

# Relationship between Brand Personality and the Personality of Consumers, and its Application to Corporate Branding Strategy

Kim, Young-Ei\* · Jung-Wan Lee\*\* · Yong-Ki Lee\*\*\*

〈Abstract〉

Many consumers enjoy the challenge of purchasing a brand that matches well with their own values and personalities (for example, Ko et al., 2008; Ko et al., 2006). Therefore, the personalities of consumers can impact on the final selection of a brand and its brand personality in two ways: first, the consumers may incline to purchase a brand or a product that reflects their own personalities; second, consumers tend to choose a company that has similar brand personalities to those brands that are being promoted. Therefore, the objectives of this study are following:

1. Is there any empirical relationship between a consumer's personality and the personality of a brand that he or she chooses?
2. Can a corporate brand be differentiated by the brand personality?

In short, consumers are more likely to hold favorable attitudes towards those brands that match their own personality and will most probably purchase those brands matching well with their personality. For example, Matzler et al. (2006) found that extraversion and openness were positively related to hedonic product value; and that the personality traits directly (openness) and indirectly (extraversion, via hedonic value) influenced brand effects, which in turn drove attitudinal and purchase loyalty. Based on the above discussion, the following hypotheses are proposed:

Hypothesis 1: the personality of a consumer is related to the brand personality of a

---

\* Assistant Professor of Marketing Department of Business Administration, Seoul Digital University 1 Shinsa-dong Kangnam-ku, Seoul, Republic of Korea / e-mail: kimyei@adu.ac.kr, The 1<sup>st</sup> Author.

\*\* Professor of Economics and Management Dept Faculty of Economics and Finance, Kazakh-British Technical University 59 Tole Bi Street, Almaty, 050000, Republic of Kazakhstan / e-mail: jwlee1119@yahoo.com ,The 2<sup>nd</sup> Author.

\*\*\* Associate Professor of Marketing, College of Business Administration, Sejong University 98 Gunja-dong Gwangjin-gu, Seoul, Republic of Korea / e-mail: yongki2@sejong.ac.kr, Corresponding Author.

product/corporate that he/she purchases.

Kuksov (2007) and Wernerfelt (1990) argued that brands as a symbolic language allowed consumers to communicate their types to each other and postulated that consumers had a certain value of communicating their types to each other. Therefore, how brand meanings are established, and how a firm communicate with consumers about the meanings of the brand are interesting topics for research (for example, Escalas and Bettman, 2005; McCracken, 1989; Moon, 2007). Hence, the following hypothesis is proposed:

Hypothesis 2: A corporate brand identity is differentiated by the brand personality. And there are significant differences among companies.

A questionnaire was developed for collecting empirical measures of the Big-Five personality traits and brand personality variables. A survey was conducted to the online access panel members through the Internet during December 2007 in Korea. In total, 500 respondents completed the questionnaire, and considered as useable.

Personality constructs were measured using the Five-factor Inventory (NEO-FFI) scale and a total of 30 items were actually utilized. Brand personality was measured using the five-dimension scale developed by Aaker (1997). A total of 17 items were actually utilized. The seven-point Likert-type scale was the format of responses, for example, from 1 indicating strongly disagreed to 7 for strongly agreed.

The Analysis of Moment Structures (AMOS) was used for an empirical testing of the model, and the Maximum Likelihood Estimation (MLE) was applied to estimate numerical values for the components in the model. To diagnose the presence of distribution problems in the data and to gauge their effects on the parameter estimates, bootstrapping method was used.

The results of the hypothesis-1 test empirically show that there exist certain causality relationship between a consumer's personality and the brand personality of the consumer's choice. Thus, the consumer's personality has an impact on consumer's final selection of a brand that has a brand personality matches well with their own personalities. In other words, the consumers are inclined to purchase a brand that reflects their own personalities and tend to choose a company that has similar brand personalities to those of the brand being promoted.

The results of this study further suggest that certain dimensions of the brand personality cause consumers to have preference to certain (corporate) brands. For example, the conscientiousness, neuroticism, and extraversion of the consumer personality have positively related to a selection of “ruggedness” characteristics of the brand personality. Consumers who possess that personality dimension seek for matching with certain brand personality dimensions.

Results of the hypothesis-2 test show that the average “ruggedness” attributes of the brand personality differ significantly among Korean automobile manufacturers. However, the result of ANOVA also indicates that there are no significant differences in the mean values among manufacturers for the “sophistication,” “excitement,” “competence” and “sincerity” attributes of the corporate brand personality. The tight link between what a firm is and its corporate brand means that there is far less room for marketing communications than there is with products and brands. Consequently, successful corporate brand strategies must position the organization within the boundaries of what is acceptable, while at the same time differentiating the organization from its competitors.

Key words: Brand personality, personality, consumer behavior, corporate brand, marketing communications, branding strategy, marketing strategy.

## 品牌个性与消费者个性的关系及其在公司品牌战略的应用

金荣伊\* · 李正皖\*\* · 李勇基\*\*\*

### <摘要>

许多消费者愿意购买与他们的价值观念和个性相匹配的品牌。因此，消费者个性能够影响到他们最终的品牌和品牌个性的选择，主要体现在以下两方面：首先，消费者会倾向于购买反映他们个性的品牌或产品；其次，消费者倾向于选择有相似品牌个性的公司。本研究的目的包括以下几点：

- 1 消费者个性与他们选择的品牌个性之间存在实证关系吗？
- 2 品牌个性会使公司的品牌差异化吗？

总之，消费者对那些符合他们个性的品牌持更为欣赏的态度。例如Matzler 等(2006)发现，奢华和铺张与享乐产品价值有正向关系；这种个性直接地（通过铺张）和间接地（通过奢华和享乐价值）影响那些导致态度和购买忠诚的品牌效应。基于以上观点，提出以下假设：

假设1：消费者个性与他购买的产品或公司的品牌个性相关。

Kuksov (2007) 和 Wernerfelt (1990)认为，作为一种象征性语言，品牌让各种类型的消费者彼此沟通。因此如何建立品牌内涵，公司如何将品牌的内涵传达给消费者成为有趣的研究题目（如Escalas和 Bettman, 2005; McCracken, 1989; Moon, 2007），因此提出以下假设：

假设2：品牌个性导致公司品牌识别的差异化，而且在公司之间存在显著差异。

设计问卷实证测量五大个性特征和品牌个性变量。2007年12月通过互联网在韩国进行在线调查，共有500名响应者提供了有效的问卷。

用5因子量表测量个性构念，30个题项实际上是有效的。采用Aaker (1997)设计的5维度量表测量品牌个性，17个题项是有效的。使用利科特7点量表，“1”代表“非常不同意”，“7”代表非常同意。用AMOS对模型进行实证检验，用极大似然法估计模型各因子值。

假设1的检验结果说明，消费者个性与其购买品牌的个性存在一定的因果关系，这样消费者个性就会影响消费者最终选择与其个性相匹配的品牌。即消费者倾向于购买反映其个性的品牌，并选择有相似个性品牌的公司。

研究结果进一步显示，品牌个性的某些方面会使消费者选择某个（公司）品牌。比如谨慎、神经和

---

\* Assistant Professor of Marketing Department of Business Administration, Seoul Digital University 1 Shinsa-dong Kangnam-ku, Seoul, Republic of Korea / e-mail: kimyei@adu.ac.kr, The 1<sup>st</sup> Author.

\*\* Professor of Economics and Management Dept Faculty of Economics and Finance, Kazakh-British Technical University 59 Tole Bi Street, Almaty, 050000, Republic of Kazakhstan / e-mail: jwlee1119@yahoo.com ,The 2<sup>nd</sup> Author.

\*\*\* Associate Professor of Marketing, College of Business Administration, Sejong University 98 Gunja-dong Gwangjin-gu, Seoul, Republic of Korea / e-mail: yongki2@sejong.ac.kr, Corresponding Author.

奢华的消费者个性与选择粗犷的品牌个性相关。具有某方面个性的消费者也会去尝试与某品牌的个性一致。

假设2的检验结果表明,一般来说,粗犷的品牌属性在韩国的手机制造商中显著不同。但是ANOVA结果显示,“老练”、“兴奋”、“好胜”和“诚实”的属性在公司的品牌个性中差别不显著。这表明对公司品牌内涵的营销沟通作用没有品牌和产品的作用大。因此成功的公司品牌战略必须把组织定位于可接受的范围内,同时能够与竞争者有所差异。

**关键词：**品牌个性, 个性, 消费者行为, 公司品牌, 营销沟通作用, 品牌战略, 营销战略

## 브랜드개성, 소비자 개성 간의 관계, 그리고 기업브랜딩 전략에의 적용

김영이\* · 이정완\*\* · 이용기\*\*\*

### 〈한글요약〉

본 연구는 브랜드 개성과 소비자 개성간의 인과성을 연구하고, 이러한 관계들이 기업 브랜드 전략에 어떻게 적용되는 가를 실증분석 하였다. 분석자료는 한국의 자동차 소비자들로부터 수집되었으며, 요인분석, 분산분석, 그리고 구조모형분석을 이용하여 분석되었다. 본 연구의 결과는 브랜드 개성과 소비자 개성간의 유의한 관계가 있음을 보여주고 있다. 연구의 마지막에는 기업 브랜드 전략을 위한 관리적 시사점과 향후 연구방향이 제시되었다.

---

\* 서울디지털대학교 조교수. 제1 저자.

\*\* Kazakh-British Technical University 교수. 제2 저자.

\*\*\* 세종대학교 부교수. 교신저자.

# Relationship between Brand Personality and the Personality of Consumers, and its Application to Corporate Branding Strategy

Kim, Young-Ei\* · Jung-Wan Lee\*\* · Yong-Ki Lee\*\*\*

## 1. Introduction

A consumer is an individual with a distinctive personality. The term “personality” refers to the unique psychological characteristics eliciting relatively consistent and lasting responses to one’s own environment. Therefore, personality can be useful in analyzing individual consumer’s responses to or behavior about certain products or brand choices. A brand personality symbolizes the specific mix of human traits that are attributed to a particular brand. Aaker (1997) found that a number of well-known brands tended to be strongly associated with one particular trait, for example, Levi’s with “ruggedness,” MTV with “excitement,” and CNN with “competence.” Hence these brands will

attract consumers who possess the same personality traits. In other words, a “rugged” consumer likes to wear Levi’s, an excitable viewer prefers to watch MTV, etc.

Harris and DeChernatony (2001) proposed that brand personality was one component of brand identity. Nandan (2005) asserted that while the other components, such as brand vision, brand culture, and brand positioning, contributed to the overall identity the firm sought to propagate, however, consumers would form their own opinions of a brand and would express this as brand image. Brand image represents the understanding consumers derive from the total set of brand related activities engaged by the firm (Park et al., 1986). Brand image is, therefore, viewed as the outcome of a dialogue between marketers

---

\* Assistant Professor of Marketing Department of Business Administration, Seoul Digital University 1 Shinsa-dong Kangnam-ku, Seoul, Republic of Korea / e-mail: kimyei@adu.ac.kr, The 1<sup>st</sup> Author.

\*\* Professor of Economics and Management Dept Faculty of Economics and Finance, Kazakh-British Technical University 59 Tole Bi Street, Almaty, 050000, Republic of Kazakhstan / e-mail: jwlee1119@yahoo.com, The 2<sup>nd</sup> Author.

\*\*\* Associate Professor of Marketing, College of Business Administration, Sejong University 98 Gunja-dong Gwangjin-gu, Seoul, Republic of Korea / e-mail: yongki2@sejong.ac.kr, Corresponding Author.

and consumers.

Many marketers have applied the personality related concept of a person's self-image or self-concept in their research (for example, Aaker, 1999; Azoulay and Kapferer, 2003; Belk, 1988; Govers and Schoormans, 2005; Park et al., 1986; Sirgy et al., 1991; Sirgy et al., 1997). The self-concept is based on the premise that people's possessions contribute to and reflect their identities. Thus, in order to understand consumer behavior, the marketer must first understand the relationship between consumers' self-concept and their possessions. More recently, brand images are increasingly viewed as a form of personal statements. For example, clothing, perfume, and cars are the most frequently mentioned products that consumers use as means of self-expression (Aaker, 1996). However, since a much wider variety of products have a brand or user image associated with them, the associations of brand user with brand

image may affect consumer brand choice, especially when many other individuals observe the brand consumption.

Many consumers enjoy the challenge of purchasing a brand that matches well with their own values and personalities (for example, Ko et al., 2008; Ko et al., 2006). Therefore, the personalities of consumers can impact on the final selection of a brand and its brand personality in two ways: first, the consumers may incline to purchase a brand or a product that reflects their own personalities; second, consumers tend to choose a company that has similar brand personalities to those brands that are being promoted. Therefore, the objectives of this study are following:

1. *Is there any empirical relationship between a consumer's personality and the personality of a brand that he or she chooses?*
2. *Can a corporate brand be differentiated by the brand personality?*

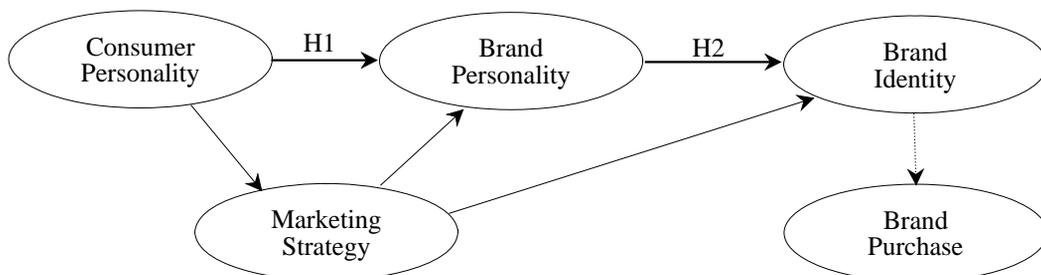


Figure 1 Research Framework

Combining the above research questions, this study puts forth an integrated research framework as shown in Figure 1.

## **2. Literature review and hypothesis formation**

### **2.1 Personality traits**

Personality refers to the unique psychological characteristics that lead to relatively consistent and lasting responses to one's own environment. Different personality theories have been developed over the years to explain the structure, process and development of human behavior. Among these personality theories, the trait theory tends to place a great emphasis on exploring the basic structure of personality. Trait theory assumes that people possess broad predispositions that cause them to behave in a particular way. There has been growing agreement among personality researchers that there are five basic dimensions of personality.

These traits, known as the Big-Five (Costa and McCrae, 1987; 1992a; 1992b), are extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Extraversion refers to the tendency to

experience positive emotional states and feel good about oneself and the world around one. Agreeableness is the tendency to get along well with others. Conscientiousness is concerned with the extent to which a person is careful, scrupulous, and persevering. Neuroticism refers to the tendency to experience negative emotional states and view oneself and the world around one negatively. Openness to experience is concerned with the extent to which an individual is original, open to a wide variety of stimuli, has broad interests and is willing to take risks.

### **2.2 Brand personality and consumer personality**

While the Big-Five model of human personality is relatively universal in acceptance, many researchers are still working on the brand personality attributions. According to Aaker (1997, p.347), brand personality is "the set of human characteristics associated with a brand." Azoulay and Kapferer (2003, p.151) proposed a narrower definition, "brand personality is the set of human personality traits that are both applicable to and relevant for brands." Contrary to the human, brands are inanimate objects and

obviously do not in themselves behave in a consistent manner. They are imbued by personality traits associations arising from person-related attributes such as traits that are transferred from persons associated with a brand, and from product-related traits inferences that are stemming from product design, performance characteristics, and others.

Many researchers have attempted to explore and define the meaning of brands by examining how brand personality attributes are structured (for example, Aaker, 1997, Azoulay and Kapferer, 2003; Bosnjak et al., 2007; Goldberg, 1990; Kim et al., 2007; Kim and Jia, 2005; Ko et al., 2008; Ko et al., 2006; Moon, 2007). Exploratory and confirmatory factor analyses yielded a perceptual space for individuals comprising five dimensions (Aaker, 1997): sincerity, excitement, competence, sophistication, and ruggedness. "Sincerity" comprises brand personality characteristics like domestic, honest, and genuine. "Excitement" consists of characteristics like exciting, trendy, spirited, and up-to-date. "Competence" includes characteristics such as reliable, responsible, and efficient. "Sophistication" is characterized by pretentious, glamorous and charming. "Ruggedness" incorporates characteristics

of tough, strong, and outdoorsy.

However, cross-cultural research on brand personality employing Aaker's (1997) approach resulted in considerable differences among cultures, with respect to the number of dimensions extracted and their meaning (Aaker et al., 2001; Austin et al., 2003; Bosnjak et al., 2007; Kim et al., 2007; Kim and Jia, 2005; Ross, 2008; Smit et al., 2003; Sung and Tinkham, 2005). For example, Ross (2008) examined Aaker's brand personality scale (BPS) in the context of sport and suggested that the BPS was not fully applicable to the area of sport and further development of the scale was needed in order to improve the reliability and validity.

Ramaseshan and Tsao (2007) investigated the effects of the brand concept on the relationship between brand personality and perceived quality. They proposed a brand concept scale consisting of the following three brand sub-concepts: functional, symbolic, and experiential. Park et al., (1986) had demonstrated that the "functional" concept could be applied to differentiate both brands and products. Beyond utilitarian and experiential attributes, many researchers (for example, Kim et al., 2007; Kim and Jia, 2005; Ko et al., 2008; Ko et al., 2006; Lee and Tai,

2006; Moon, 2007; Shavitt, 1990; Siguaw et al., 1999; Sirgy et al., 1991, 1997; Wysong et al., 2002) found that brands are significant as consumption symbols, stressing their capacity to fulfill symbolic or value expressive functions for the individual. "Symbolic" represents the concept that one can express oneself with the brand of product one uses. In turn, the brand of products or companies that one uses will signal to others about one's social status. Research on the symbolic use of brands has shown that consumers preferred those brands that matched well with their own personality (Govers and Schoormans, 2005).

Empirical research in the fields of consumer psychology and marketing has extensively shown that by purchasing and utilizing certain brands, consumers are inclined to maintain and enhance social approval of certain aspects of self-concept (Aaker, 1997; Govers and Schoormans, 2005; Hayes et al., 2006; Kim et al., 2007; Kim and Jia, 2005; Lee and Tai, 2006; Moon, 2007; Sirgy et al., 1997; Wysong et al., 2002). Hayes et al. (2006) suggested that perceived attractiveness significantly influenced the consumer-brand relationship development process in meaningful and predictable ways. Results

indicate that consumer perceptions regarding a product brand's possession of certain personality traits can influence their opinion of the desirability of the brand as a relationship partner, and that the brand personality-partner quality connection depends, to a degree, on the brand's perceived attractiveness.

After Aaker (1996) proposed that the company's image, logo, packaging and celebrity endorser might be antecedents in creating such brand personality, Wysong et al (2002) have explored the antecedents and consequences of brand personality. As for the consequences of brand personality, Siguaw et al. (1999) found that a well-established brand personality could result in increased preference and usage, higher emotional ties to brand, trust and loyalty. Freling and Forbes (2005) also suggested that brand personality had a positive influence on product evaluations and that subjects exposed to a brand's personality had a significantly greater number of brand associations. In particular, Govers and Schoormans (2005) suggested that consumers tended to prefer products with a product personality that matched his/her own self-image. Furthermore, Filo et al. (2008) supported that brand trust mediated the

link between brand loyalty and the management and popularity of the managed brands. They asserted that brand managers worked to leverage brand trust through social responsibility, consumer satisfaction and quality customer service in an effort to increase consumer brand loyalty.

In short, consumers are more likely to hold favorable attitudes towards those brands that match their own personality and will most probably purchase those brands matching well with their personality. For example, Matzler et al. (2006) found that extraversion and openness were positively related to hedonic product value; and that the personality traits directly (openness) and indirectly (extraversion, via hedonic value) influenced brand effects, which in turn drove attitudinal and purchase loyalty. Based on the above discussion, the following hypotheses are proposed:

*Hypothesis 1: the personality of a consumer is related to the brand personality of a product/corporate that he/she purchases.*

*1a-e: the “conscientiousness” factor of the consumer personality is related to each dimension (e.g., ruggedness, competence, sophistication, excitement, sincerity) of the brand personality.*

*1f-j: the “agreeableness” factor of the consumer personality is related to each dimension of the brand personality.*

*1k-o: the “neuroticism” factor of the consumer personality is related to each dimension of the brand personality.*

*1p-t: the “openness” factor of the consumer personality is related to each dimension of the brand personality.*

*1u-y: the “extraversion” factor of the consumer personality is related to each dimension of the brand personality.*

### **2.3 Brand personality and corporate brand**

Brand personality is a component of brand image, which has been previously considered as a co-construction of the firm and its brands. In fact, because the firm usually uses marketing communications to create a brand personality, the brand identity itself is a co-construction between the firm and its marketing communications. Corporate branding can be understood as a marketing communication practice that is concerned with the propagation of products and brands the firm produces.

Corporate brands are vulnerable to the attribution of meanings. Therefore, many

of researchers (Aaker, 1996; Balmer, 2001a; Keller, 1998; Moon, 2007) have emphasized on brand differentiation on the importance of standing out as unique products. For example, Balmer (2001a) contended that corporate brand differentiation was one of the virtues of successful corporate branding. Keller (1998) argued that differentiation was the second principle guiding the creation of brand knowledge. Aaker (1996) also argued that differentiation was particularly important at the corporate brand level because a distinctive corporate brand enables consumers to select between products offerings that are otherwise similar or the same.

Anisimova (2007) suggested that corporate values, corporate brand personality and functional consumer benefits were the most critical and consistent predictors of both attitudinal and behavioural loyalty. To the same extent, Beldona and Wysong (2007) suggested that national brands had stronger brand personality traits when compared to store brands; however, such differences diminished when consumers were allowed to taste and experience the products. Wang and Yang (2008) founded that both brand personality and country-of-origin image exerted significant positive main effects on purchase intention.

Furthermore, country-of-origin image was found to be a positive moderator in the relationship between brand personality and purchase intention. Finally, Rajagopal (2007) suggested that the perceptions on brand name in reference to brand risk and brand differences have been the prime factors in making a buying decision for new brands among the consumers (for example, Chun et al., 2007; Kim et al., 2007; Lee et al., 2008).

On the other hand, Leitch and Motion (2007) argued that the interplay between normalization and differentiation was at the heart of the creation of corporate brand value. While product brands can be ephemeral, there is a close relationship between the corporate brand and the firm's identity it represents. Balmer (2001b) argued that a corporate brand should be directly derived from a firm's identity, and constituted the major vehicle for communicating that identity to consumers. While brand meanings may spontaneously arise from the types of consumers who purchase and use brands, the firm may facilitate the process of brand image creation through marketing communications.

Kuksov (2007) and Wernerfelt (1990) argued that brands as a symbolic language

allowed consumers to communicate their types to each other and postulated that consumers had a certain value of communicating their types to each other. Therefore, how brand meanings are

established, and how a firm communicate with consumers about the meanings of the brand are interesting topics for research (for example, Escalas and Bettman, 2005; McCracken, 1989; Moon, 2007). Hence,

Table 1 Characteristics of Samples

|                | Sample characteristics  | N   | %  |
|----------------|-------------------------|-----|----|
| Sex            | Male                    | 297 | 59 |
|                | Female                  | 203 | 41 |
| Age            | Below 19 years old      | 18  | 4  |
|                | 20-29                   | 137 | 27 |
|                | 30-39                   | 191 | 38 |
|                | 40-49                   | 109 | 22 |
|                | Above 50 years old      | 45  | 9  |
| Monthly Income | Less than USD1000       | 76  | 15 |
|                | USD1001-2000            | 146 | 29 |
|                | USD2001-3000            | 131 | 26 |
|                | USD3001-4000            | 72  | 14 |
|                | USD4001-5000            | 50  | 10 |
|                | More than USD5001       | 25  | 5  |
| Education      | Secondary (high school) | 149 | 30 |
|                | Junior college          | 83  | 17 |
|                | University              | 246 | 49 |
|                | Graduate                | 22  | 4  |
| Work           | Company employee        | 272 | 54 |
|                | Self-employed           | 47  | 9  |
|                | Civil servant           | 27  | 5  |
|                | Professional            | 44  | 9  |
|                | Student                 | 41  | 8  |
|                | Housewives              | 36  | 7  |
|                | Not employed            | 18  | 4  |
|                | Freelancer              | 9   | 2  |
| Other          | 6                       | 1   |    |

the following hypothesis is proposed:

*Hypothesis 2: A corporate brand identity is differentiated by the brand personality. And there are significant differences among companies.*

### **3. Methodology**

#### **3.1 Survey and sample characteristics**

A questionnaire was developed for collecting empirical measures of the Big-Five personality traits and brand personality variables. A survey was conducted to the online access panel members through the Internet during December 2007 in Korea. In total, 500 respondents completed the questionnaire, and after careful evaluation, all 500 were considered as useable. Of these respondents, 59 percent were male. Of these respondents, 27 percent aged 20-29, 38 percent aged 30-39, and 22 percent aged 40-49 years old. About 70 percent of these respondents had junior college or university education. More than 54 percent of them have been employed full time for longer than 1 year in various industries. The average income per capita for these

respondents is USD 1,900 per month, which is slightly higher than the average income per capita of USD 1,700 per month for Korean employees in 2007, see Table 1 for details.

#### **3.2 Measurements**

Personality constructs, such as Neuroticism, Extraversion, Openness, etc., were measured using the Five-factor Inventory (NEO-FFI) scale developed by Costa and McCrae (1992a; 1992b). This original instrument had twelve items for each of the five personality dimensions that add up to a total of 60 items. Since a web-based survey questionnaire of 60 items would be too lengthy as well as too time-consuming to be completed by respondents, a total of 30 items instead of 60 items were actually utilized. Respondents indicated how much they possessed the personality traits described by each objective item. The seven-point Likert-type scale was the format of responses, for example, from 1 indicating strongly disagreed to 7 for strongly agreed.

Brand personality was measured using the five-dimension scale developed by Aaker (1997). This original instrument has a total of 42 items for the five

dimensions of brand personality. Since a web-based survey questionnaire of 42 items would be too lengthy as well as too time-consuming to be completed by respondents, a total of 17 items instead of 42 items were actually utilized. The response format for each of these items was a seven-point scale, that is, from 1 for strongly disagreed to 7 for a strongly agreed response. To insure the minimization of idiomatic wording, all of the instruments were first translated into Korean, and then results were checked and translated back to English by the authors.

All respondents further indicated their preferences about Korean automobile manufacturers and their products, afterwards labeled as firms A, B, C, D, and E. Each respondent can then be grouped into one of the five A, B, C, D, or E categories based on his or her preference towards an automobile manufacturer.

### **3.3 Factor analysis and reliability test**

Factor analysis with a varimax rotation procedure was employed to identify underlying dimensions of the consumer and the brand personality. Then, the

reliability test was used to test the internal consistency for extracted constructs. As shown in Table 2, an exploratory factor analysis with a varimax rotation for the consumer personality yielded five factors based on an eigenvalue cut-off of 1. The sums of squared loadings from the five-component have the cumulative value of 53.888 percent in explaining the total variance in the data. The five components of the consumer personality are named as “conscientiousness,” “extraversion,” “agreeableness,” “neuroticism,” and “openness,” respectively. To test the appropriateness of factor analysis, two measures were used. The Kaiser-Meyer-Olkin (KMO) overall measure of sampling adequacy (MSA) was 0.857, which falls within the acceptable level. In addition, the Bartlett’s test of sphericity was  $6206.616_{df=435}$ , significant at  $p=0.000$  which showed a significant correlation among the variables (Hair, Anderson, Tatham, & Black, 1998).

Further scale refinement was done by examining item-to-total correlation to improve the reliability. This led to the retention of 21 items, which represented five dimensions; “conscientiousness” (6 items,  $\alpha = 0.877$ ); “extraversion” factor (5 items,  $\alpha = 0.867$ ); “agreeableness” factor (4 items,  $\alpha = 0.772$ ); “neuroticism” factor

Table 2 Results of Factor Analysis and Reliability Test for the Consumer Personality Scale

| Items                         | Factor loadings | Eigenvalue | Extracted variance | Factor name       | Corrected item-total correlation | $\alpha$ |
|-------------------------------|-----------------|------------|--------------------|-------------------|----------------------------------|----------|
| Follow through                | 0.809           | 5.480      | 18.267%            | Conscientiousness | 0.738                            | 0.877    |
| Perform tasks conscientiously | 0.776           |            |                    |                   | 0.667                            |          |
| Strive for excellence         | 0.775           |            |                    |                   | 0.687                            |          |
| Productive person             | 0.774           |            |                    |                   | 0.737                            |          |
| Work with clear goals         | 0.719           |            |                    |                   | 0.668                            |          |
| Get things done on time       | 0.651           |            |                    |                   | 0.599                            |          |
| Rarely feel fearful           | 0.818           |            |                    |                   | 3.928                            |          |
| Not worrisome                 | 0.788           | 0.738      |                    |                   |                                  |          |
| Seldome depressed             | 0.762           | 0.760      |                    |                   |                                  |          |
| Rarely feel blue              | 0.712           | 0.632      |                    |                   |                                  |          |
| Cheerful                      | 0.606           | 0.525      |                    |                   |                                  |          |
| Cold and calculating          | 0.831           | 2.671      | 8.906%             | Agreeableness     |                                  | 0.680    |
| Selfish and egotistical       | 0.713           |            |                    |                   | 0.532                            |          |
| Arguments with co-workers     | 0.703           |            |                    |                   | 0.539                            |          |
| Cynical and skeptical         | 0.670           |            |                    |                   | 0.552                            |          |
| Feel helpless                 | 0.707           | 2.111      | 7.037%             | Neuroticism       | 0.418                            | 0.584    |
| Feel tense                    | 0.605           |            |                    |                   | 0.447                            |          |
| Feel sadness                  | 0.577           |            |                    |                   | 0.319                            |          |
| Not waste time daydreaming    | 0.617           | 1.975      | 6.583%             | Openness          | 0.437                            | 0.595    |
| Little interest on the nature | 0.583           |            |                    |                   | 0.352                            |          |
| Controversials only confuse   | 0.574           |            |                    |                   | 0.430                            |          |
| Total variance                |                 |            | 53.888%            |                   |                                  |          |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

(3 items,  $\alpha =0.584$ ); and “openness” factor (3 items,  $\alpha =0.595$ ), respectively

Again, the principal components analysis procedure was applied to transform the 17 items of the brand personality into new sets of linear combinations. As shown in Table 3, an exploratory factor analysis with a varimax rotation for the brand

personality yielded five factors based on an eigenvalue cut-off of 1. The sums of squared loadings from the five-component have the cumulative value of 74.398 percent in explaining the total variance in the data. The five components of the brand personality are named as “ruggedness,” “sophistication,” “excitement,”

“competence,” and “sincerity,” respectively. To test the appropriateness of factor analysis, two measures were used. The Kaiser-Meyer-Olkin (KMO) overall measure of sampling adequacy (MSA) was 0.927, which falls within the acceptable level. In addition, the Bartlett’s test of sphericity was 5444.445<sub>df=136</sub>, significant at p=0.000 which showed a significant correlation among the variables.

Further scale refinement was done by examining item-to-total correlation to improve the reliability. This led to the retention of 17 items, which represented five dimensions; “sophistication” factor (3 items,  $\alpha = 0.906$ ); “ruggedness” factor (6 items,  $\alpha = 0.903$ ); “excitement” factor (3 items,  $\alpha = 0.769$ ); “competence” factor (2 items,  $\alpha = 0.853$ ); and “sincerity” factor (3 items,  $\alpha = 0.668$ ), respectively.

Table 3 Results of Factor Analysis and Reliability Test for the Brand Personality Scale

| Items               | Factor loadings | Eigenvalue | Extracted variance | Factor name    | Corrected item-total correlation | $\alpha$ |
|---------------------|-----------------|------------|--------------------|----------------|----------------------------------|----------|
| Strong              | 0.742           | 3.859      | 22.704             | Ruggedness     | 0.722                            | 0.903    |
| Important           | 0.733           |            |                    |                | 0.737                            |          |
| Outgoing/outdoorsy  | 0.712           |            |                    |                | 0.665                            |          |
| Respected           | 0.670           |            |                    |                | 0.785                            |          |
| Competent person    | 0.653           |            |                    |                | 0.773                            |          |
| Charming            | 0.645           |            |                    |                | 0.721                            |          |
| Upper class         | 0.853           | 2.759      | 16.230             | Sophistication | 0.822                            | 0.906    |
| Successful          | 0.777           |            |                    |                | 0.804                            |          |
| Wealthy/rich        | 0.728           |            |                    |                | 0.815                            |          |
| Excitement          | 0.762           | 2.363      | 13.899             | Excitement     | 0.589                            | 0.769    |
| Up-to-date/modern   | 0.695           |            |                    |                | 0.626                            |          |
| Intelligent         | 0.627           |            |                    |                | 0.593                            |          |
| Cheerful            | 0.749           | 1.929      | 11.347             | Competence     | 0.745                            | 0.853    |
| High-spirited/happy | 0.734           |            |                    |                | 0.745                            |          |
| Honest              | 0.847           | 1.737      | 10.217             | Sincerity      | 0.558                            | 0.668    |
| Reliable            | 0.584           |            |                    |                | 0.442                            |          |
| Beneficial          | 0.512           |            |                    |                | 0.458                            |          |
| Total variance      |                 |            | 74.398%            |                |                                  |          |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

### **3.4 Measurement and structural model**

The Analysis of Moment Structures (AMOS: Arbuckle, 1994) was used for an empirical testing of the model, and the Maximum Likelihood Estimation (MLE) was applied to estimate numerical values for the components in the model. To diagnose the presence of distribution problems in the data and to gauge their effects on the parameter estimates, bootstrapping (Efron, 1982, 1987; Stine, 1989) method was used and 200 bootstrap replications were obtained. Confirmatory factor analysis was employed to test the validity of the scales in measuring specific constructs of the measurement model and Fornell and Larcker's (1981) guidelines were applied.

To diagnose possible identification problems, the degree of freedom with large standard error variances (Bollen and Joreskog, 1985) was used and an identification problem was remedied according to Hayduk's (1987) study. To evaluate the overall goodness-of-fit of the proposed model, the criteria suggested by Bollen (1989, p.275) were used and measures were selectively assessed of the

following: Chi-square statistic (CMIN), degrees of freedom (DF), CMIN divided by DF (CMIN/DF), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), root mean square residual (RMR), normed fit index (NFI), parsimony ratio (PRATIO), and root mean square of approximation (RMSEA).

## **4. Results of the hypotheses tests**

The results of the data analysis generally achieved an appropriate parsimony model (df=647, PRATIO=0.920, RMSEA=0.079). Note that a value of about 0.08 or less for the RMSEA would indicate reasonable error of approximation (Browne and Cudeck, 1993). But to some extent, the model has relatively poor goodness-of-fit measures, in particular, the indices of GFI (0.763), AGFI (0.729), and NFI (0.754). The GFI of 0.763 describes that the goodness of fit of the model indicates about 76 percent fit. The NFI of 0.754 describes that the fit of the proposed model is about 75 percent closer to the fit of the saturated model (the perfectly fitting model). Note that values of the GFI and AGFI can vary from 0 to 1,

with values above 0.90 considered as good and values from 0.80 to 0.90 considered as moderate (Bentler and Bonett, 1980). For NFI, the closer its values to 1, the better are the fitness of the hypothesized model over the null model.

Many fit measures represent an attempt to balance between parsimonious and well fitting model, that is, two conflicting objectives-simplicity and goodness of fit. Steiger (1990) stated that “in the final analysis, it may be impossible to define one best way to combine measures of complexity and measures of badness-of-fit in a single numerical index, because the precise nature of the best numerical tradeoff between complexity and fit is a matter of personal taste. The choice of a model is a classic problem in the two dimensional analysis of preference” (p.179). This study seeks the grounds for preferring a simple, parsimonious model instead of complex ones. At the same time, a well fitting model is preferable to poorly fitting ones.

#### 4.1 Statistical test of “hypothesis 1”

*Null hypothesis 1*, “the conscientiousness factor of the consumer personality has

no relationship with each dimension of the brand personality,” *was empirically tested. The results show that a causality relationship between “conscientiousness” of the consumer personality and the ruggedness, competence, sophistication, excitement, and sincerity of the brand personality are statistically significant ( $p < 0.05$ ), as shown in Table 4. This suggests that the conscientiousness of the personality of consumers can be utilized to better communicate to as election of brand identity.*

*Null hypothesis 1*, “the agreeableness factor of the consumer personality has no relationship with each dimension of the brand personality,” *was empirically tested. The results of data analysis show that a causality relationship between “agreeableness” of the consumer personality and the ruggedness and sophistication of the brand personality are statistically significant ( $p < 0.05$ ). However, the causality relationship between the agreeableness of the consumer personality and the sincerity of the brand personality show a negative effect. That is, the higher representing “agreeableness” consumers, the less concerning “sincerity” characteristics of brands. Consequently, the results*

Table 4 Outputs of Structural Equation Model (SEM) Estimates

|              |                   |   |                | Proposed model                 | Bootstrap (200) |
|--------------|-------------------|---|----------------|--------------------------------|-----------------|
| Path diagram |                   |   |                | Standardized estimate(t-value) | Estimate        |
| H1a          | Conscientiousness | → | Ruggedness     | 0.466(11.601)***               | 0.581***        |
| H1b          | Conscientiousness | → | Competence     | 0.433(9.937)***                | 0.465***        |
| H1c          | Conscientiousness | → | Sophistication | 0.269(6.809)***                | 0.441***        |
| H1d          | Conscientiousness | → | Excitement     | 0.481(10.246)***               | 0.459***        |
| H1e          | Conscientiousness | → | Sincerity      | 0.721(11.276)***               | 0.577***        |
| H1f          | Agreeableness     | → | Ruggedness     | 0.134(3.723)***                | 0.164           |
| H1g          | Agreeableness     | → | Competence     | 0.013(0.330)                   | -0.013          |
| H1h          | Agreeableness     | → | Sophistication | 0.223(5.289)***                | 0.400           |
| H1i          | Agreeableness     | → | Excitement     | 0.070(1.706)                   | 0.052           |
| H1j          | Agreeableness     | → | Sincerity      | -0.120(-2.617)**               | -0.131          |
| H1k          | Neuroticism       | → | Ruggedness     | 0.225(5.209)***                | 0.486           |
| H1l          | Neuroticism       | → | Competence     | 0.188(3.966)***                | 0.356           |
| H1m          | Neuroticism       | → | Sophistication | 0.194(4.179)***                | 0.565           |
| H1n          | Neuroticism       | → | Excitement     | 0.362(6.451)***                | 0.563***        |
| H1o          | Neuroticism       | → | Sincerity      | 0.269(4.826)***                | 0.342**         |
| H1p          | Openness          | → | Ruggedness     | -0.659(-9.223)***              | -1.403***       |
| H1q          | Openness          | → | Competence     | -0.540(-8.360)***              | -1.006***       |
| H1r          | Openness          | → | Sophistication | -0.586(-8.809)***              | -1.772***       |
| H1s          | Openness          | → | Excitement     | -0.588(-8.341)***              | -0.973***       |
| H1t          | Openness          | → | Sincerity      | -0.381(-6.293)***              | -0.551**        |
| H1u          | Extraversion      | → | Ruggedness     | 0.447(9.657)***                | 0.689***        |
| H1v          | Extraversion      | → | Competence     | 0.422(8.660)***                | 0.562***        |
| H1w          | Extraversion      | → | Sophistication | 0.455(9.315)***                | 0.940***        |
| H1x          | Extraversion      | → | Excitement     | 0.384(7.911)***                | 0.443***        |
| H1y          | Extraversion      | → | Sincerity      | 0.190(4.212)***                | 0.168**         |

\*\*p<0.05, \*\*\* p<0.001

Fitness measures: Chi-square = 2673.540, df = 647, p = 0.000

Discrepancy / df = 4.132, RMR = 0.239, RMSEA = 0.079, PRATIO = 0.920,

GFI = 0.763, Adjusted GFI = 0.729, NFI = 0.754

*suggest that the agreeableness of the consumer personality can be partly utilized to better communicate to a neutralization or normalization of brand identity.*

*Null hypothesis 1, “the neuroticism factor of the consumer personality has no relationship with each dimension of the brand personality,” was empirically tested. The results of data analysis show that a causality relationship between “neuroticism” of the consumer personality and the ruggedness, competence, sophistication, excitement, and sincerity of the brand personality are statistically significant ( $p < 0.05$ ). Consequently, the results conclude that the neuroticism of the personality can be utilized to better communicate to a reinforcement of brand identity.*

*Null hypothesis 1, “the openness factor of the consumer personality has no relationship with each dimension of the brand personality,” was empirically tested. The results of data analysis show that a causality relationship between “openness” of the consumer personality and the ruggedness, competence, sophistication, excitement, and sincerity of the brand personality are statistically significant ( $p < 0.05$ ) see Table 4 for details.*

*However, the causality relationship between the openness and each of the brand personality dimensions shows a negative effect. That is, the higher representing “openness” consumers, the less concerning specific characteristics of brand. Consequently, the results suggest that the openness of the consumer personality can be utilized to better communicate to a neutralization or normalization of brand identity.*

*Null hypothesis 1, “the extraversion factor of the consumer personality has no relationship with each dimension of the brand personality,” was empirically tested. The results of data analysis show that a causality relationship between “extraversion” of the consumer personality and the ruggedness, competence, sophistication, excitement, and sincerity of the brand personality are statistically significant ( $p < 0.05$ ). Consequently, the results suggest that the extraversion of the consumer personality can be utilized to better communicate to a selection of brand identity.*

*Overall, the results of hypothesis-1 test suggest that the “conscientiousness,” “neuroticism,” and “extraversion” characteristics of the personality of consumers can be*

Table 5 ANOVA Outputs of the Brand Personality by Manufacturers

| Dimensions                          | Firm-A                        | Firm-B           | Firm-C           | Firm-D           | Firm-E           | Total            | F       |
|-------------------------------------|-------------------------------|------------------|------------------|------------------|------------------|------------------|---------|
| Ruggedness                          | 4.827 <sup>#</sup><br>(1.224) | 4.480<br>(1.212) | 4.895<br>(1.124) | 4.412<br>(1.149) | 4.932<br>(1.242) | 4.709<br>(1.190) | 3.019** |
| Sophistication                      | 4.134<br>(1.367)              | 3.955<br>(1.413) | 4.020<br>(1.477) | 3.675<br>(1.417) | 4.654<br>(1.596) | 4.087<br>(1.454) | 2.165   |
| Excitement                          | 4.932<br>(1.126)              | 4.777<br>(1.173) | 4.833<br>(1.060) | 4.733<br>(1.128) | 4.901<br>(1.183) | 4.835<br>(1.134) | 0.473   |
| Competence                          | 4.947<br>(1.109)              | 4.886<br>(1.145) | 5.093<br>(0.691) | 4.600<br>(1.092) | 4.907<br>(1.035) | 4.886<br>(1.014) | 0.912   |
| Sincerity                           | 5.180<br>(1.080)              | 5.071<br>(1.175) | 5.291<br>(1.019) | 4.900<br>(0.989) | 5.000<br>(1.111) | 5.088<br>(1.075) | 0.546   |
| <u>% of brand preference</u><br>(n) | 57.2%<br>(211)                | 20.3%<br>(75)    | 4.3% (16)        | 10.8%<br>(40)    | 7.3% (27)        | 100%<br>(369)    |         |

\*\* p<0.05

<sup>#</sup> Means (Standardized Deviation)

*utilized to better communicate to a selection of brand identity. To the same extent, the “openness” and “agreeableness” characteristics of the consumer personality can be utilized to better communicate to a neutralization or normalization of brand identity.*

#### 4.2 Statistical test of “hypothesis 2”

To test the hypothesis 2, an analysis of variance (ANOVA) of the brand personality dimensions was applied to Korean automobile manufacturers (There are five automobile manufactures in Korea: Hyundai, Kia, GM Daewoo, Renault Samsung, and Ssangyong). The results of

ANOVA suggest that there are significant differences in the mean values of “ruggedness” dimension of the brand personality (F = 3.019, p = 0.018) among automobile manufacturers, see Table 5 for details. For other dimensions of the brand personality, that is, “sophistication,” “excitement,” “competence” and “sincerity,” the empirical data do not support that there are significant differences in their mean values by automobile manufacturers.

When respondents are grouped according to the dimensions of automobile manufacturer brand personality (i.e., ruggedness, sophistication, excitement, competence, sincerity), they show a preference for different manufacturers. For example, a

larger group of the respondents, who appreciate positively E-firm's brand identity, had a mean value of 4.932 out of 7 point scale with the standard deviation of 1.242 in their perceptions of the "ruggedness" attribute. Another group of the respondents, who less appreciate D-firm's brand identity, yielded a least mean value 4.412 with the standard deviation of 1.149, and additional group of respondents, who preferred B-firm's brand identity, had the mean value of 4.480 with the standard deviation of 1.212 in their perceptions of ruggedness attribute.

As shown in Table 5, for the "ruggedness" attribute of the corporate brand personality, there are significant mean differences between Firm-B ( $Mean_B = 4.480$ ) and Firm-C ( $Mean_C = 4.895$ ), and between Firm-D ( $Mean_D = 4.412$ ) and Firm-C ( $Mean_C = 4.895$ ), respectively. However, there were not significant differences between Korean automobile manufacturers for "sophistication," "excitement," "competence" and "sincerity" attributes of the corporate brand personality. This result means that the consumers' perceptions towards Korean automobile manufacturers' brand identity may be neutralized by the companies' marketing communications and/or

moderated by the mixture of different brands of the companies.

## 5. Managerial implications and discussion

The results of the hypothesis-1 test empirically show that there exist certain causality relationship between a consumer's personality and the brand personality of the consumer's choice. Thus, the consumer's personality has an impact on consumer's final selection of a brand that has a brand personality matches well with their own personalities. In other words, the consumers are inclined to purchase a brand that reflects their own personalities and tend to choose a company that has similar brand personalities to those of the brand being promoted.

Accordingly, this study concludes that consumers enjoy the challenge of purchasing a brand with the personality that matches well with their own personal values and personalities. This result attests to the Govers and Schoormans' (2005) proposal that the consumer prefer products and brands with a brand personality that matches his/her own self-image. Since

brand personality is the sole of the brand and is derived from the brand's characteristics and firm's marketing communications, it is an important consequence of consumers' personalities. Consequently, consumers tend to hold favorable attitudes towards those brands matching their own personalities and will most probably purchase those brands representing well their personalities.

The results of this study further suggest that certain dimensions of the brand personality cause consumers to have preference to certain (corporate) brands. For example, the conscientiousness, neuroticism, and extraversion of the consumer personality have positively related to a selection of "ruggedness" characteristics of the brand personality. Consumers who possess that personality dimension seek for matching with certain brand personality dimensions. It is possible then to identify the percentage or number of consumers, who possess those personality dimensions, from the large population for targeting and marketing certain brands that match well with the personality dimensions. For example, if it is known that 10 percent or 4 million individuals of the total population possess the "extraversion" personality, an automobile manufacturer

can design and produce the optimal number of cars, and then perform marketing communications to the target market that seeks the "ruggedness" attribute of the brand personality. This may be the best production plan and target marketing since this study determine that consumers with "extraversion" dimension of the personality tend to prefer the car brand possessing "ruggedness" attribute.

Results of the hypothesis-2 test show that the average "ruggedness" attributes of the brand personality differ significantly among Korean automobile manufacturers. However, the result of ANOVA also indicates that there are no significant differences in the mean values among manufacturers for the "sophistication," "excitement," "competence" and "sincerity" attributes of the corporate brand personality. The tight link between what a firm is and its corporate brand means that there is far less room for marketing communications than there is with products and brands. Consequently, successful corporate brand strategies must position the organization within the boundaries of what is acceptable, while at the same time differentiating the organization from its competitors.

Corporate branding can be understood

as a marketing communication practice that is concerned with the propagation of products and brands the firm produces. In fact, because the firm usually uses marketing communications to create a brand personality, the brand identity itself is a co-construction between the firm and its marketing communications. Therefore, a differentiation of corporate brand image is particularly important at the corporate level, because a distinctive corporate brand identity enables consumers to select specific brand offerings. At the same time, it can be argued that the interplay between normalization and differentiation is at the heart of the creation of corporate brand identity because there is a close relationship between the corporate brand and the firm's identity it represents. From the results of this study, it is much clear that brand as a symbolic language allow consumers to communicate their personality to each other and postulate that consumers have a certain value of communicating their personality to each other. Therefore, how brand meanings are established, and how a firm communicate with consumers about the meanings of a brand are important.

There is still much to learn about the dialogue between marketers and consumers,

and that has been the main focus of research in marketing communications. What has been less well researched is the effect of the consumer's personality on the process of selecting a brand, and how the brand's personalities, if any, affect the process of selection by the consumer. Brand personality does not fully formed by itself, nor can it be calculated in the brand manager's office. Part of the dialogue and part of the brand developing must involve the personalities of those who purchase the brand. There is therefore considerable possibility and capacity for examining dialogue in a broad sense, by incorporating different aspects of the dialogue between the firm and the consumer, and between the consumer's personality and the brand personality.

(Received: 13 May 2008)

(Accepted: 2 September 2008)

## References

- Aaker, D.A. (1996). *Building Strong Brand*, New York: The Free Press.
- Aaker, J.L. (1997). Dimensions of brand personality. *Journal of Marketing*

- Research*, 34(3), 347-356.
- Aaker, J.L. (1999). The malleable self: The role of self expression in persuasion. *Journal of Marketing Research*, 36(2), 45-57.
- Aaker, J.L., Benet-Martinez, V., and 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.
- Anisimova, T.A. (2007). The effects of corporate brand attributes on attitudinal and behavioural consumer loyalty. *Journal of Consumer Marketing*, 24(7), 395-405.
- Arbuckle, J.L. (1994). AMOS-Analysis of Moment Structures. *Psychometrika*, 59(1), 135-137.
- Austin, J.R., Sigauw, J.A., and Mattila, A.S. (2003). An assessment of the Aaker brand personality framework: Method, measurement and conceptual issues. *Journal of Strategic Marketing*, 11(2), 77-92.
- Azoulay, A. and Kapferer, J.-N. (2003). Do brand personality scales really measure brand personality?. *Journal of Brand Management*, 11(2), 143-155.
- Balmer, J.M.T. (2001a). The three virtues and the seven deadly sins of corporate brand management. *Journal of General Management*, 27(1), 1-17.
- Balmer, J.M.T. (2001b). Corporate identity, corporate branding and corporate marketing: Seeing through the fog. *European Journal of Marketing*, 35(3/4), 248-291.
- Beldona, S. and Wysong, S. (2007). Putting the "brand" back into store brands: an exploratory examination of store brands and brand personality. *Journal of Product & Brand Management*, 16(4), 226-235.
- Bentler, P.M. and Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Bollen, K.A. (1989). *Structural Equations with Latent Variables*, New York: Wiley.
- Bollen, K.A. and Joreskog, K.J. (1985). Uniqueness does not imply identification. *Sociological Methods and Research*, 14(2), 155-163.
- Bosnjak, M., Bochmann, V., and Hufschmidt, T. (2007). Dimensions of brand personality attributions: A person-centric approach in the German cultural context. *Social Behavior and Personality: An International*

- Journal*, 35(3), 303-316.
- Browne, M.W. and Cudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen and J.S. Long (Eds.) *Testing structural equation models*. Newbury Park, CA: Sage Publications, 136-162.
- Caprara G.V., Barbaranelli, C., and Guido, G. (2001). Brand personality: How to make the metaphor fit?. *Journal of Economic Psychology*, 22(3), 377-395.
- Chun, Tae-Yoo, Lee, Dae-Hong, and Yoon, Nam-Soo(2007). The Structural Relationships among Restaurant's Environments, Value, Quality, Overall Satisfaction, and Customer Voluntary Performance. *Journal of Global Academy of Marketing Science*, 17(1), 77-100.
- Costa, P.T. and McCrae, R.R. (1987). Validation of the Five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81-90.
- Costa, P.T. and McCrae, R.R. (1992a). Discriminant validity of NEO-PIR facet scales. *Educational and Psychological Measurement*, 52(1), 229-237.
- Costa, P.T. and McCrae, R.R. (1992b). *NEOPI-R Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Efron, B. (1982). *The Jackknife, the Bootstrap and Other Resampling Plans*, SIAM Monograph Number 38. Philadelphia: Society for Industrial and Applied Mathematics (SIAM).
- Efron, B. (1987). Better bootstrap confidence intervals. *Journal of the American Statistical Association*, 82, 171-185.
- Escalas, J. and Bettman, J. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(4), 378-389.
- Filo, K., Funk, D.C., and Alexandris, K. (2008). Exploring the role of brand trust in the relationship between brand associations and brand loyalty in sport and fitness. *International Journal of Sport Management and Marketing*, 3(1/2), 39-57.
- Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Freling, T.H. and Forbes, L.P. (2005). An empirical analysis of the brand personality effect. *Journal of Product & Brand Management*, 14(7), 404-413.
- Goldberg, L.R. (1990). An alternative

- “description of personality: The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216-1229.
- Govers, P.C.M. and Schoormans, J.P.L. (2005). Product personality and its influence on consumer preference. *Journal of Consumer Marketing*, 22(4), 189-197.
- Harris, F. and DeChernatony, L. (2001). Corporate branding and corporate brand performance. *European Journal of Marketing*, 35(3/4), 441-456.
- Hayduk, L.A.(1987). *Structural Equation Modeling with LISREL: Essentials and Advances*, Baltimore: Johns Hopkins University Press.
- Hayes, J.B., Alford, B.L., Silver, L., and York, R.P. (2006). Looks matter in developing consumer-brand relationships. *Journal of Product & Brand Management*, 15(5), 306-315.
- Keller, K. (1998). *Strategic Brand Management*, Upper Saddle River, NJ: Prentice-Hall.
- Kim, Hyoung-Gil, Kim, Jung-Hee, and Kim, Youn-Jeong (2007). The Influence of Store Environment on Service Brand Personality and Repurchase Intention. *Journal of Global Academy of Marketing Science*, 7(4), 141-173.
- Kim, Joo-Ho and Jia, Yong Xian (2005). Assessing the Perspective of Individual Consumers on Cosmetics Brand Purchasing According to Their Lifestyle of Young Consumers Living in the Metropolitan Areas of China. *Journal of Global Academy of Marketing Science*, 15(3), 1-30.
- Ko, Eun-Ju, Kim, Kyung-Hoon, Park, Yeung-Kurn, and Zhang, Hao (2008). A Cross Cultural Study of Antecedents of Purchase Intention for Sports Shoes in Korea and China. *Journal of Global Academy of Marketing Science*, 18(1), 157-177.
- Ko, Eun-Ju, Kwon, Jun-Hee, and Kim, Kyung-Hoon (2006). Impact of Fashion On-line Community Characteristics on Brand Loyalty: Comparisons among Lifestyle Groups. *Journal of Global Academy of Marketing Science*, 16(3), 87-106.
- Kuksov, D. (2007). Brand value in social interaction. *Management Science*, 53(10), 1634-1644.
- Lee, J-W. and Tai, S.W. (2006). Young consumers' perceptions of multinational firms and their acculturation channels towards western products in a transition economy. *International Journal of Emerging Markets*, (3), 212-224.
- Lee, Soo-Hyung and Park, Mi-Ryong

- (2008). The Relationship between Trust, Trustworthiness, and Repeat Purchase Intentions: A Multidimensional Approach. *Journal of Global Academy of Marketing Science*, 18(1), 1-31.
- Leitch, S. and Motion, J. (2007). Retooling the corporate brand: A Foucauldian perspective on normalization and differentiation. *Journal of Brand Management*, 15(1), 71-80.
- Matzler, K., Bidmon, S., and Grabner-Kräuter, S. (2006). Individual determinants of brand affect: the role of the personality traits of extraversion and openness to experience. *Journal of Product & Brand Management*, 15(7), 427-434.
- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, 16(3), 310-321.
- Moon, Jun (2007). Corporate Image Effects on Consumers' Evaluation of Brand Trust and Brand Affect. *Journal of Global Academy of Marketing Science*, 17(3), 21-37.
- Nandan, S. (2005). An exploration of the brand identity-brand image linkage: A communication perspective. *Journal of Brand Management*, 12(4), 264-278.
- Park, W.C., Jaworski, B.J., and MacInnis, D.J. (1986). Strategic brand concept-image management. *Journal of Marketing*, 50(4), 135-145.
- Rajagopal (2007). Influence of brand name in variety seeking behaviour of consumers: an empirical analysis. *International Journal of Management Practice*, 2(4), 306-323.
- Ramaseshan, B. and Tsao, H.-Y. (2007). Moderating effects of the brand concept on the relationship between brand personality and perceived quality. *Journal of Brand Management*, 14(6), 458-466.
- Ross, S.D. (2008). Assessing the use of the brand personality scale in team sport. *International Journal of Sport Management and Marketing*, 3(1/2), 23-38.
- Shavitt, S. (1990). The role of attitude objects in attitude functions. *Journal of Experimental Social Psychology*, 26(2), 124-148.
- Siguaw, J.A., Mattila, A., and Austin, J.R. (1999). The brand personality scale. *Cornell Hotel and Restaurant Administration Quarterly*, 40(3), 48-55.
- Sirgy, M.J., Grewal, D., Mangleburg, T.F., Park, J.O., Chon, K.-S., Claiborne, C.B., Johar, J.S., and Berkman, H. (1997). Assessing the Predictive Validity of Two Methods of

- Measuring Self-Image Congruence. *Journal of the Academy of Marketing Science*, 25(3), 229-241.
- Sirgy, M.J., Johar, J.S., Samli, A.C., and Claiborne, C.B. (1991). Self-congruity versus functional congruity: Predictors of consumer behavior. *Journal of the Academy of Marketing Sciences*, 19(4), 363-375.
- Smit, E.G., Berge, E. van den, and Franzen, G. (2003). Brands are just like real people! The development of SWOCC's brand personality scale. In F. Hansen and L. Bech Christensen (Eds.), *Branding and Advertising*, Copenhagen: Copenhagen Business School Press, 22-43.
- Steiger, J.H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173-180.
- Stine, R.A. (1989). An introduction to bootstrap methods: Examples and ideas. *Sociological Methods and Research*, 18, 243-291.
- Sung, Y. and 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.
- Wang, X. and Yang, Z. (2008). Does country-of-origin matter in the relationship between brand personality and purchase intention in emerging economies?: Evidence from China's auto industry. *International Marketing Review*, 25(4), 458-474.
- Wernerfelt, B. (1990). Advertising content when brand choice is a signal. *Journal of Business*, 63(1), 91-98.
- Wysong, S., Munch, J., and Kleiser, S. (2002). An investigation into the brand personality construct, its antecedents, and consequences. *American Marketing Association Conference Proceedings*, 12, 512-518.