# Brand personality: A meta-analytic review of antecedents and consequences

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**Abstract** This article presents a meta-analysis on brand personality (BP) by investigating the antecedents and consequences of the BP dimensions of sincerity, excitement, competence, sophistication, and ruggedness, as suggested by Aaker (Journal of Marketing Research 34:347–356, 1997). The authors synthesize the results from 76 independent samples in 56 studies. The meta-analysis finds several new empirical generalizations about BP. First, the key drivers of BP are communication with hedonic benefit claims, branding activities, a brand's country-of-origin, and consumer personalities. Second, the study finds that the effects of BP are stronger for mature brands than for brands in the early life cycle stages. Third, sincerity and competence have the strongest influence on brand success variables (e.g., brand attitude, image, commitment, purchase intention), while excitement and ruggedness have the weakest influence on brand attitude and brand commitment.

Keywords Brand personality  $\cdot$  Brand personality dimensions  $\cdot$  Brand relationship strength  $\cdot$  Brand loyalty  $\cdot$  Meta-analysis

# **1** Introduction

In their pursuit of fulfilling self-definitional needs, individuals tend to increasingly perceive brands as relationship partners (e.g., Fournier 1998). Consequently, these individuals engage in anthropomorphizing; that is, they attribute human characteristics to nonhuman forms, such as brands (Aggrawal and McGill 2007). A key element of a successful brand is the brand's personality, which is defined as "the set of human characteristics associated with a brand" (Aaker 1997, p. 347).

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To measure a brand's personality, the predominantly applied concept is the Aaker (1997) brand personality (BP) scale that consists of five dimensions: sincerity, excitement, competence, sophistication, and ruggedness. The seminal work of Aaker (1997) on BP has fostered a growing body of research on this topic. Thus far, however, research has generally looked into the antecedents of BP in isolation (i.e., communication variables, product characteristics, consumer demographics and psychographics and consumer brand experiences; Diamantopoulos et al. 2005; Orth and Malkewitz 2008; Yoo et al. 2009) and neglected their relative influences on BP.

Additionally, although much insightful research exists in terms of the consequences and the relevance of BP for brand management (e.g., Chang and Chieng 2006; Johar et al. 2005; Sung and Kim 2010), little is known about the relative importance of the BP dimensions with regard to driving brand preference and loyalty (e.g., Keller and Lehmann 2006). Our knowledge of the antecedents and consequences of BP is therefore derived from a background of scattered findings.

The overall goal of the present study is to conduct the first meta-analysis on the antecedents and consequences of BP. Our research makes some key contributions. First, we synthesize the antecedents of BP and their relative impact on the BP dimensions and thus identify their key drivers. Second, we contribute to the literature by investigating the consequences of the BP dimensions (brand attitude, brand image, brand relationship strength, brand commitment, purchase intentions, and purchase behavior) and, third, we show how the impact of BP is moderated (e.g., by the brand's life cycle stage).

### 2 Conceptual background

Table 1 provides an overview and a definition of the antecedents and consequences of BP that were investigated in prior research and included in our meta-analysis. The antecedents of the BP dimensions were grouped into five major categories, and the consequences of the BP dimensions were each assigned to one of six categories. In addition to the estimates of the variables described above, we collected data on a set of moderator variables that could potentially influence the estimates. The selection of these variables was guided by theoretical considerations regarding the BP dimensions and methodological variations across studies that became apparent during the coding procedure and during earlier meta-analyses. Table 2 presents an overview of the moderator variables, their descriptions and operationalization, and a sketch of the expected relationships with consequences. We did not investigate the moderators for estimates of the antecedents due to the small number of estimates per antecedent.

## 3 Method

#### 3.1 Data collection and coding

We selected studies that provide estimates on the effects of the antecedents or consequences on the BP dimensions, as measured by Aaker's BP scale. To identify the relevant studies, we first searched all papers that cited the work of Aaker (1997) via the Social Sciences Citation Index. We further performed a keyword search of

Variable	Definition		
Antecedents			
Advertising			
Complexity	The degree to which an ad is complex and relatively difficult to understand		
Consistency	The degree to which an ad (campaign) is coherent and in agreement with itself		
Hedonic benefit claim	A message with a hedonic benefit claim describes hedonic needs for sensory pleasure, while a utilitarian claim concerns a pragmatic benefit (Lim and Ang 2008)		
Product characteristi	cs		
Branding	Activities that support the creation of a unique and inimitable brand		
Country of origin (COO)	The country of manufacture, production, or growth where a product comes from, coded as home country or other country (Peterson and Jolibert 1995)		
Product design	The measures and tools to create a product, its form and packaging		
Consumer demograp	phics		
Age	The age of the consumer		
Education	The level of education of the consumer		
Gender	The gender of the respondent, coded as female or male		
Nationality	The nationality/home country of the respondent (USA or other)		
Consumer psychogr	aphics		
Personality	Set of brand-congruent human characteristics possessed by a person		
Prior attitude	Prior positive evaluation of an interest in the product category		
Self-confidence	The extent to which a consumer feels capable and assured with respect to his or he (marketplace) decisions and behaviors (Bearden et al. 2001)		
Consumer brand experience	Consumer's prior experience with the brand (including prior brand use, brand familiarity, and brand expertise)		
Consequences			
Brand attitude	Overall evaluation of and attitude toward the brand (e.g., Ajzen and Fishbein 1977)		
Brand image	Attributes of the brand as perceived by the consumer, such as similarity, prestige, and distinctiveness, that primarily result from the consumer's drive to fulfill goals of self-continuity or self-verification, self-distinctiveness, and self-enhancement through brand consumption (e.g., Chernev et al. 2011)		
Brand relationship strength	The strength of the binding of the consumer with the brand (e.g., attachment, connection, and relationship strength)		
Brand commitment	Attitudinal willingness to repurchase and patronize a brand combined with favorable attitudes (e.g., Fournier 1998)		
Purchase/behavioral intentions	Behavioral intention and willingness to purchase and use a brand; behavioral long-term dedication to a brand (e.g., Chaudhuri and Holbrook 2001)		
Purchase behavior/use	Actual purchase behavior or use of a brand		

Table 1 Antecedents and consequences of BP dimensions

electronic databases (e.g., *ABI/INFORM, EMERALD, ELSEVIER, and EBSCO*) using "brand personality" and/or "Aaker 1997" (and variations on the word spelling) as keywords, followed by an Internet search on *Google scholar*. Then, we performed a manual search of journal outlets, which were major sources for journal articles concerning BP. Once a study was identified, the references were examined to locate

Variable	Description and operationalization	Coding scheme and data description	Expected relationship with estimates
Product type	Captures whether the evaluated brand is a service or a good; obtained from individual studies. The coding is in line with previous meta-analyses (e.g., Troy et al. 2008)	0 = good (57 samples), 1 = service (19 samples)	Anthropomorphization is easier for goods than for services; brand personalities are more easily accessible, leading to larger effects for goods compared with services (e.g., Aggrawal and McGill 2007)
Life cycle	Captures whether the product was in the early or mature stage of its brand life cycle; obtained from individual studies. Coding is in line with previous meta-analyses (e.g., Sethuraman et al. 2011)	0 = mature (59 samples), 1 = early (17 samples)	Brand personalities have to be "built up;" thus, the effects of brand personalities are stronger for mature compared with early life cycle brands (e.g., Johar et al. 2005)
Sample	Captures whether the sample consists (predominantly) of students or not; obtained from individual studies	0 = students (48 samples), 1 = nonstudents (28 samples)	Control for the confounding effects of the sample characteristics (e.g., Beard 2003)
Study design	Captures the study design as either experiment or survey; obtained from individual studies	0 = survey (41 samples), 1 = experimental (35 samples)	Experimental designs allow for more control and should lead to stronger effects compared with surveys (e.g., Field and Hole 2003)
Manuscript status	Captures whether the paper has appeared in an academic journal; provided by each study	0 = unpublished (13 samples), 1 = published (63 samples)	According to publication bias (Rust et al. 1990), effects in unpublished studies are lower than the effects in published studies

Table 2 Moderator variables used in the meta-analysis

further studies. This search resulted in 56 usable manuscripts providing data from 76 independent samples. One of the authors and a student assistant who was not otherwise involved with the study completed the coding of the moderator variables. The two coders concurred on 94 % of the coded data. The inconsistencies were resolved after discussion.

# 3.2 Meta-analytic procedure

The effect size metric selected for the meta-analysis is the correlation coefficient; higher coefficient values indicate stronger effects of the antecedents on the BP dimensions or stronger effects of the BP dimensions on the consequences. For studies that reported other measures, they were converted to correlation coefficients and adjusted for unreliability, following common guidelines (e.g., Lipsey and Wilson 2001). We transformed the reliability-corrected correlations into Fisher's *z* coefficients. We averaged the *z* coefficients and weighted them according to their variances, following a random effects perspective, before reconverting the integrated results.

We applied HLM to test the effects of the suggested moderators for the relationship between each BP dimension and all consequences. To check for collinearity, we examined the correlations between the moderator variables and regressed the *z* scores on all of the moderators for each model. For all of the models, both the tolerances (minimum tolerance = 0.451) and the VIF (maximum VIF = 2.216) indicate acceptable figures.

Relationship	Number of effect sizes	Variance-weighted, reliability-adjusted average <i>r</i>	Q statistic for homogeneity	
Advertising complexity→brand personality	46	0.153	931.074***	
Advertising complexity→sincerity	10	0.288**	102.280***	
Advertising complexity→excitement	10	0.108	158.603***	
Advertising complexity→competence	10	0.372***	34.366***	
Advertising complexity→sophistication	10	-0.034	81.191***	
Advertising complexity→ruggedness	6	-0.072	459.751***	
Advertising consistency→brand personality	16	0.135**	89.940***	
Advertising consistency→sincerity	4	0.018	20.670***	
Advertising consistency→excitement	2	0.124	8.673***	
Advertising consistency→competence	4	0.137	37.330***	
Advertising consistency→sophistication	5	0.194***	10.954**	
Advertising consistency→ruggedness	1	0.0	_	
Advertising hedonic benefit claim→brand personality	16	0.648***	1,699.900***	
Advertising hedonic benefit claim→sincerity	4	0.666***	118.137***	
Advertising hedonic benefit claim→excitement	4	-0.137	470.903***	
Advertising hedonic benefit claim→competence	4	0.772*	436.243***	
Advertising hedonic benefit claim→sophistication	4	0.885***	28.383***	
Advertising hedonic benefit claim→ruggedness	_	_	_	
Product branding→brand personality	57	0.128***	899.206***	
Product branding→sincerity	10	0.237***	56.134***	
Product branding→excitement	16	0.029	121.959***	
Product branding→competence	11	0.230*	427.714***	
Product branding $\rightarrow$ sophistication	12	-0.038	80.035***	
Product branding→ruggedness	8	0.256***	24.917***	
Product country of origin (COO)→brand personality	30	0.168**	420.330***	
Product country of origin (COO)→sincerity	6	0.298***	17.492***	
Product country of origin (COO)→excitement	6	0.244	80.782***	
Product country of origin (COO)→competence	6	0.415*	39.727***	
Product country of origin (COO)→sophistication	6	0.351	46.033***	
Product country of origin (COO)→ruggedness	6	0.413*	131.476***	
Product design→brand personality	74	-0.011	3,028.977***	
Product design→sincerity	16	0.003	116.632***	
Product design→excitement	14	0.152	696.277***	
Product design→competence	16	-0.133	1,522.831***	
Product design $\rightarrow$ sophistication	14	-0.013	471.561***	
Product design→ruggedness	14	-0.021	128.480***	
Consumer age $\rightarrow$ brand personality	9	-0.078*	41.623***	
Consumer age→sincerity	1	0.026	_	
Consumer age→excitement	1	-0.007	_	
Consumer age→competence	5	-0.190***	14.372**	

# Table 3 (continued)

Relationship	Number of effect sizes	Variance-weighted, reliability-adjusted average <i>r</i>	Q statistic for homogeneity	
Consumer age→sophistication	1	0.090		
Consumer age→ruggedness	1	0.056	_	
Consumer education→brand personality	7	-0.082	47.640***	
Consumer education→sincerity	1	-0.090	_	
Consumer education→excitement	1	-0.294**	_	
Consumer education→competence	3	-0.038	24.941***	
Consumer education→sophistication	1	-0.020	_	
Consumer education→ruggedness	1	-0.029	_	
Consumer gender→brand personality	6	0.027	18.714**	
Consumer gender→sincerity	1	0.009	_	
Consumer gender→excitement	1	0.093	_	
Consumer gender→competence	2	0.142	8.073**	
Consumer gender $\rightarrow$ sophistication	1	-0.104	_	
Consumer gender→ruggedness	1	-0.033	_	
Consumer nationality→brand personality	20	0.145	781.514***	
Consumer nationality→sincerity	4	0.028	58.296***	
Consumer nationality→excitement	4	0.216	281.539***	
Consumer nationality→competence	4	-0.128	227.245***	
Consumer nationality $\rightarrow$ sophistication	4	0.238**	40.718***	
Consumer nationality→ruggedness	4	0.350***	53.926***	
Consumer personality→brand personality	32	0.100***	303.071***	
Consumer personality→sincerity	7	0.069*	20.583**	
Consumer personality→excitement	7	0.142*	83.712***	
Consumer personality→competence	8	0.151*	156.464***	
Consumer personality→sophistication	8	0.140**	89.790***	
Consumer personality→ruggedness	1	0.189*	_	
Consumers' prior attitude→brand personality	28	0.330	257.629***	
Consumers' prior attitude→sincerity	2	0.064	5.405**	
Consumers' prior attitude→excitement	2	0.175**	3.702*	
Consumers' prior attitude→competence	20	0.387***	155.700***	
Consumers' prior attitude→sophistication	2	0.144	6.749***	
Consumers' prior attitude→ruggedness	2	0.119***	0.096	
Consumer self-confidence→brand personality	15	0.077***	32.759***	
Consumer self-confidence→sincerity	3	0.054	15.166***	
Consumer self-confidence→excitement	3	0.057	3.775	
Consumer self-confidence $\rightarrow$ competence	3	0.105	7.771**	
Consumer self-confidence→sophistication	3	0.124***	1.666	
Consumer self-confidence→ruggedness	3	0.046	0.672	
Consumer brand experience→brand personality	145	0.042	4,092.638***	
Consumer brand experience→sincerity	26	0.008	136.022***	

#### Table 3 (continued)

Relationship	Number of effect sizes	Variance-weighted, reliability-adjusted average r	Q statistic for homogeneity	
Consumer brand experience→excitement	30	0.108	3,000.111***	
Consumer brand experience→competence	36	0.059*	249.350***	
Consumer brand experience→sophistication	26	0.012	179.007***	
Consumer brand experience→ruggedness	27	-0.012	86.189	

\*p<0.10, \*\*p<0.05, \*\*\*p<0.01 (two-sided tests)

# 4 Results

Table 3 presents the mean correlations for the estimates of the antecedents and the homogeneity tests for the mean correlations. The mean correlations for the antecedents reveal that advertising complexity increases the perceptions of sincerity and competence, and consistency increases sophistication. Hedonic benefit claims increase sincerity and sophistication. Branding and country of origin (COO) support sincerity, competence, and ruggedness evaluations, while product design does not have any influence. Regarding the demographics, the results are mixed and show a tendency of the effects to decrease with education level and age and to increase with regard to sophistication and ruggedness, depending on nationality (e.g., US respondents show higher evaluations of ruggedness concerning items, such as western). Regarding consumer psychographics, human personality (congruence) exhibits positive effects for all dimensions, while the other variables (e.g., consumer self-confidence) show mixed results and seem to only play a minor role as a driver of the BP dimensions.

Table 4 presents the mean correlations for the estimates of the consequences and the homogeneity tests. Nearly all of the mean correlations are significantly different from zero. All five dimensions show comparable effects concerning brand image, brand relationship strength, and purchase/behavioral intentions. Sincerity and competence have stronger effects on brand attitudes than do the other dimensions, and excitement and ruggedness show weaker effects on brand commitment than do the other dimensions. Not only do sincerity and competence have the strongest effects on brand attitudes and brand commitment, but competence is found to be the BP dimension with the strongest influence on purchase behavior/use. The homogeneity test indicates heterogeneity in most cases, that is, the variation in effect sizes cannot be explained by sampling error alone, but possibly depends on further variables such as the moderators that we consider next.

Table 5 presents the moderator regression model for the estimates with regard to the consequences of each BP dimension. All of the models show significant improvements in fit after adding the moderator variables. We find, for instance, that a brand's personality has a stronger effect on consequences for brands in the late stages than for brands in the early stages of their life cycles. We did not find any effect from the sample characteristics. The effects of the BP dimensions on the consequences are more pronounced for the studies in which the data are based on experiments, rather than surveys, for two of the BP dimensions. Finally, whether a study was published did not influence the estimates.

195.288\*\*\*

0.355

7.195\*\*

Relationship	Number of effect sizes	Variance-weighted, reliability-adjusted average <i>r</i>	Q statistic for homogeneity	
Brand personality→brand attitude	210	0.529***	7,743.842***	
Sincerity→brand attitude	38	0.605*** a	848.282***	
Excitement→brand attitude	42	0.487*** b	1,042.766***	
Competence→brand attitude	49	0.664*** a	1,385.977***	
Sophistication→brand attitude	40	0.514*** b	1,354.600***	
Ruggedness→brand attitude	41	0.298*** c	1,749.244***	
Brand personality→brand image	39	0.508***	2,422.814***	
Sincerity→brand image	8	0.559*** a	605.017***	
Excitement→brand image	12	0.474*** a	440.169***	
Competence→brand image	6	0.655*** a	300.745***	
Sophistication $\rightarrow$ brand image	7	0.575*** a	232.154***	
Ruggedness→brand image	6	0.396** a	415.753***	
Brand personality $\rightarrow$ brand relationship strength	73	0.687*	7,481.079***	
Sincerity $\rightarrow$ brand relationship strength	20	0.698*** a	1,896.773***	
Excitement $\rightarrow$ brand relationship strength	17	0.703*** a	2,691.406***	
Competence $\rightarrow$ brand relationship strength	11	0.687*** a	204.059***	
Sophistication $\rightarrow$ brand relationship strength	16	0.653*** a	1,788.555***	
Ruggedness $\rightarrow$ brand relationship strength	9	0.755*** a	1,344.643***	
Brand personality→brand commitment	72	0.329***	1,926.949***	
Sincerity→brand commitment	11	0.354*** ab	129.748***	
Excitement→brand commitment	12	0.232*** c	61.082***	
Competence→brand commitment	22	0.452*** a	500.472***	
Sophistication→brand commitment	10	0.269*** bc	208.245***	
Ruggedness→brand commitment	7	0.015 d	35.957***	
Brand personality→purchase/behavioral intention	19	0.449***	1,648.229***	
Sincerity→purchase/behavioral intention	3	0.537*** a	20.951***	
Excitement→purchase/behavioral intention	4	0.409** a	275.968***	
Competence→purchase/behavioral intention	6	0.510*** a	293.557***	
Sophistication → purchase/behavioral intention	4	0.448* a	434.789***	
Ruggedness→purchase/behavioral intention	2	0.174 a	68.526***	
Brand personality $\rightarrow$ purchase behavior/use	24	0.481***	697.358	
Sincerity→purchase behavior/use	3	0.150 a	35.597***	
Excitement→purchase behavior/use	2	0.300*** a	0.540	

Table 4 Consequences of the BP dimensions: mean correlations and homogeneity tests

\**p*<0.10, \*\**p*<0.05, \*\*\**p*<0.01 (two-sided tests)

Competence→purchase behavior/use Sophistication→purchase behavior/use

Ruggedness→purchase behavior/use

The letters behind the estimates indicate differences in estimates related to a specific category across dimensions. Estimates with different letters differ significantly from each other (p<0.05). For example, the effect of sincerity on brand attitudes is larger than the effect of excitement on brand attitudes, but it does not differ significantly from the effect of competence on brand attitudes

14

2

3

0.591\*\*\* b

0.256\*\*\* a

0.225\*\*\* a

	Sincerity (k=83)	Excitement (k=89)	Competence ( <i>k</i> =108)	Sophistication ( <i>k</i> =79)	Ruggedness (k=68)
Intercept	0.587 (0.208)***	0.529 (0.139)***	0.532 (0.125)***	0.600 (0.181)***	0.352 (0.324)
Product type	0.082 (0.176)	-0.178 (0.084)**	-0.008 (0.089)	-0.120 (0.120)	0.078 (0.272)
Life cycle	-0.435 (0.161)**	-0.192 (0.082)**	-0.322 (0.080)***	-0.308 (0.122)**	-0.450 (0.275)
Sample	-0.072 (0.144)	0.009 (0.093)	0.022 (0.097)	-0.028 (0.098)	-0.119 (0.131)
Study design	0.328 (0.284)	0.671 (0.456)	0.199 (0.150)	0.711 (0.172)***	0.911 (0.189)***
Manuscript status	0.126 (0.191)	0.011 (0.139)	0.079 (0.111)	0.094 (0.178)	0.134 (0.336)
Model fit					
ΔD	268.126***	1,509.558***	1,238.677***	2,475.974***	3,156.629***
Dummy variables included in the model for	Brand attitude, relationship, commitment	None	Brand image, relationship, commitment	Brand commitment	Brand commitment

Table 5 Factors influencing the correlations between BP dimensions and consequences: HLM estimates

For each brand personality dimension, we first tested whether the different consequence as reported in Table 4 shows significant differences when included in the model. If there was a significant effect, a dummy variable was included as a control variable for the particular consequence. The table reports the results of the moderator variables only. The last row reports which consequences were considered as dummy variables

The unstandardized regression coefficient with the standard error in brackets is given

 $\Delta D$  refers to the change in deviance between the unconditional model (intercept-only model without moderators) and the conditional model (model with moderators) and follows a chi-square distribution

\*\**p*<0.05, \*\*\**p*<0.01 (two-sided tests)

#### **5** Discussion and implications

Table 6 provides an overview of the key findings of the meta-analysis and its implications for research and managers. In the following, we elaborate on the most interesting and partly surprising findings of our meta-analysis.

*Antecedents* While research has, for instance, noted the importance of branding for creating unique brands (e.g., Bhattacharya and Sen 2003; Keller 2008) and highlighted the relevance of the perceived congruity between the brand's and the consumer's personality in establishing affiliations with brands (e.g., Aaker 1997; Levy 1959; Sirgy 1982), little is known on the effect of advertising on BP (Lim and Ang 2008). This meta-analysis shows that hedonic benefit claims have a significant and strong influence on overall BP as well as on its dimensions sincerity (captures the notion of down-to-earth and honesty), competence (represents the idea of reliability and security), and sophistication (relates to the notion of upper class or charming). This partly counter-intuitive result is interesting and important. It shows that hedonic advertising claims help to strengthen rather cognitive BP dimensions, such as sincerity and competence, but do not necessarily support the aspirational dimensions of excitement (relates to associations such as imaginative and up-to-date) and ruggedness (represents traits such as outdoorsy and tough).

*Consequences* The study shows that the effects of BP on the brand success variables partly depend on the specific BP dimension with sincerity and competence most

Key findings	Research and managerial implications		
Antecedents			
The overall key drivers of BP are advertising with hedonic benefit claims, branding, country of origin, and self-brand congruent consumer personality.	Communication with hedonic benefit claims and branding activities are critical for establishing a strong BP. The brand's COO and the personalities of the brand's target group are important antecedents to BP. Management should find ways to reveal and trigger the target group's personalities that are congruent with their brand's personality.		
Consequences			
All five dimensions show the same effect on brand relationship strength, brand image, and purchase intentions. Sincerity and competence have the strongest influence on brand attitudes and brand commitment; excitement and ruggedness have the weakest influence on these brand success variables.	Management might initially focus their branding activities on establishing a sincere and competent brand by investing in such personality characteristics as honest, real, responsible, and reliable.		
Moderators			
The effects of the BP dimensions are stronger for mature brands compared with brands in an early life cycle stage.	Management has to be aware that BP has to be "built up;" effects of brands in their early life cycle are less strong.		
Effects on consequences are larger for goods than for services regarding the BP dimension excitement.	Managers of service brands with a focus on an excitin, BP should invest into customers' anthropomorphizin of their services by, for instance, working with tools (e.g., brand mascots) to enhance such processes.		
Sample characteristics (i.e., non-students compared with the student samples) do not influence the size of the effects. The effects of two BP dimensions on the consequences are more pronounced for the studies in which the data are based on experiments, rather than surveys. Finally, whether a study was published did not influence the estimates.	Method differences play a minor role in BP research and results are quite stable across different study settings.		

Table 6	Summary	of key	findings	and	implications
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strongly affecting brand attitudes and brand commitment. By keeping in mind that the metaanalytic findings are heterogeneous and that single findings can differ across specific product categories and brands, brand managers might initially consider the overall positioning of their brands as sincere and competent by investing in personality characteristics, such as honest, original, real, or down-to-earth, and responsible, reliable, secure, or intelligent. A similar result was reported by Aaker et al. (2004), who tested the effects of sincere brands versus exciting brands on what the authors call relationship strength indicators that are, commitment, intimacy, satisfaction, and self-connection. They found that stronger relationships are likely to result from sincere rather than from exciting brand personalities.

*Moderators* The effects of the BP dimensions are stronger for mature brands compared with brands in an early life cycle stage. This latter result is both interesting and relevant for marketing research and practice. Similar to how the personalities of humans become more stable with increasing age, brand personalities need time to be "built up" (e.g., Johar et al. 2005).

Additionally, the study showed that the effects on consequences are larger for goods than for services regarding the BP dimension excitement. Due to the intangibility of their offerings, service managers need to be more creative than managers of product brands in anthropomorphizing their services. Such possibilities could incorporate the shape and content of the brand logo (e.g., TUI logo) or the creation of a mascot with human personality traits, such as, for instance, Ronald McDonald of McDonald's, the Twitter bird of Twitter, and Geico the Gecko of Geico Insurance.

The non-significant findings of most of the method moderators show that method differences play a minor role in BP research and results are quite stable across different study settings. These findings underline the generalizability of the meta-analytic findings.

#### **6** Conclusion

Overall, we can conclude that in order to build strong and congruent brand personalities, brand and communication managers should emphasize the human characteristics of their products and services by working with hedonic benefit claims and, potentially, COO effects. Knowing that anthropomorphizing is more likely to occur when, for instance, an object shows movement (Tremoulet and Feldman 2000), is shaped like a person, and shows humanness, such as facial features, sounds, and intentionality (Dennett 1996), managers should consider creating "human" forms of their products and/or packaging. Although this is not an easy task, lessons may be learned from car manufacturers that successfully anthropomorphize the engine hoods of their cars (e.g., Aggrawal and McGill 2007). For example, many car models of Lexus or Mercedes seem to have friendly "faces" with smiles, whereas the majority of BMW models seem to have rather tough or masculine looks, supporting the BMW brand's personality. Finally, our study suggests a high relevance of the BP dimensions sincerity and competence, and managers should at least initially invest into these dimensions in order to build up strong and successful brand personalities.

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