

In Brands We Trust; The Development and Validation of a Contemporary Brand Trust Scale

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In Brands We Trust

The Development and Validation of a Contemporary Brand Trust Scale

Abstract

Brand trust is becoming even more important now consumers are changing their shopping behavior, also for high involvement products. The current scales to measure brand trust, however, have been developed particularly using low involvement purchases in traditional retail settings. The purpose of this research is to update the conceptualization of brand trust, including its dimensional structure and their corresponding measurement items. For this, we conducted four different studies, using two high involvement product categories: mobile phones and fashion clothing.

Our new brand trust scale comprises two dimensions. The reliability dimension seems consistent with the existing literature but may be improved by adding items that represent important developments in the current retail sector, focusing on user needs and shopper experience. The security dimension, however, bridges a gap in the current brand trust literature. This feeling of relief and safety indicates strong brand trust signals for consumers in a high involvement product category. Security proves even more important than reliability in brand trust.

Keywords

brand trust, scale development, conceptualization

Track

Product and Brand Management

1. Introduction

According to Hiscock (2001, p.1) “the ultimate goal of marketing is to create an intense bond between the consumer and the brand”. Chaudhuri & Holbrook (2001) consider trust as the “heart” of this bond, and Delgado-Ballester, Munuera-Alamán and Yagüe-Guillén (2003, p. 1) claim that trust is “the most important attribute any brand can own”. Brand trust has a positive effect on important key success variables, such as: “purchase intention” (Cuong, 2020; Lacey, 2007), “brand commitment” (Chaudhuri & Holbrook, 2002), and “brand loyalty” (e.g., Kabadayi & Alan, 2012). Despite its central importance in marketing, the conceptualization of brand trust may need an update, since there are at least three important issues that need attention.

The first issue is about its dimensional structure. According to Chaudhuri and Holbrook (2001), who authored the most widely cited article on the conceptualization of brand trust, brand trust is a one-dimensional concept, focusing on the brand’s performance only. Delgado-Ballester et al. (2003), responsible for the second most cited article, however, concluded that brand trust is best conceptualized using two dimensions: the consumers’ beliefs of the brand’s reliability and its intentions. Li, Zjou, Kashyap and Yang (2008) suggest that brand trust may even consist of three dimensions: benevolence, integrity, and competence.

The second issue is the product category used in the conceptual studies discussed above. Although Delgado-Ballester and colleagues (2001 and 2003) recognize that the level of involvement is an indicator for the importance of the product and the consequences of the purchase, and Chaudhuri and Holbrook (2001) indicate that trust is especially relevant in situations of felt uncertainty, they only used low involvement product categories to develop their brand trust measurement scales.

The third issue concerns the changes in the retail sector since the previous fundamental studies on the brand trust scale were conducted. They all focused on traditional shopping whereas omni-channel shopping has become the standard nowadays. Omni-channel retailing includes a mix of click & order and brick & mortar shopping and orientation. Following Carter (2021), marketers should focus more on creating “experiential and immersive experiences” to enhance interaction with the brand and the product. This suggests that the current brand trust scales may no longer be up to date.

The main goal of this paper is to re-investigate the conceptualization of brand trust. By developing a new, up to date brand trust scale for the contemporary consumer using high involvement product categories, this study contributes to the brand trust literature.

2. Background

In brand management, brand trust has been used in different ways to imply different meanings. This section begins with stressing the importance of brand trust. After that, a review on the conceptualization and contextualization of brand trust in previous scale developments studies is presented.

A widely accepted statement about trust is that it is a “fundamental component of any valuable social interaction” and “evolves out of perceived risk” (Delgado-Ballester & Munuera-Alemán, 2001, p. 1241). As a result of the growing importance of relationship marketing, trust has become an important branding concept. In branding research, brand trust “is based on the perspective of a brand-consumer relationship” Zehir, Sahin, Kitapci, and Ozsahin (2011, p. 1220). Three different studies have influenced our conceptualization of brand trust.

1. Morgan & Hunt (1994, p.23)¹ conceptualize trust as “a degree of confidence in an exchange partner’s reliability and integrity,” which is the result of characteristics including competence, honesty, and fairness. They also stress that trust is the basis of relationship commitment because it entails vulnerability. Consequently, people seek for trustworthy parties and brands. Morgan & Hunt (1994) found that trust is a very important management concept and mediator between relationship efforts (e.g., communication) and relationship benefits (e.g., cooperation). Trust was measured using a seven-item scale, including “In our relationship, my major supplier (1) cannot be trusted at times (2) can be counted on to do what is right, and (3) has high integrity” with a Cronbach’s alpha of .95.

2. Chaudhuri and Holbrook (2001, p. 82)² define brand trust as “the willingness of the average consumer to rely on the ability to perform its stated function”, and thus focus specifically on the performance of the brand. The study contained several product categories (e.g., candy, coffee, laundry soap, chewing gum, beer, bottled iced tea, bacon, ice cream), all being frequently purchased and widely distributed goods. Brand trust was measured as a four-item index, using the following statements: “I rely on this brand”, “this brand is safe”, “this is an honest brand” and “I trust this brand.” They found support for a one-dimensional brand trust measurement and an alpha of .81. Chaudhuri & Holbrook’s (2001) study also proved that brand trust is a significant contributor to attitudinal and purchase loyalty.

¹ Number of citations since publication: 34263 and since 2020: 5149 (Google Scholar)

² Number of citations since publication: 10332 and since 2020: 2533 (Google Scholar)

3. Delgado-Ballester et al. (2003, p.2)³ claim that Chaudhuri & Holbrook (2001) have ignored the “motivational aspects” of the brand trust, which captures its (true) intentions and found support for this. This brand intention dimension is based on the belief of the consumer in the brand to pursue the consumers’ interest when problems with the product consumption arise. Their brand reliability dimension appears close to the performance dimension, defined here as the belief of the consumer in the brand to accomplish its value promise. Consequently, Delgado-Ballester et al. (2003) defined brand trust as “the confident expectations of the brand’s reliability and intentions in situations entailing risk to the consumer.”

The study used two product categories: shampoo and deodorant, and found four conceptual items per dimension. The reliability dimension consists of the items: “The brand meets my expectations”, “I feel confident in the brand”, “The brand never disappoints me”, and “The brand guarantees satisfaction” (alpha .81). The intentions dimension contains the items: “The brand would be honest and sincere in addressing my concerns”, “I could rely on the brand to solve the problem”, “The brand would make effort to satisfy me”, and “The brand would compensate me in some way for the problem” (alpha .83).

More recently Koschate-Fischer & Gärtner (2015) developed a one-dimensional brand trust scale based on items from e.g., Chaudhuri & Holbrook (2001) and Delgado-Ballester et al. (2003), using chocolate, shampoo, and laundry detergent brands. They recommend that brand trust is best measured using 5-items: “I rely on the brand”, “I trust the brand”, “The brand is safe”, “I am confident in the brand’s ability to perform well”, and “I expect the brand to deliver on its promise;” resulting in a coefficient alpha of .90. Koschate-Fischer & Gärtner (2015) also tested the nomological validity and found that brand trust has a significant effect on customer satisfaction, customer loyalty, and brand equity.

3. Research Method & Results

The measurement approach of this study will be based on Churchill’s (1979) scale development paradigm, which has been used and expanded by e.g., Koschate-Fischer & Gärtner (2015); Napoli et al. (2014); Sprott et al. (2009). The process includes four studies.

3.1 Study 1 – Item generation

An initial item pool was based on the previous scales of brand trust, including Chaudhuri & Holbrook (2001); Delgado-Ballester et al. (2003); Hess (1995); and Li et al. (2008). Additionally, specific items for high involvement products relevant to the current

³ Number of citations since publication: 1364 and since 2020: 378 (Google Scholar)

retail landscape, i.e., more focused on the store providing experimental experiences and the option of click & collect, were included. This resulted in the initial item pool consisting of 44 items.

Following Napoli et al. (2014), five young marketing graduates, being highly familiar with the selected product categories (phones and fashion) judged the items. Each participant was provided with a description of brand trust and was asked to rate the items as ‘not representative’, ‘somewhat representative’ or ‘representative’ of brand trust. Items were kept if the item (a) was judged as ‘representative’ by at least two participants and (b) was not considered once as ‘not representative’. Twenty-one items were removed from the basis of the scale-formation.

3.2 Study 2 – Exploratory Factor Analysis

Since, there is little consensus in the literature about the underlying factor structure of the construct brand trust, we employed an exploratory factor analysis first.

Following Hollebeek, Glynn and Brodie (2004), and Brakus, Schmitt & Zarantonello (2009), 110 marketing students (response rate 52%) rated how much they trust specified brands, placed on a five-point Likert scale. To reduce the occurrence of primacy and recency effects, we developed different questionnaire versions for each brand (for mobile phones: Apple, Samsung, Huawei, Nokia and for fashion clothing: Louis Vuitton, Nike, Hugo Boss, Primark) using a distinct, randomly assigned sequence of the remaining 23 brand trust items. Principal Component Analysis with Varimax rotation resulted in a set of seventeen items reflecting a two-factor solution, explaining 59,97% of the variance and indicating two brand trust dimensions: (a) beliefs on reliability and (b) feelings of relief and security. These 17 items form the basis for the confirmatory factor analysis in Study 3.

To assess the effect of each dimension on brand trust, the questionnaire also asked the respondents to rate how much they overall trusted the randomly assigned brand on a five-point Likert scale. The model shows an Adjusted R² of 0.734 with for security: $\beta = 0.549$ ($p < 0.05$); and for reliability: $\beta = 0.345$ ($p < 0.05$).

3.3 Study 3 – Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was employed on a new data set to indicate the fit of the model. A CFA is a statistical method to verify and confirm a factor structure of a collection of items.

New data was gathered from a representative sample of the Dutch population, and we followed the same research procedure as in Study 2. The data of the 213 respondents were screened for multivariate assumptions (normality, linearity, homogeneity, and homoscedasticity) and all assumptions were met.

Multiple alternative Structural Equation Models (SEM) were examined including: the null model, two-factor original model, two-factor orthogonal model, and two-factor revised. As shown in Table 1, the two-factor revised model provided the best data fit. The fit statistics are: comparative fit index (CFI) = 0.93, Tucker Lewis index = 0.92, the standardized root means square residual (SRMR) = 0.05, normed fit index (NFI) = 0.90, and incremental fit index (IFI) = 0.93, all within the norms recommended by Schumacker and Lomax (2004), Kelloway (1998) and Bollen (1989).

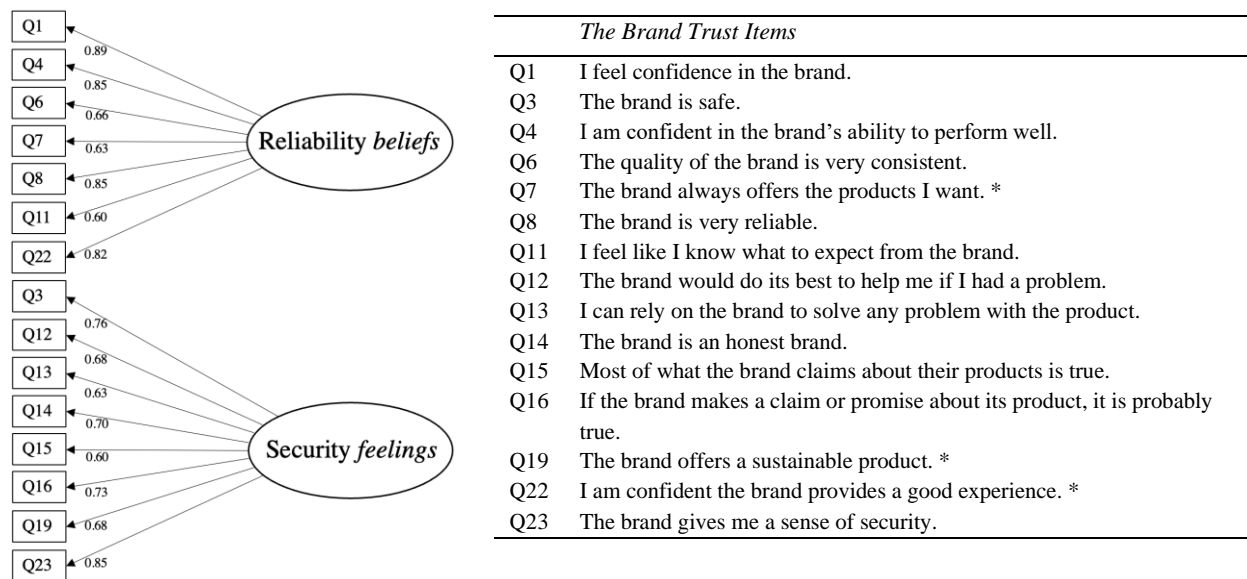
Table 1 – Confirmatory Factor Analysis Model Fit Comparison

<i>2-F Model</i>	<i>X²</i>	<i>df</i>	<i>p</i>	<i>Norm X²</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>GFI</i>	<i>AGFI</i>	<i>NNFI</i>	<i>IFI</i>
Null	2630.419	136	0.000	19.341	NA	NA	NA	NA	NA	NA	NA	NA
Original	374.640	120	0.000	3.122	0.90	0.88	0.10	0.19	0.83	0.78	0.88	0.90
Orthogonal	683.548	121	0.000	5.649	0.77	0.75	0.15	0.38	0.80	0.75	0.75	0.78
Revised	232.257	89	0.000	2.610	0.93	0.92	0.08	0.05	0.88	0.84	0.92	0.93

Figure 1 shows the two-factor revised model, containing the feelings of security factor (8 items) and the beliefs on reliability factor (7 items). The Cronbach alphas for the two conceptual dimensions of brand trust based on the data of Study 3 are: security ($\alpha = 0.89$) and reliability ($\alpha = 0.90$).

In Table 2, the corresponding composite reliability (CR) estimates and the average variance extracted (AVE) for both the security and reliability factors are shown and further contribute to the internal consistency of the scale (Fornell & Larcker, 1981). Study 4 further assesses the construct and predictive validity of the new scale.

Figure 1 – Two-Factor Revised Model & Items



a. all items load significant on the factor (p-value < 0.001). b. * = self-developed item.

Table 2 – Reliability Assessments Brand Trust Scale

	<i>Sum of squared loadings</i>	<i>AVE</i>	<i>Sum of loadings squared</i>	<i>CR denominator</i>	<i>CR</i>
F1 – Security	4.00	0.50	31.65	35.65	0.89
F2 – Reliability	4.09	0.59	28.03	30.94	0.91
Acceptable?	yes (>0.5)			yes (>0.7)	

CR = Composite reliability = $(\sum \text{of loadings})^2 / \text{CR denominator}$

AVE = Average variance extracted = $\sum \text{of (loadings)}^2 / \sum \text{of factor items}$

3.4 Study 4 – Assessing Construct and Predictive Validity

Construct validity tests the capacity of the brand trust scale to measure unique dimensions of the brand trust concept (i.e., convergent and discriminant validity). Predictive validity tests whether the brand trust scale relates to other theoretical constructs as predicted by current theory.

The construct validity was tested conform the two most widely cited studies of the brand trust concept: Chaudhuri & Holbrook (2001), and Delgado-Ballester et al. (2003). All the items demonstrated adequate convergent validity since all the items loaded on their assigned dimensions from the EFA, and the estimates were significant and positive (Bagozzi & Yi, 1988). Discriminant validity of the two brand trust dimensions was proved by three different procedures recommended by Gerbing & Anderson (1988), and Fornell & Larcker (1981). The results are shown in Table 3.

Table 3 – Test of Discriminant Validity

	<i>Test</i>	<i>Results</i>	<i>Discriminant validity?</i>
1st test	CI Security (ϕ) \neq 1	[0.52:0.70]	Yes
	CI Reliability (ϕ) \neq 1	[0.63:0.76]	Yes
2nd test	AVE Security $>$ (ϕ) ²	0.50 $>$ (0.604) ²	Yes
	AVE Reliability $>$ (ϕ) ²	0.59 $>$ (-0.706) ²	Yes
3rd test	X ² perfect correlation - X ² 2-F model $>$ 3.84	256.557 - 232.257 $>$ 3.84	Yes

In order to test the predictive validity of the brand trust scale, the questionnaire in Study 3 also contained three items for purchase intention (adopted from Bian & Forsythe, 2012) and thirteen items for perceived risk (adopted from Hong, 2015; Jacoby & Kaplan, 1972; and Sweeney et al., 1999). The fit statistics are: comparative fit index (CFI) = 0.91, Tucker Lewis index = 0.90, the standardized root means square residual (SRMR) = 0.06, and incremental fit index (IFI) = 0.91, which are within the guidelines recommended.

As predicted by the theory, brand trust shows a strong and significant positive effect on customer purchase intention [$\beta = 0.73$ $p < 0.001$], a strong and significant negative effect on the level of perceived risk [$\beta = -0.78$ $p < 0.001$], and perceived risk shows a strong negative effect on purchase intention [$\beta = -0.69$ $p < 0.001$]. This shows that the brand trust scale relates to established theoretical constructs, supporting the predictive validity of our new brand trust scale.

4. Discussion

Despite the importance of brand trust in marketing, there are important issues that need attention: the dimensional structure and its measurement scale; the lack of focus on high involvement product categories; and the changes in shopping perspectives. This study's objective was to develop and validate a brand trust scale, focusing on the issues posed.

Our brand trust scale for high involvement product categories contains two dimensions. The first dimension is 'reliability', focusing on the cognitive beliefs of the consumer in the brand to perform its stated function. This reliability dimension contains items mostly similar to the previous literature (e.g., Chaudhuri & Holbrook, 2001; Delgado-Ballester et al., 2003; Hess, 1995; Koschate-Fischer & Gärtner, 2015; Li et al., 2008), except for two self-developed items i.e., "the brand always offers the products I want" and "I am confident the brand provides a good experience." These self-developed items represent new preferences when shopping, since it entails both providing a memorable experience and more focus on user needs (Wallace, 2021). Our 'security' dimension may be considered as an

advancement of the current literature since it not only covers both Delgado-Ballester et al's (2003) call to also include 'intention,' and Li et al's (2008) 'benevolence' dimension in a brand trust scale, it also expands on the honesty related items used by Chaudhuri & Holbrook (2001) and Hess (1995), accentuating a previously neglected component in brand trust: affect. Feelings of honesty, safety, and relief offer a sense of security for consumers with a high level of interest and involvement in the product category. It also includes a self-developed item that reflects the growing importance of sustainability. As a result of this, brand trust may be best conceptualized as "the customer's reliability beliefs and security feelings about a brand."

Our study has at least three managerial implications. First, companies need to complement their brand trust strategies with additional activities focusing on creating feelings of security. This brand trust scale provides applicable insights and is especially suitable for brands operating in high involvement product categories. Many companies still act as if merely producing high quality products is sufficient to gain trust, relying on the one-dimensional brand trust scale of Chaudhuri & Holbrook (2001). An important insight of our study is also that the security dimension has even more impact on developing brand trust. This may be due to the rise of omni-channel shopping, which has brought a variety of concerns into the shopping scene. Second, the current study provides managers with insights into how to measure brand trust. The new brand trust scale not just demonstrates the importance of both the security and reliability dimensions, it also provides a validated scale to measure brand trust, its fundamental dimensions, and their corresponding items. Third, Delgado-Ballester et al. (2003, p. 4) state that "the understanding of consumer-brand relationships is viewed to have critical importance to the development of marketing and consumer behavior theories." The findings of the current study support the idea of the important role of brand trust in a model of customer purchase intention, and consequently may help managers to understand and potentially better predict consumer behavior.

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