

BRAND AS DETERMINANT OF EVALUATION OF PRODUCT PERSONALITIES – A CROSS CULTURAL STUDY

Hyeon-Jeong Suk*, Hans Irtel**, Woo-Sung Park*, Minsik Sohn*

Department of Industrial Design, Korea Advanced Institute of Science and Technology, Department of Psychology, Universitaet Mannheim

ABSTRACT:

A cross-cultural study was carried out in Germany and in South Korea in order to investigate the relationship between brand personality and product personality facilitating the three dimensions of personality; agreeableness, excitement, and extroversion. Two pairs of shoes were prepared across categories of product function; symbolic (a pair of high-heeled shoes) versus utilitarian (a pair of sport shoes). In experiments, each pair of shoes was labeled as a luxury brand ("Versace") or a casual brand ("C&A", Germany; "Migliore", South Korea) or left unlabeled. Prior to the experiments, an expert group in each country evaluated the brand personality in terms of "cheerful" (agreeableness), "honest" (conscientiousness), and "provocative" (extroversion) and the results were considered as a baseline. In Experiment I and II, subjects were exposed to two pairs of shoes labeled in one of the three ways and assessed the personality of both pairs of shoes using the personality traits, cheerful, honest, and provocative. Identical versions of the experiment

were conveyed in Germany (N=56), an individualist culture, and in South Korea (N=72), a collectivist culture, and we purposed to find cultural differences in evaluating product personalities influenced by brands. The empirical results do not show any significant influence of brand personality on product personality in either cultural group (p>.05). Nevertheless, the subjects estimated the retail price of the shoes to be significantly different depending on the brands in both cultural groups (p<.001).

1. PERSONALITY THEORIES ON BRAND AND PRODUCT

Consumer behavior research has given considerable attention to the construction of brand personality, which refers to the set of human characteristics associated with a brand. Aaker (1997) developed a structure of brand personality dimensions in which the distinctive dimensions are: sincerity, excitement, competence, sophistication, and ruggedness. Aaker noted that with the use of the brand personality scale, the marketing variables, such as user imagination, advertising, and packaging, could be manipulated systemically. Relating these dimensions with the "Big Five" (John, 1990), the five dimensions of human personality, sincerity would related to agreeableness, excitement with extroversion, and competence with conscientiousness, while sophistication and ruggedness are unique dimensions related to brand personality (Aaker, 1997). Hence, Aaker's work provided a theoretical framework of the brand personality construct by determining the number and the nature of dimensions of brand personality.

On the other hand, in Govers (2004), the personality of a product was developed only in terms of agreeableness, extroversion, and conscientiousness. Instead, Govers's work proposed paired sets of traits describing each dimension in a dichotomized way. The three dimensions of product personality can provide companies a systematic way of developing characteristic profiles of a product required by the market.

Despite an increasing number of studies addressing the impact of the personality of either a brand or a product, little attention has been focused on the relationship between a brand and a product in terms of personality dimensions. Rather, some research has explained the relationship between brands and products in a comprehensive way. For example, brands add value to products by supplying meaning (McCracken, 1993), communicating competence, standard, and image to the consumer (Lim and O'Cass, 2001). Some research asserts that brand personalities

influence the recognition of product attributes and a clear brand personality can increase likelihood of purchase (Aaker, 1999; Aaker, Benet-Martinez, & Garolera, 2001).

Advocating the idea that the characteristics of brand and product should be coherent, we tried to explain that mechanism. In summary, we concentrated on the relationship between brand and product in terms of personality dimensions and intended to investigate whether brand personality affects the consumers' evaluation of product personality.

2. CULTURAL ISSUE ON BRAND

Although Aaker (1997) provided evidence that there are five dimensions of brand personality, it remained unclear whether the dimensions would be cross culturally generalizable. According to Aaker and Schmitt (2001)'s research, the symbolic use of brands differs considerably across cultures. For example, in individualist cultures, where independence, autonomy, and uniqueness are valued (Markus and Kitayama, 1991), consumers are more likely to use brands to express how they are different from members of their in-group. In contrast, in collectivist cultures, where dependence, conformity, and similarity are valued (Markus et al.,1991), consumers are more likely to use brands to express how they are similar with members of their in-group.

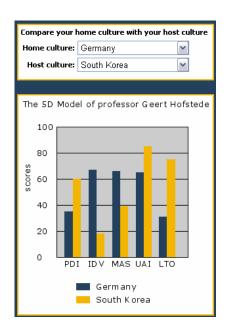


Figure I. The comparison of score of individualism ("IDV") between Germans and South Koreas, http://www.geert-hofstede.com

Facilitating the recent database of Geert HofstedeTM, Germany scored much higher than South

Korea in the dimension of "IDV", individualism (see Figure 1). In other words, Korean subjects

would assess product personalities more strongly depending on the brand, especially when the brand was representing social status. Based on this concept, we planned an identical experiment with Germans and Koreans and expected to discover any cultural difference in evaluating product personality influenced by brands.

3. BRAND INFLUENCE AND PRODUCT CATEGORIES.

The purpose of a cross-category study is to determine the generality of our empirical evidence and explore category-specific results. We viewed categories of product in two ways: symbolic versus utilitarian types. Yoo, Chung, and Han (2006) indicated the difference between symbolic and utilitarian products related to consumers' perception. Functional aspects of the product are the primary reasons behind the purchase (i.e. utilitarian consumption), while other purchases may be motivated by the social meaning the product conveys, such as the owner's status or image in society (i.e. symbolic consumption).

In line with the cultural issue discussed in section 2, we assumed that there would be a relationship between collectivist culture and use of symbolic products. If consumers in collectivist cultures, such as Korea, would like to care more about their social status through a product than consumers in individual cultures, such as Germany, their interest in a brand would be more skewed to symbolic products than to utilitarian products. In this study, we purposed to demonstrate that the influence of a brand personality on the personality of a symbolic product (i.e. high-heeled shoes) would be greater than that of a utilitarian product (i.e. sport shoes).

4. GOALS AND HYPOTHESES

The foremost goal of this study is to investigate the relationship between brand personality and product personality. Two main experiments were carried out in Germany and in South Korea and there were three major variables—brand, culture, product category—taken into account for the analysis. We formulated three hypotheses as follows:

[H.1] The brand personality influences the evaluation of product personality.

[H.2] The effect of [H.1] is greater in collectivist (South Korea) cultures than in individualist cultures (Germany).

[H.3] The effect of [H.1] is more pronounced with regard to symbolic products (high-heeled shoes) than with regard to utilitarian products (sport shoes).

4. PLANS FOR EXPERIMENTS

Since we aimed at carrying out a cross-cultural study, an identical version of the experiment was designed. In the following subsections, the construction of measurement tools and the selection of stimuli are introduced.

4.1 THE PERSONALITY CONSTRUCT OF BRAND AND PRODUCT

Based on Aaker (1997)'s framework for brand personality and Govers (2004)'s framework for product personality, we assumed that the personality dimensions of "Sincerity"-"Agreeableness", "Competence-Extroversion", and "Excitement-Conscientiousness" could be correspond to describe a brand and a product (see the second and third rows in Figure 2). This provided a basic idea of assessing the personality of a brand as well as a product in terms of the traits of each of these three dimensions. Govers (2004)'s traits were translated into German and into Korean to evaluate the personalities of brand and product: In German, a trait of each dimension was used: "froehlich" (cheerful) for agreeableness, "ehrlich" (honest) for conscientiousness, and "provokativ" (provocative) for extroversion. In Korean, a pair of synonymous words to describe each dimension was chosen: "밝은/캐주얼한" (cheerful) for agreeableness, "진술한/과하지않은" (honest) for conscientiousness, "매력적인/세련된" (provocative) for extroversion. These particular traits were selected from a pool of traits, since they were more appropriate to describe personality of shoes for women. They were also used to rate the brand personality in both experiments.

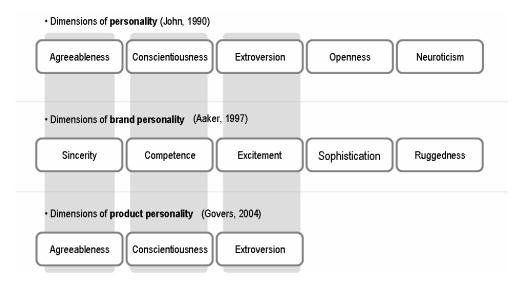


Figure 2. The three counterpart personality dimensions across three references: human-brand-product

4.2 BRANDS

Consumer brand knowledge determines how a consumer thinks about a brand (Keller, 1993), and how the consumer responds to different stimuli regarding a brand (Lim et al., 2001). In selecting brands, two criteria were taken into account: First, salient, well-known brands were chosen; Second, the characteristics of the brands were recognized in a similar way—luxurious or casual—by all subjects.

In this study, we chose one luxury brand and one casual brand: As a luxury brand, an Italian fashion brand "Versace", which is globally recognized, was chosen. As a casual brand, "C&A" was taken for German subjects, and "Migliore" was used for Korean subjects. Table 1 presents the results of brand personality assessed by 4 students attending consumer psychology class at the University of Mannheim and by 10 students attending design marketing class at Korea Advanced Institute of Science and Technology (KAIST). Those expert groups rated how descriptive the given traits were of brands in general (1=not at all descriptive, 5=extremely descriptive). They rated the casual brands greater in agreeableness, higher in conscientiousness, and lower in extroversion than the luxury brand, "Versace". This tendency provided implications to which directions the product personality would be shifted due to the influence of the brand personality.

Table I. Means of brand personality. N=4, Germany; N=10, South Korea DE*=Germany, KR**=South Korea

dimension	The luxury brand		The casual brands	
	Versace (DE*)	Versace (KR**)	C&A (DE)	Migliore (KR)
Agreeableness	2.00	2.15	5.00	4.15
Conscientiousness	1.50	2.40	4.50	3.10
Extroversion	4.00	3.75	3.50	2.20

4.3 PRODUCT ATTRIBUTES: PRICE

Keller (1993) asserted that in contrast to "product-related-attributes", which tend to serve a utilitarian function for consumers, brand personality tends to serve a symbolic or self-expressive function. In line with this, Maeder (2005) argued the product price is an objective product attribute that is distinguished from the subjective attributes, such as personality or emotional response to the product. In order to establish an objective attribute of the product, subjects were asked to estimate a retail price of each pairs of shoes. At the end of the both experiments, they were asked to write down the price in their local currency.

5. EXPERIMENT I

5.1 PILOT STUDY OF EXPERIMENT I

Before beginning the main experiment, a pilot study was carried out during a seminar on marketing psychology at the University of Mannheim, Germany.

5.1.1 Methods

Three photos of pair of high-heeled shoes were prepared; two of them were labeled with the brand name, "Versace" or "C&A" respectively, while the third one was left unlabeled.

In pilot study, 15 subjects were divided into three groups and each group was provided with one of the three photos (see Figure 3). As intended, the brands, "Versace" as well as "C&A", were

known to all subjects. Based on the given photo, subjects assessed the product personality using the same terms as in the brand evaluation (Table 1).







Figure 3. The stimuli of pilot study of Experiment I (N=15)

Presenting stimuli (Figure 3), the logos of brands were not simulated on the product, since the form of the logo would change the appearance of the product, which might influence its personality. Instead, the experimenter explained to the subjects that shoes were products of the given brand, even though the label was not located on the product.

In addition, subjects were asked, "Wie viel wärst du bereit für diese Schuhe zu bezahlen? (How much would you be willing to pay)", at the end of the pilot study and they wrote down the price in Euro.

5.1.2 Results

Based on the ratings of 15 subjects, means of the ratings are presented in Table 2. Although the number of subjects was not yet enough to provide any reliable statistical evidence, the empirical results show the tendency to support the [H.1] that the product personality is influenced by the brand personality. For example, subjects evaluated less "froehlich (cheerful)", less "ehrlich (honest)", and more "provokativ (provocative)", when the shoes were labeled as "Versace" than as "C&A", which corresponds to the different tendency as presented in Table 1.

Table 2. Means of ratings, pilot study (N=15)

Trait/ personality dimension	Labeled with a		unlabeled (N=5)
	Versace (N=5)	C&A (N=5)	
Froehlich/ agreeableness	2.00	2.20	2.75
Ehrlich/ conscientiousness	1.60	2.80	1.25
Provokativ/ extroversion	3.40	3.20	4.00

Moreover, the amount the subjects were willing to pay was compared (Table 3). The question implied not only the brand influence on the price, but also the likelihood of purchasing the product by the subject. Hence, when a subject was not likely to buy the shoes, he or she answered "0" Euro, regardless of the brand. Therefore, the question about the price should have been "How much should the retail price of the shoes be?" which does not necessarily ask about the subjects for personal preference for the shoes.

Table 3. Averaged price of the high-heeled shoes (N=15)

	branded		Unbranded (N=5)
	Versace (N=5)	C&A (N=5)	
Price in Euro	53.00	6.00	2.50

5.2 METHOD

With regard to product category, Experiment I employed another pair of shoes (i.e. sport shoes), distinguishing the utilitarian aspect of a product from the symbolic one (i.e. the high-heeled shoes).

5.2.1 Subjects

Fifty-six subjects made up of 19 males and 37 females served as subjects and they were recruited at the University of Mannheim in Germany (M=24.70, SD=4.18).

5.2.2 Stimuli

As in the prior experiment, three photos of these shoes were made and labeled accordingly. Subjects were randomly given one picture of each pair of shoes and asked to respectively assess

them in terms of the same traits. Figure 4 shows the pictures used for the experiment. The stimuli consisted of one photo from the upper row and another photo from the lower row. Since we varied the order of presenting high-heeled shoes or sport shoes, we prepared 18 (3x3x2) variations of the sheets for the survey (see Figure 5).



Figure 4. The pool of stimuli, Experiment I



Figure 5. A survey form among 18 variations, Experiment I

The subjects rated the product personality in terms of "froehlich (cheerful)", "ehrlich (honest)", and "provokativ (provocative)" using a Likert scale ranging from 1 (not at all descriptive) to 5 (extremely descriptive). At the end, subjects were asked, "Bitte schätzen Sie den Verkaufpreis dieser Schuhe ein. (Please estimate the retail price of the shoes)" and wrote down the price in Euros.

5.3 RESULTS

Based on the ratings, means and standard deviations regarding the personalities of the high-heeled shoes and those of sport shoes are presented in Figure 6 and in Figure 7 respectively. In both figures, baselines are marked with horizontal slots and they indicate the average ratings of brand personality, mentioned in section 4.2. For example, the brand "Versace" was evaluated lower than the brand "C&A" in the "froehlich (cheerful)" aspect. However, subjects rated the "froehlich" aspect of the high-heeled shoes higher, when the shoes were branded "Versace". In the dimension of conscientiousness, the shoes branded "C&A" were rated slightly higher than those branded "Versace", but the difference was much less than anticipated. Again in dimension of extroversion, the results of the ratings appear in the contrary direction to the brand evaluation.

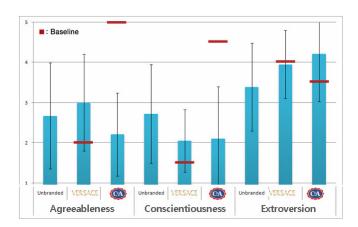


Figure 6. Ratings of the high-heeled shoes on three traits (dimensions), Experiment I

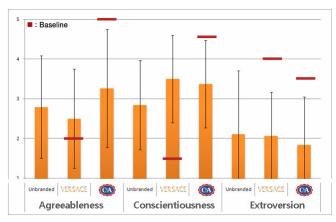


Figure 7. Ratings of the sport shoes on three traits (dimensions), Experiment I (N=56)

Then, one-way ANOVA was run in order to find out whether the changes of ratings varied significantly by changing the brands. The statistical results do not support [H.1] at the significance level of .05 (p>.05, Table 4).

Table 4. P-values yielded by one-way ANOVA on factor: brands, Experiment I

	trait (dimension)		
	Froehlich (agreeableness)	Ehrlich (conscientiousness)	Provokativ (extroversion)
High-heeled shoes	p=.132	p=.142	p=.062
Sport shoes	p=.218	p=.152	p=.807

Nevertheless, the subjects discriminated retail prices of both pairs of shoes significantly depending on the brand (p<.001). For example, they estimated the retail price of the pair of high-heeled shoes to be 174.89 Euros on average when they were branded "Versace" and only 33.88 Euros on average when they were branded "C&A". The price difference by brands was extended to the sport shoes as well (p<.001).

Table 5. Means and standard deviations (in parentheses) of price estimation in Euros, Experiment I

	Brand		
	Versace	C&A	Unbranded
High-heeled shoes	174.89 (125.43)	33.88 (41.42)	58.83 (50.17)
Sport shoes	137.22 (90.86)	25.84 (16.10)	70.42 (50.25)

5.4 DISCUSSION

Although the results of the pilot study advocated [H.1], no evidence was found in Experiment I that the evaluation of product personality is influenced by the brand personality (p>.05). As discussed in section 2, individualist cultures like Germany might weaken the brand impact in perceiving product personality. Nevertheless, we found a significant difference on price estimation for both pairs of shoes when they were branded differently (p<.001). The results give an implication that consumers are ready to pay for the brand, even if they perceive that the product personality is not different.

6. EXPERIMENT II

In Experiment II, the identical experiment design was translated into Korean and carried out in South Korea.

6.1 METODS

6.1.1 SUBJECT

Seventy-two students from the Korea Advanced Institute of Science and Technology (KAIST) made up of 35 males and 37 females participated in the experiment.

6.1.2 STIMULI

In Experiment II, a casual brand, "Migliore", was substituted for "C&A" since "C&A" is not known to Koreans. As presented in Table 1, the brand personality of "Migliore" was evaluated similarly to "C&A", especially when it is compared with the luxury brand, "Versace". Therefore, each pair of shoes was labeled either "Versace" or "Migliore" or left unlabeled. Varying the order of stimuli, 18 variations (3x3x2) of the survey form were distributed.

Translating traits into Korean, pair of synonymous words were used: "밝은/캐주얼한 (cheerful)" in agreeableness dimension, "진솔한/과하지않은 (honest)" in conscientiousness dimension, and

"매력적인/세련된 (provocative)" in extroversion dimension. The ratings on the traits were later averaged to obtain a representative value for each dimension. In addition, the Korean subjects were asked to estimate the retail prices of the given shoes in Korean Won.

6.2 RESULTS

Based on the ratings of product personality on the traits ranging form 1 (=not descriptive at all) to 5 (extremely descriptive), the following Figure 8 and Figure 9 show means and standard deviations of high-heeled shoes and sport shoes on each dimension.

Likewise in Experiment I, the baseline (brand personality) is marked in each figure in order to observe if the changes of product personality follow the direction toward the baseline. However, the means in the figures do not follow the direction of the baseline and rather often vary in the opposite direction.

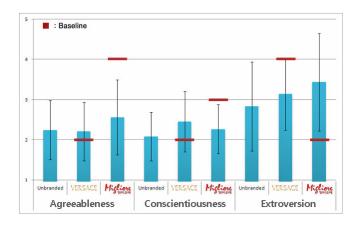


Figure 8. Averaged ratings of the high-heeled shoes on three dimensions, Experiment II

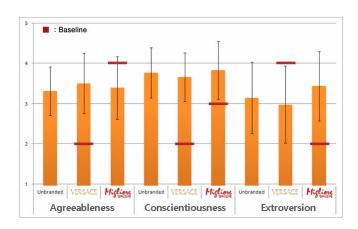


Figure 9. Averaged ratings of the sport shoes on three dimensions, Experiment II

Table 6. P-values yielded by one-way ANOVA on factor: brands, Experiment II

	trait (dimension)		
	밝은, 캐주얼한 (agreeableness)	진솔한, 과하지않은 (conscientiousness)	매력적인, 세련된 (extroversion)
High-heeled shoes	p=.256	p=.145	p=.161
Sport shoes	p=.663	p=.670	p=.214

Concerning the estimation of the retail prices of the shoes, Korean subjects assigned different prices depending on the brand (p<.001).

Table 7. Means and standard deviations (in parentheses) of price estimation in KRW (unit: 1000won), Experiment II (N=72)

	Brand		
	Versace	Migliore	Unbranded
High-heeled shoes	278.82 (193.60)	53.20 (39.41)	99.03 (144.58)
Sport shoes	162.875 (155.42)	38.39 (216.23)	66.75 (50.50)

6.3 DISCUSSION

Both Experiment I and II could not provide any empirical evidence that the evaluation of product personality is influenced by brand personality [H.1; rejected]. Accordingly, the second hypothesis

([H.2]), whether the brand influence is stronger in collectivist cultures than in individualist cultures, can not yet be determined.

As the third hypothesis, we presumed that the influence of the brand on the symbolic category of product would appear more strongly than on the utilitarian category of product [H.3]. The p-values in yielded by one-way ANOVA with regard to the high-heeled shoes are always less than the p-values with regard to the sport shoes (see Table 4 and Table 6). By improving the experiment design, [H.3] could be statistically supported.

7. GENEARL DISCUSSION

Recent emphasis in design and marketing is creating global brands that compete across countries and cultures (Yoo and Donthu, 2002). In this study, we carried out a cross-cultural study that consisted of one pilot study and two main experiments and intended to investigate the relationship between brand personality and product personality across cultures (individual versus collectivist) as well as product categories (symbolic versus utilitarian).

Two parallel experiments were conducted in Germany (Experiment I) and in South Korea (Experiment II), representing individualist cultures and collectivist cultures respectively. Subjects in the experiments were shown two pairs of shoes labeled either as a luxury brand, "Versace" or as a casual brand, "C&A (Germany)" / "Migliore (South Korea)" or unlabeled.

Prior to the experiments, an expert group in each culture assessed the brands in terms of three traits—"cheerful (in the dimension of agreeableness)", "honest (in the dimension of conscientiousness)", and "provocative (in the dimension of extroversion)", which were thought to be a baseline. Those traits were used in the main experiment for subjects to evaluate the product personality.

Based on the ratings of traits, a one-way ANOVA was run to discover any statistical evidence that the evaluation varied by brands. With regard to the brand, the analysis does yield any statistical evidence at the significance level of .05, rejecting [H.1] (p>.05). Since the [H.1] was not supported, any discussions about [H.2] or [H.3] are irrelevant at this stage. Nevertheless, the p-values yielded by a one-way ANOVA on the factor of brands provide an implication: all the p-values with regard to high-heeled shoes were less than the p-values with regard to sport shoes. Based on this,

it is predictable that the product personality of a symbolic product would be more easily manipulated by brand than the product personality of a utilitarian product.

On the other hand, both experiments showed that the estimated prices for both pairs of shoes were significantly influenced by brand (p<.001). Also, the results assure us that the subjects perceived not only the product, but also the labeled brand. In both experiments, the subjects estimated the retail prices approximately twice as high as when shoes were labeled "Versace" than when the shoe were unlabeled. Conversely, subjects estimated the price of the shoes labeled, "C&A or Mgliore" to be approximately a half the price of the unlabeled shoes. The pricing pattern found in this study highlights a consumer attitude: they would pay four times as much for a luxury brand than for a casual brand, although they do not perceive different product personalities.

For future study, we propose three issues to be taken into consideration: First, subjects should be recruited from a pool that is more deeply involved with the product. The majority of the subjects in both experiments were university students and they are not the typical target consumer of a luxury fashion brand, i.e. "Versace". In other words, products familiar to the subjects might be used (e.g. MP3 player).; Second, the brands could be selected more carefully. Although the luxury brand, "Versace" was known to all the subjects, Korean subjects were more likely to associate it with eyewear products rather than with shoes. Third, the number of traits could be increased and they should be appropriate to describe the facilitating products. In this study, the traits were translated into German and into Korean referring to Gover (2004)'s study, which were developed based on consumer goods.

A product cannot be separable from the brand and they both should leverage each other to create a targeted personality. Utilizing an analytic and systematic empirical design, this underlying mechanism hopefully can be identified.

ACKNOWLEDGMENT

The Survey carried out in Korea was sponsored by the Brain Korea 21 Research Unit of the Department of Industrial Design at Korea Advanced Institute of Science and Technology.

REFERENCES:

Aaker, J. (1999) The malleable self: The role of self-expression in persuasion. Journal of Marketing Research, 36, 45-57.

Aaker, J.(1997) Dimensions of Brand Personality, Journal of Marketing Research, Vol 34, 347-365.

Aaker. J and Schmitt (2001) Culture-Dependent Assimilation and Differentiation of the Self: Preferences for Consumption Symbols in the United States and China, Journal of cross-cultural psychology, 32(5), 561-576

Aaker, J., 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.

Bauer, H.H, Mäder, R. and Huber, F. (2002) Markenpersönlichkeit als Determinante von Markenloyalität. Zeitschrift für betriebswirtschaftliche Forschung, 54(5), 687-707.

De Chernatony, L. and McDonald, M. (1992) Creating Powerful Brands, Butterworth-Heinemann, Oxford.

Govers, P. (2004) Product Personality. Unpublished Doctoral Dissertation, Delft University of Technology.

Herrmann, A. and Huber, F. (2000) Value-oriented brand positioning. Int. Rev. of Retail, Distribution and Consumer Research. Vol 10 (1), 95-112.

Hofstede, G., Neuijen, B., Ohayv, D.D. and Sanders, G. (1990) Measuring organizational cultures. A qualitative and quantitative study across twenty cases. Administrative Science Quarterly, 35, 286–316.

John, O. (1990) "The ,Big Five' Factor Taxonomy: Dimensions of Personality in the Natural Language and in Questionaires," in Handbook of Personality: Theory and Research, L.A. Pervin, ed. San Francisco: Harper, 66-100.

Keller, L.K. (1993) Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. Journal of Marketing, Vol 57, 1-22.

Lim, K. and O'Cass, A. (2001) Consumer brand classifications: an assessment of culture-of-origin versus country-of-origin, Journal of Product & Brand Management, Vol 10 (2), 120-136.

Mäder, R. (2005) Messung und Steuerung von Markenpersönlichkeit, Wiesbaden: DUV.

Markus, H. and Kitayama, S. (1991) Culture and the Self: Implications for Cognition, Emotion and Motivation, Psychology Review, 98, 224-253.

McCracken, G. (1993) The value of the brand: an anthropological perspective, in Aaker, D.A. and Biel, A. L. (Eds), Brand Equity and Advertising, Lawrence Erlbaum Associates, Hillsdale, NJ.

Yoo, B. and Donthu, N. (2002) Testing cross-cultural invariance of the brand equity creation process. The Journal of Product & Brand Management, 11(6), 380-390.

Yoo, S., Chung, S.W. and Han, J.K. (2006) A Durable Replacement Model for Symbolic versus Utilitarian Consumption: An Integrated Cultural and Socio-economic Perspective, Global Economic Review, 35(2), 193-206.

Website: Geert HofstedeTM, http://www.geert-hofstede.com