The brand personality of rocks: A critical evaluation of a brand personality scale

Mark Avis, Sarah Forbes and Shelagh Ferguson

Marketing Theory published online 6 December 2013
DOI: 10.1177/1470593113512323

Article

Marketing Theory
1–25

DOI: 10.1177/1470593113512323
mtq.sagepub.com

The brand personality of rocks: A critical evaluation of a brand personality scale

Mark Avis
Massey University, New Zealand

Sarah Forbes
University of Birmingham, UK

Shelagh Ferguson
University of Otago, New Zealand

Abstract
Aaker's (1997) brand personality (BP) scale is widely used in research and is an important foundation for the theory of BP. Building on extant critiques of the scale, this article considers the possibility that Aaker's (1997) scale methodology 'creates' the BP that it measures. Using pictures of rocks as stimuli, this article applies the principles of Aaker's methodology to examine the BP of rocks. Rocks are the chosen stimuli as they do not have any obvious commonalities with brands, or have antecedents to BP formation. Findings revealed that each of the rock stimuli has a distinct BP and that the personality is developed from sometimes surprisingly detailed personifications. In consideration of the importance of Aaker's scale in the development of the BP concept, the findings raise questions about its conceptualisation and emphasises the importance of critical examination of the methods used to measure marketing concepts.

Keywords
Brand personality, personification, research methods, surveys

Introduction

The concept of brand personality (BP) dates back to the 1950s (Gardner and Levy, 1955), but it was not until Aaker's (1997: 347) article that BP developed into a significant branch of academic research. Formally defining BP as 'the set of human characteristics associated with the brand',

Corresponding author:
Mark Avis, Department of Marketing, Massey University, Private Bag 11222, Palmerston North, New Zealand.
Email: mark.avis@otago.ac.nz

Aaker (1997) adapted the human five-factor model of personality (e.g. see McCrae and Costa, 2003) to develop a brand personality five-factor model (BPFFM). Since the publication of the BPFFM, new BP scales have been developed using methodologies based on the human five-factor model (e.g. Smit et al., 2003), but the BPFFM has remained the most widely used survey instrument for the measurement of BP (Freling et al., 2010).

In the literature reviewed for this article, outside of new BP factor model development (e.g. Ambroise, 2006), model testing (e.g. Huang et al., 2012), a circumplex model (Sweeney and Brandon, 2006) and a small number of qualitative research projects (e.g. Arora and Stoner, 2009), all post-1997 BP studies reviewed for this article used the BPFFM methodology. In consideration of the influence of the BPFFM in BP research, it is particularly important to ascertain whether the BPFFM methodology is valid for use in measuring and understanding BP. Specifically, it is essential that any brand attribute measure actually measures what it purports to measure.

Elements of the BPFFM have been criticised (e.g. Sweeney and Brandon, 2006), and this article extends these critiques by identifying several other potential problems in the BPFFM methodology. This article considers the possibility that, rather than measure pre-existing BP perceptions, the BPFFM methodology 'creates' the perceptions of personality. To examine this possibility, the BPFFM methodology is applied to pictures of rocks, as rocks would not *ordinarily* be perceived as 'having' personality. In a second study, having found that rocks can have distinct personalities, it is apparent that the personification used in the BPFFM development can stimulate detailed personification of rocks. The findings of the research raises questions about the validity of the BPFFM, as well as questions about the current conceptualisation of BP, and will highlight the importance of careful evaluation and use of brand attribute scales.

The BPFFM

Aaker (1997: 347) proposed that the aim of the BPFFM methodology was to create a 'reliable, valid and generalizeable scale' to measure BP. The BPFFM development used a range of different sources in the generation of traits; the human five-factor model, the human inter-circumplex model, earlier BP scales and traits generated by consumers in a free association task. The number of traits was reduced by having consumers rate how descriptive each trait was for a brand and selecting only traits deemed as very descriptive. Once traits for the scale were selected, consumers were asked to rate, on a five-point Likert scale, the traits for a range of carefully chosen symbolic and utilitarian brands. A key element in the development process was that participants were asked to personify the brands before rating the brands against the traits, as follows:

> . . . 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. [Examples of characteristics for brands] We're interested in finding out which personality traits or human characteristics come to mind when you think of a particular brand. (Aaker, 1997: 350)

The human five-factor methodology was adapted to validate the trait items and generate a factor model of BP (see Figure 1). As a final stage, the BP dimensions were confirmed through a replication that used a new set of brands and new set of research subjects.

With the exception of Sweeney and Brandon's (2006) circumplex model and Huang et al.'s (2012) use of a human personality scale, all subsequent BP scales have followed a similar methodology for the development of the BPFFM (e.g. Geuens et al., 2009). The purpose of these

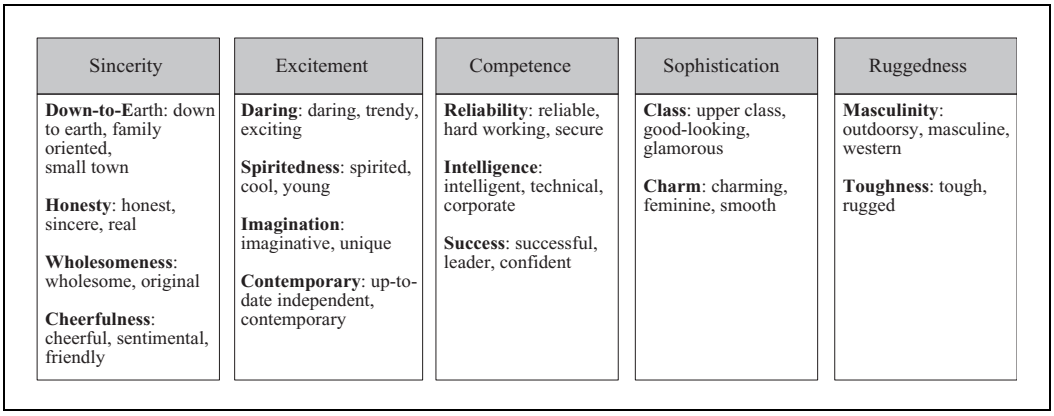

Figure 1. The brand personality five-factor model, based upon figure 1, Aaker et al. (2001), factors are in grey, facets in boldface and items in plain text.

adaptations was to rectify perceived problems in the BPFFM and has resulted in different factors, facets and items. As such, they appear dissimilar to the BPFFM. For example, the Bosnjak et al. (2007) model produced factors of drive, conscientiousness, emotion and superficiality.

The BPFFM methodology has been used for BP assessment in a variety of brand categories such as toys (Lin, 2010) and in relation to consumer perceptions such as self-congruence (e.g. Kressmann et al., 2006), quality (e.g. Ramaseshan and Tsao, 2007) and the role of employees in brand impression formation (Wentzel, 2009). Notably, some researchers have found significant differences between BP factors, facets and items for different brands (e.g. Beldona and Wysong, 2007), with significant differences between brand factors justifying a brand as having a distinct personality from another brand. Notably, the BPFFM has also been adapted into specialist areas such as retail personality (e.g. Merrilees and Miller, 2001), which highlight the perceived importance of the BPFFM methodology.

Critiques of the BPFFM

The BPFFM has not been without criticism. Siguaw et al. (1999) questioned whether the BPFFM is 'generalizeable' and questioned the utility of the scale when measuring individual brands or brands within a category. Azoulay and Kapferer (2003: 150) question the selection of traits, which they believe do not represent personality, but rather 'an all encompassing potpourri' that has moved too far from the concept of personality. Avis (2012) presents a broad critique on factor models in which he argues that (1) factor model descriptor items alter meaning according to the category they are applied to, (2) category perceptions are confused with brand perceptions and (3) there is a lack of clarity in the BP concept that might be used to bound what descriptor types might be included in scales. Finally, there have been criticisms that the BPFFM has no negative traits despite consumers having both positive and negative perceptions of brands (e.g. Bosnjak et al., 2007). Despite the criticism and the development of scales that addressed some of the critiques (e.g. Bosnjak et al., 2007), the use of the BPFFM methodology in research is ongoing (e.g. Matthiesen and Phau, 2010).

In addition to critiques of the BPFFM in particular, it might also be noted that concerns have been expressed about the use of factor analysis both in principle and in practice. For example,

Armstrong and Soelberg (1968) expressed concern about the lack of reliability measures and demonstrated that random numbers and factor analysis might generate what appeared to be meaningful results. Further, Ford et al. (1986: 309) reviewed studies that used factor analysis and found the method was poorly applied and consider that the poor application might lead to 'meaningless solutions and erroneous conclusions'. Rossiter (2002) is also critical of factor analysis and in particular the tendency to throw out potentially content-valid items that do not load onto one of the factors. However, whilst recognising concerns about factor analysis, this article will evaluate the BPFFM to understand how participants engage with the methodology.

Additional concerns about the BPFFM

Personification and projection. Although many concerns have been expressed about the BPFFM, the concern of this article is that the BPFFM is 'creating' the perceptions it measures. In particular, the BPFFM methodology includes the method of personification and, in conjunction with other recognised problems in the use of attribute scales, might actually see the methodology 'creating' the perceptions. A particular concern is that there is a surprising absence of discussion as to why personification is used in the BPFFM development, or why it is thought to be a valid method, or indeed what kind of data the method might generate. This absence of discussion continues in the BP literature (e.g. Huang et al., 2012) and may reflect the widely cited discussion of Blackston (1993: 115) who simply asserts 'we are all comfortable with the idea of personifying brands'.

The origins of the method of personification may suggest that such comfort toward personifying brands is unwarranted. Avis (2013) identified that the method was developed by James Vicary, a practitioner who developed research gimmicks to gain publicity for his marketing research practice. These gimmicks included counting shoppers eye blinks, but Vicary was most notably responsible for the infamous and fraudulent study that was to launch the subliminal advertising controversy. Avis also examined Vicary's claim that personification was based upon the projective method of psychodrama but found no literature to support the claim. As such, in absence of any theoretical justification and Vicary's dubious history, Avis concludes that personification was indeed developed as another research gimmick.

Further, even if personification were to have a genuine foundation in projective techniques such as psychodrama, the validity of projective techniques have been the subject of significant controversy in both psychology (e.g. Lilienfeld et al., 2000) and marketing (e.g. Yoell, 1974). It is beyond the scope of the article to go into the details of the projective techniques controversies, but Lilienfeld et al.'s (2000) critiques regarding the validity of many projective techniques have been described as 'compelling' (Widiger and Samuel, 2005). Notwithstanding these concerns, personification has come to be widely used in BP research (including in the BPFFM methodology) and without any reference to the status of the method as a projective technique.

Azoulay and Kapferer (2003) trace the more recent history of BP and note that the concept was imported from practitioner literature, in particular Plummer (1984/1985) and King (1973). Although both practitioners used brand personification, they did not link BP to personification, albeit that they saw that personification was one means of eliciting BP. In the case of Plummer (1984/ 1985), he also used other 'association' projections, thus reflecting that brand personification has been classified as an 'associative' projective technique alongside methods such as asking consumers to think of brands as animals (e.g. Steinman, 2008).

For example, Plummer (1984/1985) used the following association projection data for the Olay brand; animal = mink, country = France, occupation = secretary, activity = swimming,

magazine = vogue. From these answers, Plummer (1984/1985: 29) interpreted the BP as 'someone's secretary on the Riviera, by the swimming pool, in a silk bathing suit, reading vogue, with her mink coat on the adjacent chair'. Although this interpretation might be seen as more indicative of Plummer's imaginative capacity than the participant's perceptions of Olay, it illustrates that BP was derived from more than personification. However, why BP came to be exclusively linked to personification has again, not been explained. By following the logic of Plummer and the logic of the BPFFM, it appears that scales measuring the 'zebra-ness' or 'mink-ness' of brands might be plausible (e.g. a participant associated KFC with a zebra).

A further point of note is that Plummer (1984/1985) interpreted the responses of an *individual* participant in a broad context of the participant's responses to other association projections. This reflects literature in which there is general agreement that projective data require considerable interpretation by researchers who are experienced in the use of projective methods (e.g. Mostyn, 1978; Alderson, 1958; Rossiter, 2011); some researchers even consider the reason *why* a participant gives an answer is as important as the answer itself (e.g. Steinman, 2008).

By contrast, in quantifying the data from projections in the BPFFM methodology, data are taken 'as is' and are treated as 'literal', but there is no explanation of why this might be a valid way to use projective data. This is not to say that there are no examples of a similar methodology; Alt and Griggs (1988) are cited in the BPFFM literature review, and use a very similar methodology to the BPFFM, but also offer no reason why a method that is considered to require interpretation should be used in conjunction with an attribute scale.

Additionally, in the case of personification and other association projections, theorists have proposed that they do not represent how consumers *ordinarily* think of brands (e.g. O'Guinn and Muniz, 2009; Zaltman and Zaltman, 2008: 37). This is not a minor point. In particular, data from projective techniques have been described by Rook (2006: 146) with terms such as 'fanciful', 'metaphoric', 'aesthetic' and observes that projective techniques develop 'imaginary material'. Similarly, Branthwaite and Lunn (1985: 102) acknowledge that projective stimuli such as personification can be 'ambiguous', novel and sometimes 'bizarre', 'unrealistic and fantastic' and describe participants 'disbelief, embarrassment and self-consciousness' when they are first asked to use the techniques (Branthwaite and Lunn, 1985: 107; also see Boddy, 2007).

The key point in discussing the data generated by projective methods is that it provides the context to explain an apparent contradiction between the BPFFM methodology and BP theory. The contradiction is found in a *key premise* in the BPFFM literature review, as follows: '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)' (Aaker, 1997: 347). The notion that consumers imbue brands with human traits is self-evidently a key reason why BP has generated so much interest, as the perceptions of the personality traits presumably influence consumer behaviour. As such, when purchasing a product, consumers presumably perceive the personality traits 'imbued' into the brand (Avis et al., 2012).

However, if consumers ordinarily imbue brands with human personality traits, then the use of personification in the BPFFM becomes puzzling. There should be no need to ask participants to personify brands, as the brands should already be 'imbued' with human personality traits. Further, seemingly contradicting the central premise of the supporting theory for the BPFFM, the personification script includes a discussion that participants might find the request to think of brands as a person 'unusual'. This introduction reflects the literature that acknowledges that projective methods such as personification are bizarre, unrealistic and fantastic. The essence of the contradiction is that on the one hand consumers must literally perceive human traits in brands for BP to

influence behaviour, but on the other, a method is used in the scale development which asks participants to 'unusually' think of brands as people. The result of this contradiction sees the inadvertent development of a positive test strategy in the BPFFM methodology.

Acquiescence responding and leading questions. The problem of a positive test strategy is considered in acquiescence responding (AR) literature, with AR being a tendency for research participants to defer to researchers and acquiesce to their views (Krosnik, 1999). Zuckerman et al. (1995: 59) express the problem as being a combination of AR and the use of a positive test strategy to confirm a hypothesis by stating, 'it is possible, under some conditions, *to obtain respondents' support for any assertion that is the focus of the question*' (emphasis added). Furthermore, having been asked to think of brands as people, the participants are presented with de facto leading questions. Leading questions have been found to have a significant effect on what individuals perceive (e.g. Loftus, 2005). For example, in one study, when a question about a scene in a film includes a reference to a non-existent object, the respondent actually believed that they saw the object in the scene (Loftus, 1975).

Considering a research participant engaged in the BPFFM research, it may be that they have never thought, for example, of Campbell's soup as 'confident' but, having personified the brand and confronted with a rating scale and leading questions, they defer to the researchers' intention and will do their best to rate the brand. Although research on attribute scales has shown that people can rate entities against sometimes intuitively 'implausible' descriptors (Osgood et al., 1957), the use of personification in the BPFFM makes this a moot point; the participants are actually being asked to think of the rated entity in implausible ways.

Forced choice. Whether all participants manage to personify the brand is not certain. For example, Gordon and Langmaid (1988: 144) actively screened participants for their creativity when undertaking projective research, including research that used personification. However, even if a participant was not personifying the brand, the BPFFM methodology forces participants to rate the items such that, even if the participant is having trouble equating trait x with brand y, they must nevertheless present a rating. Notably, where unsure of their answer, participants have a tendency to default to the scale midpoint (Romaniuk, 2008). Therefore, it is important to recognise how closely the results for the BP ratings for the BPFFM development clustered around the scale midpoint.

In addition, Barnard and Ehrenberg (1990) emphasise that previous research has shown that forced choice questions might provide additional associations when compared to free choice questions. This is evident in the research of Romaniuk and Ehrenberg (2012). Using the Young and Rubicam BrandAsset^{TM} Valuator (including 13 BPFFM traits), a free choice method was used, in which consumers only placed a tick against a descriptor that was applicable to a brand. Brand users, for example, only ticked 9% of traits (non-users just 5%), and the low response rate was not replicated for non-trait items. Furthermore, it was apparent that brands in the same category tended to have the same personality trait attribution, which suggests finding category rather than BP (e.g. see Batra et al., 2010 for category 'personality'). Notably, personification was not used in Romaniuk and Ehrenberg's research.

Summary. Overall, it is apparent that there are some question marks over the BPFFM methodology, and these question marks centre on the use of personification; *a questionable application by an extremely dubious practitioner of a set of techniques whose validity has been the subject of*

considerable controversy and questioning. Moreover, the way in which personification is used in the BPFFM may be questioned, as the methodology does not allow for interpretation of the data, as the responses are quantified for the BPFFM. However, the most important point is that a foundation for the BPFFM is the idea that consumers imbue brands with personality traits, but the method of personification asks consumers to think of brands as people and, in conjunction with potential problems such as leading questions, may *create* the traits that are purportedly already imbued in brands. The research for this article is an examination of whether this might be the case.

Hypotheses

Does the BPFFM methodology 'create' the perceptions that are being measured? In order to examine this question, the approach of the research was to apply the BPFFM scale methodology to a non-brand entity that shared none of the antecedents to BP. In applying the BPFFM methodology to non-brand stimuli, we sought to test the following hypotheses and research question:

H1: Using the BPFFM scale and survey methodology, the non-brand stimuli will be significantly different for traits (H1a), facets (H1b) and factors (H1c).

H2: Using the BPFFM scale and survey methodology, each non-brand stimuli will be found to have a distinct personality.

RQ1: What is/are the sources/foundations for participant ratings of the rocks?

Aaker (1997) proposes a range of direct and indirect antecedents for BP formation; user imagery, transfer from CEO/employees or endorsers such as celebrities, gender/age/class, product related attributes/product category associations/brand name/symbol/logo/advertising style/price and distribution channel. Aaker also discusses animism and anthropomorphism of brands but in the best interpretation of Aaker's discussion, these result from the antecedents given above. As a brand is a metaphor (Davies and Chun, 2003), an entity located within human intuitive ontology as an artefact (e.g. see De Cruz and De Smedt, 2007) would provide an interesting contrast, and stimuli within a single category would also avoid category influences (Batra et al., 2010).

Study 1: exploration of H1 and H2

Methodology

Study overview. We used a within-subject design, with participants rating three different stimuli using the BPFFM scale and methodology. The methodology used for the study included a personification script (see Appendix A), forced rating using a Likert scale, de facto leading questions in the 42 BPFFM trait items (rate '*x*' with '*y*' implies the traits are applicable) and potential for AR due to the presence of 'authoritative' researchers. The aim of the study was to therefore examine whether using the BPFFM methodology might create personality for the non-brand stimuli.

Stimuli selection. Pictures of three rocks were selected as the non-brand stimuli. Rocks are a natural category, inanimate and have no obvious antecedents of perceptions comparable to the formation of BP. Although in some cultures, rocks are seen as animate/living (e.g. see Reynolds, 2009) there is no reason to believe that this is the case in the culture where the study took place and routine personification would require cultural extension of notions of personhood (Harvey, 2005). Notably, Kiesler and Kiesler (2005) have already applied the BPFFM to rocks, but in their study the

rocks were first decorated by individuals to be 'pet rocks' (some of which were anthropomorphic), and their study is therefore not comparable to the unadorned rocks in this study. However, rocks with a distinctly different appearance were chosen to assist participants in differentiating personalities. Whilst this might be seen as 'loading the dice', there is no reason why a rock might *ordinarily* be perceived to have a personality in the first place. The pictures of the rocks can be seen in Figure 2.

Participants. A convenience sample of 225 students was recruited from a New Zealand university (marketing students were excluded from participation), with chocolate offered as an incentive for participation. The sample differed from the BPFFM development, which used a representative sample of US consumers consisting of five different groups, as the purpose of this study was testing the scale methodology rather than developing a scale. From the 225 participants 4 withdrew from the study, as they were unable to personify the rocks. A quality control measure requiring at least four minutes to complete the survey saw one participant's survey removed from the sample. The final participant demographics were 40% male ($n = 90$) and 60% female ($n = 135$), with a mean age of 24.33 $\pm$ 9.11 years.

Procedure. The research was undertaken in a dedicated research room, allowing monitoring of the participants during the online survey. Each participant received a briefing (same researcher for all briefings) informing them that they would see three images and descriptors, and they would then need to rate each image against the descriptors. A scripted prime (see Appendix A) was read to the participants and they were briefed on the five-point Likert scale used to rate each of the BPFFM traits (1 = not at all descriptive; 5 = extremely descriptive). On the very rare occasions participants asked for help with the survey, the researchers politely declined to help. The survey was designed such that the rocks being rated were always visible throughout the survey.

An important difference between this study and the BPFFM development is that, this study adapted the BPFFM prime; the latter mentioned brands and gave examples of personified brands, whilst the former mentioned rocks but gave no examples of personified rocks. As such, the prime used in this study might be seen as a weaker prime than that used for the BPFFM. Also, as it was possible that the participants' ratings of rocks would become progressively easier as the survey progressed (Siguaw et al., 1999), the order of the rock presentation was rotated. Each third of the sample was exposed to a different sequence of rocks compared to the remaining two-thirds. No ordering changes were made within the scale.

Analysis. Overall, the BPFFM survey consists of 42 traits, 15 facets and 5 factors. For the purpose of analyses, the same traits, facets and factors were used for comparison amongst the three rocks. To analyse the differences between trait, facet and factor means across the three rocks, we used SPSS; version 18. We determined the reliability of the factor measures by the coefficient alpha, all of which were higher than 0.7 (ranging from 0.77 to 0.89), as specified by Cortina (1993) to be the level of internal consistency necessary for the scale to be acceptable.

We used repeated measures analysis of variance (ANOVA) to determine whether means between Rocks G, H and I were significantly different for the traits, facets and factors of the BPFFM. In order for us to use this statistical tool, we assessed the data to determine whether it met the tools' assumptions. In cases where assumptions of statistical tests were violated, these are indicated in the results (if the Mauchly's sphericity test was violated, we used the Greenhouse-Geisser correction to make the F ratio more conservative, Greenhouse and Geisser, 1959). We also used repeated contrasts to give pairwise comparisons of how rocks varied for BPFFM traits, facets

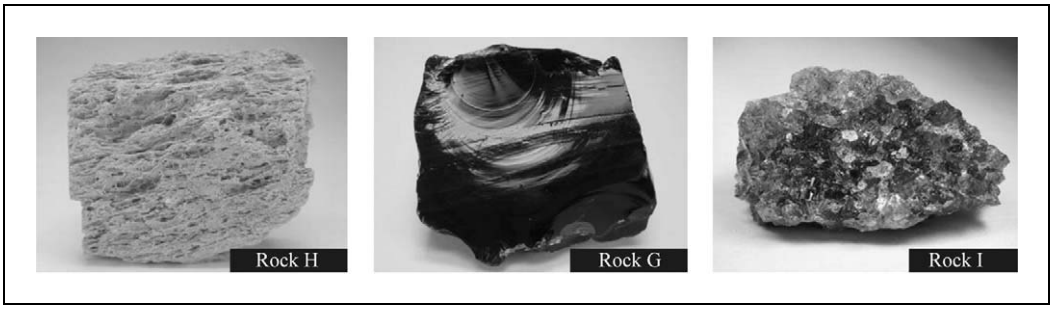

Figure 2. Images of rocks (originals in colours).

and factors. Due to the multiple comparisons experimental design used, we used a mixed model ANOVA between subjects analysis to ensure reduction of any potential type one errors. A between-subjects variable representing the ordering of the survey was used to separate each third of the sample. Factors, facets or traits found with an ordering effect had a Bonferroni correction ($p < .0167$) applied.

For H2, a problem arises when trying to determine how many traits, facets and factors would be required to show significant differences and in what combination, to allow an evaluation of distinct personality. An obvious solution might be to use existing evaluation methods, but there appears to be no clear framework within the BP literature. For example, Ramaseshan and Tsao (2007) characterise several brands in their discourse but make no reference to a method for evaluating whether the brands might be distinct. Similarly, in a study of restaurant BP, Siguaw et al. (1999) compared the personality between restaurants, in a format of restaurant *x* has higher *y* than restaurant *z*.

Overall, there appears to be no objective method or framework to evaluate H2 that might not (quite reasonably) be challenged as arbitrary and subjective. In light of these problems, we will take a heuristic approach to the data evaluation. As this is an unusual approach, in addition to providing relevant data in this article, we can provide the raw data for those who wish to examine it more closely.

Results

Traits analysis for BP

Within BP research, traits are used to provide details for understanding how brands may differ in BP from one another. Trait means for each rock using the BPFFM methodology can be seen in Table 1. Repeated contrasts found significant differences between one or all three pairings of rocks for 41 out of 42 traits. In total, repeated measures ANOVA found 41 BP traits were significantly different across the three rocks rated by participants. One trait that was not significantly different across the three rocks rated by participants was 'secure' (Rock H mean = 3.19, Rock G mean = 3.21, Rock I mean = 3.01; $F(2, 448) = 1.687$, $p = 0.186$). Therefore, H1(a) has been supported.

Facet analysis for BP

Aaker (1997) described BP factors as a broad representation of BP, so facets were used to provide more detail on BP perceptions. All 15 facets were significantly different across the 3 rocks which supports H1(b).

Table 1. Means and significant differences (where applicable) for brand personality traits for the three rocks.

Traits	Rock H (± SD)	Rock G (± SD)	Rock I (± SD)	H≠G≠I	H≠G	G≠I	I≠H
Down to earth[a]	3.62 (± 1.22)	2.46 (± 1.33)	2.54 (± 1.23)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Family orientated[a]	3.19 (± 1.30)	2.08 (± 1.17)	2.51 (± 1.23)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Small town[a]	3.23 (± 1.35)	1.92 (± 1.19)	2.18 (± 1.20)	$p < 0.001$	$p < 0.001$	$p < 0.05$	$p < 0.001$
Honest	3.48 (± 1.14)	2.45 (± 1.31)	2.99 (± 1.22)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Sincere	3.37 (± 1.21)	2.46 (± 1.31)	2.89 (± 1.20)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Real	3.76 (± 1.11)	2.94 (± 1.37)	3.30 (± 1.29)	$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.001$
Wholesome[a]	3.70 (± 1.25)	2.28 (± 1.30)	2.77 (± 1.27)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Original[a]	3.28 (± 1.24)	3.46 (± 1.28)	3.60 (± 1.23)	$p < 0.01$			$p < 0.01$
Cheerful	2.93 (± 1.21)	2.22 (± 1.20)	3.08 (± 1.34)	$p < 0.001$	$p < 0.001$	$p < 0.001$	
Sentimental	3.15 (± 1.28)	2.34 (± 1.25)	2.99 (± 1.33)	$p < 0.001$	$p < 0.001$	$p < 0.001$	
Friendly	3.28 (± 1.26)	2.28 (± 1.17)	3.05 (± 1.38)	$p < 0.001$	$p < 0.001$	$p < 0.001$	
Daring	2.47 (± 1.25)	3.74 (± 1.18)	3.16 (± 1.17)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Trendy	2.16 (± 1.21)	3.86 (± 1.17)	3.34 (± 1.31)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Exciting	2.43 (± 1.20)	3.58 (± 1.25)	3.52 (± 1.21)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Spirited	2.81 (± 1.31)	3.28 (± 1.20)	3.55 (± 1.28)	$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.001$
Cool	2.40 (± 1.24)	3.76 (± 1.11)	3.32 (± 1.23)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Young	2.45 (± 1.36)	3.18 (± 1.33)	2.97 (± 1.39)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Imaginative	2.74 (± 1.32)	3.16 (± 1.18)	3.33 (± 1.29)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Unique[a]	3.25 (± 1.33)	3.79 (± 1.17)	3.88 (± 1.21)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Up to date	2.26 (± 1.16)	3.49 (± 1.30)	3.14 (± 1.31)	$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.001$
Independent[a]	3.18 (± 1.32)	4.07 (± 1.08)	3.48 (± 1.25)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.01$
Contemporary	2.58 (± 1.24)	3.85 (± 1.21)	3.23 (± 1.35)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Reliable	3.49 (± 1.26)	2.86 (± 1.22)	3.04 (± 1.20)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Hardworking	3.64 (± 1.26)	3.17 (± 1.32)	3.04 (± 1.32)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Secure	3.19 (± 1.25)	3.21 (± 1.25)	3.01 (± 1.25)				
Intelligent	3.00 (± 1.14)	3.71 (± 1.18)	3.37 (± 1.19)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Technical[b]	2.59 (± 1.24)	3.34 (± 1.28)	2.82 (± 1.29)	$p < 0.001$	$p < 0.001$	$p < 0.001$	
Corporate[a]	2.00 (± 1.15)	3.35 (± 1.47)	2.55 (± 1.29)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Successful	2.74 (± 1.20)	3.82 (± 1.19)	3.33 (± 1.22)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Leader	2.57 (± 1.26)	3.70 (± 1.22)	3.04 (± 1.33)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$

(continued)

Table 1. (continued)

Traits	Rock H (± SD)	Rock G (± SD)	Rock I (± SD)	H≠G≠I	H≠G	G≠I	I≠H
Confident	3.04 (± 1.25)	4.10 (± 1.14)	3.71 (± 1.22)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Upper Class[a]	2.02 (± 1.12)	3.75 (± 1.30)	3.33 (± 1.42)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Good Looking	2.45 (± 1.24)	4.01 (± 1.02)	3.54 (± 1.23)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Glamorous[b]	1.80 (± 1.09)	3.72 (± 1.30)	3.44 (± 1.46)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Charming	2.64 (± 1.32)	3.56 (± 1.29)	3.40 (± 1.30)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Feminine	2.21 (± 1.38)	2.52 (± 1.49)	3.15 (± 1.54)	$p < 0.001$	$p < 0.05$	$p < 0.001$	$p < 0.001$
Smooth[b]	2.08 (± 1.22)	3.98 (± 1.22)	2.35 (± 1.31)	$p < 0.001$	$p < 0.001$	$p < 0.001$	
Outdoorsy[a]	3.74 (± 1.31)	2.39 (± 1.31)	2.84 (± 1.45)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Masculine	3.26 (± 1.38)	3.29 (± 1.39)	2.61 (± 1.49)	$p < 0.001$		$p < 0.001$	$p < 0.001$
Western[a]	3.28 (± 1.36)	2.61 (± 1.39)	2.53 (± 1.39)	$p < 0.001$	$p < 0.001$		$p < 0.001$
Tough	3.22 (± 1.42)	3.38 (± 1.36)	2.96 (± 1.43)	$p < 0.01$		$p < 0.001$	
Rugged	3.40 (± 1.49)	2.50 (± 1.42)	2.76 (± 1.54)	$p < 0.001$	$p < 0.001$		$p < 0.001$

[a]Greenhouse-Geisser correction was used.
[b]Bonferroni correction ($p < 0.0167$) applied to make finding non-significant.

Table 2. Means and significant differences for brand personality factors for the three rocks.

Factor	Rock H	Rock G	Rock I	H≠G≠I	H≠G	G≠I	I≠H
Sincerity	3.36 (± 0.73)	2.44 (± 0.86)	2.90 (± 0.83)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Excitement	2.61 (± 0.87)	3.61 (± 0.78)	3.36 (± 0.83)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Competence	2.92 (± 0.82)	3.47 (± 0.86)	3.10 (± 0.85)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.01$
Sophistication	2.20 (± 0.93)	3.59 (± 0.90)	3.20 (± 1.07)	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
Ruggedness[a]	3.38 (± 1.13)	2.83 (± 1.00)	2.74 (± 1.16)	$p < 0.001$	$p < 0.001$		$p < 0.001$

[a]Greenhouse-Geisser correction was used.

Factors analysis for BP

Identifying differences in factors between the stimuli that were rated by the same participants has previously been used to assist in identifying ways a consumer may be influenced in their preference toward a brand (Aaker, 1997). The overall BP factor means for each of the three rocks found when using the BPFFM methodology can be seen in Table 2. The highest mean was for Rock H for 'Ruggedness' (mean = 3.38) and the lowest mean was found for Rock H for 'Sophistication' (mean = 2.20). Repeated contrast statements found significant differences for all five factors between two or all three pairings of rocks using. Significant differences were found across all five factors for the three rocks using repeated measures ANOVA. H1(c) is therefore supported, as each rock was sufficiently different to represent BP factors.

Study 2: exploration of RQ1

Methodology

Study overview. For study 2, the same methodology as study 1 was applied with the exception that the participants were, in addition to rating the rocks, to explain what they were thinking while rating each rock. The aim of study 2 was to establish the participants' thought process in rating the three rock stimuli which produced qualitative data. For the purpose of study 2, only the qualitative data will be explored to evaluate RQ1.

Participants. A convenience sample of 20 students was recruited from the same university as in study 1, with chocolate offered as an incentive for participation. The final participant demographics were 14 females and 6 males with 16 of the 20 participants being between the ages of 18 and 24.

Procedure. Participants in study 2 completed the same procedure as in study 1. However, participants had three additional questions at the end of the online survey:

> Please explain what you were thinking when you were completing the ratings for Rock [G, H or I].

The same question was asked to each of the three rocks and in the same order in which the participants were exposed to the rocks stimuli in the first part of the survey (when rating rocks using the BPFFM items). The question was purposefully worded to not be a leading question and influence participant responses.

Table 3. Codes identified within the responses.

No.	Code	Description
1.	Full personification	Describing the rock as if it were a person
2.	Person association	Associating the rock with a person and using that person as a basis for rating
3.	Physical attributes	Including any mention of physical attributes of the rocks
4.	Non-human associations	Examples include objects, memories of places, or usage associations
5.	Ambiguous	Use of descriptors that might apply to objects or people with no clear context or the overall meaning is unclear and might suggest personification
6.	Geological	Thinking of the rock in geological ways

Table 4. Basis for rating the rocks and themes.

No.	Code	Rock H	Rock G	Rock I
1.	Full personification	75% ($n = 15$)	75% ($n = 15$)	80% ($n = 16$)
2.	Person association	5% ($n = 1$)	20% ($n = 4$)	0% ($n = 0$)
3.	Physical attributes	25% ($n = 5$)	30% ($n = 6$)	15% ($n = 3$)
4.	Non-human associations	15% ($n = 3$)	10% ($n = 2$)	10% ($n = 2$)
5.	Ambiguous	15% ($n = 3$)	10% ($n = 2$)	20% ($n = 4$)
6.	Geological	5% ($n = 1$)	5% ($n = 1$)	0% ($n = 0$)

Analysis. For the analysis of the data, the approach might be labelled as 'analytic' but only in the respect that the intention was to develop a 'mini-theory' to explain the results of the quantitative research through analyst inference (Rossiter, 2011). The method of data analysis was to identify themes through a continual process of iteration as recommended by Braun and Clarke (2006). The analysis of the data used an experienced analyst and the research presented draws on the recommendations of Onwuegbuzie and Leech (2007) with regards to validity, including creating an audit trail. A second coder independently recoded the data with 87% of the 60 responses (20 participants completed the question for each of the three rocks) agreeing with the first coder (see Table 3 for final coding scheme). The few individual codes that created the disagreement were discussed and 100% agreement on the final codes was achieved.

Results

Prevalence of theme codes within the sample per rock

The prevalence of each theme code per rock is displayed in Table 4. Themes that were prevalent across the sample included full personification, person association and physical attributes.

Further investigation of data

The codes capture the frequency of the rock personification, but not oddities such as Rock I being a 'bit depressed', or the detail given for some personifications:

Table 5. Thought processes and ratings in the BPFFM for traits.

	Explanation of what participants were thinking when rating rocks	Examples of trait ratings		
		Hard Working	Corporate	Outdoorsy
Rock G	"A big New York type businessman, rich, smooth. Maybe a little shady"	4	5	3
	"Upper class business man"	5	5	2
	"Some young business man, slick and smart but devious. Probably would back stab you if he could make his way up the corporate ladder faster. Carries a black brief case, slick hair, quick thinker and quicker talker. Not a good dude though"	3	1	3
	"Middle aged, female, businessie"	4	3	2

> Liberal, attractive and female, I saw a young person, maybe mid-30s, who was very attractive when she was younger/possibly a model. Has her own way of thinking, with a somewhat grounded confidence, enjoys organic food. (Rock I)

It was also possible to find, even with the limited numbers of responses, some commonalities present amongst the rock descriptions but each description was also unique for that particular participant. For example, Rock G had 4 participants out of 20 describe the 'person' as a business person and/or urban. Rock H on the other hand was rural and described with terms such as a 'farmer', 'farm mechanic', 'farming lifestyle' living in a 'rural area' and living in a small town in the dessert (however, one participant described Rock H as 'a hardened boss'). A similar contrast is apparent in other descriptors, with Rock G garnering many negative traits (e.g. 'criminal', 'not quite honest lifestyle', 'devious', 'back-stabber', 'corporate climber', 'a little shady'), whilst Rock H was viewed more positively ('modest', 'down-to-earth', 'reliable', 'works hard'). Although it was possible to see some limited commonality in the evaluations for Rock I (e.g. classy, female), the descriptions were often quite different, as in the following two examples:

> (1) More feminine bubbly but also quite trendy' (2) 'This is a gypsy or a traveller, a hippy, someone who believes in star signs and what not. Happy with their life, maybe living off the land etc.

Personification and the BPFFM

In one of the examples given for Rock G, one participant explained that they were thinking of a New York businessman but, having personified the rock in this way, then had to rate that business person against the trait outdoorsy. As can be seen in Table 5, the participant rated the business person at 3 but it is not clear why this rating was made. Additionally, when participants rated Rock G for the trait 'corporate', it remains unclear why one participant described the rock as businessman and rated it as 5 for corporate, but another participant described the rock as a businesswoman and only rated the rock as 1 for corporate (see Table 5). These examples serve to illustrate why it is questionable to use quantification with projective data as the data are 'fantastic' and can therefore produce such odd results. After all, the participants were rating how corporate a rock was.

Negative descriptions and the BPFFM

Perhaps the single most notable point in the qualitative data was that, despite no negative descriptors in the BPFFM, the participants still used negative descriptors for some of the rocks. This is indicative that the personifications were genuine and presumably 'fleshed out'.

> Some young businessman, slick and smart but devious. Probably would backstab you if he could make his way up the corporate ladder faster .... [description continues] (Rock G).

Summary of study 1 and study 2

Intriguingly, study 2 gives indications of why the mean rating for Rock G's confidence (from study 1) was so much higher than the other rocks; for example, whilst descriptions of Rock G included brash business people, Rock H descriptions included modest rural workers. When looking at the participant responses in study 2, it is apparent that the distinct personalities appear to be derived from varying degrees of commonality in the imagined rock 'people', albeit that the explanations of what participants were thinking when rating the rocks also includes some very different descriptions for the same rock (e.g. explanations given for Rock I). In a very loose sense, the aggregate mean ratings for the rocks 'meaningfully' reflect that some participants were thinking of the rocks in similar ways.

Discussion

The current study applied the BPFFM methodology to examine whether the BPFFM might elicit 'BP' for rocks. Having followed the BPFFM methodology, our evaluation is that H1 and H2 have been demonstrated empirically in the analysis of the survey data. Arguably, as the BPFFM has no purpose outside the measurement of BP, the participants created a 'BP' for each rock. However viewed, the findings highlight that the BPFFM methodology is at least able to 'create' personality in stimuli which share no obvious antecedents to the formation of BP. This is evident in the significant differences between the rocks at the trait, facet and factor level. The BPFFM was described as a valid and 'generalizeable' measure of BP and this study saw it 'generalized' to pictures of rocks.

Although there are extant critiques of the BPFFM (e.g. Austin et al., 2003), this was the first study to highlight the possible influence of a potentially problematic research method, in particular the use of personification. We found the 3 rocks assessed within this study are significantly different for 41 out of the 42 BPFFM traits, including variation in the ratings for traits such as 'sincere' and 'leader' despite the stimuli being inanimate entities. Only 'secure' resulted in no significant differences across the three rocks. This may be due to the physical attributes of the rocks or the term may have been difficult for the participants to interpret clearly. We believe that the finding of no significant differences for only a single trait supports H1 and H2. Further, despite the fact that rocks should have no BP some trait means for the rocks were higher than those for brands in the original BPFFM study. For example, 2 rocks in this study had means for 'confidence' that were higher (Rock G = 4.10, Rock I = 3.71) than the 3.33 reported mean in the BPFFM study.

In light of the research findings, the argument of this article is straightforward. BP perceptions, according to Aaker (1997), are developed as a result of antecedents such as advertising and user imagery. The BPFFM is then used to measure the BP perceptions that are perceived by consumers as a result of the antecedents. Although brands have visual elements and this research used visual

stimuli, rocks are inanimate objects from a different ontological category and by any reasonable interpretation, rocks and brands have nothing in common that might explain the research findings. The trait ratings should have been entirely random or the majority of traits rated as not at all descriptive. The fact that participants were able to assign distinct personalities to each rock can therefore only be reasonably explained as an artefact of the research methodology. The RQ1 study supports this view. Rocks were found to have a personality simply because participants were asked to perceive one, and the only explanation of this finding is that the BPFFM therefore 'creates' personality.

Zuckerman et al. (1995) suggested that AR might see participants providing answers confirming the assertions of researchers, and this may be a characterisation of the results obtained in this study. In this case, with a chocolate incentive and apparently authoritative researchers, nearly all participants were willing to complete the odd study without question. From 230 participants, only 4 participants withdrew from the study. One individual who withdrew was a geology student (unable to think of rocks as people), one due to disability (problems managing the data input), one for unknown reasons and only one participant withdrew due to the odd nature of the study.

In addition to the possible AR influence, it is also quite possible that other elements of the BPFFM methodology might have been influential. The results may also, in part, be due to the affect of being forced to rate against an item regardless of whether they had ever thought about a rock in these terms (i.e., forced rating), or possibly be resultant from the person prime (Murphy and Zajonc, 1993), or leading questions (Loftus, 2005). This article is unable to identify the degree of influence each of the potentially problematic research methods might have had on the outcome. However, it is highly improbable that participants had ever previously thought of rocks in terms of the traits that are included in the BPFFM. As such, where there is uncertainty over whether participants might ordinarily think of subject *x* in terms of *y,* we suggest using a free choice method, with the advantage of this approach being illustrated in Romaniuk and Ehrenberg's (2003) research.

Another concern expressed in the review was the quantification of projections. In this survey, the aggregated data were converted by the analysis into means. However, when examining individual participant data from study 1, it was not possible to explain, for example, if participant *x* rated item *y* as 4, why they did so and why another participant might rate the same item differently. However, in study 2 it is possible to see (to a degree) the basis for the ratings and how participants were able to think of rocks as if they were people. There is no reason to believe that, when entering the research lab, that the participants had any existing perceptions of the rock stimuli as people and it is therefore apparent that the research methodology 'created' the perceptions of rocks as people. If it is possible for participants to create personalities for rocks, it is also the case that they can 'create' personalities for brands. As such, we recommend that novel and unusual methodologies, such as the quantification of projections, should be considered and justified before implementation.

Limitations and future research

Due to the use of rock photographs and a modified prime, the methodology used here is not an exact replication of the BPFFM methodology. We also diverged from the BPFFM methodology by using a convenience sample based upon the premise that rocks should not be found to have personality, regardless of participant backgrounds. Also, in using a New Zealand sample of students, there may have been some different interpretations of trait meanings. However, the original BPFFM study was conducted in a Western, Educated, Industrialised, Rich Democratic society

(WEIRD; Henrich et al., 2010) and New Zealand is also a WEIRD country and shares other commonalities such as the use of the English language.

Finally, we accept that other stimuli might not generate the same degree of 'distinctiveness' of personality and the rocks stimuli were chosen to be distinctive. Again, this returns to the point that rocks should not ordinarily have a 'personality' in the first place. Choosing distinctive rocks served to highlight that people were not randomly assigning traits to the rocks and this was further illustrated in the study 2 data. Nevertheless, it is accepted as a limitation that less distinctive rocks may not have produced such distinct personalities. Although this study has identified the potential to create BP using the BPFFM and how rocks are personified, an interesting extension of the research would be to investigate what research participants are actually thinking of when personifying a brand in general. Of particular interest would be an examination of the source of the perceptions, and establish whether the data are 'meaningful' in terms of understanding brand perceptions held by consumers.

Conclusions

Rock images share no obviously comparable antecedents to BP formation, but nevertheless we found rock pictures had distinct personalities when using the BPFFM methodology. The BPFFM has been the dominant tool in BP research, and use of the BPFFM methodology is ongoing (e.g. Freling et al., 2010). Previous articles, such as Azoulay and Kapferer (2003), have raised legitimate concerns about the BPFFM, but these have not prevented the continued use of the scale. The research findings presented here extends these concerns; if the BPFFM methodology can find personality for rocks, then it is apparent that the methodology can create personality. There is a large body of literature and theory which rests upon the validity of the BPFFM methodology, and with the methodology in doubt, the validity of research findings and theory founded in the use of the BPFFM is likewise doubtful.

However, there is a wider concern. Aaker (1997: 347) defines BP as 'the set of human characteristics associated with a brand' and titled the section on the development of the BPFFM as 'What is Brand Personality?' The implication of the title is that BP is what is measured with the BPFFM, but this research suggests that this is not BP, but is instead a research artefact. This potentially leaves a gap in the conceptualisation of BP, raising questions about what *exactly* BP is? Whilst other researchers have presented alternative models that address *some of* the identified problems with the BPFFM, these have not been adopted by other researchers suggesting an implicit rejection of the models.

Another concern is the salience of the descriptors used in the models, which is illustrated by the research of Romaniuk and Ehrenberg (2003). In the research for this article, participants were able to rate a rock's intelligence and confidence, and how hard working a rock is. Even if using one of the scales that addresses some of the problems of the BPFFM, do consumers ever ordinarily think of, for example, a brand of bleach as 'confident' or 'loving' (see Bosnjak et al., 2007). As such, we recommend the approach of Romaniuk and Ehrenberg (2003), which may *help* to restrict the traits identified to those which are pre-existing and salient. After all, how can 'intelligent' be a salient descriptor for a rock and what is the probability that 'loving' is a salient descriptor for a brand of bleach? Sirgy (1982: 296) makes this point indirectly in relation to self-congruence theory, recommending that researchers use only 'those images which are most related to the products being tested'.

We also strongly recommend that researchers forgo the use of personification, unless theorists are able to provide a theoretical justification for how the data that are generated might be meaningful when removed from the context of individual participant perceptions. Overall, we consider that surveys are valid and very useful research instruments, but draw the conclusion that, as with any research approach, they should be used with careful consideration. In consideration of the findings of this article, it is apparent that there is a necessity for researchers to justify novel methodologies or risk developing data that misleads rather than enlightens.

Addendum

This section of the article has been added in response to a very relevant and pertinent point made by a reviewer in the first draft of the article. Whilst this article narrowly focused on the concept of BP, the reviewer observed that there are some points which might be seen as having broader relevance for research in the areas of branding and marketing in general. In particular, marketing is predominantly reliant on the use of metaphor (e.g. see Brown, 2009), as is the branding literature (Davies and Chun, 2003) and in this context the evolution of the BP concept raises some concerns. As Avis et al. (2012) noted, BP has contradictory theoretical foundations; one foundation seems to propose that it is a metaphor for researchers and the other that consumers actually perceive brands as humanlike.

Whilst Avis et al. (2012) identify an interesting contradiction in theory; an examination of the origins of the BP concept may be more useful for understanding BP. As with personification, the use of the concept of 'personality' in marketing was a product of the motivation research era, and it is apparent that the term was used very loosely (e.g. Newman, 1957; Martineau, 1957). It was not only applied to the brand, but also to the product and corporations (Scriven, 1958). Furthermore, the usage of the term 'personality' was vague when applied to brands, as it was frequently used as a synonym for either brand image or (using modern terminology) user imagery (e.g. Martineau, 1958) and was also used in parallel with terms such as 'character' (Dichter, 1960). Even the seminal work of Gardner and Levy (1955), often cited in the BP literature as an early discussion of BP, is ambiguous in the use of the term personality. This ambiguity is highlighted by Levy (1959) who later described the 1955 article as discussing *brand image*.

Even in these few examples, it is apparent that there were a profusion of terms creating a conceptual quagmire of overlapping and/or redundant renaming of extant terms and the problems of such variable terminology were noted at the time (Scriven, 1958). However, terms such as character, personality and image shared in common that they were all metaphors for intangible brand/product/firm associations and BP was just another novel metaphor. Although the term 'brand personality' was sometimes linked to user imagery, there was no indication that the meaning was limited to human characteristics associated with brands. Also, there was no linkage between BP and personification, even in Vicary's (1951) article introducing personification.

One of the interesting points about the use of the term BP was that it was a term that was primarily used by motivation research marketing practitioners and this may explain the lack of academic interest in BP until the 1990s. In particular, as a result of controversies such as subliminal advertising (Fullerton, 2010) and other concerns about motivation research (Henry, 1958), motivation researcher practitioners were increasingly subjected to fierce critiques, including questioning their integrity (e.g. Levitt, 1960; Blankenship, 1965). Also, notwithstanding Haire's (1950) very different method of shopping list personification, the personification method did not generate much academic interest; the only academic references to brand personification found in the 1950s

are Vicary's (1958) replication of his article in an American Marketing Association volume on motivation research and Smith's (1954) discussion in a review of motivation research. Following these examples, it is apparent that brand personification disappeared from the academic literature, for example not even being mentioned in Kassarjian's (1974) review of projective techniques.

However, whilst disappearing from academic interest, BP and personification continued to be of interest to practitioners, leading to a flurry of practitioner articles in the 1980s (e.g. Lannon and Cooper, 1983; Alt and Griggs, 1988; Plummer, 1984/1985). These articles in turn were the initial stimulus for academic interest in personification and also the concept of BP (e.g. Aaker, 1991). However, the ambiguity of the term BP was carried forward from the motivation research era; for example, Plummer (1984/1985) tries to delineate the term from brand image but instead offers only further confusion. Indeed, even as the term BP was garnering academic interest, questions were raised about delineating the concept from other brand concepts, (e.g. Kim, 1990; Dobni and Zinkhan, 1990).

The concern over delineating the concept was recognised by Aaker and Fournier (1995) and Aaker (1997) later sought to address the problem through a formal definition. Although this appeared to resolve the problem, concerns over delineating BP from other concepts persisted (e.g. Patterson, 1999). Most notably, Azoulay and Kapferer (2003: 153) therefore sought to refine and narrow the definition of BP, proposing BP as 'human personality traits both applicable and relevant to brands'. Although this definition can be seen to place clear boundaries around the concept of BP (e.g. see Morse et al., 1996 for a discussion of concept boundaries), it also drew the concept even further from its origins. Further, it was to create a logic that is best seen in the work of Huang et al. (2012), who have used a human personality inventory to examine BP. It is a logic that may be seen as problematic.

In particular, in using a human personality inventory for measuring BP, Huang et al. (2012) are implicitly endorsing the idea that brands are perceived by consumers as some kind of humanlike living entity (see Avis, 2011 for a discussion of 'humanlike brand theory'). For example, human personality researchers select personality judges who are very familiar with the individual being judged (e.g. spouses, see McCrae and Costa, 1987). Huang et al. follow this logic and their research implies that consumers have a perception of well-known brands that mirrors a husband's knowledge of his wife's personality. Whilst their research methods are meticulously detailed and produced apparently meaningful results, the final result is the intuitively implausible idea that consumers perceive brands with the full set of personality traits of a *well-known* and real human.

There are several points that highlight the implausibility. For example, when comparing the new precise conceptualisation to the ambiguous origins of the term, it appears as a baffling development. In particular, a concept that started as yet another metaphor for intangible brand attributes has come to be used to measure brands as if they have a complete human personality. If comparing the origins of the term BP as a novel metaphor and the consideration that brands are actually perceived to have a complete human personality, it is apparent that the term has evolved to a meaning that is entirely disconnected from its original usage. The facilitator of the evolution of the BP concept is undoubtedly the linkage between brand personification and BP. However, as was identified earlier, the practitioner articles that first generated interest in BP report a variety of methods of eliciting BP in addition to personification. Further, Vicary (1951) makes no link between brand personification and BP for the logical reason that BP was just a novel metaphor of intangible brand attributes.

Further, when Vicary (1951) developed brand personification, he did so in absence of humanlike brand theory and the modern conceptualisation of BP. As such, his development of

brand personification would need to be explained as the most astonishing good fortune, as he would have accidentally stumbled upon the method which would later reveal that consumers perceive brands with a detail that mirrors human perceptions of human personalities. Although the history of science suggests that such occurrences are possible, in the context of the evolution of the BP concept, this seems a most improbable explanation. Further, not only is this improbable, but even a brief moment of self-reflection might suggest that the notion is implausible; do you, the reader of this article and a 'consumer', perceive brands as having a fully developed human personality?

Presumably, when answering the question given above, the answer will be 'no' but some readers will nevertheless have endorsed a theory that 'other' consumers do think this way. One of the reasons for such a contradictory position may again be a legacy of the motivation research era. The literature of the era was filled with marketing experts loftily uncovering the lying and self-deception of consumers, thereby purportedly revealing their true irrational nature as seething masses of sub-conscious desires, perceptions and motivations (e.g. Dichter, 1960). However, as Alderson (1958: 20) pithily pointed out at the time, 'Every copywriter knows that a man buys suspenders to hold up his trousers and not as a ''reaction to castration anxiety''.

Nevertheless, it seems that the view of consumers as 'others' to be dissected by 'us', the informed marketing experts, appears to have endured beyond the era of motivation research. After all, why would 'we' marketers believe that 'other' consumers think of brands as complete humans (e.g. see Puzakova et al., 2009 for the most explicit discussion of this view), when we (presumably) do not think this way ourselves? Much like the researchers of the motivation research era, it seems that the only explanation is that consumers are still loftily seen as odd specimens of another species. Although consumers were described by motivation research as mired in self-deception, perhaps we (the 'marketing experts') have the potential to deceive ourselves with our perceived 'lofty' oversight.

Although the consideration of consumers as 'others' can partly explain the evolution of BP, this is only a partial explanation of the evolution. As has been discussed, marketing and branding theory are reliant on the use of metaphor and there are risks in the use of metaphor. For example, Mac Cormac (1985: 27–28), offers a warning that a metaphor might become 'true' through repetition and 'entice' scientists into believing that the metaphor is literal. Ewing et al. (2009: 333), in a discussion of marketing metaphors, discuss the potential creativity of metaphor but warn that 'on the other hand is the danger of hiding behind the metaphor and wrongly assuming that the metaphor is in itself the argument to justify the thesis'. Furthermore, many years before the introduction of the BPFFM, Feldwick (1991) understood this risk when he presciently and explicitly warned against taking the BP *metaphor* too seriously or literally. In the case of BP, the 'enticement' of the metaphor has combined with the use of the method of personification to create a circular self-confirming theory. Personification elicits BP perceptions and BP is demonstrated to exist through research using personification. In this circular system, the fact that BP was a vague novel metaphor has been forgotten.

As a reviewer for this article observed, 'It's a serious issue for marketing that we may be too quick to theorise from metaphor, borrowing and twisting theory that has no place in marketing'. It is a valid point in the case of BP. In this case, the metaphor was enticing and there was a means in the use of brand personification to stretch the metaphor into an entirely new theory and one which has profoundly affected branding theory and research overall. However, to use another metaphor, the foundations of BP are built upon the sand of a vague and novel metaphor and what appears to be a research 'gimmick'. To suggest that such theory has 'no place in marketing' seems reasonable.

Appendix A

The instructions used as a script for rock BP:

> We would like you to think of each rock as if it were a person. This may sound unusual, but think of the set of human characteristics associated with each rock. If you see a descriptor and you have no sense of how it applies to the rock, look at the rock picture again and think of it as if it were a person.

Acknowledgements

We would like to thank Professor Ellen Gabarino for very constructive suggestions that significantly improved the article and Professor Rob Lawson for his advice and assistance.

Note

1. Brand Personality Five-Factor Model.

References

Aaker, D. (1991) *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York, NY: The Free Press.

Aaker, J. (1997) 'Dimensions of Brand Personality', *Journal of Marketing Research* 34(3): 347–56.

Aaker, J., Benet-Martinez, V. and Garolera, J. (2001) 'Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs', *Journal of Personality and Social Psychology* 81(3): 492–508.

Aaker, J. and Fournier, S. (1995) 'A Brand as a Character, a Partner and a Person: Three Perspectives on the Question of Brand Personality', *Advances in Consumer Research* 22: 391–95.

Alderson, W. (1958) 'Advertising Strategy and Theories of Motivation', in R. Ferber and H. G. Wales (eds) *Motivation and Market Behaviour*, pp. 11–20. Homewood, IL: Richard D. Irwin Inc.

Alt, M. and Griggs, S. (1988) 'Can a Brand Be Cheeky', *Marketing Intelligence and Planning* 6(4): 9–26.

Ambroise, L. (2006) 'La Personnalité des Marques: Une Contribution Réelle à Leur Gestion?', *Revue Française du Marketing* 207(2/5): 25–41.

Armstrong, J. S. and Soelberg, P. (1968) 'On the Interpretation of Factor Analysis', *Psychological Bulletin* 70(5): 361–64.

Arora, R. and Stoner, C. (2009) 'A Mixed Method Approach to Understanding Brand Personality', *Journal of Product & Brand Management* 18(4): 272–83.

Austin, J., Siguaw, J. and Mattila, A. (2003) 'A Re-Examination of the Generalizability of the Aaker Brand Personality Measurement Framework', *Journal of Strategic Marketing* 11(2): 77–92.

Avis, M. (2011) 'Anthropomorphism and Animism Theory in Branding', in *Asia-Pacific Conference of the Association of Consumer Research*, Beijing, China, 16–18 June 2011.

Avis, M. (2012) 'Brand Personality Factor Based Models: A Critical Review', *Australasian Marketing Journal* 20(1): 89–96.

Avis, M. (2013) 'Motivation Research: In the DNA of Branding', in G. Cornelissen, E. Reutskaja and A. Valenzuela (eds) *European Conference of the Association of Consumer Research*. Barcelona, Spain, 4–6 July 2013.

Avis, M., Aitken, R. and Ferguson, S. (2012) 'Brand Relationship and Personality Theory: Metaphor or Consumer Perceptual Reality?', *Marketing Theory* 12(3): 311–31.

Azoulay, A. and Kapferer, J. N. (2003) 'Do Brand Personality Scales Really Measure Brand Personality?', *Journal of Brand Management* 11(2): 143–55.

Barnard, N.R. and Ehrenberg, A. S. C. (1990) 'Robust Measures of Consumer Brand Beliefs', *Journal of Marketing Research* 27(November): 477–84.

Batra, R., Lenk, P. and Wedel, M. (2010) 'Brand Extension Strategy Planning: Empirical Estimation of Brand-Category Personality Fit and Atypicality', *Journal of Marketing Research* 47(2): 335–47.

Beldona, S. and Wysong, S. (2007) 'Putting the ''Brand'' Back into Store Brands: An Exploratory Examination of Store Brands and Brand Personality', *Journal of Product & Brand Management* 16(4): 226–35.

Blackston, M. (1993) 'Beyond Brand Personality: Building Brand Relationships', in D. A. Aaker and A. L. Biel (eds) *Brand Equity and Advertising: Advertising's Role in Building Strong Brands*, pp. 113–24. New Jersey, NJ: Lawrence Erlbaum.

Blankenship, A. B. (1965) 'Freud in Consumerland', *Journal of Marketing* 29(1): 116.

Boddy, C. R. (2007) 'Projective Techniques in Taiwan and Asia-Pacific Market Research', *Qualitiatigve Market Research* 10(1): 48–62.

Bosnjak, M., Bochmann, V. and Hufschmidt, T. (2007) 'Dimensions of Brand Personality Attributions: A Person-Centric Approach in the German Cultural Context', *Social Behavior and Personality* 35(3): 303–16.

Branthwaite, A. and Lunn, T. (1985) 'Projective Techniques in Social and Market Research', in R. Walker (ed.) *Applied Qualitative Research*, pp. 101–21. Brookfield, VT: Gower Publishing Company.

Braun, V. and Clarke, V. (2006) 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology* 3(2): 77–101.

Brown, S. (2009) 'Metphorical Myopia: Some Thoughts on Analogical Thinking', in P. Maclaran, M. Saren, B. B. Stern and M. Tadajewski (eds) *The Sage Handbook of Marketing Theory*, pp. 266–81. London, UK: Sage Publications Ltd.

Cortina, J. M. (1993) 'What is Coefficient Alpha? An Examination of Theory and Applications', *Journal of Applied Psychology* 78(1): 98–104.

Davies, G. and Chun, R. (2003) 'The Use of Metaphor in the Exploration of the Brand Concept', *Journal of Marketing Management* 19(1): 45–71.

De Cruz, H. and De Smedt, J. (2007) 'The Role of Intuitive Ontologies in Scientific Understanding; the Case of Human Evolution', *Biology and Philosophy* 22(3): 351–68.

Dichter, E. (1960) *The Strategy of Desire*. New York, NY: Doubleday.

Dobni, D. and Zinkhan, G. M. (1990) 'In Search of Brand Image: A Foundation Analysis', *Advances in Consumer Research* 17**:** 110–19.

Ewing, M. T., Jevons, C. P. and Khalil, E. L. (2009) 'Brand Death: A Developmental Model of Senescence', *Journal of Business Research* 62(3): 332–38.

Feldwick, P. (1991) 'Defining a Brand', in D. Cowley (ed.) *Understanding Brands*, pp. 17–30. London, UK: Kogan Page.

Ford, J. K., Maccallum, R. C. and Tait, M. (1986) 'The Application of Exploratory Factor Analysis in Applied Psychology: A Critical Review and Analysis', *Personnel Psychology* 39(2): 291–314.

Freling, T. H., Crosno, J. L. and Henard, D. H. (2010) 'Brand Personality Appeal: Conceptualization and Empirical Validation', *Journal of the Academy of Marketing Science* 39(3): 392–406.

Fullerton, R. A. (2010) '"A Virtual Social H-bomb": The Late 1950s Controversy Over Subliminal Advertising', *Journal of Historical Research in Marketing* 2(2): 166–73.

Gardner, B. B. and Levy, S. J. (1955) 'The Product and the Brand', *Harvard Business Review* 33: 33–59.

Geuens, M., Weijters, B. and De Wulf, K. (2009) 'A New Measure of Brand Personality', *International Journal of Research in Marketing* 26(2): 97–107.

Gordon, W. and Langmaid, R. (1988) *Qualitative Market Research: A Practitioner's and Buyer's Guide*. Aldershot, UK: Gower Publishing Company.

Greenhouse, S. W. and Geisser, S. (1959) 'On Methods in the Analysis of Profile Data', *Psychometrika* 24(2): 95–112.

Haire, M. (1950) 'Projective Techniques in Marketing Research'. *Journal of Marketing* 14(4): 649–56.

Harvey, G. (2005) *Animism: Respecting the Living World*. New York, NY: Columbia University Press.

Henrich, J., Heine, S. J. and Norenzayan, A. (2010) 'The Weirdest People in the World?', *Behavioral and Brain Sciences* 33(2/3): 61–83.

Henry, H. (1958) *Motivation Research: Its Practice and Uses for Advertising, Marketing, and Other Business Purposes*. London, UK: Crosby Lockwood and Son Ltd.
Huang, H. H., Mitchell, V. W. and Rosenaum-Elliott, R. (2012) 'Are Consumer and Brand Personalities the Same?', *Psychology and Marketing* 29(5): 334–49.
Kassarjian, H. H. (1974) 'Projective Methods', in R. Ferber (ed.) *Handbook of Marketing Research*, pp. 316–43. New York, NY: McGraw Hill.
Kiesler, T. and Kiesler, S. (2005) 'My Pet Rock and Me: An Experimental Exploration of the Self Extension Concept', *Advances in Consumer Research* 32: 365–70.
Kim, P. (1990) 'A Perspective on Brands', *Journal of Consumer Marketing* 7(4): 63–67.
King, S. H. M. (1973) *Developing New Brands*. UK: Pitman House.
Kressmann, F., Sirgy, J. M., Herrmann, A., Huber, F., Huber, S. and Lee, D. J. (2006) 'Direct and Indirect Effects of Self-Image Congruence on Brand Loyalty', *Journal of Business Research* 59(9): 955–64.
Krosnik, J. A. (1999) 'Survey Research', *Annual Review of Psychology* 50(1): 537–67.
Lannon, J. and Cooper, P. (1983) 'Humanistic Advertising: A Holistic Cultural Perspective', *International Journal of Advertising* 2: 195–213.
Levitt, T. (1960) 'The M-R Snake Dance', *Harvard Business Review* 38(6): 76–84.
Levy, S. J. (1959) 'Symbols for Sale', *Harvard Business Review* 37: 117–24.
Lilienfeld, S. O., Wood, J. M. and Garb, H. N. (2000) 'The Scientific Status of Projective Techniques', *Psychological Science in the Public Interest* 1(2): 27–66.
Lin, L. Y. (2010) 'The Relationship of Consumer Personality Trait, Brand Personality and Brand Loyalty: An Empirical Study of Toys and Video Games Buyers', *Journal of Product & Brand Management* 19(1): 4–17.
Loftus, E. F. (1975) 'Leading Questions and the Eyewitness Report', *Cognitive Psychology* 7(4): 560–72.
Loftus, E. F. (2005) 'Planting Misinformation in the Human Mind: A 30-year Investigation of the Malleability of Memory', *Learning & Memory* 12(4): 361–66.
Mac Cormac, E. (1985) *A Cognitive Theory of Metaphor*. Cambridge, MA: MIT Press.
Martineau, P. (1957) *Motivation in Advertising*. New York, NY: McGraw Hill Book Company, Inc.
Martineau, P. (1958) 'The Personality of the Retail Store', *Harvard Business Review* 36: 47–55.
Matthiesen, I. M. and Phau, I. (2010) 'Brand Image Inconsistencies of Luxury Fashion Brands: A Buyer-Seller Exchange Situation Model of Hugo Boss Australia', *Journal of Fashion Marketing and Management* 14(2): 202–18.
McCrae, R. and Costa, P. (1987) 'Validation of the Five-Factor Model of Personality Across Instruments and Observers', *Journal of Personality and Social Psychology* 52(1): 81–90.
McCrae, R. and Costa, P. T. (2003) *Personality in Adulthood: A Five-Factor Theory Perspective*. New York, NY: The Guilford Press.
Merrilees, B. and Miller, D. (2001) Antecedents of brand-personality in Australian retailing: an exploratory study, in S. Chetty and B. Collins (eds) *Proceedings of the Australian and New Zealand Marketing Academy Conference*. Palmerston North, New Zealand, 1–5 December.
Morse, J. M., Mitcham, C., Hupcey, J. E. and Tason, M. C. (1996) 'Criteria for Concept Evaluation', *Journal of Advanced Nursing* 24(2): 385–90.
Mostyn, B. J. (1978) *A Handbook of Motivational & Attitude Research Techniques*. Bradford, UK: MCB Publication Ltd.
Murphy, S. T. and Zajonc, R. B. (1993) 'Affect, Cognition, and Awareness: Affective Priming with Optimal and Suboptimal Stimulus Exposures', *Journal of Personality and Social Psychology* 64(5): 723–39.
Newman, J. W. (1957) *Motivation Research and Marketing Management*. Boston, MA: Harvard University Press.
O′Guinn, T. C. and Muniz, A. M. (2009) 'Collective Brand Relationships', in D. J. Macinnis, C. W. Park and J. R. Priester (eds) *Handbook of Brand Relationships*, pp. 173–94. London, UK: Society for Consumer Psychology.
Onwuegbuzie, A. and Leech, N. (2007) 'Validity and Qualitative Research: An Oxymoron?', *Quality & Quantity* 41(2): 233–49.

Osgood, C. E., Suci, G. J. and Tannenbaum, P. H. (1957) *The Measurment of Meaning*. Urbana, IL: Univerity of Illinois Press.

Patterson, M. (1999) 'Re-Appraising the Concept of Brand Image', *Journal of Brand Management* 6(6): 409–36.

Plummer, J. T. (1984/1985) 'How Personality Makes a Difference', *Journal of Advertising Research* 24: 27–31.

Puzakova, M., Kwak, H. and Rocereto, J. (2009) 'Pushing the Envelope of Brand and Personality: Antecedents and Moderators of Anthropomorphized Brands', *Advances in Consumer Research* 36: 413–19.

Ramaseshan, B. and Tsao, H. Y. (2007) 'Moderating Effects of the Brand Concept on the Relationship Between Brand Personality and Perceived Quality', *Journal of Brand Management* 14(6): 458–66.

Reynolds, F. (2009) 'Regenerating Substances: Quartz as an Animistic Agent', *Time and Mind* 2(2): 153–66.

Romaniuk, J. (2008) 'Comparing Methods of Measuring Brand Personality Traits', *The Journal of Marketing Theory and Practice* 16(2): 153–61.

Romaniuk, J. and Ehrenberg, A. (2003) *Do Brands Lack Personality?* Report for Corporate Sponsors, Ehrenberg-Bass Institute for Marketing Science, University of South Australia.

Romaniuk, J. and Ehrenberg, A. (2012) 'Do Brands Lack Personality?', *Marketing Theory* 12: 333–39.

Rook, D. W. (2006) 'Let's Pretend: Projective Methods Reconsidered', in R. W. Belk (ed.) *Handbook of Qualitative Research Methods in Marketing*, pp. 143–55. Cheltenham, UK: Edward Elgar Publishing Ltd.

Rossiter, J. R. (2002) 'The C-OAR-SE Procedure for Scale Development in Marketing', *International Journal of Research in Marketing* 19(4): 305–35.

Rossiter, J. R. (2011) *Measurement for the Social Sciences: The C-OAR-SE Method and Why it must Replace Psychometrics*. New York, NY: Springer.

Scriven, E. L. (1958) 'Rationality and Irrationality in Motivation Research', in R. Ferber and H. G. Wales (eds) *Motivation and Market Behaviour*, pp. 64–72. Homewood, IL: Richard D. Irwin Inc.

Siguaw, J. A., Mattila, A. and Austin, J. R. (1999) 'The Brand-Personality Scale: An Application for Restaurants', *Cornell Hotel and Restaurant Administration Quarterly* 40(3): 48–56.

Sirgy, J. M. (1982) 'Self-Concept in Consumer Behavior: A Critical Review', *Journal of Consumer Research* 9(3): 287–300.

Smit, E. G., Van Den Berge, E. and Franzen, G. (2003) 'Brands are Just Like Real People!', in F. Hansen and L. Bech (eds) *Branding and Advertising*, pp. 22–43. Copenhagen, Denmark: Copenhagen Business School Press.

Smith, G. H. (1954) *Motivation Research in Advertising and Marketing*. Westport, CT: Greenwood Press.

Steinman, R. B. (2008) 'Projective Techniques in Consumer Research', in J. D. Belloit and T. R. Johns (eds) *Northeastern Association of Business, Economics and Technology Conference*, pp. 253–263. University of Pennsylvania, 30–31 October 2008.

Sweeney, J. C. and Brandon, C. (2006) 'Brand Personality: Exploring the Potential to Move from Factor Analytical to Circumplex Models', *Psychology and Marketing* 23(8): 639–63.

Vicary, J. M. (1951) 'How Psychiatric Methods Can be Applied to Market Research', *Printers' Ink*. (May 11): 39–48.

Vicary, J. M. (1958) 'How Psychiatric Methods Can be Applied to Market Research', in R. Ferber and H. G. Wales (eds) *Motivation and Market Behaviour*, pp. 31–36. Homewood, IL: Richard D. Irwin Inc.

Wentzel, D. (2009) 'The Effect of Employee Behavior on Brand Personality Impressions and Brand Attitudes', *Journal of the Academy of Marketing Science* 37(3): 359–74.

Widiger, T. A. and Samuel, D. B. (2005) 'Evidence-Based Assessment of Personality Disorders', *Psychological Assessment* 17(3): 278–87.

Yoell, W. A. (1974) 'The Fallacy of Projective Techniques', *Journal of Advertising* 3(1): 33–6.

Zaltman, G. and Zaltman, L. H. (2008) *Marketing Metaphoria: What Seven Deep Metaphors Reveal About the Minds of Consumers*. Boston: MA, Harvard Business School Publishing.

Zuckerman, M., Knee, R. C., Hodgins, H. S. and Miyake, K. (1995) 'Hypothesis Confirmation: The Joint Effect of Positive Test Strategy and Acquiescence Response Set', *Journal of Personality and Social Psychology* 68(1): 52–60.

Mark Avis is a lecturer at the Massey University (New Zealand). He has enjoyed a diverse career, including spending time as a submarine officer in the Royal Navy and working in international sales and marketing roles in multi-national companies. Mark recently returned to academia and completed master of commerce and PhD at the University of Otago (New Zealand). Mark's research interests include how consumers perceive brands and the underlying drivers for brand choice. Address: Department of Marketing, Massey University, Private Bag 11222, Palmerston North, New Zealand. [email: m.avis@massey.ac.nz]

Sarah Forbes is a lecturer at the Department of Marketing at the University of Birmingham (UK). Her research interests include social marketing (physical activity and alcohol consumption) and survey methods. Address: Department of Marketing, Birmingham Business School, University House, Birmingham, B15 2TT, United Kingdom. [email: s.forbes@bham.ac.uk]

Shelagh Ferguson is currently a lecturer in marketing management at the University of Otago (New Zealand). Her research interests include adventure tourism, consumer theory and culture, consumption communities within society and interpretive and ethnographic research methods. She has published in *Advances in Consumer Research* (Asia Pacific and European) and the *International Journal of Sociology and Social Policy*. Her videography film has been shown at Asia Pacific ACR Film Festival. Address: Department of Marketing, University of Otago, Level 6, Commerce Building, Cnr Clyde and Union Streets, Dunedin, New Zealand. [email: shelagh.ferguson@otago.ac.nz]