ORIGINAL EMPIRICAL RESEARCH

Brand personality appeal: conceptualization and empirical validation

Traci H. Freling · Jody L. Crosno · David H. Henard

Received: 22 March 2009 / Accepted: 5 July 2010 / Published online: 4 August 2010 © Academy of Marketing Science 2010

Abstract A substantial literature stream indicates there are benefits to having a favorable brand personality, such as enhanced brand attitudes and purchase intentions and higher levels of consumer trust and loyalty. Contemporary advertisements and promotional activities by a host of firms demonstrate a managerial belief in the value of establishing a brand personality that mirrors that of branding scholars. Yet extant research has yet to fully evaluate the perceived appeal of brand personality to consumers. This issue is important to managers because it is precisely this level of appeal that influences target consumers' purchase decisions and helps to sustain the endurance of a brand's perceived personality between promotional cycles. This article conceptualizes, develops, and validates measures for assessing a consumer's perception of brand personality appeal (BPA). Three dimensions of BPA (favorability, originality, clarity) emerge and are empirically demonstrated to directly and positively impact consumer purchase intentions.

T. H. Freling 217 College of Business Administration, University of Texas-Arlington, Arlington, TX 76019, USA e-mail: freling@uta.edu

J. L. Crosno 209 College of Business and Economics, West Virginia University, Morgantown, WV 26506, USA e-mail: jlcrosno@mail.wvu.edu

D. H. Henard (⊠) College of Management - 7229, North Carolina State University, Raleigh, NC 27695-7229, USA e-mail: dhhenard@ncsu.edu

Keywords Brand personality · Scale development · Brand management · Brand extension · Purchase intentions

"Hello, I'm a Mac.... And I'm a PC"
Initial exchange of character lines in Apple Computer television ads

Advertisers and brand managers have known for some time that brand personality plays a pivotal role in consumer attitudes and purchase intentions (e.g., Plummer 1985). The concept of brand personality is not new. Marketers and consumers alike are familiar with the rugged persona of Marlboro and Harley-Davidson, the sophistication of Mercedes-Benz, and the youthful excitement of Pepsi-Cola. Apple's long running "Mac vs. PC" television advertisements feature two spokespeople who personify Macintosh and PC branded computers. The comparison of brand personalities in these advertisements is both enduring and clear. One is young, hip and easy to use while the other is old, staid and difficult to use. This campaign, which attempts to promote a strong, positive brand personality for Apple Computers, has been so successful that it forced Microsoft to respond with a counter "I'm a PC" advertising campaign designed to freshen its personality perceptions among consumers.

For decades the concept of brand personality predominantly resided in the realm of marketing practice (Olins 1978). Years of anecdotal, practical accounts in the business press lauding the virtues of brand personality stimulated a groundswell of academic interest in the topic. The concept has been building since then and continues to be at the forefront of contemporary marketing theory and practice today. Recently, it has been investigated in a variety of extended contexts such as financial services (e.g., Gibbons

2008) and biotechnology (e.g., Papania et al. 2008), as well as across genders (e.g., Grohmann 2009) and attachment types (Swaminathan et al. 2009).

Consensus among scholars on the impact of brand personality has been steadily growing. An evaluation of extant studies suggests that brand personality has several positive effects. It influences consumer preference and usage (Sirgy 1982), increases levels of trust and loyalty (Fournier 1998), elicits consumer emotions (Biel 1993), stimulates active information processing (Biel 1992), encourages self-expression and association (Belk 1988), provides a basis for product differentiation (D. A. Aaker 1992), and influences brand attitudes and cognitive associations (Freling and Forbes 2005).

While the flurry of research activity surrounding brand personality represents substantial progress in evaluating the importance of establishing a brand personality, it also highlights an important issue that warrants further exploration. Namely, what are other practical implications of a brand's personality beyond the simple recognition of its existence? What makes one brand personality "better," or more impactful, than another? In particular, we are interested in consumers' perceptions regarding the appeal of a brand's personality. We define brand personality appeal as a brand's ability to appeal to consumers through the combination of human characteristics associated with it. By understanding the degree of appeal of a brand's personality, managers can better understand the relevance, potency, and endurance of a particular brand personality and how this personality influences purchase intentions and behaviors.

A review of the brand personality literature reveals two dominant themes. The first theme focuses on diagnosing the nature of a brand's personality by measuring the extent to which it possesses one (or a combination) of five primary personality traits (e.g., J. L. Aaker 1997). Aaker's (1997) Brand Personality Scale (BPS), developed specifically to measure the nature of a brand's personality, is comprised of five dimensions: competence, excitement, ruggedness, sincerity, and sophistication. Although the scale is not without criticism (e.g., Azoulay and Kapferer 2003), it has been validated and refined in a variety of cultures and contexts (see J.L. Aaker 2000; J. L. Aaker et al. 2001; Swaminathan et al. 2009) and currently stands as the dominant brand personality scale in the marketing literature. While the Brand Personality Scale enables managers to accurately gauge the nature of a brand's personality, it neither permits measurement of consumers' feelings regarding a brand's personality nor specifies how a given personality will affect target consumers' purchase intentions. For example, assume that a brand is perceived to have a "sophisticated" personality. Does this personality elicit favorable attitudes and translate into greater purchase intentions because consumers regard the brand as suave and

refined? Or, conversely, does it evoke negative attitudes, decrease purchase intentions, and detract from brand equity because it is perceived to be snobby and aloof?

The second theme of research on brand personality emphasizes changes in brand attitudes and related measures as the primary consequence of a brand having a distinctive, favorable personality (e.g., J. L. Aaker 2000; Batra and Homer 2004). With respect to this theme, investigations of brand personality effects have traditionally either relied upon the use of ad hoc, qualitative techniques or have utilized experimental procedures featuring a differential manipulation of brand personality (often for fictitious brands) followed by an evaluation of variations in related attitudinal measures. The most frequently used outcome variables in these studies are attitude toward the brand and purchase intentions. We view a consumer's perception of brand personality appeal to be distinct from a general recognition of a brand personality, an attitude toward the brand, or purchase intentions, which also capture the individual's opinions of the brand's physical features, product quality, usage experience with the brand and its competitors, and other brand associations.

Taking the existence and relevance of establishing a brand personality as given, we now turn our attention toward the practical issue of gauging brand personality appeal. This article proceeds with a conceptual discussion of brand personality appeal, followed by a description of the dimensions that comprise it. We then describe a series of six studies that both develop a measure of consumer-perceived brand personality appeal and assess the measure's dimensionality, reliability, and validity. The article concludes with a discussion of the practical implications of this research, as well as limitations and directions for future investigation in this area.

Conceptual development

While definitions in the literature vary, we define brand personality as the set of human characteristics associated with a brand (J. L. Aaker 1997) and regard it as a particular type of brand association (D. A. Aaker 1992). Branding researchers generally agree that consumers store brand associations in a memory-based brand network and that these associations may be accessed during decisionmaking. As such, brand personality is a cornerstone of customer-based brand equity, which D. A. Aaker (1991) defines as a set of brand assets and liabilities that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers. Consistent with this conceptualization, Keller (1993) asserts that strong, unique, and favorable brand associations—including perceptions of a brand's personality—have the capacity to positively affect a brand's overall equity. However, to more fully



appreciate the implications of a brand possessing a given personality, we must first understand precisely what consumers think about that particular brand personality. That is, we need to understand the degree of appeal that the brand's personality holds for target consumers.

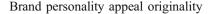
Hence, we seek to develop an empirical measure of a brand's ability to appeal to consumers through the combination of human characteristics associated with it. Combining research on attitude theory and measurement models with insights from brand equity research, brand personality appeal is conceptualized as consisting of three dimensions: favorability, originality, and clarity. We expand upon these dimensions in the following sections.

Brand personality appeal favorability

We define *favorability* of brand personality appeal as the extent to which consumers positively regard the brand's personality. To properly assess brand personality appeal (BPA), it is not sufficient to simply know how consumers perceive a brand's personality traits. It is also necessary to understand the evaluative aspect of that personality. The evaluative aspect of the beliefs held about an object is equated with the "goodness or badness" of the attribute and can be conceptualized as the satisfaction one derives from a particular attribute (Cohen et al. 1972). An attribute that is perceived as satisfying will be viewed more favorably and will result in a more positive attitude toward the object. Conversely, an attribute that is not perceived as satisfying will be regarded as unfavorable and will result in a more negative attitude toward the object.

Keller (1993) applies this logic to the concept of brands, suggesting that a successful marketing program creates favorable brand associations among consumers such that these individuals regard the brand as an entity possessing attributes and benefits that will satisfy their needs and wants and that subsequently instill positive overall brand impressions. Similarly, a favorable brand personality—one regarded as satisfying to consumers—should lead to more positive evaluations, while an unfavorable brand personality is likely to detract from the brand's personality appeal.

Yet, a favorable brand personality might not appeal to target consumers in a way that compels them to purchase the brand. That is, favorability alone cannot explain all the variance in reactions to different brand personalities. Consumers may evaluate the personalities of several brands in a product category favorably and simultaneously regard them as indistinguishable from one another. A brand personality has to not only be favorable, but it also has to be distinguishable and different from other brand personalities in the product category to influence consumer decisions. Therefore, in addition to favorability, any brand personality appeal measure should also assess the originality of a given brand's personality.



We define *originality* of brand personality appeal as the extent to which consumers perceive the brand's personality to be novel and distinct from other brands in the same product category. Keller (1993) contends that such attributes give consumers a reason to purchase one brand over another. Original attributes contribute to a consumer's tendency to respond favorably toward a brand, which in turn compels the consumer to purchase that brand over alternatives.

The brand equity literature supports this assertion. Keller (1993) finds that the number of competing brands in a product category affects consumers' ability to recall and evaluate a particular brand. Specifically, he demonstrates that interference effects could be overcome through original attributes and/or associations, which improved brand evaluations. This suggests that a perceived original brand personality could help a brand overcome interference effects that characterize advertising processing and many purchase situations when there are numerous, similar competing products in the product category. In fact, an original brand personality might constitute a determinant attribute—a feature that really relates to or "determines" buying behavior (Myers and Alpert 1968). If a brand embodies original, unique human characteristics, then consumers might evaluate the brand's personality more favorably, which in turn could drive preferences and purchase decisions. Thus, we anticipate that brand personality appeal will be partially based on the perceived originality of the brand's personality.

Brand personality appeal clarity

A favorable, original brand personality, however, is not sufficient if this personality is not salient to target consumers (Keller 1993). A brand's personality must be accessible and recognizable to target consumers for it to appeal to them and ultimately influence their purchase decisions. Therefore, we propose clarity as a third dimension of brand personality appeal. We define *clarity* of brand personality appeal as the extent to which a brand's personality is apparent and recognizable to consumers. Any measure of brand personality appeal must take into account how salient or apparent individuals perceive a brand's personality to be. We base this assertion on Fishbein's expectancy-value model, which contends that evaluations are partially a function of the beliefs about the attributes of the object, or the probability that the object possesses particular attributes (Cohen et al. 1972). Not all beliefs about the attributes "stand out with equal prominence" in a consumer's cognitive field (Krech and Crutchfield 1948, p. 163); thus, it is important to consider how differences on



this dimension affect consumer perceptions, attitudes, and behaviors.

A belief is relatively clear when an attribute comes to mind easily and/or is recognized when thinking about or seeing the product (Van Ittersum et al. 2007). Conversely, a belief is considered to be relatively less clear when the attribute is not easily accessible and/or not recognizable to the consumer when thinking about or seeing the product. In a marketing context, these attributes can be product-related (i.e., functional and experiential benefits) or non-product-related (i.e., symbolic benefits) (Keller 1993). We regard brand personality as a non product-related attribute of a brand that has the power to add to or detract from a consumer's evaluation of the brand. In the following sections, we detail our BPA scale development efforts.

Scale development

Item generation and content validity

We generated an initial pool of 75 items after exploratory research and a review of extant measures. Our exploratory research efforts entailed 10 focus groups that were conducted with MBA students who participated in the research to earn partial class credit in a graduate-level brand management course. Each focus group session included eight to twelve participants and was comprised of 54% females with an average age of 24.3 years. The moderator for all ten groups was a paid, independent researcher with marketing research industry experience. The moderator first provided a definition of brand personality and numerous illustrations then instructed focus group participants to list several of their preferred brands. Participants subsequently used J. L. Aaker's (1997) Brand Personality Scale to characterize the nature of the brand personality they associated with each identified brand. Next, the moderator asked them a series of probing questions regarding the importance of each brand's personality, how it differed from other similar brands, and the thoughts, feelings, and behaviors that it elicited. After carefully examining the focus group transcripts and videotapes, we converted participants' open-ended responses to 49 word pair items to initially develop the various dimensions of brand personality appeal (see Richins and Dawson 1992; Shimp and Sharma 1987).

Following this, we conducted 25 in-depth interviews with a convenience sample of adult consumers of mixed age (M=39.2 years) and gender (51% female). Similar to J. L. Aaker (1997), we recruited non-faculty university employees via e-mail to take part in the in-depth interviews, and paid them a \$25 incentive for participation. The same moderator used a discussion guide and procedure that closely resembled the focus group sessions to conduct these

one-on-one interviews. While we observed considerable overlap in consumer sentiments regarding their favorite brands' personalities (as compared to our focus group participants), these interviews yielded an additional 12 unique word pair items that we incorporated into our developing BPA scale.

Consistent with established scale-development procedures (Bearden et al. 2001; Grohmann 2009; Tian et al. 2001), and to ensure that we generated a comprehensive list of BPA items, we also reviewed published scale books and identified other related measures that assess various attitudes, involvement, and similarly relevant constructs. This search produced an additional 14 potential BPA scale items. All items, regardless of their genesis, were constructed using established guidelines on item writing (see Angleitner and Wiggins 1985; Kline 1986), which recommend using simple, straightforward language appropriate for the reading level of the scale's target population and avoiding trendy expressions, colloquialisms, and other language for which familiarity can vary substantially. Using the literature as a guide, we then revised the expanded set of potential word pair items via author collaboration to eliminate redundant, complex or ambiguous pairings.

We assessed content validity of the revised 75 items in three stages using 22 different expert judges (see Bearden et al. 1989). We carefully selected expert judges for this phase of our research, based on their education—each judge holds a Ph.D. in Marketing or Psychology—and research interests (including those possessing expertise in some combination of personality or branding, and psychometrics or scale development). Each expert judge evaluated the scale items once and had no further involvement with this project. First, we presented seven judges with the list of items and asked them to qualitatively assess the extent to which each word pair represented opposite ends of the same semantic continuum. This resulted in a very slight modification and refinement of some items. We then provided eight additional judges with a definition, a related explanation and an illustrative item for each BPA dimension (i.e., BPA Favorability, Originality, and Clarity). This second group of judges was instructed to assign each item to one of the three dimensions or alternatively to a "not applicable/other" dimension.

Those items that were not assigned to the correct dimension by a minimum of seven judges were eliminated from further consideration. This resulted in a revised set of 60 items. We submitted this set of items to a third panel of seven judges along with a definition of each dimension. We instructed these judges to rate each scale item as being "clearly," "somewhat," or "not" representative of the intended dimension. We retained only those items evaluated as *clearly representative* by at least five judges. This process resulted in a refined 40-item scale with multiple items to represent each of the three dimensions (BPA)



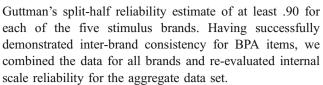
Favorability: 14, Originality: 11, Clarity: 15). In the subsequent sections, we elaborate on five studies that were conducted to further refine the scale. This discourse is followed by a description of an additional experimental study conducted to demonstrate the practical relevance of the scale.

Study 1: Item purification

Stimuli selection To develop a generalizable scale that functions well with multiple brands, we selected five wellknown national brands representing a spectrum of personality types and product categories. We based our selection on extensive pretesting of the brands used in J. L. Aaker's (1997) groundbreaking research by first identifying brands that clearly exemplified at least one dimension of brand personality. We then substantiated the personality of each brand by administering Aaker's (1997) BPS with a convenience sample of 53 adult consumers (M=32.4 years, 47% female). To ensure that subjects would be motivated and able to meaningfully evaluate the brands, we concurrently administered Zaichowsky's (1994) personal involvement inventory and Kent and Allen's (1994) brand familiarity scale. Based on pretest results, the following brands were ultimately retained: Crest (competence); Pepsi (excitement); Levi's (ruggedness); Hallmark (sincerity); and Macy's (sophistication).

Method Student investigators from an undergraduate marketing class administered the Brand Personality Scale (BPS) and our 40-item Brand Personality Appeal (BPA) scale to a sample of 241 adult subjects. The investigators received partial course credit for their participation. Survey packets included a cover letter explaining the purpose of the research and detailed response instructions. Following Mick's (1996) data collection guidelines, we instructed the investigators to obtain responses from both genders, to include one respondent from each of four age groups (21-30, 31-40, 41-50, and >50 years) and to exclude personal family members or other students. Validation telephone calls were made to a sub-sample of 125 participants (52%) to ensure that proper data collection procedures were followed and to assess response consistency. Feedback from respondents indicated that proper interview procedures were followed. Both genders were adequately represented (47% female), the median age category was 31-40 years of age, and the average age of the sample population was 42 years.

Item analyses Mean Brand Personality Scale scores for each brand were highest on the intended brand personality dimension. In addition, the Brand Personality Appeal items had an item-to-total correlation of 0.50 or higher on their respective subscale and a Cronbach alpha level and



We analyzed the factor loadings using principal factor analysis with oblimin rotation and then examined the corrected item-to-total correlations and inter-item correlations for each factor. We assessed the factorability of the data using Kaiser-Meyer-Olkin tests of sampling adequacy (kmo=.945) and Bartlett tests of sphericity ($\chi^2=6284.11$), which yielded results suggesting that using factor analysis was appropriate. We eliminated any items with: (a) factor loadings below .40; (b) corrected item-to-total subscale correlations below .30; or (c) inter-item correlation below .20 (see Briggs and Cheek 1986). Items that did not have statistically higher correlations with the dimension to which they were hypothesized to belong (in comparison to item correlations with remaining dimensions' total scores) were also deleted (see Bearden et al. 1989). Finally, we reassessed the clarity of retained items in terms of their meaning and relationship to the designate dimension. Together these analyses resulted in a reduced 18-item scale comprised of the same three dimensions (BPA Favorability: 8, Originality: 4, and Clarity: 6).

Study 2: Content validity assessment

Following procedures recommended by Lawshe (1975), we asked a Content Evaluation Panel of five members to assess the content validity of the 18-item BPA measure. Each member of this panel holds a doctorate degree and actively conducts research in the area of personality or branding. Independent of other panelists, each member was first provided with a definition of Favorability, and then asked to respond to the following question for each of its constituent items: *Is this item* (essential; useful but not essential; or not necessary) to the measurement of this construct? We calculated the Content Validity Ratio (CVR) for each item using the following ratio:

$$CVR = \frac{n_e - N/2}{N/2}$$

in which n_e is the number of panelists indicating "essential" and N is the total number of panelists. With the exception of the unagreeable/agreeable item, all of the Favorability scale items met the scale development criteria (0.99) with all five panelists. Only three of five panelists rated the unagreeable/agreeable Favorability item as essential, giving this item a CVR of only .20. Hence, this item was



eliminated on the basis of this content validity assessment. Next, we computed the Content Validity Index (*CVI*) (i.e., the mean of the *CVR* values of the retained items) for the entire Favorability scale. The *CVI* for the Favorability scale was .99, suggesting significant overlap between the scale items and the domain they are meant to assess.

The same procedure was followed for Originality scale items, resulting in a CVR value of .99 for each Originality item and a CVI value of .99 for the Originality scale. Thus, all four Originality items were retained. Following the identical procedure for the Clarity scale items, the CVR value for three of six items was .99. However, CVR values for three items (memorable/forgettable CVR=.20; distinct/ indistinct CVR=.60; and, unclear/clear CVR=.60) suggested potential problems with content validity. Since four of five panelists rated distinct/indistinct and unclear/clear as "essential," we retained both of these items. Only two panelists rated memorable/forgettable as "essential." Thus, we eliminated this item. Doing so raised the CVI value for Clarity from .728 to .834. Following this content validity assessment, the 16-item BPA measure was comprised of seven items for Favorability, four items for Originality, and five items for Clarity.

Study 3: Assessment of latent structure, dimensionality, reliability, and validity

Confirmatory factor analysis Trained student investigators administered the refined 16 Brand Personality Appeal items to a second sample of 196 adult subjects following the same procedures outlined in Study 1, except that the stimulus product was now limited to one brand in one product category (Crest toothpaste). The average age for these respondents was 43 years, and the gender mix was balanced (51% female). We evaluated the 16 BPA items and their structure using a series of confirmatory factor models to determine the best representation of the data. The estimated models included: (a) a null model; (b) a one-factor model in which all 16 items loaded on a single factor; (c) a twofactor uncorrelated model in which the Favorability and Clarity items were forced on one factor and the Originality items on a second factor; (d) a two-factor correlated model with similar loadings as the two-factor uncorrelated model; (e) a three-factor uncorrelated model in which the Favorability, Originality, and Clarity items loaded on their corresponding factors; and (f) a three-factor correlated model with similar loadings as the three-factor uncorrelated model. We expect the three-factor correlated model to achieve the best fit of all models tested, as this model best represents our conceptualization of brand personality appeal.

As Table 1 indicates, the three-factor correlated model does show the best fit relative to the other comparison

models (χ^2 (101)=212.55). The CFI and TLI exceed the recommended value of .90 (Byrne 1998) and the RMSEA (.075) is within the range of acceptable fit (Browne and Cudeck 1993). The chi-square difference tests additionally support the three-factor correlated model. The chi-square difference test between the three-factor uncorrelated and the three-factor correlated model is also statistically significant ($\Delta\chi^2$ (3)=164.79, $p\leq$.05). Overall, these results suggest that the three-factor correlated model is more representative of the data than the other models tested.

Internal scale reliability Estimates of internal consistency reliability for each dimension (see Nunnally 1978) were as follows: Favorability α =.948 (r_G =.936); Originality α =.788 (r_G =.757); Clarity α =.866 (r_G =.779). Construct reliability estimates (see Fornell and Larcker 1981) based on the standardized loadings for the three-factor correlated model were .875, .796, and .833 for Favorability, Originality, and Clarity, respectively. All indicator t-values were statistically significant (p<=.05).

Convergent validity In addition to evaluating the 16 BPA items, single validation items for each dimension were also assessed using the procedures recommended by Bagozzi (1993). To measure these items, at the conclusion of each survey we presented participants with a blanket statement that corresponded to each of the three BPA dimensions and then asked them to indicate the extent to which they (dis) agreed with the statement using a 7-point Likert scale. Pairwise correlations between the three BPA dimensions and their respective single-item convergent validity measures averaged .601 and were: .643 (Favorability); .507 (Originality); and .652 (Clarity). All of the correlations were statistically significant $(p \le .05)$ and hence offer evidence of convergent validity. In each case, the correlation of the single-item convergent validity measure with its corresponding dimension was higher than the correlations with the other two dimensions.

Discriminant validity We next examined the discriminant validity of the three dimensions using methods recommended by Fornell and Larcker (1981). Specifically, we compared the Brand Personality Appeal measure to four scale items that are traditionally used to assess purchase intentions (Juster 1966; Kalwani and Silk 1982). Purchase intentions were chosen for inclusion because this measure is conceptually related to, but distinct from, brand personality appeal. That is, whereas brand personality appeal gauges perceptions of a brand's personality, purchase intentions reflect a plan to purchase a particular brand in the future (Kalwani and Silk 1982) and it is more appropriately conceived as an outcome of BPA. Data from this study demonstrated that the average correlation



Table 1 Confirmatory factor analysis results

Model	Chi-square	Degrees of freedom	Chi-square difference ^a		<i>GFI</i> ^b	CFI ^c	TLI (NNFI) ^d	RMSEA ^e
Null	5969.39	120	-					
One-factor	560.20	104	5409.19*	One-factor	0.74	0.94	0.93	0.150
Two-factor (uncorrelated)	374.77	104	185.43*	Two-factor (uncorrelated)	0.81	0.96	0.95	0.116
Two-factor (correlated)	346.40	103	28.37*	Two-factor (correlated)	0.82	0.97	0.96	0.110
Three-factor (uncorrelated)	377.34	104	-30.94*	Three-factor (uncorrelated)	0.81	0.95	0.94	0.116
Three-factor (correlated)	212.55	101	164.79*	Three-factor (correlated)	0.88	0.98	0.98	0.075

^a The chi-square difference test compares the null model with the one-factor model, the two-factor uncorrelated model with the one-factor model, and so forth

between the three dimensions and purchase intentions is a moderate positive correlation (r=.521, p≤.05). We obtained evidence of discriminant validity for BPA using Fornell and Larcker's (1981) test, which involved comparing the pairwise correlations between factors obtained from the fully correlated measurement model with the variance extracted estimates for the constructs making up each possible pair. The average variance extracted for Favorability (AVE=.729), Originality (AVE=.501), and Clarity (AVE=.582) exceeded the square of their correlation with purchase intentions, as did the average variance extracted for purchase intentions (AVE=.881).

Study 4: Assessment of test-retest reliability

Test-retest reliability We examined the test-retest reliability of the refined 16 items using a new convenience sample of undergraduate marketing students (N=157). These subjects evaluated Colgate toothpaste by responding to the Brand Personality Appeal measure on two different occasions, separated by approximately 2 months. The survey was initially administered during class time and took approximately 10 min to complete. Seven weeks later, the scales were administered a second time to the same respondents. Test-retest correlations for the three BPA dimensions were as follows: .852 (Favorability); .694 (Originality); and .740 (Clarity) (all ps≤.05).

Study 5: Assessment of concurrent validity

We assessed the concurrent (known-groups) validity of the 16 items by investigating whether the measure could distinguish

between groups of people for which meaningful differences in the three dimensions are expected to occur (see Lastovicka et al. 1999). Specifically, we collected surveys from 171 adults who owned either a Ford (N=87) or Chevrolet (N=84) truck/sport utility vehicle. A local automobile repair shop provided us with a list of customers who were serviced within the preceding 6 months and with a discount coupon to offer subjects as an incentive to participate in the study. Our sample was comprised of an almost even gender split of 48% females with the median age falling in the 31–50 years category and an average age of 39 years.

We sent our initial mailing to a sample of 300 customers (50% Ford owners, 50% Chevrolet owners). In addition to the discount coupon incentive, we included a cover letter explaining our research purpose, detailed instructions for responding, and a brief survey (comprised of the Brand Personality Appeal scales, the Brand Personality Scale and a purchase intentions scale for both automobile brands). To assess the presence of nonresponse bias, we compared mean scores across the three BPA dimensions for the last quarter of the sample with the rest of the sample (Armstrong and Overton 1977; Groves 2006). Results yielded no differences in the average scores of late versus early responses.

Estimates of internal consistency reliability for each dimension were as follows: Favorability (α =.933; r_G =.925);, Originality (α =.912; r_G =.896), Clarity (α =.925; r_G =.903). Two tests of known-groups differences were conducted with the comparison groups representing consumers with different perceptions of the personality of Ford and Chevrolet trucks. The Favorability ratings (M=6.32, SD=.564), Originality ratings (M=6.24, SD=.523), and Clarity ratings (M=6.37, S=.509) of Ford trucks were significantly higher among Ford owners than those of Chevrolet owners ($M_{\rm Favorability}$ =3.67, SD=.617, t(169)=17.33, p<.05; $M_{\rm Originality}$ =3.58, SD=.561,



^b *GFI* = Goodness of Fit Index

^c CFI = Comparative Fit Index

^d TLI (NNFI) = Tucker-Lewis Index (Non-Normed Fit Index)

^e RMSEA = Root Mean Square Error of Approximation

^{*}p≤.05

t(169)=16.12, $p \le .05$; $M_{\text{Clarity}}=3.61$, SD=.617; t(169)=18.01, $p \le .05$). Conversely, Chevrolet owners rated Chevrolet trucks significantly higher on Favorability (M=6.21, SD=.591), Originality (M=6.29, S=.614), and Clarity (M=6.33, S=.578) than did Ford owners ($M_{\text{Favorability}}=3.59$, SD=.628, t(169)=18.21, $p \le .05$; $M_{\text{Originality}}=3.53$, SD=.601, t(169)=18.78, $p \le .05$; $M_{\text{Clarity}}=3.71$, SD=.552; t(169)=16.41, $p \le .05$). These statistically significant comparisons provided additional support for the 16-item Brand Personality Appeal measure, which appears in Table 2.

Application of the brand personality appeal measures

To provide additional evidence of the usefulness of capturing the brand personality appeal dimensions, we conducted an experimental study. The primary objectives of this study were to demonstrate the utility and interaction of the three dimensions and to establish the unique importance of brand personality appeal in a context that was both theoretically and practically relevant.

Pretest development

We conducted several pretests to assist in product selection and stimulus development and employed a 2×2×2 betweensubjects factorial design consisting of two levels of Brand Personality Favorability (high and low), Brand Personality Originality (high and low), and Brand Personality Clarity (high and low). An initial pretest was necessary to identify a product for which subjects had sufficient familiarity and involvement so that they would be motivated and able to comprehend and process the stimulus materials. A second intent of this pretest was to identify a product for which familiarity and involvement levels were fairly homogeneous, thus providing some control for these variables. Additionally, we sought to select a target product for which perceived brand personality varied considerably across competitors within the same product category.

We administered Zaichkowsky's (1994) Personal Involvement Inventory and Kent and Allen's (1994) Brand Familiarity Scale to 50 subjects for 20 different products. Responses to involvement and familiarity items were averaged to form composite measures of each for all product categories. After providing a definition of brand personality to subjects, we asked consumers to respond to the following four agree/disagree items designed to assess variance in products' brand personalities: The personalities of brands in this product category are pretty much the same; Brands in this product category have very different brand personalities; The personalities of brands in this product category vary a lot; and Brands in this product category have personalities that are very similar to one another. Pretest results suggested that a magazine targeted toward career-oriented college students was likely to conform to the established criteria for this subject pool.

Table 2 Final brand personality appeal (BPA) items with factor loadings

		Factor loadings				
Item		BPA favorability	BPA originality	BPA clarity		
1	This brand's personality is unapparentapparent	.350	.321	.870		
2	This brand's personality is distinctindistinct ^a	.266	.277	.765		
3	This brand's personality is satisfactoryunsatisfactory	.902	.379	.246		
4	This brand's personality is obviousnot obvious	.339	.098	.829		
5	This brand's personality is unpleasantpleasant	.902	.320	.252		
6	This brand's personality is commondistinctive	.311	.829	.237		
7	This brand's personality is attractiveunattractive	.864	.354	.275		
8	This brand's personality is ordinarynovel	.312	.865	.179		
9	This brand's personality is positivenegative	.828	.170	.322		
10	This brand's personality is badgood	.906	.205	.369		
11	This brand's personality is vaguewell-defined	.265	.339	.787		
12	This brand's personality is poorexcellent	.883	.317	.272		
13	This brand's personality is undesirabledesirable	.895	.235	.307		
14	This brand's personality is predictablesurprising	.251	.717	.103		
15	This brand's personality is routinefresh	.278	.647	.325		
16	This brand's personality is unclearclear	.349	.222	.896		

Each BPA dimension's constituent scale items are bolded



^a Italicized items were reverse scored so that a higher rating designated a more favorable attitudinal response

Relative to other products, subjects were sufficiently involved (M=4.61 on a seven-point scale) and familiar (M=6.26 on a seven-point scale) with professional magazines and variance for involvement and familiarity (SD=1.09 and SD=1.31, respectively) was also minimal. Further, subjects perceived variance in the brand personalities of different professional magazines to be substantial (M=5.63)

With the appropriate product (i.e., magazine) identified, we then turned our attention to its content, namely developing the high and low levels of the three BPA dimensions. We asked a separate group of undergraduate participants (N=55) to write down all expectations they had about a professional magazine aimed at college students preparing to enter the work force. This provided us with information about the types of article topics that would credibly appear in such a publication. We also asked subjects to complete J. L. Aaker's (1997) BPS measure to indicate which personality traits would be "typical" for a magazine like this. Analysis revealed that participants expected marketers to position such a magazine as competent, accomplished, assertive, and in control. These findings provided the basis for the low-Originality condition of our Originality manipulation.

With a third and distinct group of undergraduate participants (N=51), we explained the product concept and described our previous findings regarding what would constitute a "typical" professional magazine targeting career-minded college students. We asked subjects to complete the Brand Personality Scale to indicate which personality characteristics would be interesting and unique for this sort of publication. Analysis revealed that participants would view a more exciting, energetic, young, and trendy magazine in this light. We used these results to develop the high-Originality condition of the Originality manipulation.

We conducted a fourth pretest with undergraduate participants (N=63) to determine suitable fictitious brand names for both the low-Originality (competent) and high-Originality (exciting) magazine concepts that would lend credence to the presumed purpose of the research and eliminate any preconception bias associated with established brand names. Based on this pretest, we chose *Drive* as the name for the brand with the low-Originality (competent) personality and Launch as the name for the brand with the high-Originality (exciting) personality. In the treatment condition featuring the high-Originality (exciting) brand personality, the headline stated "Launch...see your career blast off" and featured bold, italicized Imnact font script and red and yellow lettering on a black background. Descriptors like "daring," "exciting," "imaginative," and "contemporary" were used in article titles to communicate the Originality of Launch's brand personality. In contrast, the cover for the low-Originality (competent) magazine stated "Drive...travel the road to success" and featured Cooper Black font and a navy-blue, red, and pale grey color scheme. To communicate the less unique (competent) personality of Drive, we employed words like "works hard," "professional," "confident" and "in control" in the body copy.

Using the Originality manipulation as a foundation, we then developed the manipulation for Favorability. Building on personality traits comprising the facets of competence and excitement in J. L. Aaker's (1997) Brand Personality Scale (BPS), we generated an exhaustive list of additional descriptors that were semantically related to both of these BPS dimensions, including adjectives of positive and negative valence. We asked a fifth sample of undergraduate students (N=71) to respond to the following statement for each descriptor using a 7-point scale: A professional magazine for college students that possesses a personality would be unfavorable...favorable. While the more positive facets of each dimension were straightforward, through this exercise we also identified negative traits associated with both competence (e.g., superior, aloof, and arrogant) and excitement (e.g., reckless, edgy, and volatile) that we used to develop the low-Favorability condition of the Favorability manipulation.

Developing the Clarity manipulation entailed creating treatment conditions that instilled variance in the extent to which participants believed the stimulus brand possessed a specific personality. To do this, we varied the article titles, using fewer (more) brand personality adjectives and more (fewer) generic descriptions for the low (high)-Clarity condition. We were careful to hold the quality and quantity of information constant (see Keller and Staelin 1987) so that these factors did not create confounds in the manipulation. In a sixth and final pretest, we asked undergraduate students (N=68) to evaluate the Clarity of two magazine covers using our five Clarity items (This magazine's brand personality is: unapparent...apparent; distinct... indistinct; obvious...not obvious; memorable...forgettable; and, vague...well-defined). Results suggest that subjects regarded the brand personality of magazines in the high-Clarity condition (M=5.29) as significantly stronger than the low-Clarity brand personality $(M=3.02; F(1, 66)=129.41, p \le .05).$

Based on pretest results, we constructed eight full-page color magazine covers to correspond to the experimental treatments, each with identical layouts and spacing. We manipulated all three dimensions by varying the copy of the magazine covers, including the overall tonality, brand identity elements, visuals and content (see Swaminathan et al. 2009). Although all of the articles in stimulus magazines across conditions addressed topics including interviewing, resume building, networking, mentoring, internships, workplace ethics, and professional attire, the adjectives used to describe the magazine content appropriately varied according to the specific manipulation.



Assessment of predictive validity

Following pretesting and stimulus development, a sample of undergraduate students (N=160) participated in an experiment to fulfill course requirements for a marketing class in which they were enrolled. Participants were randomly assigned to each of the eight treatment conditions. We administered the experiment to small groups using MediaLab software in a behavioral laboratory with individually partitioned computer stations, so that subjects could perform the experimental task in a self-paced manner.

We informed participants that this was a consumer research study dealing with their opinions about a new professional magazine targeting college students who would be graduating and beginning their careers soon. Since the Favorability and Clarity manipulations stemmed from the Originality induction, we included a measure to assess its effectiveness. All participants were asked to rate the applicability of multiple personality descriptors for excitement (spirited, up-to-date, trendy, stimulating, invigorating, independent, unique) and competence (reliable, hard working, secure, intelligent, technical, corporate, successful, leader and confident) using 7-point semantic differential scales. The multiple items for each brand personality dimension were then averaged, producing composite scores with high reliability (excitement α =.909 $[r_G=.984]$; competence $\alpha=.887$ $[r_G=.879]$).

Following manipulation checks, subjects were also asked to indicate the likelihood that they would purchase the magazine they saw using four seven-point semantic differential items (anchored by very likely...not at all likely, very probable...not at all probable, very possible...not at all possible, and very certain...not at all certain). This was done to assess the impact of the three dimensions of brand personality appeal on purchase intentions. Consistent with prior research assessing purchase intentions (e.g., Bennett and Harrell 1975; Dover and Olson 1977; MacKenzie 1986; Marks and Kamins 1988; Smith and Swinyard 1983), an average of the scale items was used to form a composite purchase intention measure. Finally, we asked participants to rate the magazine that they evaluated using J. L. Aaker's (1997) 42-item Brand Personality Scale, and to complete our measures for Favorability, Originality, and Clarity.

Analysis of manipulation checks

Consistent with our expectations and pretest findings, ANOVAs on the *excitement* measure $(F (1, 158) = 127.69, p \le .05)$ and the *competence* measure $(F (1, 158) = 146.03, p \le .05)$ both yielded statistically significant results. Participants rated **Launch** (M=5.97) as higher on excitement than Drive (M=3.41) and Drive (M=6.03) as higher on competence than **Launch** (M=3.89), suggesting that our

Originality manipulation operated as intended. We also observed a statistically significant main effect for the Originality manipulation check (F(1, 158)=137.43, $p \le .05$), with higher ratings for **Launch** (M = 6.03) than (M=3.58). Similarly, an ANOVA on the Favorability manipulation check yielded a significant main effect $(F (1, 158)=112.80, p \le .05)$ with significantly higher ratings among subjects in the high-Favorability condition (M=5.46) than for subjects in the low-Favorability condition (M=3.21). Finally, an ANOVA on the Clarity manipulation check revealed a significant main effect (F $(1, 158)=124.37, p \le .05$, with higher ratings among subjects in the high-Clarity condition (M=5.11), as compared to those in the low-Clarity condition (M=3.29). Taken together, initial results suggest that all manipulations operated in the intended manner.

Assessment of BPA's impact on purchase intentions

Table 3 presents the overall regression results denoting how the three dimensions of Brand Personality Appeal impact purchase intentions. We centered the independent variables to maximize interpretability and minimize problems of multicollinearity (Aiken et al. 1991). Model 1 shows the main effects of the three dimensions, while Model 2 denotes the main effects plus the two-way interactions. Model 3 presents the full model including all interaction terms. Results of this analysis reveal a statistically significant three-way interaction, which indicates the interaction of Favorability, Originality, and Clarity impacts purchase intentions and renders interpretations of the two-way interactions and main effects conditional.

To better understand the intricacies of the three-way interaction and the degree to which each dimension helps predict purchase intentions, we followed procedures recommended by Aiken et al. (1991) and Jaccard and Turrisi (2003) to examine the null hypothesis that the coefficients for Favorability at high and low levels were different from zero. Specifically, we estimated values of the slope of purchase intentions on Favorability (F) at different combinations of Originality (O) and Clarity (C), creating four scenarios under which to describe the slope: (1) a low value on O and a low value on C; (2) a low value on O and a high value on C; (3) a high value on O and a low value on C; (4) a high value on O and a high value on C. The "high" and "low" values were defined as one standard deviation above and one standard deviation below the sample means of O and C, respectively. We then computed standard errors and t-scores of the slopes to test whether the impact of the scale dimensions are significantly different from zero under these various conditions. That is, we examined the amount by which purchase intentions change when Favorability



**p*≤.05

Table 3 Regression results for the relationship between BPA and purchase intentions

Independent variable	Model 1	Model 2	Model 3	
Intercept	3.802 (.048)*	3.799 (.038)*	3.767 (.033)*	
BPA Favorability	.784 (.046)*	.804 (.036)*	.815 (.031)*	
BPA Originality	.392 (.033)*	.417 (.026)*	.430 (.022)*	
BPA Clarity	.506 (.049)*	.546 (.038)*	.543 (.033)*	
BPA Favorability × BPA Originality	_	.155 (.024)*	.150 (.021)*	
BPA Favorability × BPA Clarity	_	.208 (.036)*	.202 (.031)*	
BPA Originality × BPA Clarity	_	.116 (.026)*	.117 (.022)*	
BPA Favorability × BPA Originality × BPA Clarity	_	_	.154 (.021)*	
Model F	184.77*	167.948*	204.454*	
Adjusted R^2	.776*	.863*	.900*	

Standard deviations are noted in parentheses

changes by one unit under varying conditions of Originality and Clarity. Results of this analysis are presented in the top panel of Table 4.

The interplay among Favorability and the other dimensions is graphically depicted in Fig. 1. Combined, these results indicate that subjects are significantly more likely to purchase brands perceived as having a brand personality high on F. This result is more punctuated when a brand also possesses high O and C. Interestingly, when a brand is low on both F and O, higher C results in significantly lower purchase intentions than lower C. This suggests that subjects are less likely to purchase a brand that clearly has a brand personality they regard as unfavorable or lacking in originality. Also of note are findings for brands perceived as low on O and C. When a brand's personality is not original or clear, it depresses the positive impact of a favorable impression.

We repeated these analytical procedures by next examining the impact of O on purchase intentions as a function of F and C (see middle panel of Table 4 and Fig. 2). As demonstrated, subjects express significantly higher purchase intentions when they perceive brands as having an original brand personality. As seen with previous results, this impact is more pronounced when a brand also possesses high F and C. Interestingly, when a brand is low on F and C, the impact of O on purchase intentions is not statistically significant.

Finally, we examined the impact of C on purchase intentions as a function of F and O (see bottom panel of Table 4 and Fig. 3). Overall, subjects are significantly more likely to purchase brands they regard as having clear brand personalities. A notable exception occurs for brands with personalities perceived as low on both F and O; greater C is associated with lower purchase intentions than having less

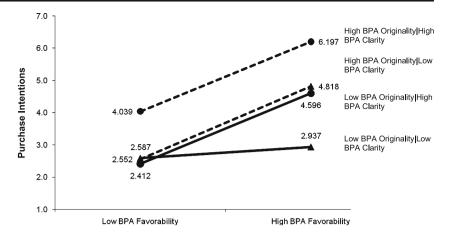
Table 4 Impact of BPA on purchase intentions

Grouping variable: B	BPA favorability							
	Low BPA or	riginality		High BPA o	High BPA originality			
	Beta	Standard Error	t value	Beta	Standard Error	t value		
Low clarity	.1639	.0620	2.644*	1.0615	.0570	18.618*		
High clarity	1.024	.0570	17.951*	1.0111	.0620	16.312*		
Grouping variable: B	BPA originality							
	Low BPA fa	vorability		High BPA f	High BPA favorability			
	Beta	Standard Error	t value	Beta	Standard Error	t value		
Low clarity	0118	.0416	284	.6375	.0451	14.122*		
High clarity	.5517	.0463	11.916*	.5427	.0430	12.630*		
Grouping variable: B	BPA clarity							
	Low BPA fa	vorability		High BPA f	High BPA favorability			
	Beta	Standard Error	t value	Beta	Standard Error	t value		
Low originality	0877	.0650	-1.348	.8284	.0638	12.99*		
High originality	.7425	.0660	11.25	.6887	.0665	10.353*		

^{*}*p*≤.05



Figure 1 Impact of BPA on purchase intentions under high and low BPA favorability.



C when the brand's personality is low on F and O. Again, this suggests that subjects' purchase intentions might be lower when they can clearly detect a brand's personality as unfavorable and unoriginal than when these dimensions are relatively less obvious.

Discussion

The brand personality literature has evolved beyond a point of simply recognizing the existence of a brand personality to one where scholars and managers alike are now interested in its practical and impactful implications. As previously noted, this research seeks to partially address this increased interest by investigating consumers' perceptions of a brand's given personality and how that impacts their purchase intentions. We do this through the conceptualization, development, and empirical validation of three dimensions of brand personality defined as Brand Personality Appeal.

Results indicate that all three dimensions are important and that consumer purchase intentions are optimized when Favorability, Originality, and Clarity are each at high levels.

Figure 2 Impact of BPA on purchase intentions under high and low BPA originality.

While this represents the optimal solution for combinations of the three dimensions, reality dictates that managers must be able to develop strategy under multiple, sub-optimal scenarios. For example, when perceptions of the Favorability dimension are low, this can be offset to a large degree by high perceptions of Originality or Clarity. The results also demonstrate that when specifically assessing the overall impact of Favorability on purchase intentions, Originality perceptions are somewhat more meaningful to consumers than Clarity.

Further, when perceptions of Originality are low, purchase intentions can be boosted by high perceptions of Favorability or Clarity. A more detailed examination shows that perceptions of Favorability are more impactful than Clarity. Similarly, when assessing the impact of the Clarity dimension on purchase intentions, results indicate that when perceptions of Clarity are low, purchase intentions are elevated by either high Favorability or high Originality with Favorability perceptions being the more impactful of the two.

In sum, while all three dimensions are apparently important, managers would be well advised to closely monitor consumer perceptions of the Favorability dimen-

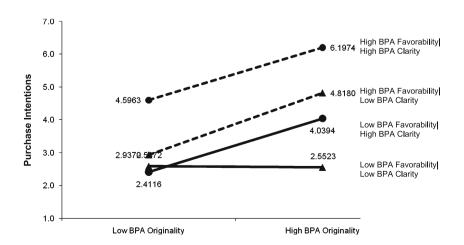
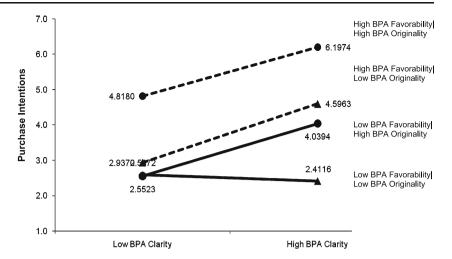




Figure 3 Impact of BPA on purchase intentions under high and low BPA clarity.



sion given its relative, inflationary impact on purchase intentions across multiple scenarios. The next dimension of relative importance with respect to purchase intentions appears to be Originality followed by Clarity. This is interesting because, while the perceived originality and clarity of a given brand personality definitely appeal to consumers, it appears that a favorable brand personality is the key driver of their purchase intentions. While the consumer's perception of clarity has the lowest relative ranking of the three dimensions, it seems to have an influential role in that it can accentuate both positive and negative perceptions of the other two dimensions.

The brand personality literature has matured to the point that marketers generally take its existence as a given and now seek to parse the construct into more meaningful facets and to apply it to different scenarios. Our current research represents a stride forward for both scholars and marketing managers. By understanding the degree of appeal of a brand's personality as well as its underlying dimensions, managers are better able to determine the relevance, potency, and endurance of a particular brand personality. The issue of brand personality appeal is important to managers for several reasons. In an economically challenging environment—as firms currently face—advertisements and promotions are often among the first expenditures cut. Thus, the greater the perceived brand personality appeal, the greater its ability to linger in a consumer's mind until the next promotional cycle returns to reinforce the image.

Furthermore, in an era of hyper competition and accelerated commoditization of products and services (Kim and Mauborgne 2005), a brand's personality may be used to appeal to consumers and differentiate the brand from competitors. In essence, managers are increasingly turning to brand personality as a practical and requisite marketing tool. The brand personality appeal dimensions provide them with a more refined strategic tool than was previously available. This information is useful in deter-

mining timing for promotional cycles as well as the potential impact of less frequent cycles. During times of economic constriction, marketing managers might be better able to determine which brands will suffer relatively less from reduced advertising support. The degree of brand personality appeal (e.g., high-Favorability or high-Originality) is also an indicator of the potential resistance marketers might face if contemplating repositioning an existing brand personality via a new promotional campaign.

An additional contribution of this research lies in the utility it holds for marketing managers. In assessing advertising and promotional efforts aimed at brand personality development, marketers are no longer restricted to qualitative and projective techniques (Levy 1978, 1985), recall and pre-post persuasion measures (McQueen 1990), measures of brand preferences (Higie and Sewall 1991), or other traditional measures (Stewart et al. 1985). While these methods ascertain whether certain tools create the desired brand personality perceptions, they do not necessarily possess the capability to predict what consumer reactions to that personality will be. The three scale dimensions provide a useful alternative that permits a sensitive measurement of the effects of marketing strategies on brand personality perceptions by allowing marketers to discriminate among different ad executions and promotions and to better understand the likely impact such efforts would have on the promoted brand's personality appeal dimensions.

This research also adds to the body of knowledge pertaining to brand personality by giving scholars a valuable tool for studying its effects. We believe that the Brand Personality Appeal (BPA) dimension scales represent a cognate and compatible measure to the Brand Personality Scale (BPS) that could be used in conjunction with the BPS in scholarly research to explore the effects of various branding strategies on consumer perceptions of brand personality. Together, the two complementary scales would help researchers to diagnose and describe a given brand's



personality (i.e., using BPS) while also quantifying the impact of that brand personality on related consumer perceptions (i.e., using BPA). Using the Brand Personality Appeal scales as the outcome variables in other research would also provide a more precise measurement of initiatives meant to create, build, or change a brand's personality by actually assessing impressions or appeal of that personality.

There are multiple avenues of future research for these measures. Research is needed to examine other interesting and untested relationships among the constructs comprising the brand-equity nomological network in which brand personality resides. Further, although the usefulness of these measures was demonstrated in the application study, the scale items could easily be adapted for application with other brand associations (i.e., beyond brand personality). Consumer evaluations of brand attributes (e.g., product ingredients, service functions, pricing information, packaging, user imagery, usage imagery) and benefits might now be measured more directly and systematically. Doing so would facilitate the assessment of congruence among brand associations and thus the cohesiveness of the brand image (see Keller 1993).

Acknowledgements The authors wish to express thanks to the Editor and four anonymous reviewers for their insightful and constructive comments on this manuscript during the revision process. They also thank Ryan Freling and Ann McFadyen for additional contributions.

References

- Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. New York: The Free Press.
- Aaker, D. A. (1992). The value of brand equity. The Journal of Business Strategy, 13, 27–32.
- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34, 347–356.
- Aaker, J. L. (2000). Accessibility or diagnosticity? Disentangling the influence of culture on persuasion processes and attitudes. *Journal of Consumer Research*, 26, 340–357.
- Aaker, J. L., Benet-Martinez, V., & Garolera, J. (2001). Consumption symbols as carriers of culture: a study of Japanese and Spanish brand personality constructs. *Journal of Personality and Social Psychology*, 81, 492–508.
- Aiken, L. S., Reno, R. R., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage Publications.
- Angleitner, A., & Wiggins, J. S. (1985). Personality assessment via questionnaires. New York: Springer-Verlag.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mail surveys. *Journal of Marketing Research*, 14, 396–440.
- Azoulay, A., & Kapferer, J. N. (2003). Do brand personality scales really measure brand personality? *Journal of Brand Manage*ment, 11, 143–155.
- Bagozzi, R. P. (1993). Assessing construct validity in personality research: applications to measures of self-esteem. *Journal of Research in Personality*, 27, 49–87.

- Batra, R., & Homer, P. M. (2004). The situational impact of brand image beliefs. *Journal of Consumer Psychology*, 14, 318–330.
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 9, 183–194.
- Bearden, W. O., Hardesty, D. M., & Rose, R. L. (2001). Consumer self-confidence: refinements in conceptualization and measurement. *Journal of Consumer Research*, 28, 121–134.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15, 139–168.
- Bennett, P. D., & Harrell, G. D. (1975). The role of confidence in understanding and predicting buyers' attitudes and purchase intentions. *Journal of Consumer Research*, 2, 110–117.
- Biel, A. L. (1992). How brand image drives brand equity. *Journal of Advertising Research*, 32, RC6–RC12.
- Biel, A. L. (1993). Converting image into equity. In D. A. Aaker & A. L. Biel (Eds.), *Brand equity and advertising* (pp. 67–82). Hillsdale: Lawrence Erlbaum.
- Briggs, S. R., & Cheek, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality*, 54, 106–148.
- Browne, M. W., & Cudeck, R. A. (1993). Alternative ways of assessing fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park: Sage.
- Byrne, B. M. (1998). Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming. Mahwah: Erlbaum Associates.
- Cohen, J. B., Fishbein, M., & Ahtola, O. T. (1972). The nature and uses of expectancy-value models in consumer attitude research. *Journal of Marketing Research*, 9, 456–460.
- Dover, P. A., & Olson, J. C. (1977). Dynamic changes in expectancy value attitude model as a function of multiple exposures to product information. In B. A. Greenberg & D. N. Bellenger (Eds.), Contemporary marketing thought (pp. 455–459). Chicago: American Marketing Association.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Fournier, S. (1998). Consumers and their brands: developing relationship theory in consumer research. *Journal of Consumer Research*, 24, 343–373.
- Freling, T. H., & Forbes, L. P. (2005). An examination of brand personality through methodological triangulation. *Journal of Brand Management*, 13, 148–162.
- Gibbons, J. (2008). Discover your bank's personality. *ABA Bank Marketing*, (November), 30–35.
- Grohmann, B. (2009). Gender dimensions of brand personality. *Journal of Marketing Research*, 46, 105–119.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70, 646–675.
- Higie, R., & Sewall, M. A. (1991). Using recall and brand preference to evaluate advertising effectiveness. *Journal of Advertising Research*, 31, 56–63.
- Juster, F. T. (1966). Consumer buying intentions and purchase probability: an experiment in survey design. *Journal of the American Statistical Association*, 61, 658–696.
- Jaccard, J., & Turrisi, R. (2003). Interaction effects in multiple regression. Thousand Oaks, CA: Sage Publications.
- Kalwani, M. U., & Silk, A. J. (1982). On the reliability and predictive validity or purchase intention measures. *Marketing Science*, 1, 243–286.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57, 1–22.
- Keller, K. L., & Staelin, R. (1987). Effects of information quantity and quality on decision effectiveness. *Journal of Consumer Research*, 14, 200–213.



- Kent, R. J., & Allen, C. T. (1994). Competitive interference effects in consumer memory for advertising: the role of brand familiarity. *Journal of Marketing*, 58, 97–105.
- Kim, W. C., & Mauborgne, R. (2005). Blue ocean strategy: How to create uncontested market space and make the competition irrelevant. Boston: Harvard Business School Publishing.
- Kline, P. (1986). A handbook of test construction: Introduction to psychometric design. New York: Methuen.
- Krech, D., & Crutchfield, R. S. (1948). Theory and problems of social psychology. New York: McGraw-Hill.
- Lastovicka, J. L., Bettencourt, L. A., Hugner, R. S., & Kuntze, R. J. (1999). Lifestyle of the tight and frugal: theory and measurement. *Journal of Consumer Research*, 26, 85–98.
- Lawshe, C. H. (1975). A quantitative approach to content validity. Personnel Psychology, 28, 563–575.
- Levy, S. J. (1978). Marketing behavior: Its meaning for management. New York: AMACOM.
- Levy, S. J. (1985). Dreams, fairy tales, animals, and cars. Psychology and Marketing, 2, 67–81.
- MacKenzie, S. B. (1986). The role of attention in mediating the effect of advertising on attribute importance. *Journal of Consumer Research*, 13, 174–195.
- Marks, L. J., & Kamins, M. A. (1988). The use of product sampling and advertising: effects of sequence of exposure and degree of advertising claim exaggeration on consumers' belief clarity, belief confidence, and attitudes. *Journal of Marketing Research*, 25, 266–281.
- McQueen, J. (1990). The different ways ads work. *Journal of Advertising Research*, 30, RC13–RC16.
- Mick, D. G. (1996). Are studies of dark side variables confounded by socially desirable responding: the case of materialism. *Journal of Consumer Research*, 23, 106–119.
- Myers, J. E., & Alpert, M. I. (1968). Determinant buying attitudes: meaning and measurement. *Journal of Marketing*, 32, 13–20.
- Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill.

- Olins, W. (1978). Corporate personality. New York: Mayflower Books.
 Papania, L., Campbell, C., Opoku, R. A., Styven, M., & Berthon, J.-P.
 (2008). Using brand personality to assess whether biotechnology firms are saying the right things to their network. Journal of Commercial Biotechnology, 14, 247–255.
- Plummer, J. T. (1985). Brand personality: A strategic concept for multinational advertising. In *Marketing educators conference* (pp. 1-31). New York: Young and Rubicam.
- Richins, M., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: scale development and validation. *Journal of Consumer Research*, 19, 303–316.
- Shimp, T. A., & Sharma, S. (1987). Consumer ethnocentrism: construction and validation of the CETS scale. *Journal of Marketing Research*, 24, 280–289.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: a critical review. *Journal of Consumer Research*, *9*, 287–300.
- Smith, R. E., & Swinyard, W. R. (1983). Attitude-behavior consistency: the impact of product trial vs. advertising. *Journal of Marketing Research*, 20, 257–267.
- Stewart, D. W., Pechmann, C., Ratneshwar, S., Stroud, J., & Bryan, B. (1985). Methodological and theoretical foundations of advertising copytesting: a review. Current Issues and Research in Advertising, 2, 1–74.
- Swaminathan, V., Stilley, K. M., & Ahluwalia, R. (2009). When brand personality matters: the moderating role of attachment styles. *Journal of Consumer Research*, 35, 985–1002.
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for originality: scale development and validation. *Journal of Consumer Research*, 28, 50–66.
- Van Ittersum, L., Pennings, J. M. E., Wansink, B., & van Trijp, H. C. M. (2007). The validity of attribute-importance measurement: a review. *Journal of Business Research*, 60, 1177–1190.
- Zaichkowsky, J. L. (1994). The personal involvement inventory: reduction, revision, and application to advertising. *Journal of Advertising*, 23, 59–70.



Copyright of Journal of the Academy of Marketing Science is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.