to which a brand's personality "is apparent and recognizable to consumers" (Reling, et al., 2011, p.394).	Reling et al. (2011) scale
Emotional attachment to the brand	attachment "reflects the bond that connects a consumer with a specific brand and involves feelings toward the brand." (Malär et al., 2011, p.36).	Thomson et al. (2005) scale

Figure 1. Conceptual model





Figure 2. Country profiles of luxury brand personalities (t-scores)

Figure 3. Response Surface Analyses



Sincerity-Agreeableness (ste)

Competence-Conscientiousness (ste) Excitement-Extraversion (ste)







