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Brand love: development and validation of a practical scale

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Abstract Batra et al. (*Journal of Marketing 76*, 1–16, 2012) created a new conceptualization of brand love but did not develop a pragmatically useful measure for studies where questionnaire length is a constraint. The current research develops a more parsimonious brand love scale, with three nested versions of 26, 13, and 6 items, respectively. This research also validates the scales, and in so doing conducts several important validity tests not considered by Batra et al. The 26-item scale is able to predict consumer loyalty, word of mouth, and resistance to negative information, with an R^2 of .90, after correcting for measurement error.

Keywords Brand love · Brand management · Brand loyalty · Brand trust · Brand attachment

1 Introduction

Brand love is an intrinsically interesting topic for theory-focused research, and research on this subject goes back many years (Ahuvia, 1992, 1993, 2005; Carroll and Ahuvia, 2006; Fournier, 1998; Richins, 1997; Shimp and Madden, 1988). However, this

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construct has recently sparked renewed interest among academic and applied marketers alike such that a Google-Scholar search for the exact phrase "brand love" turns up over 1200 papers. The recent article by Batra et al. (2012) (henceforth BAB) has played a central role in this literature (already cited over 400 times in Google-Scholar) for both managerial and theory-building reasons.

Managerially, BAB showed that brand love has the potential to be important in the diagnosis and enhancement of consumer relationships with the brand. For the primary dependent variable, BAB combined measures of willingness to engage in positive word of mouth (WOM), favorable repurchase intentions, questioning negative information, and brand loyalty, and called this combined measure loyalty/WOM/resistance (henceforth abbreviated Loy/WOM/Res). Brand love did a good job of predicting Loy/WOM/Res, with R^2 = .61. This R^2 was notably higher than the R^2 of .17 for a comparative model that predicted Loy/WOM/Res using a measure that was typical of "conventional attitude models in marketing that rely on the brand's perceived high quality" (BAB, p. 10).

Importantly, to create and test their higher-order brand love construct, BAB began with two qualitative grounded theory studies, rather than merely transferring a theory of interpersonal love into consumer behavior. Data from these studies were then analyzed in the light of the literatures on interpersonal love and on consumer behavior. This analysis provided theoretical insights and guidelines on questionnaire items that were then used in a structural equation analysis of data from a field study. These studies revealed both similarities and differences between interpersonal love and brand love, while presenting a more comprehensive empirical view of brand love than had been put forward previously (see Table 1 for dimensions of brand love in BAB and some of the items they used to measure it).

The findings from BAB suggest that brand love might be relevant to a wider variety of contexts than sometimes thought. Generally speaking, people only have a strong love for a few brands, if they love any at all (Ahuvia, 2015; Ahuvia et al., 2014; Ahuvia, 1992; Thomson et al., 2005). Some researchers have concluded from this that brand love is not relevant in most marketing situations (Romaniuk, 2013). The findings of BAB suggest, on the other hand, that such a conclusion may not be warranted. In collecting data, BAB asked respondents to list a consumer electronic brand that they loved (or came close to loving) and another brand that they felt neutral about and did not love. Respondents then completed the brand love items for each of these two categories of brands. Although the questionnaire asked respondents to provide neutral brands that were not loved, 80 % of the respondents still reported at least some love for the "neutral" brand, so BAB referred these brands as "low love" rather than neutral in their study. Even in the context of these low love brands, brand love predicted Loy/WOM/Res with an R^2 of .63, comparable to the R^2 for the loved brands of .61. This suggests that even in situations where it is unrealistic to generate a lot of brand love, a little brand love can go a long way (c.f., Bergkvist & Tino, 2010). So, we speculate, brand love may be a good predictor of important managerial variables even for low or moderate involvement brands.

With these contributions, and others, BAB provided what might be seen as a "proof of concept" for brand love. However, while BAB has been cited in over 400 published papers to date, none of these papers has used the brand love measure from BAB. At *56 items*, that measure is simply too long to be pragmatically useful in many studies. The

Table 1 Items for the brand love scale shown in Fig. 1

	Factor	Brand love scale items
Higher-order factor Self-brand integration	Current self-identity	To what extent do you feel that… • Wearing of American Eagle Outfitters says something "true" and "deep" about whom you are as a person?[a,b] • American Eagle Outfitters is an important part of how you see yourself?
	Desired self-identity	To what extent is American Eagle Outfitters able to… • Make you look like you want to look?[a] • Make you feel like you want to feel?
	Life meaning and intrinsic rewards	To what extent is American Eagle Outfitters able to… • Do something that makes your life more meaningful?[a] • Contribute something towards making your life worth living?
	Attitude strength 1	To what extent do you… • Find yourself thinking about American Eagle Outfitters?[a] • Find that American Eagle Outfitters keeps popping into your head?
Higher-order factor Passion-driven behaviors	Willingness to invest resources	To what extent… • Are you willing to spend a lot of money improving and fine-tuning a product from American Eagle Outfitters after you buy it?[a] • Are you willing to spend a lot of TIME improving and fine-tuning a product from American Eagle Outfitters after you buy it?
	Passionate desire to use	Using the products: To what extent do you feel yourself… • Desiring to wear American Eagle clothing?[a,b] • Longing to wear American Eagle clothing?
	Things done in the past (involvement)	To what extent have you… • Interacted with American Eagle Outfitters in the past?[a] • Been involved with American Eagle Outfitters in the past?
Higher-order factor Positive emotional connection	Factor	Brand love scale items
	Intuitive fit	Please express the extent to which… • You feel there is a natural "fit" between you and American Eagle Outfitters.[a] • American Eagle Outfitters seems to fit your own tastes perfectly.
	Emotional attachment	Please express the extent to which… • You feel emotionally connected to American Eagle Outfitters?[a,b] • You feel you have a "bond" with American Eagle Outfitters.
	Positive affect	

Table 1 (continued)

Factor	Brand love scale items
	To what extent do you feel that American Eagle Outfitters… • Is fun?[a] • Is exciting?
Long-term relationship	Please express the extent to which you… • Believe that you will be wearing American Eagle Outfitters for a long time.[a,b] • Expect that American Eagle Outfitters will be part of your life for a long time to come.
Anticipated separation distress	Suppose American Eagle Outfitters were to go out of existence, to what extent would you feel… • Anxiety[a,b] • Apprehension
Attitude valence	On the following scales, please express your overall feelings and evaluations towards American Eagle Outfitters. • 7-point negative-positive[a,b] • 7-point unfavorable-favorable
Attitude strength 2 (certainty and confidence) Note: *Attitude strength 2* failed to correlate highly with the rest of the scale and *was dropped from the scale*	• How certain are you of these overall feelings and evaluations you just gave above? • How much confidence do you have in these overall feelings and evaluations you just gave above? 7-point "not confident at all" to "extremely confident"

All items are measured using a 7-point "not at all" to "very much", with "moderately" as a midpoint, unless otherwise noted. Scale items copyrighted © 2014 by the authors

[a] Item for reduced 13-item scale

[b] Item for reduced 6-item scale

current paper introduces three nested scales of 26, 13, and 6 items in length, to measure brand love as explicated in BAB, and we explore the comparative predictive and diagnostic values of these.

Furthermore, because BAB focused on theory development rather than scale development, it omitted the following important aspects of scale validation, which we examine herein.

1.1 Factor structure with single-brand data

In BAB, respondents each named their own loved brand, rather than having all respondents answer questions about the same brand supplied by the researchers. This had the advantage of increasing the likelihood that respondents would love the brand they were answering questions about. However, in almost all applied settings, the

researcher would supply the brand(s) in question, and as a consequence, while some respondents might love that brand, many respondents might not. We do not know if BAB's structural findings will hold for this situation in which all respondents rate the same brand. This is a critical issue because BAB's brand love construct is both extensive and complex (see Table 1), and therefore, the factor structure may not be very robust. The first contribution of the current research is to see if the factor structure for brand love found in BAB holds when applied to a single brand.

1.2 Product category scope

BAB found an R^2 of brand love on Loy/WOM/Res of .61 for loved consumer electronic brands. This R^2 is relatively high. Does brand love offer high explanatory power in other product categories? Products like computers and cell phones are highly responsive to their users, often even speaking with a human voice. This makes many of these products somewhat anthropomorphic (Aggarwal and McGill, 2007), and anthropomorphism has been shown to facilitate brand love (Rauschnabel and Ahuvia, 2014). The second contribution of the current research is to investigate if such high R^2s can be sustained in a less anthropomorphic product category, clothing, where a particular brand is the target of focus.

1.3 More comprehensive construct validation assessment

While BAB provided evidence of convergent and nomological validity for brand love, the types of construct validity evidence they provided were nonetheless limited. We augment BAB by providing for the first time an assessment of construct validity in a more rigorous multi-trait, multi-method matrix manner that includes controls for method bias.

Thus, the current research provides the first fully validated and pragmatically useful scales of brand love as explicated in BAB.

2 Methodology

2.1 Samples and data sets

Three data sets were utilized in the studies reported herein. The primary data set was collected from a sample of 315 undergraduate students at a mid-sized public university in the USA. Respondents were 57 % male, enrolled in business classes, and received class credit for participation. Prior to the survey, students were asked to list clothing brands that were popular with their peers, and by informal consensus, they selected American Eagle Outfitters, J. Crew, Aeropostale, Express, and H&M. American Eagle Outfitters was used as the target brand in the primary data set.

After analyzing the primary data set, we determined that a multi-trait, multi-method matrix analysis would strengthen the contribution of this research, and a second data set was collected specifically for this purpose—the MTMM matrix data set. The sample process was the same as above yielding an $N = 317$ that was 51 % male. Respondents provided reactions to J. Crew clothing on the new brand love scale (Table 1) using two-

method formats: the original 7-point "not at all" to "very much" scale and a 7-point "disagree-agree" scale with appropriate changes in wording to accommodate the two response formats. The two scales were separated by 32 items measuring reactions to Facebook in order to disguise the intent of the study and clear short-term memory, and the two brand love scales were counterbalanced across respondents. Note that because the two methods are both self-reports and it is therefore more difficult to establish discriminant validity when methods are relatively similar, as ours are, the test of discriminant validity done herein is actually a more stringent one than when relatively different methods are used.

Finally, we determined that exploring the pros and cons of various brand love measures requires data in which each respondent rates multiple competing brands. A third data set was collected to compare different brands, specifically American Eagle Outfitters, Aeropostale, Express, and H&M. The sample process was the same as above yielding an $N = 471$ that was 52 % male. In addition to the items from the previous surveys, we measured how many articles of clothing respondents owned of each brand, either through own purchase or as gifts, on 10-point scales, and the frequency of shopping for each brand was measured separately with regard to retail shops, print catalogs, and websites, on 10-point scales.

2.2 Item selection for new brand love scale

Based on the item loadings in the original BAB data set, we chose two items per factor for all 14 factors found in BAB's model, where items were selected based on those with the highest loadings in BAB. As explained below, the two items for attitude strength #2 were later dropped from the scale, yielding a 26-item final scale. As noted above, we also developed shorter scales of 13 and 6 items each for cases where researchers have questionnaire length restrictions and are willing to sacrifice some detail and insights to meet these constraints.

3 Results

3.1 Extending the scope of brand love

BAB provided some evidence of validity but did so using electronic brands that had anthropomorphic traits. This is important given the strong connection between anthropomorphism and brand love (Rauschnabel and Ahuvia, 2014). BAB also allowed each respondent to select a brand they loved (or came close to loving) to answer questions about brand love. Our first step was to extend the applicable scope of the new scale by replicating two key analyses from BAB (factor structure and factor means) using a single, less anthropomorphic clothing brand, assigned to all respondents.

The LISREL program was applied to test the brand love prototype factor structure proposed by BAB in this 28-item dataset (see Fig. 1). This model fits well: $\chi^2(283) = 891.51$, $p = .00$, RMSEA = 0.07, NNFI = 0.98, CFI = 0.98, and SRMR = 0.07. Importantly, in these data (and in our other data sets, see below), the two measures of attitude strength #2 failed to load on brand love significantly and/or the factor failed to correlate significantly with the other factors, thereby bringing into

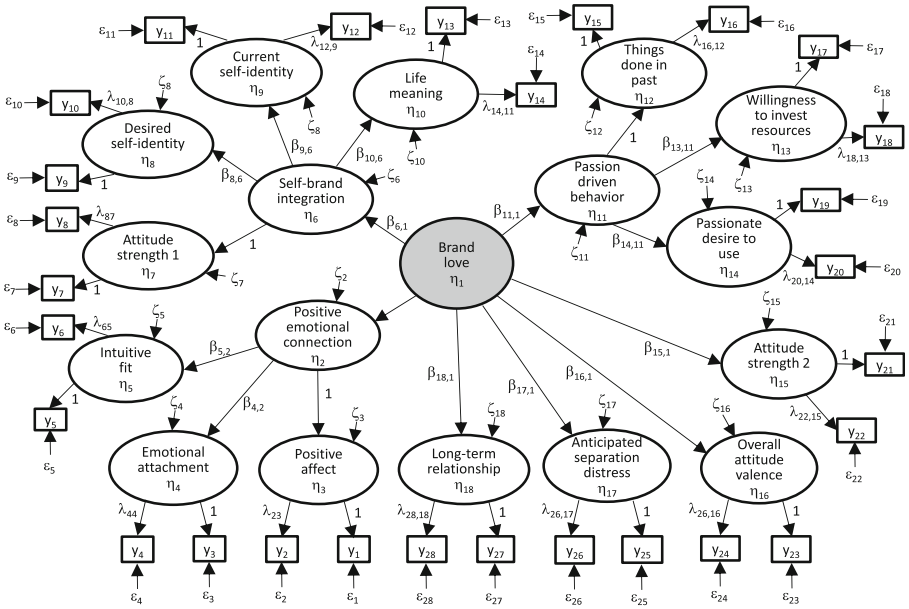


Fig. 1 Higher-order brand love confirmatory factor analysis model

question the validity of measures of attitude strength #2. Attitude strength #2 measures the level of certainty respondents have about their thoughts and feelings towards the brand, whereas attitude strength #1 measures how frequently respondents thought about the brand. Similar problems with the attitude strength #2 measures were found by Rauschnabel and Ahuvia (2014). Therefore, the attitude strength #2 measures were omitted from the prototype model here and in all subsequent analyses (except as noted below). Convergent validity of measures of the brand love prototype is thus confirmed, with this one change, resulting in a multifactor scale of 26 instead of 28 items.

If the brand love items are valid, then the means of the 13 factors should be significantly greater for owners versus non-owners. As in BAB, an analysis of factor means showed indeed that all means for the brand love factors are significantly higher for owners versus non-owners.[1] We also checked if this measurement model (the factor loadings of the items) also fit for non-purchasers of the brand and found no significant differences in factor loadings for owners versus non-owners. These findings are available on request.

3.2 MTMM matrix test of method bias

BAB did not explicitly control for method bias in their convergent validity tests, so we perform that test here. A MTMM matrix summarizes the amount of agreement (convergent validity) among measures of the same construct and disagreement

[1] Similar to the findings above with respect to tests of construct validity, attitude strength #2 was not significantly correlated with the other 13 brand love factors and does not appear to be part of the brand love construct in the minds of respondents in these data. Hence, we did not investigate further the mean differences on attitude strength 2.

(discriminant validity) between measures of different constructs from multiple methods. Confirmatory factor analysis models applied to such data allow one to ascertain sources of variation in items due to (1) the underlying dimensions of the brand love construct, (2) random measurement error, and (3) systematic method bias. In contrast, use of a single method typically results in inflation of estimates of convergent validity, and assessment of discriminant validity cannot be done in a way where random and systematic errors are unconfounded.

Two confirmatory factor analysis models were examined using the MTMM data set. The initial trait-error model consisted of 14 factors (that included attitude strength #2)[2] corresponding to the brand love dimensions, where each factor had four indicators, two with the unipolar scale and two with the bipolar scale. This model hypothesizes that variation in measures can be accounted for by the 14 factors plus random error (but method bias is not modeled separately here). This model is tested to see if a good fit can be obtained ignoring method bias. The findings showed that the model is highly inadequate: $\chi^2(1393) = 10{,}465.92$, $\underline{p} = .00$, RMSEA = 0.24, NNFI = 0.90, CFI = 0.91, and SRMR = 0.14. This outcome is what might be expected if method bias exists but is not taken into account.

The second model, the trait-method-error model, consisted of the 14 brand love factors, plus the introduction of two-method factors corresponding to the unipolar and bipolar scales. This model partitions variance into trait, random error, and method (i.e., systematic error, "method bias") components. The results showed a satisfactory fit: $\chi^2(1332) = 3493.24$, $\underline{p} = .00$, RMSEA = 0.07, NNFI = 0.97, CFI = 0.98, and SRMR = 0.07. That is, variation in items as measures of brand love is successfully explained as a function of the proposed construct, controlling for random and systematic error.

The average variance explained in items as reflected in the 52 trait factor loadings was 0.63, thus supporting convergent validity. Based on the construction of confidence intervals, most factors were correlated at levels far below 1.00, with the two highest factors correlated $\phi = 0.82$ (s.e. = 0.03). Chi-square difference tests also established discriminant validity for the measures of the factors, despite the fact that this is a demanding one because the high similarity of methods tends to inflate shared variance of measures across constructs.

3.3 Shorter scales and nomological validity

The 56-item measure used in BAB is prohibitively long for many uses, so a 26-item scale was developed and used above. Now we wish to explore whether even shorter scales can be created that remain valid. Because the multiple items used to measure each factor have been demonstrated to be parallel and equivalent measures of their respective factors, a practical basis exists for forming shorter scales using only one item per factor, where items were selected based on the ones with the highest loadings. This

[2] As found for the analysis of the American Eagle data, the attitude strength #2 items correlated poorly with the other 13 factors: the range of correlations was −0.18 to 0.29. Therefore, attitude strength #2 (confidence/certainty) again was a poor indicator of brand love but was included within this MTMM analysis, for completeness and comparison to BAB.

approach creates a 13-item scale that uses one item per factor to measure the 13 first-order factors listed in Table 1 (see Table 1 items with superscript a). An even shorter, 6-item scale (see Table 1 items with superscript b) uses the same approach as the 13-item scale; but where 10 first-order factors combine to create three second-order factors, the 6-item scale selects one item from each of these three second-order factors plus one item each from the unique first-order factors. This brevity, however, comes at a price, whereas the full 26-item scale produces a multifactor model of brand love, *the 13-item and 6-item scales produce a single factor representation of overall brand love*. Therefore, the 13-item and the 6-item scales aim to be useful when the focus is on the antecedents or consequences of brand love overall, rather than on understanding how the various brand love factors create or reflect these effects. The Cronbach alpha reliability was 0.83 for the 6-item scale and 0.92 for the 13-item scale.

BAB established nomological validity by placing their 56-item measure in a nomological network with perceived functional product quality (henceforth "product quality") and Loy/WOM/Res (see Table 2 for items). We do the same for all three versions of the new brand love scale using American Eagle as the focal brand.

To begin, we looked only at the full multifactor scale and using a structural equation model regressed Loy/WOM/Res on both product quality and brand love, and brand love on product quality. This is the model shown in Fig. 1 with product quality added as a predictor of brand love (η_1 in the figure) and Loy/WoM/Res also added as a dependent variable and predicted by both product quality and brand love (η_1). Supporting nomological validity for the full 26-item brand love scale, the results show a satisfactory fit: $\chi^2(476) = 1269.72$, $\underline{p} = .00$, RMSEA = 0.096, NNFI = 0.98, CFI = 0.98, and SRMR = 0.077. Likewise, high levels of explained variance occur for brand love regressed on brand quality ($\underline{R}^2 = .36$) and for Loy/WOM/Res regressed on both brand quality and brand love ($\underline{R}^2 = .90$), respectively.

Table 2 Other measures used in the study

Factor	Items
Functional quality of brand	I believe American Eagle products… 1. Have functional quality 2. Are practical 3. Are well made 7-point "not at all" to "very much", with "moderately" as a midpoint
Loyalty/word of mouth/resistance	1. How would you describe your loyalty towards American Eagle? 7-point "very weak" to "very strong" 2. If you were shopping again for this kind of product/service, would you… 7-point "definitely not buy American Eagle Outfitters again" to "definitely would buy American Eagle outfitters again" 3. If you heard something bad about American Eagle Outfitters, to what extent would you question those statements, in your own mind? 7-point "not at all" to "very much" 4. How often have you found yourself saying positive things about American Eagle, to other people? 7-point "never" to "very often"

It might be asked whether the role of brand love in mediating the effects of product quality on Loy/WoM/Res depends on respondents with "extreme/intense" responses. To test this possibility and at the suggestion of one reviewer, we removed the top 7, 9, 14, and 23 % of respondents with the highest overall brand love scores and reran the predictive SEMs. Table 3 presents the findings, where very little changes in the $\underline{R}^2$ of brand love and the $\underline{R}^2$ of Loy/WoM/Res can be seen.[3] We also compared the fit of the predictive model for brand owners versus non-owners. We found that for consumers who had bought at least one American Eagle product, the brand love is predicted by functional quality with an R^2 of 55 %, whereas among brand non-buyers, the R^2 was reduced to 26 %. This makes sense in that only buyers would have first-hand experience with the brand's functional quality, so it would have a stronger influence on brand love. When Loy/WoM/Res was predicted by both brand love and functional quality, among brand buyers the R^2 was 88 % and among non-buyers it was 83 %. Again, this slightly lower R^2 among non-buyers is what one would expect for those with less knowledge of the focal brand.

Therefore, consistent with results reported in BAB, where the representation of brand love and its role mediating the effects of product quality on Loy/WoM/Res were similar for those having high and low love for brands, we find that brand love and its role as a mediator does not appear to be dependent on extreme/intense brand love responses. Explained variance declines by relatively small amounts as the number of extreme respondents removed increases, but it might be expected that a portion of this decline would be simply due to a reduction of variation in responses.

To compare the three versions of the scale, we looked at the same set of relationships between constructs, this time using the Process Model Macro from SPSS (Hayes, 2013). To create an apples-to-apples comparison, we reanalyzed the 26-item scale in the same way we analyzed the shorter scales, i.e., it was treated as a single factor and all of its items were averaged together to create each respondent's score. The findings comparing the three versions of the scale are presented in Table 4, and the results are broadly similar for all three versions. In all three analyses, product quality predicts brand love ($p < .001$); and product quality ($p < .001$) and brand love ($p < .001$) both significantly predict Loy/WOM/Res. The bootstrap confidence intervals show that the indirect effect of product quality on Loy/WOM/Res is significant, and partial mediation is again achieved by brand love (i.e., higher quality directly predicts Loy/WOM/Res and indirectly predicts Loy/Wom/Resby increasing brand love). Thus, nomological validity is maintained even when using the shorter scales.

The variance explained by the various scales tells an interesting story. When product quality predicts brand love, the variance explained by each scale is as follows: 6-item = 26 %, 13-item = 30 %, 26-item treated as a single factor = 29 %, but 26-item treated as a multifactor prototype = 36 %; and when both product quality and brand love predict Loy/WOM/Res, the variance explained by each scale is as follows: 6-item = 66 %, 13-item = 72 %, 26-item treated as a single factor = 71 %, but 26-item scale treated as a multifactor prototype = 90 %. For these data, when the scale items are simply averaged together as single factors, there is no advantage of using the 26-item scale and only a moderate advantage in using the 13-item over the 6-item scale. However, because the 26-item scale has multiple measures for each construct, it allows

[3] These correlation matrices are available from the authors on request.

Table 3 Sensitivity analysis of predictive models for different numbers of persons with the highest brand love scores removed for comparative purposes

Sample	Percentage of extreme/intense responses based on overall brand love scores removed from analyses (%)	Explained variance
Full	0	$R\sim^2_{BL} = .36,\ R^2_{Loy} = .90$
93 %	7	$R\sim^2_{BL} = .32,\ R^2_{Loy} = .87$
91 %	9	$R\sim^2_{BL} = .31,\ R^2_{Loy} = .86$
86 %	14	$R\sim^2_{BL} = .33,\ R^2_{Loy} = .85$
77 %	23	$R\sim^2_{BL} = .33,\ R^2_{Loy} = .81$

BL brand love, *Loy* Loy/WoM/Res

Table 4 Tests of mediation of effects of functional product quality on brand loyalty by brand love

A. Scale = 26 items treated as a single factor*	Mediator model (brand love as D.V.)		Outcome model (loyalty as D.V.)	
Product quality	.38(.03)t = 11.28		.13(.03)t = 4.07	
Brand love	–		.99(.05)t = 20.94	
F(df1.df2)p	127.15(1313).000		384.39(2312).000	
R^2	.29		.71	
	Indirect effect			
	Effect	Boot SE	Boot LLCI	Boot ULCI
Brand love	.37	.03	.31	.44
B. Scale = 13 items	Mediator model		Outcome model	
Product quality	.39(.03)t = 11.85		.11(.03)t = 3.50	
Brand love	–		1.00(.05)t = 21.62	
F(df1,df2)p	140.38(1323).000		403.83(2322).000	
R^2	.30		.72	
	Indirect effect			
	Effect	Boot SE	Boot LLCI	Boot ULCI
Brand love	.39	.03	.33	.45
C. Scale = 6 items	Mediator model		Outcome model	
Product quality	.35(.03)t = 5.61		.16(.03)t = 4.64	
Brand love	–		.93(.05)t = 18.83	
	116.63(1327).000		315.85(2326).000	
R^2	.26		.66	
	Indirect effect			
	Effect	Boot SE	Boot LLCI	Boot ULCI
Brand love	.33	.03	.27	.40

Standard errors of parameter estimates in parentheses

*Brand love is measured using the 26-item scale and treating that scale as a single factor computed as the average of the 26 items

one to use a structural equations model that explains markedly more variance than any of the single factor approaches, and can also potentially offer managerial/diagnostic insight into the brand love potential of the rated brand through an examination of the differential effects due to the individual components of brand love.

4 Discussion

Brand love is an important aspect of modern brands for both consumers and marketers alike. BAB identified the core features of brand love and demonstrated their organization in consumer memory as a hierarchical prototype. But because the focus of BAB was theory development rather than scale development, they did not provide a pragmatically useable measure. We fill that gap here by creating a 26-item brand love scale that can also be used in a 13- or 6-item version, and we provide a more comprehensive validation of this scale.

One key limitation of the study by BAB is its reliance on respondents who each chose the brands that they would answer questions about. The current research showed that, for the most part, the prototype model uncovered in BAB continued to fit well when all respondents answered questions about the same brand(s). However, one of the 14 factors from BAB's brand love prototype—attitude strength #2—did not correlate highly with the factors in the rest of the model and was dropped from the scale. The current research also demonstrated construct validity for the new scale using an MTMM matrix analysis.

These findings shed more light on the concern that because most consumers do not have an intense love for most brands, brand love may not be widely relevant. However, comparing the findings in BAB where respondents selected their own loved brand (and hence the sample mostly contained strongly loved brands) to the findings here where the sample spanned a gamut from very low to very high brand love, we find that the R^2 improves from .61 in BAB to .90 here. In retrospect that should not be surprising, having more variance on a measure often leads to higher R^2 statistics. This shows, however, that brand love can be highly relevant when consumers have a wide range of levels of love for a brand. This finding is consistent with Bergkvist and Tino (2010) who found that the average level of brand love was much higher for Vegemite (an iconic food brand that was likely to be loved by their Australian sample) than it was for two brands of toothpaste, but the impact of brand love on the managerially relevant variables was more than twice as high for the toothpastes than it was for Vegemite.

The existence of 26-, 13-, and 6-item versions of the brand love scale raises the question of which version to use when? There are two issues to consider in making this decision: the amount of variance each measure can explain and the importance of looking at the subdimensions within brand love. With regard to variance explained, if analysis can be done using structural equations modeling, then the 26-item measure (R^2 = 90 %) is to be preferred over the 13-item (R^2 = 72 %) and the 6-item (R^2 = 66 %) versions of the scale. Furthermore, in other analyses of the data (not reported in detail here due to space limitations), the 26-item scale used in a structural equations model sometimes achieved statistical significance whereas the shorter scales did not. However, if the brand love score is going to be computed by simply averaging all the scale items, the 13-item scale

does just as well as or even slightly better than the full scale, and the 6-item version is not far behind, where focus is on prediction not explanation.

The second consideration is whether the analysis will look at some of the subdimensions individually or only look at the overall brand love score. There are advantages of looking at each subdimension, for both managers and academics. For managers, comparing brands on each of the 13 brand love dimensions can help them spot threats and opportunities that would have remained hidden had they used a single dimensional measure of brand love: analysis of multiple dimensions provides more diagnostics. For academics, looking at the subdimensions of multi-dimensional constructs is a valuable, and sometimes essential, approach to theory development and testing. For example, Pieters (2013) looks at how loneliness relates to each of the three subdimensions of materialism and finds important differences. Similarly, Rauschnabel and Ahuvia (2014) demonstrate the importance of looking at the subdimensions of brand love when considering theoretically its relationship to anthropomorphism. It can be helpful to recall that higher-order constructs such as brand love have no existence that is independent of their subdimensions. If another construct interacts with brand love, it must be interacting with one or more of brand love's subdimensions. Because brand love is a complex construct, it is unlikely that another construct would interact with all 13 of its subdimensions in an identical manner. Therefore, it will be difficult to provide good theoretical explanations of how brand love interacts with other constructs without being able to measure each of brand love's subdimensions.

Our research developed and validated the first pragmatically useful brand love scales based on BAB. In so doing, it confirmed the validity and usefulness of the brand love construct organized as a mental prototype and showed that it can predict Loy/WOM/Res with an R^2 of .90. We hope the new scales will facilitate future research into brand issues, in general, and aid in tests of hypotheses where brand love is central, in particular. Future research can, for example, now more easily explore the relationship between brand love and several potentially related other constructs, such as brand hate (e.g., Zarantonello et al., 2016), highly involved self-connection with brands (Escalas and Bettman, 2013), and even particular components of brand personality (Aaker, 1997; Rauschnabel et al., 2015). Such future research could go beyond psychometric investigations of nomological validity and include fresh qualitative "grounded theory" investigations, as was earlier done by BAB, thus adding to the earlier work presented by BAB on these relationships.

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