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Although a considerable amount of research in personality psychology has been done to conceptualize human personality, identify the "Big Five" dimensions, and explore the meaning of each dimension, no parallel research has been conducted in consumer behavior on brand personality. Consequently, an understanding of the symbolic use of brands has been limited in the consumer behavior literature. In this research, the author develops a theoretical framework of the brand personality construct by determining the number and nature of dimensions of brand personality (Sincerity, Excitement, Competence, Sophistication, and Ruggedness). To measure the five brand personality dimensions, a reliable, valid, and generalizable measurement scale is created. Finally, theoretical and practical implications regarding the symbolic use of brands are discussed.

Dimensions of Brand Personality

In consumer behavior research, a considerable amount of attention has been given to the construct *brand personality*, which refers to the set of human characteristics associated with a brand. Researchers have focused on how the personality of a brand enables a consumer to express his or her own self (Belk 1988), an ideal self (Malhotra 1988), or specific dimensions of the self (Kleine, Kleine, and Kernan 1993) through the use of a brand. Practitioners view it as a key way to differentiate a brand in a product category (Halliday 1996), as a central driver of consumer preference and usage (Biel 1993), and as a common denominator that can be used to market a brand across cultures (Plummer 1985).

However, despite this interest, research on brand personality and the symbolic use of brands more generally has remained limited due in part to the lack of consensus regarding what brand personality really is. How is it defined and thereby distinguished from related constructs? Does it have a framework or set of dimensions similar to or different from the "Big Five" dimensions of human personality? As a result, an understanding of how and when brand personality relates to a consumer's personality and thereby influences consumer preference has remained elusive (see Sirgy 1982).

Furthermore, no research has been conducted to develop systematically a reliable, valid, and generalizable scale to measure brand personality. Currently, researchers rely on measurement scales that tend to be ad hoc (e.g., checklists, photo-sorts, symbolic analogy) or taken directly from personality psychology but not validated in the context of brands (Kassarjian 1971). As a result, the theoretical generalizability and implications stemming from the findings in the research on the symbolic use of brands are questionable.

The objective of this research is to address these limitations by drawing on research on the "Big Five" human personality structure to develop a theoretical framework of brand personality dimensions (Norman 1963; Tupes and Christal 1958) and a reliable, valid, and generalizable scale that measures these dimensions.

THE BRAND PERSONALITY CONSTRUCT

Brand personality is defined formally here as "the set of human characteristics associated with a brand." To illustrate, Absolut vodka personified tends to be described as a cool, hip, contemporary 25-year old, whereas Stoli's personified tends to be described as an intellectual, conservative, older man. 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 (Keller 1993).

It is argued that the symbolic use of brands is possible because consumers often imbue brands with human personality traits (termed *animism*; e.g., Gilmore 1919). Consumers easily can think about brands as if they were celebrities or famous historical figures (Rook 1985) and as they relate to one's own self (Fournier 1994), which may be due in part to the strategies used by advertisers to imbue a brand with personality traits such as anthropomorphization (e.g., California Raisins), personification (e.g., Jolly Green Giant), and the creation of user imagery (e.g., Charlie girl). Through such techniques, the personality traits associated with a brand, such as those associated with an individual, tend to be

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relatively enduring and distinct. For example, the personality traits associated with Coca-Cola are cool, all-American, and real; these traits are relatively enduring (Pendergrast 1993) and differentiate Coke from its competitors (e.g., Pepsi being young, exciting, and hip; Dr Pepper being nonconforming, unique, and fun; Plummer 1985).

Motivated by this logic, previous research has suggested that the greater the congruity between the human characteristics that consistently and distinctively describe an individual's actual or ideal self and those that describe a brand, the greater the preference for the brand (e.g., Malhotra 1988; Sirgy 1982). However, the empirical exploration of this hypothesis has been handicapped by a limited conceptual understanding of the brand personality construct and the psychological mechanism by which it operates.

Antecedents of Brand Personality

Although human and brand personality traits might share a similar conceptualization (Epstein 1977), they differ in terms of how they are formed. Perceptions of human personality traits are inferred on the basis of an individual's behavior, physical characteristics, attitudes and beliefs, and demographic characteristics (Park 1986). In contrast, perceptions of brand personality traits can be formed and influenced by any direct or indirect contact that the consumer has with the brand (Plummer 1985). Personality traits come to be associated with a brand in a direct way by the people associated with the brand—such as the brand's user imagery, which is defined here as "the set of human characteristics associated with the typical user of a brand"; the company's employees or CEO; and the brand's product endorsers. In this way, the personality traits of the people associated with the brand are transferred directly to the brand (McCracken 1989). In addition, however, personality traits come to be associated with a brand in an indirect way through product-related attributes, product category associations, brand name, symbol or logo, advertising style, price, and distribution channel (Batra, Lehmann, and Singh 1993).

In addition to personality characteristics, researchers (Levy 1959, p. 12) argue that brand personality includes demographic characteristics such as gender ("Usually it is hard to evade thinking of inanimate things as male or female"), age ("Just as most people usually recognize whether something is addressed to them as a man or a woman, so are they sensitive to symbols of age"), and class ("The possession of mink is hardly a matter of winter warmth alone"). Similar to personality characteristics, these demographic characteristics also are inferred directly from the brand's user imagery, employees, or product endorsers and indirectly from other brand associations. For example, driven by distinct user imagery, Virginia Slims tends to be thought of as feminine, whereas Marlboro (currently) tends to be perceived as masculine. Partly due to the relative recency with which the two brands entered the market, Apple is considered to be young, and IBM is considered to be older. On the basis of their different pricing strategies, Saks Fifth Avenue is perceived as upper class, whereas Kmart is perceived as blue collar.

Measuring Brand Personality

To examine how the relationship between brand and human personality may drive consumer preference, two types of brand personality scales are used. The first type are ad hoc scales, which typically are composed of a set of traits ranging from 20 to 300. However, though useful, these scales tend to be atheoretical in nature—often developed for the purposes of a specific research study. As a result, key traits may be missing from such scales. Furthermore, the traits that are selected often are chosen arbitrarily, which casts doubt on the scales' reliability and validity.

The second type of brand personality scales are those that are more theoretical in nature, but are based on human personality scales that have not been validated in the context of brands (e.g., Bellenger, Steinberg, and Stanton 1976; Dolich 1969). However, though some dimensions (or factors) of human personality may be mirrored in brands, others might not. As a result, the validity of such brand personality scales often is questionable, leading researchers to argue that "*if unequivocal results are to emerge* [in the literature on the symbolic use of brands] *consumer behavior researchers must develop their own definitions and design their own instruments to measure the personality variables that go into the purchase decision*" (italics in original; Kassarjian 1971, p. 415).

In this research, a framework of brand personality dimensions is developed. By isolating these distinct dimensions versus treating brand personality as a unidimensional construct, the different types of brand personalities can be distinguished, and the multiple ways in which the brand personality construct influences consumer preference may be understood better.

In addition, a scale is developed to provide a basis for theory-building on the symbolic use of brands. Drawing on research by Malhotra (1981), who outlines a process of scale development for measuring self, person, and product constructs, reliability and validity are established by relying on subjects representative of the U.S. population, systematically selecting from a large pool of traits to establish content validity, and demonstrating the robustness of the five dimensions with an independent set of brands and subjects.

Perhaps most important, this framework and scale are generalizable across product categories. Beyond practical benefits, a generalizable framework and scale enable researchers to understand the symbolic use of brands in general versus the symbolic use of brands within a particular category. As a result, the symbolic nature of brands can be understood at the same level as the utilitarian nature of brands, which tends to be captured by models that are generalizable across product categories (e.g., multi-attribute model; Fishbein and Ajzen 1975). Therefore, like the multi-attribute model, which sheds insight into when and why consumers buy brands for utilitarian purposes, a cross-category framework and scale can provide theoretical insights into when and why consumers buy brands for self-expressive purposes.

In contrast, consider the difficulties of a theoretician's attempt to explore hypotheses regarding antecedents and consequences of brand personality using personality scales that apply only to a single product category. It would be difficult to use cross-category stimuli, explore possible moderating effects of product type, or examine the psychological mechanism that drives the symbolic use of brands across product categories, individuals, and cultures. Thus, product category–specific personality scales are of limited use in building theory.

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WHAT IS BRAND PERSONALITY?

To establish content validity, the development of a comprehensive and representative set of personality traits and the process of identifying a set of stimuli are described.

Personality Trait Generation

Overview. In the first stage of personality trait generation, a set of 309 candidate traits was created by eliminating redundancy from trait lists optioned from three sources: personality scales from psychology, personality scales used by marketers (academics and practitioners), and original qualitative research. In the second stage, this set of traits was reduced to a more manageable number (114).

First stage. Considerable research in psychology has converged on a stable, robust, and reliable factorial composition of human personality, the "Big Five." A series of scales that have been used to develop and refine the "Big Five," including the original work (Norman 1963; Tupes and Christal 1958), NEO Model (McCrae and Costa 1989), Big Five Prototypes (John 1990), ACL (Piedmont, McCrae, and Costa 1991), and Inter-Circumplex Model (McCrae and Costa 1989), contributed a total of 204 unique traits.

In addition, personality scales used by academics (Alt and Griggs 1988; Batra, Lehmann, and Singh 1993; Levy 1959; Malhotra 1981; Plummer 1985; Wells et al. 1957) and practitioners (an advertising agency, a market research supplier, and a client company) added a total of 133 unique traits.

Finally, to ensure that the list was complete and the traits were familiar and meaningful to people, a free-association task was conducted. Subjects (n = 16, 50% female, mean age = 25) were paid $40 each to participate in a study on the types of personality traits associated with brands. Subjects were asked to write down the personality traits that first came to mind when thinking about two brands in three types of product categories (as identified by Ratchford 1987 in the Appendix; think-feel dimensions): *symbolic* (jeans, cosmetics, and fragrance), *utilitarian* (computers, electronics, and appliances), and both *symbolic* and *utilitarian* (automobiles, beverages, and athletic shoes).[1] The symbolic–utilitarian framework (Katz 1960) was used here and in subsequent studies as a systematic way to select brands that span a variety of categories and serve multiple functions, so as to enhance the generalizability of the resulting scale. The 295 unique traits resulting from this task were added to the pool of personality traits.

The result of the first trait generation stage left 309 nonredundant candidate personality traits.

Second stage. In the second trait generation stage, the 309 traits were reduced to a more manageable number. Subjects (n = 25, 70% female, mean age = 33) were paid $20 each to participate in a study on the types of personality traits associated with brands. To communicate the brand personality concept to subjects, subjects were given an example of the personality of a brand in a symbolic product category (Wrangler jeans—macho, rough, and sturdy), a utilitarian product category (Pepto Bismal stomach medication—calm, sweet, and giving), and a product category that was both symbolic and utilitarian (Dr Pepper soft drink—individualistic, gregarious, and bold). In addition, to reduce the chances of focusing on a particular brand or product category, subjects were told, "Since this study is not about any brand or product category in particular, try to think of as many different types of brands in various product categories when you evaluate each trait." Subjects rated how descriptive the 309 traits were of brands in general (1 = not at all descriptive, 7 = extremely descriptive). To isolate the most relevant traits, the cutoff for the final list of personality traits was a scale rating of 6 (very descriptive), thereby leaving 114 personality traits for the study.

Stimuli Selection

Three criteria guided the selection of a comprehensive and representative set of brands: First, salient, well-known brands were chosen so that a national sample could be used; second, a wide variety of brands representing a spectrum of personality types was selected to enhance the scope of the scale; and third, a range of product categories, both symbolic and utilitarian, was drawn upon to enhance scale generalizability.

To identify the brands, an EquiTrend study (1992) was used. Here, 131 brands in 39 product categories and services were rated by a national sample on both "salience" (proportion of consumers who have an opinion about the brand) and "brand personality" (on the basis of 30 personality traits). The brands selected all had high salience ratings (above 50%). In addition, they represented different personality profiles as determined by a clustering procedure in which the 131 brands fell into nine distinct clusters. Four brands were chosen randomly from each of these clusters on the basis of one guiding criteria: Approximately the same number of brands were to be included from symbolic, utilitarian, and symbolic/utilitarian types of product categories. This set of 37 brands included those that serve symbolic functions (e.g., clothing, cosmetics, fragrance), utilitarian functions (e.g., film, pain relievers, toothpaste), and both symbolic and utilitarian functions (e.g., computers, soft drinks, tennis shoes). For a list of the brands, see Table 1.

Choosing a large number of brands has the advantage of increasing the generalizability and robustness of the measurement scale. Its disadvantage, however, is possible subject fatigue and boredom, which potentially could result in response bias. To minimize this problem, one brand from each of the nine clusters was selected and placed into one of four "Brand Groups," such that each Brand Group contained a similar profile of brands. In this way, personality heterogeneity in each of the Brand Groups similar to that of the total sample of brands was maintained. Finally, one brand (Levi's jeans) was included in each of the four Brand Groups so that the extent to which the four distinct groups of subjects differed in their brand personality perceptions could be assessed. Thus, a total of 37 brands were included.

No significant differences were found among the mean ratings of Levi's jeans in the four groups, which suggests high levels of agreement of the human characteristics asso-

[1]To ensure that the pair of brands, which also vary on the symbolic-utilitarian continuum, in a product category were selected systematically, an independent set of subjects (n = 20, 50% female, mean age = 28) was asked to rate the extent to which 36 brands in nine product categories were relatively more "symbolic (i.e., self-expressive) versus utilitarian (i.e., functional)" in nature. The brands that received the highest rating on the "symbolic" dimension are listed first, followed by the brands that received the highest rating on the "utilitarian" dimension: jeans (Guess, Wrangler), cosmetics (Revlon, Mary Kay), fragrance (Obsession, Chanel), computers (IBM, Apple), electronics (GE, Sony), appliances (Maytag, Kitchen Aid), cars (Porsche, Volvo), beverages (Diet Coke, Calistoga) and athletic shoes (LA Gear, Adidas).

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Table 1
FOUR BRAND GROUPS OF TEN BRANDS

Brand Group 1	*Brand Group 2*	*Brand Group 3*	*Brand Group 4*
Crest toothpaste	Kodak film	Lego toys	Cheerios cereal
Campbell's soup	Hershey's candy bar	Hallmark cards	Mattel toys
Kmart stores	Pepsi Cola soft drinks	Lee jeans	Saturn automobiles
Porsche automobiles	Oil of Olay lotion	Charlie perfume	Guess? jeans
Reebok athletic shoes	AMEX credit cards	ESPN station	Nike athletic shoes
Michelin tires	Sony television	AT&T phone service	CNN station
Diet Coke cola	Advil pain reliever	Apple computers	Revlon cosmetics
MTV station	MCI telephone service	Avon cosmetics	McDonald's restaurants
IBM computers	Mercedes automobiles	Lexus automobiles	Visa credit cards
Levi's jeans	Levi's jeans	Levi's jeans	Levi's jeans

ciated with a particular brand. Furthermore, the original ratings on the EquiTrend personality traits for the nine sets of four brands were examined to confirm their high levels of similarity; each of the four brands within each set were similar on all personality traits.

METHOD

Subjects

The external validity and generalizability of the brand personality scale depended on the subjects on which the scale was based. Therefore, a nonstudent sample was used; one that represented the U.S. population with respect to five demographic dimensions (gender, age, household income, ethnicity, and geographic location) as identified in the 1992 U.S. Bureau of the Census. For example, 56% of the sample was female, 20% was 18–24 years of age, 34% had a household income of more than $50,000, 10% was African-American, and 20% lived in the Northeast. The subjects in the four Brand Groups were selected to have the same profiles as the total sample. Unless otherwise specified, the same demographic profile of subjects is used in all remaining stages of this research.

To stimulate a high return rate, a total of 1200 questionnaires was sent via Federal Express to subjects from a national mail panel. Approximately 55% of the subjects returned the questionnaires (n = 631).

Procedure

Subjects, who participated in the study in exchange for a gift of their choosing and a chance to win three first prizes of $250 and five second prizes of $50, received the following set of instructions:

> Most of the following questions are about a variety of brands of products or services. We would like you to think of each brand as if it were a person. This may sound unusual, but think of the set of human characteristics associated with each brand. For example, you might think that the human characteristics associated with Pepto Bismal are kind, warm, caring, soothing, gentle, trustworthy and dependable. The human characteristics associated with Dr Pepper might be non-conforming, fun, interesting, exciting and off-beat. We're interested in finding out which personality traits or human characteristics come to mind when you think of a particular brand.

Using a five-point Likert scale (1 = not at all descriptive, 5 = extremely descriptive), subjects were asked to rate the extent to which the 114 personality traits describe a specific brand.[2] Primarily positively valenced traits were used because brands typically are linked to positive (versus negative) associations and because the ultimate use of the scale is to determine the extent to which brand personality affects the probability that consumers will approach (versus avoid) products.

Subjects repeated the rating task for the nine additional brands in the particular Brand Group. To control for primacy and recency effects, the order in which the traits were presented for each brand was counterbalanced. In addition, the order in which the ten brands were presented in the questionnaire was rotated completely.

IDENTIFYING THE BRAND PERSONALITY DIMENSIONS

Because the objective of this stage was to identify the brand personality dimensions as perceived in consumers' minds, rather than the individual differences in how different people respond to single brands, a state (versus trait) "O" analysis was used where the correlation matrix for the personality traits (n = 114) correlated across the brands (n = 37) is analyzed, and the scores of each brand on each personality trait are averaged across subjects (n = 631). The 114 × 114 correlation matrix was factor-analyzed using principal components analysis and a varimax rotation. A five-factor solution resulted on the basis of the following criteria:

1. All five factors had eigenvalues greater than one.
2. A significant dip in the Scree plot followed the fifth factor.
3. The first five factors were the most meaningful, rich, and interpretable.[3]
4. The five-factor solution explained a high level of variance in brand personality (92%).
5. The five-factor solution was the most stable and robust, as illustrated by subsample factor analyses described subsequently (e.g., males versus females, younger versus older subjects).

[2]A Likert scale was preferred over a semantic-differential scale because the objective of this study was to determine the extent to which a brand can be described by certain human characteristics (i.e., brand personality content and strength), rather than to determine when brands are associated with negative versus positive personality characteristics (i.e., brand personality valence).

[3]Although at least nine traits loaded on each of the first five factors, only three traits loaded on the sixth ("special," "classic," and "tasteful") and seventh ("big," "successful," and "leader") factors. No traits loaded on any remaining factors. More detailed information as well as the raw correlation matrix and factor scores are available from the author.

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With the exception of four traits (urban, proud, healthy, and flexible), all of the traits had high loadings (> .60) on one of the five factors and relatively low loadings on the other four factors. Because traits that load below .40 do not add to measure purification (Nunnally 1978), these four traits were removed and the factor analysis rerun. The result was an easily interpretable five-factor solution with high loadings and communalities for each of the traits. Moreover, the variance explained in each of the factors was relatively high (see Table 2).

The names determined to represent best the types of concepts subsumed in each of the five dimensions were Sincerity (e.g., typified by Hallmark cards), Excitement (e.g., MTV channel), Competence (e.g., *The Wall Street Journal* newspapers), Sophistication (e.g., Guess jeans), and Ruggedness (e.g., Nike tennis shoes).[4]

ASSESSING THE STABILITY OF THE BRAND PERSONALITY DIMENSIONS

One limitation associated with factor analysis is potential differences in the meaning of the personality traits among distinct groups of people. Therefore, to test the generality of the five brand personality dimensions and to determine if the measurement scale can be used in future research with particular groups of subjects (e.g., students), separate principal component factor analyses (with varimax rotation and unrestricted number of factors to be extracted) were run on four subsamples of subjects; males (n = 278), females (n = 353), younger subjects (n = 316), and older subjects (n = 315).

The similarity of the results from the four principal components factor analyses was assessed both qualitatively and quantitatively. Qualitatively, an inspection of the results shows that the three criteria for similar factor structures were met (Osgood, Suci, and Tannenbaum 1957): (1) the same *number* of factors were extracted—five; (2) the same *type* of five factors resulted (i.e., the same traits loaded on the same factors as in the total-sample factor analysis); (3) relatively similar *weights* for the five factors existed among the four subpopulations. In addition, the variance explained by each factor in the four groups was approximately the same. The largest difference was for Sincerity, which explained 27% of the variance for the younger subject sample versus 31% of the variance for the older subject sample. Quantitatively, factor congruence correlations (the average factor correlations between the subsamples) were calculated and ranged from .92 to .95. Although no statistical tests are associated with this coefficient, the factor structure is interpreted as essentially invariant if congruence coefficients are higher than .90 (Everett 1983).

[4]These names were chosen after the second measurement phase but are reported here to simplify the terminology used. Three of these names were represented in trait form in the five dimensions (sincere, exciting, and rugged).

REPRESENTING THE FIVE BRAND PERSONALITY DIMENSIONS: THE FINAL SET OF PERSONALITY TRAITS

The goal of the next phase was to identify the traits that most reliably, accurately, and comprehensively represent the five dimensions. Therefore, a facet identification phase was conducted, whereby each set of items in the five factors identified in the principal components analysis was factor-analyzed individually. The result of those five factor analyses was a set of "facets." To provide a reliable representation of each facet (Nunnally 1978), three traits from each facet were selected.

Facet Identification

Because many of the factors are broad, personality psychologists (e.g., Church and Burke 1994; McCrae and Costa 1989) focus on different "facets" subsumed by each factor to select representative traits that provide both breadth and depth and to serve as a framework for establishing the similarities and differences among alternative conceptions of the "Big Five." To identify the facets, the set of items in each factor (which resulted from the principal components analysis) is factor-analyzed individually, a process that results in an unconstrained set of facets. For example, the Extroversion factor of human personality consists of six facets: Warmth, Gregariousness, Assertiveness, Activity, Excitement-Seeking, and Positive Emotions. However, it should be noted that these facets are not factors in and of themselves, but rather are "used to select and refine items ... to improve the scales, not to revise the constructs" (Church and Burke 1994, p. 107).

Therefore, in this research, the set of items in each of the five factors was factor-analyzed individually using principal components analysis, a varimax rotation scheme, and an unrestricted number of factors to be extracted. The result of the five individual factor analyses was a total of 15 facets: Sincerity and Excitement each had four facets, Competence had three, and Sophistication and Ruggedness each had two.

The next stage was to select the best traits represented in each of the 15 facets to be included in the scale. To add to the scale's reliability and comprehensiveness while minimizing trait redundancy, a clustering procedure outlined by Nunnally (1978) was followed, whereby three clusters were

Table 2
FIVE DIMENSIONS OF BRAND PERSONALITY

Name	*Dimension*	*Variance Explained*	*Eigenvalue*	*Traits with Highest Item-to-Total Correlations*
Sincerity	1	26.5%	31.4	Domestic, honest, genuine, cheerful
Excitement	2	25.1%	27.9	Daring, spirited, imaginative, up-to-date
Competence	3	17.5%	14.2	Reliable, responsible, dependable, efficient
Sophistication	4	11.9%	9.2	Glamorous, pretentious, charming, romantic
Ruggedness	5	8.8%	6.7	Tough, strong, outdoorsy, rugged

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formed for each facet.[5] Next, the trait with the highest item-to-total correlation in each cluster was identified, leaving 45 traits (3 traits for each of the 15 facets) to be included in the final Brand Personality Scale. All of these traits had high item-to-total correlations on both the facets (ranging from .75 to .98) and their factors (ranging from .50 to .97), thereby ensuring high internal consistency. See Figure 1 for the brand personality framework, which includes the five dimensions and 15 facets.

ARE THE FIVE BRAND PERSONALITY DIMENSIONS RELIABLE?

To determine the degree to which the five brand personality dimensions will yield consistent results, reliability was assessed in two ways: test-retest correlations and Cronbach's alpha.

Test-Retest Reliability

A random subset of 200 subjects (50 in each of the four Brand Groups) was selected from the original sample of subjects. To minimize both potential memory effects, in which subjects might remember their responses to the original questionnaire, and "brand personality" effects, in which differences in the responses at Time 1 and 2 might differ because of gradual changes in the brand personalities over time, the test-retest questionnaire was sent two months after the original questionnaire. To avoid systematic bias, all 114 traits were included in the test-retest questionnaire.

The test-retest sample was composed of 81 subjects (a 41% return rate). The average Pearson correlation between Time 1 and Time 2 on the 45 traits was .80, ranging from .49 to .90. Three traits with test-retest correlations below .60 were dropped from the scale. Based on the remaining 42-trait scale, the test-retest correlations for each of the five factors were as follows: Sincerity = .75, Excitement = .74, Competence = .76, Sophistication = .75, and Ruggedness = .77, all of which met Nunnally's (1978) criterion of test-retest scores of greater than .70 at this stage of research.

Cronbach's Alpha

Cronbach's alphas were calculated for each of the five dimensions using the 42-trait scale. The resulting values were high: Sincerity = .93, Excitement = .95, Competence = .93, Sophistication = .91, and Ruggedness = .90. In addition, all traits within each of the five dimensions had high item-to-total correlations (averaging .85, all exceeding .55), which indicate high levels of internal reliability.

CONFIRMING THE BRAND PERSONALITY DIMENSIONS

The factor analysis conducted in the first measurement purification phase raises two questions: First, to what extent are the five dimensions based on the particular brands selected as stimuli, and therefore biased if another set of brands were used? Second, to what extent are the five dimensions a function of the particular subject sample, and therefore would change if another sample was used? To answer these questions, an additional phase of research was conducted: the confirmation of the five dimensions of brand personality using a second independent sample of brands and subjects.

Subjects and Procedure

A total of 250 questionnaires was sent via Federal Express to subjects from a national mail panel. The end sample included 180 subjects (a 72% response rate) with the same demographic profile as those in the first phase. Subjects followed the identical procedure as in the first measurement purification phase, except for two changes: (1) 42 personality traits were used (versus 114) and (2) a different set of brands was used.

[5]In this clustering procedure, the trait with the highest item-to-total correlation within a facet was identified and formed the nucleus of the first cluster. Then, the traits that were correlated most highly with the nucleus trait were identified ($r > .90$), forming the first cluster in the facet. Next, the nucleus for the second cluster was obtained by identifying the trait with the next highest item-to-total correlation in the facet. Traits with relatively high correlations with the second nucleus and relatively low correlations ($r < .89$) with the first nucleus were then identified to form the second cluster. This procedure was repeated until all clusters of the facet were identified (which was three clusters for 13 of the facets and four for the remaining 2 facets, with only one trait in the final fourth cluster). For more details, see Church and Burke (1994).

Figure 1
A BRAND PERSONALITY FRAMEWORK

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Table 3
CONFIRMATORY SAMPLE OF BRANDS

Marriott hotels	Holiday Inn hotels
Macy's stores	Sears stores
The Wall Street Journal newspapers	*USA Today* newspapers
Liz Claiborne clothing	Benetton clothing
Marlboro cigarettes	Virginia Slims cigarettes
Maytag appliances	KitchenAid appliances
Metropolitan Life insurance	Prudential insurance
Taster's Choice coffee	Maxwell House coffee
Bic razors	Gillette razors
Newsweek magazines	People magazines

Stimuli

The second sample of brands was drawn from the same source as the original set of brands (EquiTrend 1992). Of the 39 product categories used in the original EquiTrend study, 23 were used in the first study. Of the remaining 16 product categories, the 10 product categories that included more than one brand were selected. Next, the two brands with the highest salience ratings (all higher than 50%) in these 10 product categories were selected, for a total of 20 brands. However, unlike the first measurement purification phase, these brands were not chosen on the basis of their personality, so as to provide (1) a randomly chosen independent sample of brands and (2) a more stringent test of the five-factor structure. See Table 3 for a list of these brands.

Analysis

Because the objective of the second measurement purification stage was to determine the extent to which the five dimensions were robust over a new set of brands and subjects, a confirmatory factor analysis (Generalized Least Squares was conducted), estimating a five-factor model for 42 traits. When the five factors were allowed to correlate, the fit statistics suggested a good model fit (cf. Bagozzi and Heatherton 1994; Bentler 1990): the confirmatory fit index (CFI; Bentler 1990) = .98, goodness-of-fit index (GFI) = .91, adjusted goodness-of-fit index (AGFI) = .86, root mean square residual (RMSR) = .07, and Chi-square = 9,216.80[6] (with 809 degrees of freedom; $p < .01$). When the factors were restricted to be orthogonal, the fit statistics were CFI = .94, GFI = .86, AGFI = .85, RMSR = .15, and Chi-square = 9,447.11 (with 819 degrees of freedom; $p < .01$). Finally, to provide convergent support of the robustness of the structure, an exploratory principal components factor analysis was conducted using a varimax rotation scheme and an unconstrained number of factors to be extracted. The results showed that the same number of factors resulted, the same type of five factors resulted, and similar weights for the five factors existed. Moreover, factor congruence correlations for the five factors were high, ranging from .97 to .99, which provides support for the stability of the five-factor structure. For a list of the final set of personality traits that measure the five dimensions of brand personality, see Appendix A.

[6]The chi-square is of limited value in this context and greater weight should be given to other fit statistics "because [the chi-square statistic] is sensitive to sample size and can lead to a rejection of a model differing in a trivial way from the data" (Bagozzi and Heatherton 1994, p. 45).

GENERAL DISCUSSION

Summary of the Research

The objective of this research was to develop a framework of brand personality dimensions and a reliable, valid, and generalizable scale to measure the dimensions. To identify the brand personality dimensions, a total of 631 subjects rated a subset of 37 brands on 114 personality traits. The results of an exploratory principal components factor analysis suggest that consumers perceive that brands have five distinct personality dimensions: Sincerity, Excitement, Competence, Sophistication, and Ruggedness. The results of a series of factor analyses run on subsets of subjects established the robustness of the brand personality dimensions. In addition, high levels of reliability of the five dimensions were established through test-retest correlations and Cronbach's alphas. Finally, the results of a confirmatory factor analysis relying on 180 subjects, 20 brands in ten product categories, and 42 personality traits provided additional support for the stability of the five dimensions. In summary, the results of these analyses demonstrate that the framework of brand personality dimensions, as represented by the 42-item Brand Personality Scale, is reliable, valid, and generalizable.

The Symbolic Use of Brands: Brand Personality Versus Human Personality

This research has both theoretical and practical implications. Theoretically, the brand personality framework developed in this research suggests that one reason for the weak findings in the self-congruity literature may be due to the asymmetric relationship in the structure of brand versus human personality. Although it could be argued that three brand personality dimensions relate to three of the "Big Five" human personality dimensions (i.e., Agreeableness and Sincerity both capture the idea of warmth and acceptance; Extroversion and Excitement both connote the notions of sociability, energy, and activity; Conscientiousness and Competence both encapsulate responsibility, dependability, and security), two dimensions (Sophistication and Ruggedness) differ from any of the "Big Five" of human personality (Briggs 1992). This pattern suggests that brand personality dimensions might operate in different ways or influence consumer preference for different reasons. For example, whereas Sincerity, Excitement, and Competence tap an innate part of human personality, Sophistication and Ruggedness tap a dimension that individuals desire but do not necessarily have. This premise is consistent with the advertising created for prototypical Sophisticated brands (e.g., Monet, Revlon, Mercedes), in which aspirational associations such as upper class, glamorous, and sexy are a focus. Similarly, Ruggedness brands (e.g., Marlboro, Harley-Davidson, Levi's) tend to glamorize American ideals of Western, strength, and masculinity.

If true, this premise would suggest that one reason for the weak empirical support for self-congruity effects (both actual and ideal) is the focus on matching the personality between a brand and a consumer at the aggregate level (i.e., across all personality traits). Rather, this research suggests that dimensions of personalities must be examined (Kleine, Kleine, and Kernan 1993; see also Kleine, Kleine, and Allen 1995). Furthermore, the importance of these dimensions must be examined in order to understand their centrality to

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the self (Markus 1977; Markus and Wurf 1987) and the extent to which they influence preference for brands across situations.

Practical applications of this research also exist. This is the first attempt to develop a measurement scale that is based on a representative sample of subjects, a comprehensive list of traits, and a systematically chosen set of brands across product categories. Therefore, practitioners have an alternative to the ad hoc scales currently used. Moreover, the scale can be used to compare personalities of brands across product categories, thereby enabling researchers to identify benchmark personality brands. To aid this process, a set of personality trait norms is provided in Appendix A.

The Antecedents, Consequences, and Processing of Brand Personality

Assuming that having a brand personality is important, the question arises: How does a brand go about developing one? The brand personality framework and scale developed in this research also can be used to gain theoretical and practical insight into the antecedents and consequences of brand personality, which have received a significant amount of attention but little empirical testing. In terms of antecedents, many have suggested that brand personality is created by a variety of marketing variables (e.g., user imagery, advertising, packaging; cf. Batra, Lehmann, and Singh 1993; Levy 1959; Plummer 1985). However, the extent to which these variables independently and interdependently influence brand personality has yet to be determined. With the use of the Brand Personality Scale, the variables can be manipulated systematically and their impact on a brand's personality measured. Similarly, in terms of consequences, researchers suggest that brand personality increases consumer preference and usage (Sirgy 1982), evokes emotions in consumers (Biel 1993), and increases levels of trust and loyalty (Fournier 1994). These assertions can be tested by

Appendix A

A BRAND PERSONALITY SCALE

(Means and Standard Deviations)*

Traits	*Mean*	*Standard Deviation*	*Facet*	*Facet Name*	*Factor Name*	*Mean*	*Standard Deviation*
down-to-earth	2.92	1.35	(1a)	Down-to-earth	Sincerity	2.72	.99
family-oriented	3.07	1.44	(1a)				
small-town	2.26	1.31	(1a)				
honest	3.02	1.35	(1b)	Honest			
sincere	2.82	1.34	(1b)				
real	3.28	1.33	(1b)				
wholesome	2.81	1.36	(1c)	Wholesome			
original	3.19	1.36	(1c)				
cheerful	2.66	1.33	(1d)	Cheerful			
sentimental	2.23	1.26	(1d)				
friendly	2.95	1.37	(1d)				
daring	2.54	1.36	(2a)	Daring	Excitement	2.79	1.05
trendy	2.95	1.39	(2a)				
exciting	2.79	1.38	(2a)				
spirited	2.81	1.38	(2b)	Spirited			
cool	2.75	1.39	(2b)				
young	2.73	1.40	(2b)				
imaginative	2.81	1.35	(2c)	Imaginative			
unique	2.89	1.36	(2c)				
up-to-date	3.60	1.30	(2d)	Up-to-date			
independent	2.99	1.36	(2d)				
contemporary	3.00	1.32	(2d)				
reliable	3.63	1.28	(3a)	Reliable	Competence	3.17	1.02
hard working	3.17	1.43	(3a)				
secure	3.05	1.37	(3a)				
intelligent	2.96	1.39	(3b)	Intelligent			
technical	2.54	1.39	(3b)				
corporate	2.79	1.45	(3b)				
successful	3.69	1.32	(3c)	Successful			
leader	3.34	1.39	(3c)				
confident	3.33	1.36	(3c)				
upper class	2.85	1.42	(4a)	Upper class	Sophistication	2.66	1.02
glamorous	2.50	1.39	(4a)				
good looking	2.97	1.42	(4a)				
charming	2.43	1.30	(4b)	Charming			
feminine	2.43	1.43	(4b)				
smooth	2.74	1.34	(4b)				
outdoorsy	2.41	1.40	(5a)	Outdoorsy	Ruggedness	2.49	1.08
masculine	2.45	1.42	(5a)				
Western	2.05	1.33	(5a)				
tough	2.88	1.43	(5b)	Tough			
rugged	2.62	1.43	(5b)				

*Based on n = 9, 910

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systematically manipulating distinct dimensions of a brand's personality (e.g., Sincerity) and examining their impact on key dependent variables. Theoretically, this learning would contribute to an overall understanding of the symbolic use of brands. Practically, it would provide insight into the variables that influence brand personality, as well as those that are influenced by brand personality.

Further research also is needed to examine how brand personality information is processed. Past research demonstrates that under conditions of high motivation or ability, brand attributes tend to be processed systematically (Maheswaran and Chaiken 1991). However, less is known about attitude formation under conditions of low motivation or ability. One possibility is that brand personality information, used as a heuristic cue, might influence consumer attitudes and attenuate the processing of brand attribute information under low motivation. Another is that, due to the matching process required to determine if a brand personality and one's own personality are congruent versus incongruent, brand personality information might require systematic processing, and therefore should influence attitudes additively under high motivation. A final possibility that merits exploration is that brand personality could bias brand attribute information, in which the brand attributes are interpreted differently given the personality associated with a brand (cf. Chaiken and Maheswaran 1994).

The Symbolic Use of Brands Across Cultures

Finally, the brand personality framework and scale developed here have important implications for researchers examining the perceptions of brand personality across cultures. For example, the extent to which brand personality dimensions are cross culturally generalizable must be examined. Although research has shown that the human personality dimensions remain robust across cultures (Paunonen et al. 1992), the same may not be so for brand personality because of differences in the antecedents of the two constructs. Consequently, the current scale might not be appropriate for measuring brand personality in a different cultural context. Additional research is needed to determine the extent to which these brand personality dimensions are stable across cultures and, if not, theoretically why they might be altered. Answers to these questions will shed insight into the extent to which a brand's personality (versus the brand's attributes) should remain constant across cultures, what dimensions of brand personality are valued across cultures, and how consumers use brands across cultures (cf. Aaker and Maheswaran 1997).

Finally, little is known about the psychological mechanism by which brand personality operates across cultures. However, recent research in cultural psychology suggests that the symbolic use of brands differs considerably across cultures (Aaker and Schmitt 1997). 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 interdependence, conformity, and similarity are valued (Markus and Kitayama 1991), consumers are more likely to use brands to express how they are similar to members of their in-group. Such research would demonstrate that the symbolic or self-expressive use of brands is robust across cultures, while the nature of that self-expression differs significantly.

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