

CONSUMER BEHAVIOUR | RESEARCH ARTICLE

Brand Attachment: The Moderating Effect of High and Low-involvement Products

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Abstract: Brand attachment can be considered one of the predictors of consumer commitment to a brand. Based on this key concept, the type of products can condition the consumer's relationship with the brand. This study analyses the moderating effect that the brand's involvement (high or low) has on the relationship between brand attachment and some of its antecedents (brand personality, perceived quality, brand awareness, and brand credibility) and effects (brand loyalty, purchase intention, and perceived risk). This causal research, with 1922 valid surveys (simple random sampling procedure), was carried out in three main cities of Ecuador (Quito, Guayaquil, and Cuenca): 1150 high-involvement and 722 low-involvement products. Hypotheses were tested using structural equation models and multi-sample analysis. Results show that brand personality influences brand attachment and loyalty with a higher moderating effect on products with low-involvement. Additionally, brand attachment influences brand loyalty with a higher moderating effect on highly involved products. As practical implications, we state that brand managers of high-involvement products must invest in digital tools that maximize the information available to the public to make decisions. Additionally, low-involvement product brand managers must invest in an identifiable image to make it easy for customers to find their brand. This research adds value because no research has been identified that addresses the study of attachment by comparing its operation in high and low-involvement contexts. It opens future research by introducing new variables in the brand personality scale in combination with that of attachment.

Keywords: brand attachment, brand personality, brand loyalty, high/low-involvement

JEL Classification: D12, L11, M31



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PUBLIC INTEREST STATEMENT

This research presents an interesting challenge in that it explores the moderating effect of high and low-involvement products in causal relationships where no previous studies have been found.

Moreover, the study was conducted in three different cities in a country where not many studies of this nature and scope have been conducted. This study has the challenge of providing brand managers with specific information on the product category in which their activity is registered, in addition to being innovative for the academic community.

Furthermore, this study offers management suggestions tailored to the high and low-involvement product categories about the use of emotions to create a bond that influences other marketing factors. All of this is set against the backdrop of developing nations like Ecuador.



1. Introduction

Marketers and brand managers must understand the factors that drive brand attachment and its subsequent effects on consumer behaviour (Hemsley-Brown, 2023). Brand attachment, defined as the emotional bond between a consumer and a brand can significantly influence consumer loyalty, purchase intentions, and perceived risk (Hu & Wong, 2023; Park et al., 2006). However, the extent to which these relationships hold may vary depending on the level of consumer involvement with the product category (Gilal et al., 2021). High-involvement products typically require more consumer effort and carry higher perceived risks, while low-involvement products involve less effort and lower perceived risks (Juniarti & Afiff, 2020; Konstantoulaki et al., 2021). This variability presents a challenge: how does product involvement moderate the relationships between brand attachment and its antecedents (brand personality, perceived quality, brand awareness, and brand credibility) and its outcomes (brand loyalty, purchase intention, and perceived risk)?

Several studies have focused on the possible antecedents and consequences of brand attachment, including the role of certain moderating variables like product involvement, although generally, studies do not consider this variable despite the role it can play in consumer-brand relationships (Belanche et al., 2021; Gilal et al., 2021; Hemsley-Brown, 2023; Shimul, 2022).

Since the involvement with the product is a key variable in consumers' attachment (Gilal et al., 2021; Li et al., 2022), this paper studies if the emotional attachment and the relationships proposed are greater in high-involvement categories of products than those of low-involvement. The basic idea is that in low-involvement scenarios, consumers have less motivation to relate to the brand and its messages, while the opposite occurs in high-involvement scenarios (Konstantoulaki et al., 2021).

To explore this problem, a quantitative study was conducted in Ecuador (Quito, Guayaquil, and Cuenca). The study involved a simple random sampling procedure, resulting in 1922 valid responses: 1150 responses for high-involvement and 772 responses for low-involvement product categories. Before contrasting the hypotheses, the psychometric characteristics of the model were analysed, and the hypotheses in the global model were tested using structural modelling equations (SEM). After and following the procedure proposed by Aldás-Manzano (2013), a multi-sample analysis tested the moderation role of product involvement.

The theoretical framework of this study is grounded in the concept of brand attachment and its moderating effect through product involvement (Lacoeuilhe, 2000). Brand attachment theory posits that consumers form strong emotional bonds with brands, which can significantly influence their buying behaviour and brand loyalty (Shimul, 2022). The study further integrates theories of product involvement, which suggest that the level of personal significance and perceived risk associated with a product can alter consumer behaviour and the strength of brand attachments (Jiang et al., 2024). According to the literature, high-involvement products lead to stronger consumer-brand relationships due to higher perceived risks and the greater effort involved in the decision-making process (Konstantoulaki et al., 2021).

The primary objective of this research is to elucidate how product involvement moderates the relationship between brand attachment and its antecedents and consequences. This paper attends to diverse research gaps because although attachment and involvement with the product category are closely connected, research has yet to be identified that addresses the study of attachment by comparing

its functioning in high and low-involvement contexts (Gilal et al., 2021). As Shimul (2022) states, it is necessary to conduct further research to investigate the moderators that impact brand attachment and related outcomes. According to Li et al. (2023), the study of product involvement still requires more research because previous studies have not focused on specific product categories (Shetty & Fitzsimmons, 2022). In addition to the novelty for academia, this study is of great relevance to facilitate specific information for brand managers in the category of product in which their activity is registered. Additionally, this study aims to provide management recommendations in the context of emerging countries such as Ecuador.

2. Literature Review

2.1 Brand Attachment and The Moderating Role of Product Involvement

Shimul (2022), in theory, brand attachment concerns consumers' strong emotional connection with a brand, whereby consumers regard the brand as a part of their self-concept. The pioneer researcher in this field, stressed that attachment is charged with emotion, which can produce great pleasure when the subject of attachment is present, or it can produce pain with rejection or distance (Bowlby, 1958; Bowlby, 1969). One of the first definitions of emotional brand attachment states that it is a psychological variable that exposes itself in a permanent and constant affective link to the brand and articulates a link of psychological confidence to it (Lacoeuilhe, 2000).

In the following sections, this paper presents a theoretical proposal that includes some antecedents, effects, and complementary relationships of brand attachment while analysing the moderating effect of product involvement (high or low). Malär et al. (2011) define product involvement as the personal significance of the product that can be determined by the importance of the product to the consumer. Different types of product involvement may influence the relationships between the brand and consumer in driving consumers' positive behavioural intentions (Jiang et al., 2024).

2.2 Brand Personality and Brand Attachment: The Moderating Role of Product Involvement

Brand personality is created by the 'intentional behaviours' a brand shows, which consumers observe (Sander et al., 2021). In this line, diverse studies have analysed the relationship between brand personality and brand attachment. Shetty and Fitzsimmons (2022) study tested a positive relationship between brand personality congruence and brand attachment. Similarly, Ugalde et al. (2022) found a positive influence of brand personality on brand attachment to different products from different sectors.

We can feel attached to all kinds of product categories, even those with low-involvement (Gendel-Guterman, 2019). However, for high-involvement product categories, consumers require much information before deciding, given the risks present in the purchase (Shetty & Fitzsimmons, 2022). On the other hand, for low-involvement products, it is easier to find congruence between brand personality and that of the consumer, developing attachment towards them more agilely because less effort is required (Jitrapai et al., 2021).

H1: The effect of brand personality on brand attachment changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.

2.3 Perceived Quality and Brand Attachment: The Moderating Role of Product Involvement

Naini et al. (2022), perceived quality is another key factor influencing consumer behaviour. In this sense, Algharabat et al. (2020) state that brand involvement positively influences the perception of its quality. Those who experience intense attachment are more involved and demand higher quality and better standards for their satisfaction (Ahmadian et al., 2023). Juniarti and Afiff (2020) confirmed that the perceptual fit of an extended brand is important for high-involvement products, suggesting that perceived quality plays a significant role in brand attachment in these categories. Conversely, for brands/product categories towards which the consumer feels more indifferent, that is, has less involvement, quality is less critical since all brands of a certain level are expected to have an acceptable quality (Dos Santos et al., 2020). Consequently, its impact on brand attachment decreases.

H2: The effect of perceived quality on brand attachment changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

2.4 Brand Awareness and Brand Attachment: The Moderating Role of Product Involvement

Brand awareness refers to the likelihood that a person retrieves a brand identifier and a product category from memory across brand-relevant situations (Bergkvist & Taylor, 2022). Ugalde et al. (2022) found that brand awareness directly, positively, and significantly affects brand attachment in their study with diverse product categories.

Ardiansyah and Sarwoko (2020) affirm that high-involvement products require more time and effort to evaluate. On the other hand, Itasari and Hastuti (2023) stated that brand awareness is easily achieved through advertising, while emotional brand attachment is achieved with greater difficulty from initial awareness. For product categories where the level of involvement is high, it is observed that if awareness increases, the attachment will grow stronger than in the case of brands whose purchase entails less risk, representing lower involvement. In this second scenario, the degree of brand awareness is less important (Mohebi & Khani, 2014), and it is expected that the influence of this variable on attachment will not be so powerful. Therefore, we propose:

H3: The impact of brand awareness on brand attachment changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

2.5 Brand Credibility and Brand Attachment: The Moderating Role of Product Involvement

Brand credibility directly impacts brand attachment (Rosli et al., 2020), and this relationship changes depending on the product category involvement (Ladeira et al., 2020). Ju and Lou (2022) argue that credibility can be critical in the consumer's response to low-involvement product categories, which does not mean that credibility is not important when it comes to buying high-involvement products. However, there

is a tendency in the literature to give more importance to brand credibility in low-involvement products since this credibility becomes a decision-maker when consumers do not want to invest much effort at the moment of purchase and choose brands in which they believe (Valjaskova & Kral, 2019). Considering the above lines, we propose:

H4: The impact of brand credibility on brand attachment changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.

2.6 Brand Attachment and Brand Loyalty: The Moderating Role of Product Involvement

Regarding brand attachment effects, managers pay special attention to getting the loyalty of their customers (Reza et al., 2019). In this sense, consumers with high-involvement in some product categories tend to be loyal to the brand (Shetty & Fitzsimmons, 2022). Additionally, in low-involvement product categories, consumers can change brands more frequently, being less loyal to them (Casteran et al., 2019). Thus, it is found that there is a direct and positive relationship between consumer involvement and emotional attachment in high-involvement products (Li et al., 2022), whereas, for low-involvement products, low loyalty rates are obtained (Rashid et al., 2020). In this sense, we state that:

H5: The impact of brand attachment on brand loyalty changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

2.7 Brand Attachment and Purchase Intention: The Moderating Role of Product Involvement

Previous studies have investigated the relationship between brand attachment and consumers' behaviours (Hwang et al., 2019) in diverse product categories. For example, Malheiros et al. (2022) found that different levels of consumer involvement are related to different levels of purchase intention. Along the same line, highly involved consumers are more inclined to make a cognitive effort to assess and buy a brand (Konstantoulaki et al., 2021). Involvement with a product is seen as the degree of importance and personal significance of the product (Friedmann & Lowengart, 2019). Therefore, to feel a deep brand attachment, it is necessary to show a high degree of previous involvement, which ultimately ensures loyalty/repeated product purchases (Gilal et al., 2021). Lin and Ku (2018) found that brand attachment influences purchase intention in high-involvement products. Considering the above lines, we state that:

H6: The impact of brand attachment on purchase intention changes depending on the product category's involvement, being stronger in high-involvement categories than in low-involvement ones.

2.8 Brand Attachment and Perceived Risk: The Moderating Role of Product Involvement

Related to perceived risk, literature has found that for high-involvement product categories, consumers use more information and are concerned with knowing more about it, while for low-implication product categories, consumers tend to make things easier and use risk-reduction strategies (Jain, 2019). High levels of consumer

involvement and perceived risk in the purchase are associated with a greater search for information about the product (Kandemir et al., 2019; Santos & Gonçalves, 2021). On the other hand, when personal involvement is low concerning a category of products, consumers are not interested in processing information about the category in general, as they feel they are less at risk (Adhikari, 2019). Therefore, we propose:

H7: The impact of brand attachment on perceived risk changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

2.9 Brand Personality and Brand Loyalty: The Moderating Role of Product Involvement

We also propose two complementary relations, one related to brand personality and brand loyalty, and another related to brand credibility and perceived risk. In this sense, consumers are loyal to brands familiar to them, brands with which they have long-term relationships (Yang & Lee, 2019). Thus, when purchasing high-involvement products, consumers seek more information about the product and find fewer acceptable alternatives (Konstantoulaki et al., 2021). On the other hand, low-involvement products represent lower risk (Adhikari, 2019) and require less information or alternatives before making the purchase (Sridhar, 2019), so being loyal is more comfortable because it involves less effort, risk, and time. Therefore, we can state that:

H8: The impact of brand personality on brand loyalty changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.

2.10 Brand Credibility and Perceived Risk: The Moderating Role of Product Involvement

Finally, Nasution et al. (2020) found that high-involvement customers are more discerning, considering both salient and non-salient information, while low-involvement customers are more influenced by brand adjacency. Similarly, Tripopsakul et al. (2024) found that the effect of brand value on business performance is stronger in low-involvement products. Additionally, Ladeira et al. (2020) demonstrated that brand credibility influences consumers' attention to sales promotions, with low-credibility brands receiving more scrutiny. These findings collectively suggest that brand credibility has a stronger impact on perceived risk in high-involvement product categories. Accordingly, we propose that:

H9: The impact of brand credibility on perceived risk will differ depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

3. Conceptual Framework

Based on the empirical studies reviewed above, it is hypothesized that brand personality, perceived quality, brand awareness, and brand credibility affect brand attachment, and this brand attachment directly affects brand loyalty, purchase intention, and perceived risk. Furthermore, it is hypothesized that brand personality affects brand loyalty, and credibility affects perceived risk. Finally, the moderator role of product involvement influences all the relationships represented in the causal model. This conceptual framework is presented in Figure 1.

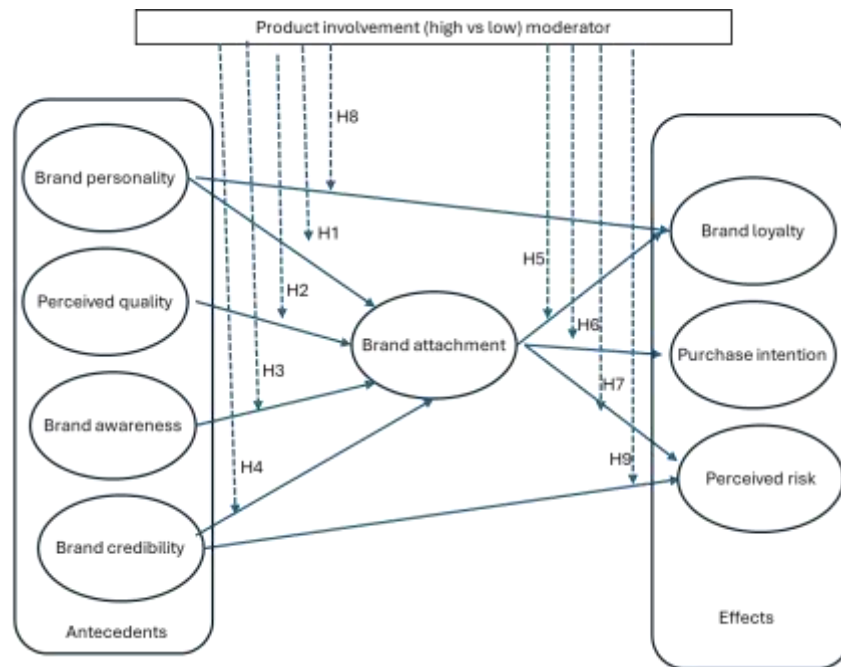


Figure 1. Causal model - Antecedents and consequences of brand attachment with product involvement moderation

The hypotheses of this study are:

- H1: The effect of brand personality on brand attachment changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.
- H2: The effect of perceived quality on brand attachment changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.
- H3: The impact of brand awareness on brand attachment changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.
- H4: The impact of brand credibility on brand attachment changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.
- H5: The impact of brand attachment on brand loyalty changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones
- H6: The impact of brand attachment on purchase intention changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.
- H7: The impact of brand attachment on perceived risk changes depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.
- H8: The impact of brand personality on brand loyalty changes depending on the product category involvement, being stronger in low-involvement categories than in high-involvement ones.
- H9: The impact of brand credibility on perceived risk will differ depending on the product category involvement, being stronger in high-involvement categories than in low-involvement ones.

4. Methods

4.1 Research Design

This quantitative and exploratory study was conducted in Ecuador (a country in north-western South America), in three main cities: Quito, Guayaquil, and Cuenca. After a simple random sampling procedure, data from 1922 valid questionnaires was analysed: 1150 high and 772 low-involvement product categories. Data was analysed following diverse procedures. First, the psychometric characteristics of the measurement model were studied using a Confirmatory Factor Analysis. Later, the hypotheses were tested using Structural Equation Models (SEM) and multi-sample analysis. The following sections offer more detailed information.

4.2 Sampling

A simple random sampling procedure was used, and the sample was collected in two moments. First, in the two largest cities in Ecuador, Quito (630 questionnaires) and Guayaquil (790 questionnaires), trying to find heterogeneity in our sample (Borenstein et al., 2021) since Quito is in the Andes and Guayaquil on the Pacific coast. The brands most reminded among the respondents fit into four main categories: (i) personal and household care, (ii) food and beverages, (iii) technology, and (iv) clothing and footwear. Because of the importance of mobile phones in the high-involvement category, we collected information about it in the third largest city of Ecuador, Cuenca (657 questionnaires).

Following a simple random sampling procedure, 1922 valid results were collected and grouped into five product categories: food and drink (n=357), technology (n=298), personal or home care (n=415), clothing and footwear (n=195), and mobile phones (n=657). Three are high-involvement (technology, clothing and footwear, and mobile phones), and two are low-involvement (food and beverages and personal or home care).

The sample size formula was used to estimate a population proportion and determine the sample sizes. The first sample (n=1420): population=4,799,899, sample error of 2.6%. The second sample (n=657): population=505,585, sample error of 3.8%. Both samples were calculated with a confidence level of 95%. Additionally, we applied the finite population correction factor to adjust for the population sizes (Ryan, 2013).

4.3 Measurement

We used existing 7-point Likert scales, with slight modifications from the original ones, to better adapt them to the context (See Table 1).

Table 1. Measurement scales of antecedents and consequences of brand attachment

Constructs	Definition	Items	Sources
Brand attachment	The emotional bond between a consumer and a brand.	BA1: Affectionate, BA2: Loved, BA3: Peaceful, BA4: Friendly, BA5: Attached, BA6: Bonded, BA7: Connected, BA8: Passionate, BA9: Delighted, BA10: Captivated	Thomson et al. (2005)

Table 1. Measurement scales of antecedents and consequences of brand attachment
 (Continue)

Constructs	Definition	Items	Source
Brand personality	The set of human characteristics associated with a brand.	BP1: Sincerity, BP2: Excitement, BP3: Competence, BP4: Sophistication, BP5: Ruggedness	Aaker (1997)
Brand loyalty	The predisposition to be loyal to a brand, demonstrated by the intention to buy the brand as a principal choice.	BL1: I consider myself to be loyal to X, BL2: X would be my first choice, BL3: I will not buy other brands if X is available at the store	Yoo and Donthu (2001)
Perceived quality	The consumer's judgment about the overall excellence or superiority of a product.	PQ1: The likely quality of X is extremely high, PQ2: The likelihood that X would be functional is very high	Yoo and Donthu (2001)
Brand awareness	Consists of both brand recognition and recall.	AA1: I can recognize X among other competing brands, AA2: I am aware of X, AA3: Some characteristics of X come to my mind quickly, AA4: I can quickly recall the symbol or logo of X, AA5: I have difficulty imagining X in my mind. (r)	Yoo and Donthu (2001)
Brand credibility	The trustworthiness of the product position information embedded in a brand, depending on consumers' perceptions.	BC1: This brand delivers (or would deliver) what it promises, BC2: Product claims from this brand are believable, BC3: Over time my experiences with this brand led me to expect it to keep its promises, BC4: This brand is committed to delivering on its claims, BC5: This brand has a name you can trust, BC6: This brand can deliver what it promises.	Baek et al. (2010)

Table 1. Measurement scales of antecedents and consequences of brand attachment (Continue)

Construct	Definition	Items	Source
Perceived risk	The extent to which consumers feel uncertain when they cannot foresee the consequences of their purchase decisions.	PR1: I need a lot more information about this brand before I would buy it, PR2: I just found out how good this brand would be before I bought it, PR3: To figure out what this brand is like I would have to try it several times.	Baek et al. (2010)
Purchase intention	The predisposition to buy the product.	PI1: I would never buy this brand. (r), PI2: I would seriously consider purchasing this brand, PI3: How likely would you be to purchase this brand?	Baek et al. (2010)

Notes: (i) 7-point Likert scales, (ii) reverse-coded items are marked with (r).

4.4 Data Collection

For one and a half months, 1922 valid results were recollected in three main cities of Ecuador (Quito, Guayaquil, and Cuenca) with 1150 high-involvement and 772 low-involvement products, following a simple random sampling procedure (Table 2) in two moments. First, in Quito and Guayaquil, through a market research call center for approximately one month. The most frequently recalled and prominent brands among respondents fell into four product categories: (1) personal and household care, (2) food and beverages, (3) technology, and (4) clothing and footwear. Second, in Cuenca, data regarding a specific technology-related product category, such as smartphones, should be included. In this phase, the data was gathered through face-to-face interactions at multiple sites, spanning two weeks.

Table 2. High and low-involvement products by product category and level of involvement

Product category	Frequency	%	High-involvement	Low-involvement
Food and beverages	357	18.6	0	357
Personal or household care	415	21.6	0	415
Technology	298	15.5	298	0
Clothing and footwear	195	10.1	195	0
Mobile phones	657	34.2	657	0
Overall sample	1922	100	1150	772

Note: (n=1922)

4.5 Data Analysis

First, through a Confirmatory Factorial Analysis (CFA), we test the psychometric characteristics of our instrument in the global sample and the two subsamples of product involvement. The sample was divided into high (technology, clothing, and footwear) and low-involvement (personal and household care, and food and

beverages) product categories based on the perceived purchase risk, the amount of information that consumers seek in each product category, and previous studies (Jain, 2019). The fits were good, and the instrument was reliable and valid, as shown in Annex 1. Then, we did an SEM (structural equation model) of our causal. And finally, we analysed the moderator effect of product involvement within the relations proposed in the causal model (H1 to H9), through a multi-group analysis. The data was analysed using SPSS and EQS software.

5. Findings

5.1 Respondent characteristics

Table 3 shows the final characteristics of the sample. Notice that the sample was collected in two phases. The first sample included more female respondents (70.4%) than the second one, which was more balanced with 51.6% of female respondents. In the second sample, there are younger people since they use more smartphones than older generations.

Table 3. Profile of the first and second sample collections in the three cities (Quito, Guayaquil, and Cuenca)

Profile	Frequency	%
1st SAMPLE collection	1420	100
Gender		
Female	999	70.4
Male	421	29.6
Age		
13 to 18 years	140	9.9
19 to 29 years	304	21.2
30 to 45 years	446	31.6
46 to 60 years	342	24.1
More than 61 years	156	10.9
N/A	32	2.3
City		
Quito	630	44.4
Guayaquil	790	55.6
2nd SAMPLE collection	657	100.0
Gender		
Female	339	51.6
Male	318	48.4
Age		
10 to 18 years	198	30.1
19 to 29 years	279	42.5
30 to 45 years	130	19.8
46 to 60 years	45	6.8
More than 61 years	5	0.8

Note: first sample (n=1420), population: 4,799,899, sample error: 2.6%; second sample (n=657), population: 505,585, sample error: 3.8%

5.2 The General Model without Moderation

Two phases were carried out to test the hypotheses (H1 to H9). First, an SEM of the databases of the two samples (high and low-involvement product categories) was performed separately to verify that the same factorial structure exists in the two groups and that the adjustment is good in each group (Table 4), as recent studies have underscored the importance of validating factorial structures in distinct sample groups to ensure the robustness of SEM findings (Moreira & Dias, 2019). Second, we proceeded with a multi-group analysis (Table 5), this is in line with the approach of using multi-group analysis to detect potential differences across groups (Aldás-Manzano, 2013).

Table 4. Relationships testing in the general model of antecedents and consequences of brand attachment

Relationships in the general model	Stand. β	t-value	Conclusions
Brand personality \rightarrow Brand attachment	0.556**	13.051	Supported
Perceived quality \rightarrow Brand attachment	-0.018	-0.168	Not supported
Brand awareness \rightarrow Brand attachment	-0.116	-1.004	Not supported
Brand credibility \rightarrow Brand attachment	0.272**	8.296	Supported
Brand attachment \rightarrow Brand loyalty	0.134**	4.221	Supported
Brand attachment \rightarrow Buying intention	0.422**	13.837	Supported
Brand attachment \rightarrow Perceived risk	0.042	1.427	Not supported
Brand personality \rightarrow Brand loyalty	0.629**	16.336	Supported
Brand credibility \rightarrow Perceived risk	0.305**	9.977	Not supported

Notes: χ^2 (237df) = 2768.39; ($p < .01$); RMSEA (90% CI) = 0.07 (0.072,0.077); CFI=.89; NNFI=.87; N = 1922; ** $p < .01$

Table 4 reveals significant relationships within the general model of brand attachment and its determinants. Brand personality and brand credibility strongly influence brand attachment (Hallem et al., 2019), indicating that consumers are drawn to brands with distinctive traits and perceived reliability. Brand attachment positively correlates with brand loyalty and buying intention (Trabelsi, 2019). However, perceived quality and brand awareness do not significantly contribute to brand attachment (Jhingan, 2023), suggesting that while they influence brand perception, they may not directly impact emotional connections with the brand. Additionally, the absence of a significant relationship between brand attachment and perceived risk implies that emotional attachment may not mitigate consumer perceptions of brand-related risks (Trabelsi, 2019).

5.3 Hypotheses Testing: The Moderator Role of Product Involvement

Table 5 shows the results of the multi-sample analysis, in which we incorporate the constraints that all the factorial loads must be equal. Also, it contrasts the partial invariance (equal factor loadings) with the help of Lagrange's multiplier to ensure that the increase in Chi-square has not significantly worsened the adjustment and verify that there are at least two invariant loads per factor.

We found significant differences between both groups for five of the nine proposed relationships: H1, H5, H7, H8, and H9. However, it is necessary to verify that the meaning of the effect is that posited in the hypotheses.

Regarding H1, the results show that, in low-involvement categories, the personality-attachment relationship is significant and more intense ($B = 0.812$, $p < 0.01$) than in high-involvement ones ($B = 0.570$, $p < 0.01$) (Table 5). Therefore, H1 is supported, in

agreement with the results of other studies, such as the one from Gilal et al. (2021). Also, Kim and Chao (2019) emphasized the importance of brand experience in the brand-building process, with a significant impact on brand attachment for both high and low-involvement products. Lastly, Li et al. (2020) highlighted the mediating role of brand attachment in the customer engagement-brand loyalty relationship, underscoring its significance in low-involvement categories.

Table 5. Moderation of product involvement (high and low) in antecedents and consequences of brand attachment model

MEA	x ² (differences)	Hyp	Structural relationships	High-involvement		Low-involvement	
				Std loading (B)	t-value	Std loading (B)	t-value
J	8.201**	H1	Brand personality→ Brand attachment	0.570**	11.685	0.812**	7.490
x	0.551	H2	Perceived quality→ Brand attachment	0.073	0.566	-0.408	-1.878
x	0.081	H3	Brand awareness→ Brand attachment	-0.152	-1.113	0.002	0.008
x	3.120	H4	Brand credibility→ Brand attachment	0.261**	5.655	0.188**	3.719
J	4.429*	H5	Brand attachment→ Brand loyalty	0.252**	5.799	-0.207**	-4.013
x	1.977	H6	Brand attachment→ Purchase intention	0.452**	13.837	0.355**	7.531
x	14.108**	H7	Brand attachment→ Perceived risk	0.149**	3.626	-0.072	-1.791
J	9.561**	H8	Brand personality→ Brand loyalty	0.561**	11.507	0.884**	12.672
x	40.449**	H9	Brand credibility→ Perceived risk	0.145**	3.498	0.477**	11.101

Notes: x² statistical difference between groups; N = 1922; **p<0,01; *p<0,05; x² = 3508.48; NNFI = .862; CFI = .875; IFI = .876; RMSA = .079; MEA= Moderator Effect Accepted; Hyp=Hypotheses

Regarding H5, the results corroborate that the intensity of the relationship between brand attachment and brand loyalty is significant and stronger in high-involvement categories (β = 0.252, p <0.01) more than in low-involvement ones (β = -0.207, p <0.01). Therefore, H5 is supported. This is consistent with other studies that show that the relationship between brand attachment and brand loyalty is significant and stronger in high-involvement categories compared to low-involvement ones (Gilal et al., 2021; Nnindini & Dankwah, 2022; Serra et al., 2022).

Regarding H7, the results show that, in effect, the relationship between brand attachment and perceived risk is significant, although positive for high-involvement categories (β = 0.149, p <0.01). Therefore, H7 cannot be supported because the sense of the relation is opposed to the one posited by being positive.

Regarding H8, results show that the impact of brand personality on brand credibility is stronger in low-involvement products (β = 0.884, p <0.01) than in high-involvement ones (β = 0.561, p <0.01). Therefore, H8 is supported. Research suggests that brand personality significantly influences consumer behaviour, particularly in low-involvement products (Jhingan, 2023).

Finally, H9 states that the impact of brand credibility on perceived risk is stronger in high-involvement product categories (β = 0.145, p <0.01) than in low-involvement ones (β = 0.477, p <0.01). However, this is not true since the relationship is stronger with low-involvement products. Therefore, we cannot support H9.

6. Discussion

Results show significant differences between both groups (high and low-involvement products) for five of the nine proposed relationships: H1, H5, H7, H8, and H9, which results are discussed below. Brand personality and brand credibility are key antecedents of brand attachment. Also, brand personality affects brand loyalty. Additionally, brand attachment influences brand loyalty and buying intention. These relationships are moderated by product involvement. More detailed information is discussed in the following lines.

6.1 Brand Personality and Brand Attachment

First, there is an influence of brand personality on brand attachment. This result is because we can feel an attachment to all kinds of product categories, including those with low-involvement (Gendel-Guterman, 2019), that is, those brands we feel comfortable with because they are familiar to us.

6.2 Brand Attachment and Brand Loyalty

Regarding the relationship between brand attachment and brand loyalty, the results support that the intensity of the relationship is significant and stronger in high-involvement categories. In this line, Li et al. (2022) affirm that high-involvement product categories seek to build strong emotional attachment with their clients, to achieve loyalty.

6.3 Brand Attachment and Perceived Risk

Results have shown that the relationship between brand attachment and perceived risk is significant, although positive for high-involvement categories. The sense of the relation is opposed to the one posited by being positive and corroborating similar results (Juniarti & Afiff, 2020).

6.4 Brand Personality and Brand Loyalty

Results corroborate the stronger impact of brand personality on brand credibility in low-involvement products, as stated by other studies (Nasution et al., 2021; Yang & Lee, 2019).

6.5 Brand Credibility and Perceived Risk

Finally, we proposed a stronger impact of brand credibility on perceived risk in high-involvement product categories. However, our results show that the relationship is stronger with low-involvement products. The directionality of the relationship is contrary to that proposed, which harmonizes with statements by various authors (Ladeira et al., 2020; Nasution et al., 2021).

6.6 Managerial Implications

Considering previous results and the nature and context of this research, this paper proposes five main managerial implications.

First, managers must take advantage of the fact that the force of the brand's emotional and cognitive bond with the self makes the feelings and thoughts related to the brand easily accessible in consumers' minds (Park et al., 2006). In this sense,

using a solid brand image is recommended so that every action reinforces the previous ones.

Second, brand attachment positively influences purchase intent. These results reinforce the importance of brand attachment for those who work in marketing and other consequences of this relationship, such as loyalty (Boateng et al., 2020). In this way, perhaps the most important managerial implication will be to generate attachment to the brands.

Third, the relationship between brand credibility and brand attachment is accepted in both high and low-involvement products. Marketing managers must pay attention to its importance because consumers do not feel attached to or believe in brands, so it is important to work on the brand's reputation and keep its promises.

Fourth, managers of high-involvement products (such as technology, vehicles, and fashion clothing) are recommended to invest in digital tools that maximize the information available to the public, bearing in mind that it is an audience that will seek information to make decisions (Lagodiienko et al., 2019).

Fifth, managers of low-involvement products (such as cookies, soft drinks, detergent, or disinfectants) are recommended to invest in an identifiable image to facilitate consumers find their product among the many with which it competes, given the impact of brand personality on brand attachment and loyalty. In this regard, studies such as Ampuero and Vila (2006) noted the relevance of packaging design to achieve the desired positioning in the minds of consumers.

6.7 Theoretical Contribution

Brand attachment is a main requirement in consumer relationships with brands (Gómez-Suárez, 2019) because, among other effects, attachment generates positive consumer behaviours like positive attitudes towards the brand and loyalty. In addition, the congruence of the brand personality with its users and brand credibility have been highlighted as important in forming brand attachment, perceived quality, and brand awareness. Indeed, these last two factors, although important, are not determinants in the development of brand attachment since much more than quality and awareness are needed for the attachment to appear. However, it is logical that they must be present.

Regarding the moderating effect of product involvement, it is surprising that it was thought that most moderating effects in terms of the level of involvement would be in products with high-involvement, a fact that is based on literature in those cases. It did not turn out to be true, perhaps since, in general terms, as Tarofder et al. (2020) stated, the involvement of consumers can vary a lot. In fact, for example, fashionable clothes can lead from total attachment when there is high-involvement to complete detachment when low-involvement is evident.

6.8 Limitations

Each study has its limitations that represent opportunities for further research. One of the main limitations is that it only includes some of the concepts related to brand attachment, such as trust, commitment, or satisfaction. Another limitation is that the sample has been collected from one country.

7. Conclusions

Product involvement has a moderator role in the relationships between brand and consumer behaviours. In low-involvement products (i.e., food and beverage, and personal or home care), brand personality has a stronger impact on brand credibility. In high-involvement products (i.e., technology, clothes and shoes, and mobile phones), the intensity of the relationship between brand attachment and brand loyalty is stronger. The same occurs in the effect of brand credibility on perceived risk.

8. Recommendation

Subsequent studies should include other variables to have a more complete vision of brand attachment. It would be interesting to deepen the application of the brand personality scale in combination with that of attachment to study the possibility of better adapting them culturally to the Latin American market. It might even be interesting to analyse the moderating role of product involvement in the model in other contexts, not only in B2C markets but also in B2B markets.

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References

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347-356.
<https://doi.org/10.1177/002224379703400304>
- Adhikari, A. (2019). Consumer behavior in low-involvement product purchase: a stochastic model. *Theoretical Economics Letters*, 9, 424-430.
<https://doi.org/10.4236/tel.2019.92030>
- Ahmadian, S., Sahraei, B., & Khosro, S. (2023). Brand attachment, brand experience, brand image, perceived quality, perceived value, and brand loyalty. *Journal of Humanities Social Sciences and Business (JHSSB)*.
<https://doi.org/10.55047/jhssb.v3i1.863>
- Aldás-Manzano, J. (2013). La invarianza del instrumento de medida. In F. J. Sarabia (Ed.), *Métodos de investigación social y de la empresa* (421-446). Madrid: Ediciones Pirámide.
- Algharabat, R., Rana, N., Alalwan, A., Baabdullah, A., & Gupta, A. (2020). Investigating the antecedents of customer brand engagement and consumer-based brand equity in social media. *Journal of Retailing and Consumer Services*, 53.
<https://doi.org/10.1016/J.JRETCONSER.2019.01.016>
- Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 23(2), 100-112.
<http://doi.org/10.1108/07363760610655032>
- Ardiansyah, F., & Sarwoko, E. (2020). How social media marketing influences consumers purchase decision: A mediation analysis of brand awareness. *JEMA: Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*, 17(2), 156-168.
<http://dx.doi.org/10.31106/jema.v17i2.6916>
- Baek, T. H., Kim, J., & Yu, J. H. (2010). The differential roles of brand credibility and brand prestige in consumer brand choice. *Psychology*

- & *Marketing*, 27(7), 662-678.
<http://doi.org/10.1002/mar.20350>
- Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products and consumers. *Journal of Business Research*, 132, 186-195.
<https://doi.org/10.1016/j.jbusres.2021.03.067>
- Bergkvist, L., & Taylor, C. (2022). Reviving and improving brand awareness as a construct in advertising research. *Journal of Advertising*, 51, 294 - 307.
<https://doi.org/10.1080/00913367.2022.2039886>.
- Boateng, H., Kosiba, J. P., Adam, D. R., Ofori, K. S., & Okoe, A. F. (2020). Examining brand loyalty from an attachment theory perspective. *Marketing Intelligence & Planning*, 38(4), 479-494.
<https://doi.org/10.1108/mip-03-2019-0161>
- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2021). *Introduction to meta-analysis*. John Wiley & Sons.
- Bowlby, J. (1958). The nature of the child's mother. *Journal of Psychoanalysis*, 39,350-373.
- Bowlby, J. (1969). *Attachment and loss, Vol. 1*. New York: Basic Books.
- Casteran, G., Chrysochou, P., & Meyer-Waarden, L. (2019). Brand loyalty evolution and the impact of category characteristics. *Marketing Letters*, 30, 57-73.
<https://doi.org/10.1007/s11002-019-09484-w>
- Dos Santos, M. A., Moreno, F. C., Gascó, V. P., & Lizama, J. C. (2020). The effect of quality and leverage on the image transfer model: The moderating role of involvement. *International Journal of Sports Marketing and Sponsorship*. 22(2), 353-368.
<https://doi.org/10.1108/IJSMS-12-2019-0149>
- Friedmann, E., & Lowengart, O. (2019). Gender segmentation to increase brand preference? The role of product involvement. *Journal of Product & Brand Management*. 28(3), 408-420.
<https://doi.org/10.1108/JPBM-06-2018-1917>
- Gendel-Guterman, H. (2019). Comparison of consumer involvement across PLB categories in retail food. In *International Conference on Advances in National Brand and Private Label Marketing*, 99-105. Springer, Cham.
- Gilal, F., Gilal, N., Gilal, R., Gong, Z., Gilal, W., & Tunio, M. (2021). The ties that bind: do brand attachment and brand passion translate into consumer purchase intention? *Central European Management Journal*, 29, 14 - 38.
<https://doi.org/10.7206/cemj.2658-0845.39>.
- Gómez-Suárez, M. (2019). Examining customer-brand relationships: A critical approach to empirical models on brand attachment, love, and engagement. *Administrative Sciences*, 9(1), 10.
<https://doi.org/10.3390/ADMSCI9010010>
- Hallem, Y., Arfi, W. B., & Guizani, H. (2019). How do emotions influence brand attachment? The mediation role of brand authenticity: An abstract. In *Finding New Ways to Engage and Satisfy Global Customers: Proceedings of the 2018 Academy of Marketing Science (AMS) World Marketing Congress (WMC) 21* (pp. 801-801). Springer International Publishing.
https://doi.org/10.1007/978-3-030-02568-7_212
- Hemsley-Brown, J. (2023). Antecedents and consequences of brand attachment: A literature review and research agenda. *International Journal of Consumer Studies*, 47(2), 611-628.

- <https://doi.org/10.1111/ijcs.12853>
- Hwang, E., Baloglu, S., & Tanford, S. (2019). Building loyalty through reward programs: The influence of perceptions of fairness and brand attachment. *International Journal of Hospitality Management*, 76, 19-28. <https://doi.org/10.1016/j.ijhm.2018.03.009>
- Hwang, J., Kim, H., Kim, J., & Kim, I. (2021). Investigation of perceived risks and their outcome variables in the context of robotic restaurants. *Journal of Travel & Tourism Marketing*, 38, 263 - 281. <https://doi.org/10.1080/10548408.2021.1906826>.
- Itasari, A. A., & Hastuti, N. H. (2023). The effect of advertisement, word of mouth, and brand awareness towards buying decision on " Ruang Guru Apps" in SMU Negeri XYZ Surakarta. *Journal of Consumer Sciences*, 8(2), 155-169. <https://doi.org/10.29244/jcs.8.2.155-169>
- Jain, M. (2019). A study on consumer behavior-decision making under high and low-involvement situations. *IJRAR-International Journal of Research and Analytical Reviews*, 6(1).
- Jhingan, A. (2023). The role of brand personality in consumer brand engagement. *Interantional Journal of Scientific Research in Engineering and Management* 7(7), 1-10. <https://doi.org/10.55041/ijsrem24794>
- Jiang, K., Zheng, J., & Luo, S. (2024). Green power of virtual influencer: The role of virtual influencer image, emotional appeal, and product involvement. *Journal of Retailing and Consumer Services*, 77, 103660. <https://doi.org/10.1016/j.jretconser.2023.103660>
- Jitrapai, N., Kittisaareekul, S., & Limsumlitnipa, T. (2021). An exploratory factor analysis of brand awareness in the low-involvement product on social media channel. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(9), 828-834. <https://doi.org/10.11594/ijmaber.02.09.13>.
- Ju, I., & Lou, C. (2022). Does influencer-follower relationship matter? Exploring how relationship norms and influencer-product congruence affect advertising effectiveness across product categories. *Journal of Interactive Advertising*, 22, 157 - 177. <https://doi.org/10.1080/15252019.2022.2087809>.
- Juniarti, R. P., & Afiff, A. Z. (2020). Consumer response to different advertising appeals: The role of brand value and the perceptual fit of an extended brand for high-involvement products. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 17(2), 135-155. <http://dx.doi.org/10.31106/jema.v17i2.6683>
- Kandemir, G., Pirtini, S., & Bayraktar, A. (2019). A research on the role of consumer involvement and product knowledge levels on purchasing decisions. *Turkish Journal of Marketing*, 4(2), 162-183. <https://doi.org/10.30685/tujom.v4i2.57>
- Kim, R. B., & Chao, Y. (2019). Effects of brand experience, brand image and brand trust on brand building process: The case of Chinese millennial generation consumers. *Journal of International Studies*, 12(3). <https://doi.org/10.14254/2071-8330.2019/12-3/1>
- Konstantoulaki, K., Kokkinaki, F., & Rizomyliotis, I. (2021). Choosing among alternative brands: revisiting the way involvement drives consumer selectivity. *Review of Marketing Science*, 19, 75 - 100. <https://doi.org/10.1515/roms-2020-0054>.

- Lacoeuilhe, J. (2000). L'attachement à la marque: proposition d'une échelle de mesure. *Recherche et Applications in Marketing*, 15(4), 61-77.
<https://doi.org/10.1177/0767370100015004>
- Ladeira, W., de Oliveira Santini, F., & Carvalho Jardim, W. (2020). The influence of brand credibility on consumers' attention to sales promotions. *Journal of Promotion Management*, 26(6), 855-873.
<https://doi.org/10.1080/10496491.2020.1745981>
- Lagodiienko, V., Karyy, O., Ohiienko, M., Kalaman, O., Lorvi, I., & Herasimchuk, T. (2019). Choosing effective internet marketing tools in strategic management. *International Journal of Recent Technology and Engineering*, 8(3), 5220-5225.
<https://doi.org/10.35940/ijrte.c5868.098319>
- Li, J. Y., Kim, J. K., & Alharbi, K. (2022). Exploring the role of issue involvement and brand attachment in shaping consumer response toward corporate social advocacy (CSA) initiatives: The case of Nike's Colin Kaepernick campaign. *International Journal of Advertising*, 41(2), 233-257.
<https://doi.org/10.1080/02650487.2020.1857111>
- Li, Q., Li, X., Chen, W., Su, X., & Yu, R. (2023). Involvement, place attachment, and environmentally responsible behaviour connected with geographical indication products. *Tourism Geographies*, 25(1), 44-71.
<https://doi.org/10.1080/14616688.2020.1826569>
- Li, M. W., Teng, H. Y., & Chen, C. Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, 44, 184-192.
<https://doi.org/10.1016/j.jhtm.2020.06.015>
- Lin, T. L., & Ku, T. H. (2018). Effects of luxury brand perceptions on brand attachment and purchase intention: A comparative analysis among consumers in China, Hong Kong and Taiwan. *South African Journal of Business Management*, 49(1), 1-9.
<https://doi.org/10.4102/sajbm.v49i1.6>
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: the relative importance of the actual and the ideal self. *Journal of Marketing*, 75(4), 35-52.
<http://doi.org/10.1509/jmkg.75.4.35>
- Mohebi, M. M., & Khani, N. (2014). Structural pattern of relationship between brand awareness, brand attachment, brand experience, brand loyalty, brand equity, brand preference and intention to purchase. *Applied Mathematics in Engineering, Management and Technology*, 2(5), 288-299.
- Moreira, P. A., & Dias, M. A. (2019). Tests of factorial structure and measurement invariance for the student engagement instrument: evidence from middle and high school students. *International Journal of School & Educational Psychology*, 7(3), 174-186.
<https://doi.org/10.1080/21683603.2017.1414004>
- Muzayyanah, M., Triatmojo, A., & Qui, N. (2023). Measuring consumer involvement and product attributes on beef consumer segmentation. *Caraka Tani: Journal of Sustainable Agriculture*.
<https://doi.org/10.20961/carakan.i.v38i1.67843>
- Naini, N. F., Santoso, S., Andriani, T. S., & Claudia, U. G. (2022). The effect of product quality, service quality, customer satisfaction on customer loyalty. *Journal of Consumer Sciences*, 7(1), 34-50.

- <https://doi.org/10.29244/jcs.7.1.34-50>
- Nasution, R. A., Arnita, D., & Purnama, S. Q. (2021). Believe it or not: the effect of involvement on the credibility of image transfer through co-branding. *Journal of International Consumer Marketing*, 33(5), 578-594. <https://doi.org/10.1080/08961530.2020.1731899>
- Nnindini, S. I., & Dankwah, J. B. (2021). Consumer loyalty and brand marketing programs in an emerging economy: evidence from the automobile industry. *Information Management and Business Review*, 13(4(I)), 23-38. [https://doi.org/10.22610/imbr.v13i4\(i\).3230](https://doi.org/10.22610/imbr.v13i4(i).3230)
- Park, C. W., Macinnis, D. J., & Priester, J. R. (2006). Beyond attitudes: attachment and consumer behavior. *Seoul National Journal*, 12(2), 3-36.
- Rashid, A. G., Rizvi, W. H., & Amir, H. (2020). Deciphering brand loyalty through brand association and emotional confidence. *Business Review*, 15(1), 97-107. <https://doi.org/10.54784/1990-6587.1012>
- Reza, F., Sumarwan, U., & Hartoyo, H. (2019). Satisfaction, purchasing behavior, and customer loyalty of Butik Emas Logam Mulia. *Journal of Consumer Sciences*, 4(2), 90-107. <https://doi.org/10.29244/jcs.4.2.90-107>
- Rosli, N., Ha, N. C., & Ghazali, E. M. (2020). Bridging the gap between branding and sustainability by fostering brand credibility and brand attachment in travellers' hotel choice. *The Bottom Line*. 32(4), 308-339. <https://doi.org/10.1108/BL-03-2019-0078>
- Ryan, T. P. (2013). *Sample size determination and power*. John Wiley & Sons.
- Sander, F., Föhl, U., Walter, N., & Demmer, V. (2021). Green or social? An analysis of environmental and social sustainability advertising and its impact on brand personality, credibility and attitude. *Journal of Brand Management*, 28, 429-445. <https://doi.org/10.1057/s41262-021-00236-8>
- Santos, S., & Gonçalves, H. M. (2021). Information searching in the mobile environment: Differences in involvement dimensions among product categories. *Technological Forecasting and Social Change*, 162, 120379. <https://doi.org/10.1016/j.techfore.2020.120379>
- Serra, E., de Magalhães, M., Silva, R., & Meirinhos, G. (2022). How market orientation impacts customer's brand loyalty and buying decisions. *Journal of Risk and Financial Management*, 15(8), 357. <https://doi.org/10.3390/jrfm15080357>
- Shetty, K., & Fitzsimmons, J. R. (2022). The effect of brand personality congruence, brand attachment and brand love on loyalty among HENRY's in the luxury branding sector. *Journal of Fashion Marketing and Management: An International Journal*, 26(1), 21-35. <https://doi.org/10.1108/JFMM-09-2020-0208>
- Shimul, A. S. (2022). Brand attachment: a review and future research. *Journal of Brand Management*, 29(4), 400-419. <https://doi.org/10.1057/s41262-022-00279-5>
- Shetty, K., & Fitzsimmons, J. R. (2021). The effect of brand personality congruence, brand attachment and brand love on loyalty among HENRY's in the luxury branding sector. *Journal of Fashion Marketing and Management: An International Journal*. 26(1), 21-35. <https://doi.org/10.1108/JFMM-09-2020-0208>

- Sridhar, G. (2019). Consumer involvement in product choice: role of perceived risk. In *Researching Marketing Decisions* (49-67). Routledge India.
- Tarofder, A. K., Karim, M. F., Adam, M. A. M., & Khalid, N. N. D. (2020). Factors affecting consumers' involvement in store brand selection. *Psychology and Education*, 57(9), 2519-2525. <https://doi.org/10.17762/PAE.V57I9.633>
- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands. *Journal of Consumer Psychology*, 15(1), 77-91. http://doi.org/10.1207/s15327663jcp1501_10
- Trabelsi, M. (2019). The brand personality: a key catalyst of the consumer-brand relationship. *American Journal of Trade and Policy*, 6(1), 13-22. <https://doi.org/10.18034/AJTP.V5I2.1075>
- Tripopsakul, S., Puriwat, W., Hoonsopon, D., & Songkhla, R. N. (2024). The impact of brand value on business performance: An analysis of moderating effects of product involvement. *HighTech and Innovation Journal*, 5(1), 79-87. <https://doi.org/10.28991/hij-2024-05-01-06>
- Ugalde, C., Vila-Lopez, N., & Kuster-Boluda, I. (2022). Brand attachment toward functional, symbolic and hedonic brands. *Journal of Fashion Marketing and Management: An International Journal*, 27(3), 470-488. <https://doi.org/10.1108/JFMM-09-2021-022>
- Valjaskova, V., & Kral, P. (2019, September). The importance of brand in consumer buying behavior and product quality assesment. In *CBU International Conference Proceedings* (Vol. 7, pp. 331-335). <https://doi.org/10.12955/cbup.v7.1382>
- Wong, A. (2023). Understanding Consumer brand love, brand commitment, and brand loyalty. *Journal of Relationship Marketing*, 22, 87 - 114. <https://doi.org/10.1080/15332667.2023.2173937>.
- Yang, S. J., & Lee, Y. (2019). Mid-to low-end fashion brand personality affects consumers' perceived quality, commitment, and loyalty. *Social Behavior and Personality: an international journal*, 47(7), 1-14. <https://doi.org/10.2224/SBP.7680>
- Yoo, B., & Donthu, N. (2001). Developing and Validating a Multi-dimensional Brand Cognition Scale. *Journal of Business Research*, 52, 1-14. [https://doi.org/10.1016/S0148-2963\(99\)00098-3](https://doi.org/10.1016/S0148-2963(99)00098-3)