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The Double-Edged Sword of Jealousy: The Intentions Toward the Brand and Rival Customer

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ABSTRACT

This study aims to examine the mediating role of brand jealousy in the relationship between brand attachment and behavioural intentions, as well as the moderating effect of perceived unfairness. This research used a quantitative method to test the research hypotheses. The data were collected from 196 respondents in Iran using a structured questionnaire, and the analysis was conducted using the AMOS 24.0 software. The results indicate that brand attachment leads to brand jealousy and brand jealousy leads to positive behavioural intentions toward the brand and negative behavioural intentions toward the rival customer. Perceived unfairness weakens the relationship between brand jealousy and intentions toward the brand, but does not strengthen the relationship between brand jealousy and intentions toward rivals. Overall, these findings provide insights into the role of brand attachment, brand jealousy and perceived unfairness in shaping consumer behaviour and highlight the importance of managing brand relationships and ensuring fairness in the marketplace.

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Introduction

Marketing researchers, borrowing theories from interpersonal relationships and psychology, have started a new trend to address consumer emotions (Xu, 2020; Ittefaq et al., 2024), focusing on negative emotions (Zarantonello et al., 2016; Shahid Sameeni et al., 2024). Jealousy is one of these emotions that is related to brand consumption, conceptualized as brand jealousy (Sarkar & Sreejesh, 2014). Social comparison theory (Festinger et al., 1954) provides a key foundation for understanding brand jealousy. This theory suggests that individuals naturally assess their own value by comparing themselves to others. In the context of brands, this can lead to jealousy if a customer perceives a rival customer receiving better treatment or having a stronger relationship with the brand (Feinberg et al., 2002). To clarify, since jealousy occurs because people believe that someone else is usurping their position in a social relationship (Buss et al., 1992; Harmon-Jones et al., 2009; Parrott & Smith., 1993), a customer may feel jealous when they perceive that their relationship with a particular brand has been damaged. Therefore, studies related to strong and romantic relationships between the customer and the brand provide another explanation for this concept (Dawood & Kashif, 2021; Ghorbanzadeh, 2023; Hasdiansa et al., 2019; Siddique & Rajput, 2022). Furthermore, cognitive dissonance theory (Festinger, 1957) can also contribute to brand jealousy. This theory proposes that people strive for consistency between their beliefs and their actions. Based on this theory, jealousy can arise from a conflict. If a customer likes a brand but doesn't own it, and sees a rival customer using it, this dissonance can lead to feelings of jealousy. While the jealousy triangle is conceptualized as a relationship consisting of the jealous person, the partner, and the rival (Neu, 1980; Parrott, 1991), the brand jealousy triangle consists of the customer (jealous), the brand (partner), and the other customer (rival).

Jealousy is like a double-edged sword due to its dual consequences (Kim & Kim, 2015; Ludwig et al., 2017). While brand addiction (Ghorbanzadeh, 2023), brand hate, brand avoidance (Dawood & Kashif, 2021), materialism, willingness to pay premiums (Hasdiansa et al., 2019), and conspicuous consumption (Chairy & Syahrivar, 2018) have been studied, purchase intention has also been considered as the outcomes of brand jealousy (Rosita & Ratnandika, 2019). The double-edged sword of jealousy occurs in a relationship that is like a triangle with three angles. However, studies have focused on two actors of the jealousy triangle, customer and brand. Although the psychological and interpersonal literature has also examined the effect of jealousy on the rival (Nguyen & Simkin, 2014; Parker et al., 2005), no study has focused on the effects of jealousy on the rival customer. In addition to the effects of interactions between customers on business (Lin et al., 2020; Wu, 2007), it affects customers' social well-being (Altinay et al., 2019; Jung & Yoo, 2017). Since the responsibility of business is to foster a positive impact on customers (Farrington et al., 2017), marketing must be socially responsible for potential illegal, unsafe, or antisocial behaviour toward all customers. Therefore, the consequences of brand jealousy are poorly understood, and there is a need to understand how a jealous customer responds to both the brand as well as the rival customer. As mentioned by Ludwig et al. (2017), one area of research that has been overlooked in the evaluation of customers' outcomes is the effect that a third party (another customer) has on the customer's experience when observing another customer's enjoyment. The omission of this perspective is particularly concerning because the presence of other customers can have a profound effect on a customer's overall service experience. To address this gap, in addition to positive outcomes for brands, this paper examines the negative effects of brand jealousy on rival customers.

Customers may feel jealous when they perceive that brands offer special treatment to others but not to them. The jealous person's perception of the fairness of this brand's special treatment is important in jealousy (Hancock et al., 2020; Liu & Johnson, 2019) as it influences the behavioural response of the jealous customer (Ashworth & McShane, 2012; Feather & Boeckmann, 2013), affecting repurchase (Ludwig et al., 2017) and brand loyalty negatively (Kim & Kim, 2019). Therefore, the positive outcomes for the brand are influenced by the jealous person's perception of the fairness of the brand's treatment. We anticipate that perceived unfairness weakens positive intentions toward the brand. In addition, according to the literature, negative consequences for the brand are also intensified by perceived unfairness (Kim & Kim, 2019). Therefore, instead of examining the negative consequences for the brand, this study examines these consequences for the rival to find out if this applies to the rival customer.

In addition, this study focuses on brand attachment instead of brand love (Dawood & Kashif, 2021; Ghorbanzadeh, 2023; Hasdiansa et al., 2019; Siddique & Rajput, 2022), considering it a better predictor of brand jealousy. The reason is that, compared to the emotional nature of brand love, the functional nature of brand attachment (Park et al., 2010) is more relevant to jealousy when it comes to brand consumption, needs and demands. In other words, relationship loss anxiety in jealousy (Mattingly et al., 2012) and negative consequences (Guerrero & Afifi, 2017; Guerrero & Andersen, 2010) are more associated with brand attachment than brand love. The purpose of this study is to examine the mediating role of brand jealousy in the relationship between brand attachment and behavioural intentions, as well as the moderating effect of perceived unfairness.

Theoretical Background

Brand Jealousy

In general, “jealousy is an emotional experience characterized by negative affect and a cognitive appraisal that a valued relationship is threatened by a rival or potential rival. Jealousy serves to motivate individuals to protect their romantic relationships and to increase the likelihood of retaining their partner” (Guerrero et al., 2017). Customers may experience brand jealousy when they perceive a brand offering preferential treatment, such as pricing, shipping, or special attention, to other customers (Hancock et al., 2020; Ludwig et al., 2017). Sarkar and Sreejesh (2014) have introduced and defined the concept of brand jealousy as a negative emotional state experienced by a consumer. It arises from the perception that a competitor possesses a cherished brand that the consumer desires but cannot currently obtain due to certain limitations. This emotional state can be characterized by feelings of envy, possessiveness, and dissatisfaction. The conceptualization of brand jealousy can be explained by referring to concepts and theories of the interpersonal relationship literature, such as social comparison and cognitive dissonance theories. Social comparison theory states that people compare themselves with others and judge their abilities or attributes (Anderson & Bushman, 2016; Festinger et al., 1954). Sarkar (2013) states that the potential customer, who does not possess the brand at present but is romantically attached to the brand, can perceive any other member of society who is currently using the brand as a rival. In brand jealousy, the potential customer judges the threat to his/her self-esteem by comparing his/her limitation in accomplishments or possessions with the rival’s use of the favored brand, leading to thoughts and feelings related to jealousy. Cognitive dissonance theory explains how people experience stress or tension facing two opposing beliefs or ideas at the same time (Lee, 2017). Based on this theory, the conflict between liking the brand and not owning it, and facing the rival’s use of it can contribute to feelings of jealousy.

It should be noted that brand jealousy occurs in certain circumstances. The first condition is the existence of interest and preference for an esteemed and premium brand. The second condition is that the potential customer currently does not own the brand due to constraints including non-financial factors such as the desire for variety, multi-brand loyalty, changes in demand, and more persuasive communication messages from rivals (Sarkar & Sreejesh, 2014). Third, there must be a rival who owns the brand and has enjoyed this possession (Ludwig et al., 2017). In other words, the jealousy triangle, which includes the jealous person, partner, and rival (Neu, 1980; Parrott, 1991), in the context of brand jealousy, includes the jealous potential customer, the brand as a partner, and the rival customer. Emotional contagion theory explains some of these underlying conditions of brand jealousy. Hsee et al. (1990) define emotional contagion as the tendency of individuals to “mimic the verbal, psychological, and/or behavioural aspects of another person’s emotional experience/expression, and thus experience/express the same emotions oneself” (p. 328). In other words, it refers to when a change in someone’s behaviour (brand) leads to the reflexive production of the same behaviour by other people (customers) (Panksepp & Lahvis, 2011). Therefore, emotional contagion fosters emotional synchrony between individuals. Individuals engaging in jealousy interactions might experience some degree of emotional contagion and targets of jealousy expressions “catch” the emotions displayed by their romantic partners (Yoshimura, 2004). In the market, emotional contagion happens when a customer feels jealous after observing other customers receive extra value, effort, or personalized attention and feels delighted (Ludwig et al., 2017). In this case, emotional contagion develops in the form of jealousy if customers do not receive the special treatment offered to other customers.

Brand Attachment and Brand Jealousy

In recent years, the concept of brand love has attracted much attention (Salehzadeh et al., 2023). Although research identifies brand love as a predictor of brand jealousy (Dawood & Kashif, 2021; Ghorbanzadeh, 2023; Hasdiansa et al., 2019; Siddique & Rajput, 2022), this study examines the predictive role of brand attachment. Literature suggests that brand love and brand attachment can be used interchangeably due to their similar core concepts (Moussa, 2015). Additionally, some scholars view brand attachment as one element of brand love (Carroll & Ahuvia, 2006; Loureiro et al., 2012). However, in the context of brand jealousy, with its potential for negative consequences (Fournier & Alvarez, 2012) and its focus on product use, caution is necessary when using brand love as an independent variable.

People generally experience stronger feelings of jealousy in attachments than in romantic relationships (Weintraub et al., 1974). This is because jealousy is associated with anxious attachments (Mattingly et al., 2012) and threats to the attachment bond (Sharpsteen & Kirkpatrick, 1997). Brand love, defined as a passionate emotional attachment to a brand (Carroll & Ahuvia, 2006), differs from brand attachment, which refers to the strength of the link between the person and the brand (Park et al., 2010). In other words, brand love focuses on the intensity of emotions, while brand attachment focuses on the strength of the relationship.

Within the context of brand jealousy, a potential customer perceives a threat to their self-esteem when they see their relationship with the brand at risk. Therefore, the focus in brand jealousy is on relational attachment, rather than the threat of losing love for a brand, which can be shared due to the nature of the marketplace.

In addition to the reasons mentioned above, the functional nature of brand attachment (Park et al., 2010) aligns better with brand jealousy than the emotional nature of brand love (Carroll & Ahuvia, 2006), given the market context and its emphasis on needs and consumption. Attachment is linked to more basic needs like security (Siegel & Hartzell, 2019), which is directly impacted by threats. Brand love stems from emotional attachment and romantic notions of the brand, while brand attachment is based on habitual or functional associations with the brand (Park et al., 2010). In brand jealousy, the threat is the loss of a relationship that provides functional benefits, such as consumption to meet important needs. Therefore, this study proposes brand attachment as a more suitable predictor of brand jealousy. Finally, using brand attachment, which is associated with stronger negative effects (Guerrero & Afifi, 2017; Guerrero & Andersen, 2010), allows us to explore the negative consequences of brand jealousy. Based on this reasoning, we propose the following hypothesis:

H1: Brand attachment has a positive relationship with brand jealousy.

Positive Intentions Toward the Brand

Research shows that brand jealousy can lead to increased positive outcomes for the brand, including word-of-mouth promotion (Batra et al., 2012), brand loyalty, and positive brand evaluation (Batra et al., 2012; Fournier & Alvarez, 2012). For instance, consumers experiencing brand jealousy are more likely to defend the brand against negative information (Fournier & Alvarez, 2012). Aligning with this research, this study investigates the positive consequences of brand jealousy on the brand by measuring purchase intention (Rosita & Ratnandika, 2019) and active engagement (Sarkar & Sreejesh, 2014). One consequence of brand jealousy could be increased consumer possessiveness of the brand (Huang et al., 2017). Mick and Fournier (1998) suggest that jealousy can trigger feelings of deprivation and low self-esteem, leading people to seek material possessions to compensate. In this case, the jealous customer might buy the desired brand to cope with the negative emotions associated with jealousy (Thomson et al., 2005). Consumption, in general, is a recognized way to manage negative emotions (Duhachek, 2005).

Buss (2000) and Buss et al. (1992) propose that jealousy serves an evolutionary function. Therefore, a potential customer who sees someone else purchasing their preferred brand, which they are unable to own due to some constraints, might experience a heightened desire to acquire it (Sarkar & Sreejesh, 2014). This situation can also lead to increased intellectual engagement with the brand. Similar to jealousy in interpersonal relationships (Sharpsteen, 1993), the jealous customer may find themselves thinking about the brand more often, resulting in a stronger mental connection (Sarkar &

Sreejesh, 2014). While some research suggests that brand jealousy can influence both positive and negative word-of-mouth about a brand (İlter et al., 2016), many studies have found that brand attachment leads to positive customer behaviors, such as a stronger desire to repurchase (Lin et al., 2011), increased loyalty, willingness to pay more for the brand, forgiveness of the brand's mistakes, and positive word-of-mouth promotion (Park et al., 2008). Overall, brand attachment can lead to behaviors that benefit the brand's profitability (Thomson et al., 2005). Therefore, this study also proposes the following hypothesis:

H2: Brand jealousy has a positive relationship with behavioural intentions toward the brand.

Negative Intentions Toward the Rival

Ludwig et al. (2017) call for the need to better understand the theoretical relationships between jealous customers and negative behavioral intentions. Brand jealousy can lead to negative outcomes for brands, such as negative WOM and reduced brand loyalty (Fournier & Alvarez, 2012), as well as potential negative consequences for jealous customers, such as dissatisfaction, financial stress, social tensions, and unsustainable consumption patterns (Mick & Fournier, 1998). Emotions, in addition to affecting business (Das & Varshneya, 2017; Kapoor & Kulshrestha, 2009; Watson & Spence, 2007), are a mutually influencing factor on people's well-being (Mick et al., 2012), from a physical (Johnstone & Scherer, 1999; McCraty et al., 1995), mental (Mann & Holdsworth, 2003), and social point of view (van Kleef & Côté, 2022). According to the "cue-utilization theory," people rely on external cues to determine their behavior towards others (Gibson, 1979). The jealous person, after determining the level of threat caused by a potential rival and relying on the cues (Buss et al., 1992), may direct negative consequences to the rival. The psychological and interpersonal literature has examined the effect of jealousy on the rival (Nguyen & Simkin, 2014; Parker et al., 2005). In line with concepts borrowed from the psychology literature, we believe similar relationships apply to the branding context. Therefore, in addition to positive outcomes for brands, this paper examines the negative effects of brand jealousy on rival customers.

The negative behaviors of a jealous customer towards the rival can include spreading false information, leaving negative reviews, and trolling on social media platforms (Kashima & Matsumoto, 2013). Recent studies show that there is a complex relationship between love, jealousy, and hate in romantic relationships (Jin et al., 2017). The rival is seen as having advantages or privileges, and the jealous person believes that they are deprived of them (Rauthmann, 2021). According to Newberry (2010) and Sternberg (2003), people who express jealousy are more likely to feel hatred towards their partner. Research is also conducted on the relationship between jealousy and derogation of the rival. Therefore, jealousy can lead to various forms of revenge against rivals (Kashima & Yamaguchi, 2019). It could be argued that, after experiencing brand jealousy, a jealous customer can show hate and engage in negative WOM (Fournier & Alvarez, 2012; Hancock et al., 2020) towards the rival customer. As mentioned, it is possible to develop hatred toward individuals. Research in marketing indicates that negative WOM can occur toward personal brands (Burtch & Sparks, 2019; Choi et al., 2019). In other words, based on the interpersonal literature, as well as concepts previously used to describe negative intentions toward brands, we examine whether a jealous customer will show hate and engage in negative WOM directed at a rival customer. Based on the arguments presented above, the third hypothesis can be stated as follows:

H3: Brand jealousy has a positive relationship with behavioural intentions toward the rival.

Perceived Unfairness

In general, inequality may be received after comparison (Butori & De Bruyn, 2013; Ludwig et al., 2017). In the market, if customers find the brand's preferred behaviours unequal after comparison, they may perceive the brand's behaviour as unfair. If the customer perceives that the other party deserves such treatment, the feeling of unfairness may be reduced (Ashworth & McShane, 2012; Feather & Boeckmann, 2013; Ludwig et al., 2017). Studies have investigated the jealous person's perception of the fairness of this brand-specific behaviour (Hancock et al., 2020). According to Liu and Johnson (2019), the customer may become jealous under certain circumstances, such as when perceiving unfair treatment by the brand. In addition, perceived unfairness affects the behaviour of

jealous customers (Ashworth & McShane, 2012; Feather & Boeckmann, 2013; Ludwig et al., 2017). According to Kim and Kim (2019), it leads to a decrease in brand loyalty and market share. Ludwig et al. (2017) state that unfairness is likely to affect the repurchase and complaint behaviour of jealous customers negatively and positively, respectively. Therefore, the intensity of the positive consequences of brand jealousy is affected by the degree of perceived unfairness experienced by jealous customers. In line with these studies, due to the potential customer's prior interest in the brand, rather than considering it as reinforcing negative consequences for the brand, this study argues that perceived unfairness undermines positive outcomes for the brand.

Studies have also looked at the effects of unfairness on the rival and have shown that if the jealous customer considers the other party to be deserving such treatment, the feeling of unfairness may be reduced (Ashworth & McShane, 2012; Feather & Boeckmann, 2013; Ludwig et al., 2017). Regarding the behavioural consequences of a jealous person, perceived unfairness can lead to negative WOM, decreased brand loyalty, and damage to brand reputation (Kim & Kim, 2019). Similarly, based on the same reasoning of associating negative consequences for the brand to the rival, if the specific behaviour of the brand is perceived as unequal, in other words, if the rival is incompetent, then the jealous customer may engage in more hate and rumors towards the rival. Therefore, we predict that in addition to reducing the positive consequences for the brand, perceived unfairness exacerbates negative consequences toward the rival. Therefore, we hypothesize:

H4: Perceived unfairness weakens the positive relationship between brand jealousy and intentions toward the brand.

H5: Perceived unfairness strengthens the positive relationship between brand jealousy and intentions toward the rival customer.

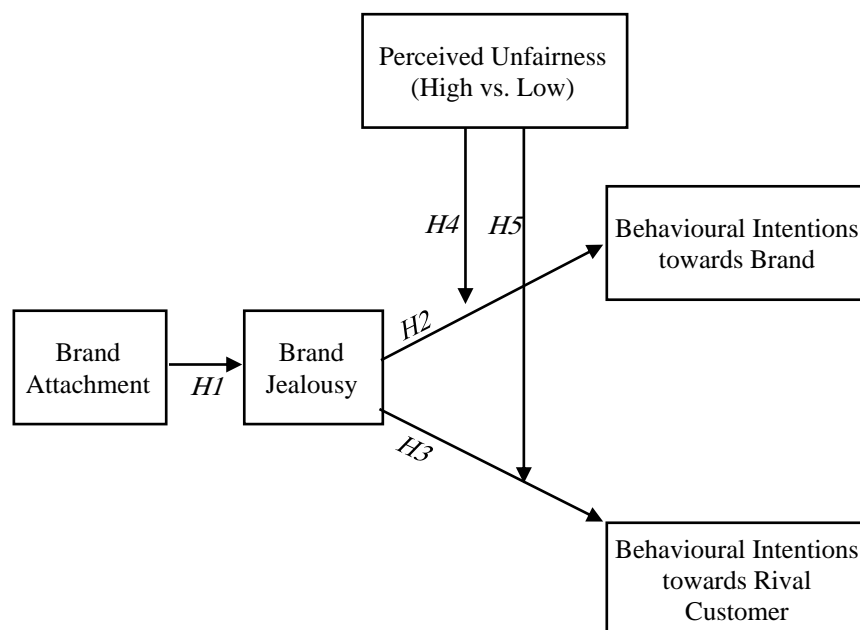


Fig. 1. Research Model

Methodology

Data Collection

This research used a quantitative method to test the research hypotheses. We employed a targeted sampling to select Iranian participants in 2022. Participants were asked to respond to an online questionnaire distributed on Telegram, a platform recognized as a valuable data source for researchers (Khaund et al., 2021). We received a total of 210 responses; however, 14 questionnaires were not completed and were therefore excluded from the study. The final analysis is based on 196 valid responses. Details about the sample size and any inclusion or exclusion criteria are provided in the next section. Demographic information, prepared using SPSS 22, is displayed in Table 1.

Table 1. Demographic Information of the Respondents

Gender	Frequency	Percent
Male	100	51
Female	96	49
Age	Frequency	Percent
15-24	147	75
25-34	38	19.4
35-44	9	4.6
45-54	1	0.5
55-64	1	0.5
Degree	Frequency	Percent
Below High School Diploma	30	15.3
High School Diploma	71	36.2
Associate Degree	19	9.7
Bachelor's Degree	48	24.5
Master's Degree	19	9.7
Ph.D. and above	9	4.6
All	196	100

Measures

The questionnaire used to collect data consisted of 22 questions, translated from English to Persian and validated linguistically (Acquadro et al., 2008). It employed a five-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The questionnaire included four items measuring brand attachment (Park et al., 2010), three items for brand jealousy (Sarkar & Sreejesh, 2014), three items for perceived unfairness (Ludwig et al., 2017), three items for hate (Zarantonello et al., 2016), three items for negative WOM (Alexandrov et al., 2013), three items for purchase intention (Netemeyer et al., 2004; Yoo & Donthu, 2001), and three items for active engagement (Bergkvist & Bech-Larsen, 2010) (see Table 2). After ensuring privacy and confidentiality, we screened and selected respondents who were eligible for the study by beginning the questionnaire with a question asking participants if there was a brand to which they felt attached. This section is informed by the opinions of experts and previous studies (e.g., Sarkar & Sreejesh, 2014). The prompt asked participants to:

Remember a brand you do not own, but are passionate about and feel a sense of belonging to (preferably an esteemed or premium brand). With a little patience and searching, you may remember this brand. Imagine that brand and think about it as you answer the following questions. If you cannot remember such a brand, please do not answer the questions.

It is important to note that jealousy is primarily based on the jealous person's perception. In psychology, the perception of jealousy can encompass both real and imagined relationships and rivalries (Sharpsteen & Kirkpatrick, 1997; White, 1981). Therefore, even in a situation without an actual relationship or rivalry, a person may still experience feelings of jealousy. From a marketing perspective, building on these propositions, Sarkar (2013) introduced the concept of brand jealousy. Sarkar et al. (2014) further explained that a present non-user, but a potential customer who is not currently using the brand but is emotionally attached to it, may perceive anyone else using the brand as a rival. Additionally, to ensure the consideration of the jealousy-evoking prerequisites in the literature (Ludwig et al., 2017; Sarkar & Sreejesh, 2014), we utilized a scenario based on expert opinion before asking participants to answer the brand jealousy questions:

Imagine a situation where someone else uses the brand you have already imagined and feels happy and satisfied.

As mentioned before, jealousy, both in interpersonal relationships and toward brands, can be based on perceptions and even imaginary situations (Sarkar et al., 2014). Therefore, a real rivalry or a real threat from the brand treatment is not necessary for jealousy to arise.

To address common method variance (CMV), the order of questionnaire items was randomized. In addition, Harmon's one-factor test was conducted to assess CMV. In this test, if a single factor explains more than 50% of the total variance in the data (Podsakoff et al., 2003), it suggests that CMV may be a significant concern. Our results showed that the first factor explained only 28.52% of the variance, well below the 50% threshold. Therefore, we concluded that CMV was not a significant concern in this study.

Reliability and Validity

Table 2 shows that all factor loadings exceed 0.45, indicating a good contribution of each item to its respective factor (Field, 2005; Yong & Pearce, 2013). The convergent validity test yielded acceptable values for all constructs in the research model. Average Variance Extracted (AVE) results were all above 0.50 (Hair et al., 2010; Henseler et al., 2016). Cronbach's alpha, a measure of internal consistency reliability, yielded good values above 0.70 for all constructs (Hammer et al., 2011; Nunnally, 1994).

Table 2. Results of the Factor Analysis and Reliability Test

Items for Each Construct	Factor Loading	α	AVE
Brand Attachment		0.824	0.551
The brand name is a part of me and shows who I am.	0.684		
I feel personally connected to the brand name.	0.813		
I feel emotionally bonded to the brand name.	0.780		
The thoughts and feelings toward the brand name come to my mind seemingly on their own.	0.686		
Brand Jealousy		0.875	0.544
I feel hurt when I see that others are using the brand while I do not have it.	0.684		
I feel very possessive about the brand when I see others using the brand that I do not have.	0.709		
The thought that others are using the brand while I do not have it always haunts me.	0.814		
Perceived Unfairness		0.855	0.671
Company or brand owner treatments are unfair.	0.845		
Company or brand owner treatments are unreasonable.	0.849		
Company or brand owner treatments are unacceptable.	0.761		
Intentions toward the Rival Customer		0.877	0.704
Negative Word of Mouth			
I will warn my friends and relatives about the person who is using the brand that I do not have.	0.823		
I will complain to my friends and relatives about the person who is using the brand that I do not have.	0.839		
I will say negative things about the person who is using the brand that I do not have.	0.855		
Hate		0.892	0.741
I dislike the person who is using the brand that I do not have.	0.808		
I hate the person who is using the brand that I do not have.	0.900		
I feel hostile toward the person who is using the brand that I do not have.	0.872		
Intentions toward the Brand			
Purchase Intention		0.882	0.716
I would like to use this brand.	0.787		
I intend to purchase this brand.	0.881		
My next purchase will be this brand.	0.868		
Active Engagement		0.754	0.506
I always try to follow the news about the brand.	0.673		
I frequently discuss the brand with others.	0.733		
I frequently visit the brand's website.	0.727		

Data Analysis

This study employed structural equation modeling (SEM) with AMOS 24.0 software for data analysis. While researchers can choose between AMOS and SmartPLS for SEM analysis (Ong & Puteh, 2017), AMOS offers a wider range of capabilities, including maximum likelihood (ML) estimation techniques, making it a popular choice for theory confirmation (Byrne, 2010).

While SmartPLS offers user-friendliness, AMOS is preferred in social science and business research due to its ability to handle various types of moderation analyses (Collier, 2020; Memon et al., 2019). This advantage aligns with the growing use of AMOS in brand jealousy research for SEM analysis (e.g., Ghorbanzadeh, 2023; Zahrah, 2023) and moderation (e.g., Saini et al., 2023; Joshi & Yadav, 2020). This study also used this software to examine the hypotheses. To test the overall fit of the models, several indicators were examined. In this regard, the estimated value for the comparative fit index (CFI), which is used to confirm the factor structure of the scale (Kline, 2015), should be greater than 0.9 (Bagozzi & Yi, 1988; Kline, 2015). Parsimony-adjusted normed fit index (PNFI),

which adjusts for degrees of freedom based on the normed fit index (NFI), should be greater than 0.5 (Mulaik et al., 1989). The acceptable range for the root mean squared error of approximation (RMSEA) is less than 0.05 (Bagozzi & Yi, 1988; Chen, 2007). According to Hooper et al. (2008), RMSEA analyzes the discrepancy between the hypothesized models. Finally, CMIN/DF (χ^2 / df) was used to examine the fit of the constructed model (Hoe, 2008; Kline, 1998). Based on Carmines et al. (1981), the range of 2 to 1 of χ^2 / df between the hypothetical model and the sample data shows an acceptable fit.

Results

Table 3 summarizes the overall fit indices of the structural model. All fit indices (CMIN/DF, CFI, PNFI, and RMSEA) fall within acceptable ranges, indicating a good fit to the data. Table 4 presents the results of testing direct hypotheses, along with the standardized estimates of structural coefficients for the research model depicted in Figure 2. The critical ratio and probability values in Table 4 were used to assess the significance of the hypotheses. A significance level of 0.05 was adopted, with a critical value exceeding 1.96 indicating significance (Rumsey, 2015). Based on these criteria, the findings in Table 4 support the first, second, and third hypotheses.

Table 3. Total Fit Indices of the Structural Model

Variables	Indices Name			
	CMIN/DF	CFI	PNFI	RMSEA
Final Model	1.612	0.956	0.752	0.056
Acceptable Level	0.50>	>0.90	>0.50	0.10>

Table 4. The Results of the Testing of Direct Hypotheses

Hs	Path	Regression Coefficients	CR	Result
H1	Brand Attachment → Brand jealousy	0.68***	7.775	Supported
H2	Brand Jealousy → Intentions toward Brand	0.43***	3.416	Supported
H3	Brand Jealousy → Intentions toward Rival Customer	0.34**	3.216	Supported

** p < 0.010 *** p < 0.001

To examine the moderation hypotheses, we employed a multigroup analysis technique introduced by Lowry and Gaskin (2014). This technique, commonly used in structural equation modeling (SEM), allows researchers to assess whether the relationships between variables differ across distinct groups. Multigroup analysis has been a valuable tool in various studies (Byrne, 2006; Steinmetz et al., 2009; Her et al., 2019; Cheah et al., 2023; Narayanan & Moon, 2023). Table 5 presents the results of the multigroup analysis testing the moderating effect of perceived unfairness. The analysis divided respondents into two subsamples: Those perceiving high levels of unfairness and those perceiving low levels. The test examines the differences between the beta coefficients (reported in Table 5) of these two groups to assess whether the effect of brand jealousy on purchase intention varies based on perceived unfairness. Our findings in Table 5 confirm the fourth hypothesis. The positive relationship between brand jealousy and purchase intention is only significant for the low perceived unfairness group, as indicated by the difference in beta values. The fifth hypothesis, however, is not supported. The multigroup analysis in Table 5 reveals no significant difference between the high and low perceived unfairness groups regarding the relationship between brand jealousy and intention towards the rival customer.

Table 5. The Results of the Testing of the Moderation Effect

Path Name	Low-Perceived Unfairness	High-Perceived Unfairness	Difference in Betas	Result
H4 Brand Jealousy → Intentions toward Brand	0.118	0.223*	0.385	Supported
H5 Brand Jealousy → Intentions toward Rival Customer	0.443***	0.387***	0.236	Not supported

* p < 0.050, ** p < 0.010, *** p < 0.001

Discussion

This study investigates how brand attachment, mediated by brand jealousy, affects potential customers' behavioral intentions toward the brand and its rival. We further examine the moderating role of perceived unfairness on both types of intentions. The results reveal a direct and significant positive effect of brand attachment on brand jealousy ($\beta = 0.68$). While this aligns with some research on the potential downsides of brand attachment (Guerrero & Afifi, 2017; Guerrero & Andersen, 2010), it challenges studies that position brand love as a predictor of brand jealousy (Dawood & Kashif, 2021; Ghorbanzadeh, 2023; Hasdiansa et al., 2019; Siddique & Rajput, 2022). As Fournier and Alvarez (2012) suggest, marketers need to appreciate the nuances of brand attachment. We propose that the functional nature of brand attachment (Park et al., 2010) is more relevant to jealousy in the context of brand consumption, needs, and demands, compared to the emotional nature of brand love. In simpler terms, the potential for loss associated with jealousy (Mattingly et al., 2012) and its negative consequences (Guerrero & Afifi, 2017; Guerrero & Andersen, 2010) seem to have a stronger connection to brand attachment than brand love.

The results support a direct and significant positive effect of brand jealousy on the brand's positive consequences ($\beta = 0.43$). This aligns with previous research on brand jealousy and its influence on purchase intention (Huang et al., 2017; Sarkar & Sreejesh, 2014; Rosita & Ratnandika, 2019) and active engagement (Sarkar & Sreejesh, 2014). Furthermore, we demonstrate that perceived unfairness mitigates this positive effect. This finding is somewhat consistent with research suggesting that unfairness can negatively impact repurchase intentions (Ludwig et al., 2017), brand loyalty, market share, and brand reputation (Kim & Kim, 2019). Interestingly, the study reveals a direct and significant effect of brand jealousy on intentions towards the rival customer ($\beta = 0.34$). While research in psychology and interpersonal relationships suggests that jealousy can influence the rival party (Nguyen & Simkin, 2014; Parker et al., 2005), this is the first study examining the effects of jealousy on rival customers. This effect might be explained by the established link between jealousy and negative emotions like hatred towards rivals (Kashima & Yamaguchi, 2019; Rauthmann, 2021; Sternberg, 2003). Additionally, studies have explored jealousy-driven behaviors like spreading rumors about rivals (Kashima & Yamaguchi, 2019). In marketing literature, negative word-of-mouth (WOM) directed towards brands after experiencing jealousy has also been explored (Fournier & Alvarez, 2012; Hancock et al., 2020). While Rosita and Ratnandika (2019) introduced electronic WOM, and İter et al. (2016) mentioned both positive and negative WOM as consequences of brand jealousy, neither considered the rival customer specifically. Building upon these established concepts of negative intentions towards brands, we posit that jealous customers harbor negative intentions towards the rival customer as well.

Finally, our findings reveal that perceived unfairness does not moderate the positive effect of brand jealousy on negative intentions towards the rival customer. This suggests that potential customers may form negative intentions towards the rival customer due to brand jealousy, regardless of their perception of the brand's fairness in its treatment of the rival. However, De Matos and Rossi (2008) proposed that customers might engage in negative behaviors when they feel the brand is responsible for their negative emotions. Our study suggests a potential distinction: Customers might harbor negative intentions towards the rival customer driven by brand jealousy, even if they don't perceive the brand's behavior as unfair.

Managerial Implications

This study aligns with a growing trend in consumer emotion research, particularly regarding negative emotions (e.g., Xu, 2020; Zarantonello et al., 2016). Drawing on social comparison and cognitive dissonance theories, we explain the phenomenon of brand jealousy. This study extends the concept of brand jealousy (Sarkar & Sreejesh, 2014) by examining both its antecedents and consequences. Our findings support the notion that potential customers who favor a brand can experience jealousy when they perceive other customers attached to the same brand. Furthermore, by reviewing core knowledge on the distinction between love and attachment (Carroll & Ahuvia, 2006; Loureiro et al., 2012; Siegel & Hartzell, 2019), particularly concerning jealousy (Carroll & Ahuvia, 2006; Weintraub et al., 1974), we contribute to the understanding of how different emotional motivations influence brand perceptions. This approach underscores the value of borrowing theories from other disciplines (Belk &

Sobh, 2019). Our findings demonstrate that brand attachment has an indirect effect on potential customers' behavioral intentions, mediated by brand jealousy. Furthermore, drawing on cue-utilization theory (Buss et al., 1992; Gibson, 1979), we reveal that jealous customers, who perceive the rival customer as a threat to their self-esteem, may exhibit negative behaviors towards the rival. The moderating effect of perceived unfairness on the relationship between brand jealousy and brand intentions suggests that consumers may become less loyal to a brand to which they were attached if the brand's behavior is perceived as unfair. Interestingly, perceived unfairness does not moderate the relationship between brand jealousy and intentions towards the rival customer. This suggests that consumers might be more likely to retaliate against the rival customer driven by jealousy, irrespective of their perception of the brand's fairness.

Overall, these findings highlight the importance of brand attachment and perceived fairness in shaping consumer behavior, and provide insights for marketers seeking to create and maintain positive brand intentions. Since brand attachment influences consumer brand behaviors and interactions (Thomson et al., 2005), managing consumers' emotional attachment to brands is essential to understanding their considerations, intentions, behaviors, and choices (Park et al., 2010). Therefore, according to the findings, marketers may want to promote brand attachment to encourage positive brand intentions. However, this strategy should be implemented cautiously. Marketers must ensure that their behavior is perceived as fair to avoid negative brand associations. The study also highlights the potential risks associated with brand jealousy, particularly when customers feel threatened by a rival. Companies should be aware of these risks and take steps to protect their customers. Furthermore, equally focusing on promoting product benefits and features can help avoid fostering unfair perceptions. Overall, the managerial implications suggest that marketers should be mindful when using jealousy as a marketing tactic and prioritize being perceived as fair and equitable to prevent negative brand and rival associations.

Limitations and Directions for Future Research

Overall, our understanding of the psychological mechanisms related to jealousy and its negative consequences in the market remains incomplete. A wider range of potential antecedents (e.g., situational factors) and consequences (e.g., feelings about the self) associated with brand jealousy awaits exploration. Future studies can examine how individual personality traits, such as self-esteem and materialism, moderate the relationships between brand attachment, brand jealousy, and behavioral intentions. The impact of different types of rivalry (e.g., direct vs. indirect competition) on these relationships can also be explored. Longitudinal research designs can shed light on how these relationships evolve over time, informing how marketing efforts can be adjusted to maintain positive brand outcomes amidst changing consumer attitudes and behaviors. Given the potential cultural variations in jealousy experiences and definitions, future cross-cultural studies on brand jealousy hold promise for insightful results.

This study focused on rival- and brand-related intentions of jealous customers. Investigating their potential intentions towards brand providers presents another opportunity for other researchers. Future research can also examine the consequences of different levels of brand jealousy intensity. In addition, participants may not always provide honest or accurate answers in their self-report, which can affect the validity of the results. Therefore, other strategies to cover the weaknesses of self-reported responses (such as asking respondents about the likelihood that other customers would experience the same feelings in the same situation) can be explored. Another limitation of the present study is that, because of the limitations, respondents were asked to imagine the situation, but real experiences lead to excessive emotional reactions and even greater effects than the recollection of an experience (Huang et al., 2016). Likewise, behavioral data can only provide limited insight into the processes underlying consumer preferences and choices (Shaw & Bagozzi, 2018), implying that even behavioral measures, such as purchase, WOM, and consumption cannot truly reflect consumers' internal intentions. More realistic laboratory tests, combined with analysis of facial expressions and questionnaires, can improve the reliability of the results.

References

- Acquadro, C., Conway, K., Hareendran, A., Aaronson, N., & European Regulatory Issues and Quality of Life Assessment (ERIQA) Group. (2008). Literature review of methods to translate health-related quality of life questionnaires for use in multinational clinical trials. *Value in Health, 11*(3), 509-521. <https://doi.org/10.1111/j.1524-4733.2007.00292.x>
- Alexandrov, A., Lilly, B., & Babakus, E. (2013). The effects of social-and self-motives on the intentions to share positive and negative word of mouth. *Journal of the Academy of Marketing Science, 41*(5), 531-546. <http://doi.org/10.1007/s11747-012-0323-4>
- Altinay, L., Song, H., Madanoglu, M., & Wang, X. L. (2019). The influence of customer-to-customer interactions on elderly consumers' satisfaction and social well-being. *International Journal of Hospitality Management, 78*, 223-233. <https://doi.org/10.1016/j.ijhm.2018.09.005>
- Anderson, J. C., & Bushman, B.J. (2016). *Handbook of experimental psychology*. Routledge.
- Ashworth, L., & McShane, L. (2012). Why do we care what others pay? The effect of other consumers' prices on inferences of seller (dis) respect and perceptions of deservingness violation. *Journal of Retailing, 88*(1), 145-155. <https://doi.org/10.1016/j.jretai.2011.10.004>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94. <https://doi.org/10.1177/009207038801600107>
- Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand love: A conceptual framework. *Journal of Marketing, 76*(2), 1-16. <https://doi.org/10.1080/0267257X.2019.1572025>
- Belk & Sobh (2019). No assemblage required: On pursuing, original consumer culture theory. *Marketing Theory, 19*(4), 489-507. <https://doi.org/10.1177/1470593118809800>
- Bergkvist, L., & Bech-Larsen, T. (2010). Two studies of consequences and actionable antecedents of brand love. *Journal of Brand Management, 17*(7), 504-518. <http://doi.org/10.1057/bm.2010.6>
- Burtch, G. C., & Sparks, L. E. (2019). Negative word-of-mouth and its impacts on consumer behavior. *Psychology & Marketing, 36*(10), 1013-1025.
- Buss, D. M., Larsen, R. J., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science, 3*(4), 251-255. <https://doi.org/10.1111/j.1467-9280.1992.tb00038.x>
- Buss, D. M. (2000). *The dangerous passion: Why jealousy is as necessary as love and sex*. Free Press.
- Butori, R., & De Bruyn, A. (2013). So you want to delight your customers: The perils of ignoring heterogeneity in customer evaluations of discretionary preferential treatments. *International Journal of Research in Marketing, 30*(4), 358-367. <https://doi.org/10.1016/j.ijresmar.2013.03.004>
- Byrne, B. (2006). *Structural equation modeling with EQS: Basic concepts, applications, and programming*. Lawrence Erlbaum Associates.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Taylor & Francis Group.
- Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), *Social Measurement: Current issues* (pp. 65-115), Sage.
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing letters, 17*, 79-89. <https://doi.org/10.1007/s11002-006-4219-2>
- Chairy, C., Syahrivar, J. (2018). Relationship between brand jealousy and conspicuous consumption. In *SU-AFBE 2018: Proceedings of the 1st Sampoerna University-AFBE International Conference, SU-AFBE 2018, 6-7 December 2018, Jakarta Indonesia* (p. 414). European Alliance for Innovation.
- Cheah, J. H., Amaro, S., & Roldán, J. L. (2023). Multigroup analysis of more than two groups in PLS-SEM: A review, illustration, and recommendations. *Journal of Business Research, 156*, 113539. <https://doi.org/10.1016/j.jbusres.2022.113539>
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural equation modeling: A multidisciplinary journal, 14*(3), 464-504. <http://dx.doi.org/10.1080/10705510701301834>
- Choi, H.-S., Kim, M., & Lee, T. (2019). How does online social media affect customer loyalty? Evidence from Korean customers' perceptions. *Computers in Human Behavior, 82*, 101552.
- Collier, J. (2020). *Applied structural equation modeling using AMOS: Basic to advanced techniques*. Routledge.
- Das, G., & Varshneya, G. (2017). Consumer emotions: Determinants and outcomes in a shopping mall. *Journal of Retailing and Consumer Services, 38*, 177-185. <https://doi.org/10.1016/j.jretconser.2017.06.008>
- Dawood, F., & Kashif, M. (2021). My love, I hate you: Rethinking brand jealousy to investigate emotional transition among rural customers. *Strategic Change, 30*(1), 45-52. <https://doi.org/10.1002/jsc.2388>
- De Matos, C.A., & Rossi, C.A.V. (2008). Word-of-Mouth Communications in Marketing: A Meta-Analytic Review of the Antecedents and Moderators, *Journal of the Academy of Marketing Science, 36*(4), 578-596.
- Duhachek, A. (2005). Coping: A multidimensional, hierarchical framework of responses to stressful consumption episodes. *Journal of Consumer research, 32*(1), 41-53. <https://doi.org/10.1086/426612>

- Farrington, T., Curran, R., Gori, K., O’Gorman, K. D., & Queenan, C. J. (2017). Corporate social responsibility: Reviewed, rated, revised. *International Journal of Contemporary Hospitality Management*, 29(1), 30-47. <http://doi.org/10.1108/IJCHM-05-2015-0236>
- Feather, N. T., & Boeckmann, R. J. (2013). Perceived legitimacy of judicial authorities in relation to degree of value discrepancy with public citizens. *Social Justice Research*, 26(2), 193-217. <http://doi.org/10.1007/s11211-013-0183-1>
- Feinberg, F. M., Krishna, A., & Zhang, Z. J. (2002). Do we care what others get? A behaviorist approach to targeted promotions. *Journal of Marketing research*, 39(3), 277-291. <https://doi.org/10.1509/jmkr.39.3.277.19108>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.
- Festinger, L., Riecken, H., & Schachter, S. (1954). *When Prophecy Fails: A social psychological study of a modern group*. Harper Torchbooks.
- Field, A. P. (2005). *Discovering statistics using SPSS: (and sex, drugs and rock’n’roll)*. Sage Publications.
- Fournier, S., & Alvarez, C. (2012). Brand pride in consumer-brand relationships: Towards a conceptualization and research agenda. *Journal of Brand Management*, 19(9), 762-778.
- Ghorbanzadeh, D. (2023). The role of brand love and brand jealousy in the formation of brand addiction. *Current Psychology*, 43(1), 1-15. <http://doi.org/10.1007/s12144-023-04508-1>
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Houghton Mifflin.
- Guerrero, L. K., & Afifi, W. A. (Eds.). (2017). *The dark side of communication* (Vol. 13). Routledge.
- Guerrero, L. K., & Andersen, P. A. (Eds.). (2010). *The dark side of jealousy and envy: Desire, delusion, desperation, and destructive communication*. Routledge.
- Guerrero, L. K., Andersen, P. A., Afifi, W. A., Spitzberg, B. H., & Yoshimura, M. (2017). The dark side of relationships: Jealousy. *Routledge Handbook of Family Communication*, 4th ed., Routledge.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Pearson
- Hammer, A., Ernstmann, N., Ommen, O., Wirtz, M., Manser, T., Pfeiffer, Y., & Pfaff, H. (2011). Psychometric properties of the hospital survey on patient safety culture for hospital management (HSOPS_M). *BMC Health Services Research*, 11, 1-10. <https://doi.org/10.1186/1472-6963-11-165>
- Hancock, T., Adams, F. G., Breazeale, M., & Lueg, J. E. (2020). Exploring jealousy and envy in communal relationship revenge-seeking. *Journal of Consumer Marketing*, 37(6), 687-699. <http://doi.org/10.1108/JCM-06-2019-3300>
- Harmon-Jones, E., Peterson, C. K., & Harris, C. R. (2009). Jealousy: Novel methods and neural correlates. *Emotion*, 9(1), 113-117. <https://doi.org/10.1037/a0014117>
- Hasdiansa, I. W., & Balqiah, T. E. (2019). *Understanding the influence of brand jealousy, brand love and materialism towards willingness to pay premium: Study on coach’s handbag* [Conference presentation]. Asia-Pacific Research in Social Sciences and Humanities Universitas Indonesia Conference (APRISH 2018). Atlantis Press.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, 116(1), 2-20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Her, Y. W., Shin, H., & Pae, S. (2019). A multigroup SEM analysis of moderating role of task uncertainty on budgetary participation-performance relationship: Evidence from Korea. *Asia Pacific Management Review*, 24(2), 140-153. <https://doi.org/10.1016/j.apmr.2018.02.001>
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of Applied Quantitative Methods*, 3(1), 76-83.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic journal of business research methods*, 6(1), 53-60. <https://doi.org/10.21427/D7CF7R>
- Hsee, C. K., Hatfield, E., Carlson, J. G., & Chemtob, C. (1990). The effect of power on susceptibility to emotional contagion. *Cognition and Emotion*, 4(4), 327-340. <http://doi.org/10.1080/02699939008408081>
- Huang, X. I., Dong, P., & Wyer Jr, R. S. (2017). Competing for attention: The effects of jealousy on preference for attention-grabbing products. *Journal of Consumer Psychology*, 27(2), 171-181. <https://doi.org/10.1016/j.jcps.2016.12.001>
- Huang, X., Huang, Z., & Wyer Jr, R. S. (2016). Slowing down in the good old days: The effect of nostalgia on consumer patience. *Journal of Consumer Research*, 43(3), 372-387. <https://doi.org/10.1093/jcr/ucw033>
- İlter, B., Bıçakcıoğlu, N., & Yaran, İ. Ö. (2016). How brand jealousy influences the relationship between brand attachment and word of mouth communication. *Acta Universitatis Danubius. Communicatio*, 10(1), 109-125.
- İttefaq, H., Akhtar, N., Iqbal Siddiqi, U., Islam, T., & Kuzior, A. (2024). The betrayal puzzle: Unraveling the connection between inauthenticity, corporate wrongdoing and brand betrayal with avoidance and reparation. *Journal of Retailing and Consumer Services*, 76, 103597. <https://doi.org/10.1016/j.jretconser.2023.103597>

- Jin, W., Xiang, Y., & Lei, M. (2017). The deeper the love, the deeper the hate. *Frontiers in Psychology*, 8, 1940. <https://doi.org/10.3389/fpsyg.2017.01940>
- Johnstone, T., & Scherer, K. R. (1999, August). The effects of emotions on voice quality. In *Proceedings of the XIVth international congress of phonetic sciences* (pp. 2029-2032). Department of Linguistics, Univ. of California at Berkeley Berkeley, CA.
- Joshi, R., & Yadav, R. (2020). Exploring jealousy nexus by demystifying the role of brand passion and loyalty: A hotel service perspective. *International Journal of Technology Marketing*, 14(4), 348-364. <http://doi.org/10.1504/IJTMKT.2020.10036121>
- Jung, J. H., & Yoo, J. J. (2017). Customer-to-customer interactions on customer citizenship behavior. *Service Business*, 11, 117-139. <http://doi.org/10.1007/s11628-016-0304-7>
- Kapoor, A., & Kulshrestha, C. (2009). Consumers' perceptions: An analytical study of influence of consumer emotions and response. *Direct Marketing: An International Journal*, 3(3), 186-202. <http://doi.org/10.1108/17505930910985134>
- Kashima, Y., & Matsumoto, H. (2013). The effects of envy on interpersonal relationships: A meta-analytic review. *Psychological Bulletin*, 141(6), 957-984.
- Kashima, Y., & Yamaguchi, S. (2019). The effects of jealousy on interpersonal behavior and emotions in romantic relationships. *Journal of Social and Personal Relationships*, 36(7), 854-872.
- Khaund, T., Hussain, M. N., Shaik, M., & Agarwal, N. (2021, May). Telegram: Data collection, opportunities and challenges. In *Information Management and Big Data: 7th Annual International Conference, SIMBig 2020, Lima, Peru, October 1-3, 2020, Proceedings* (pp. 513-526). Springer International Publishing.
- Kim, H., & Kim, W. G. (2015). The effects of brand attachment and brand attitude strength on brand jealousy. *Journal of Global Marketing*, 28(1), 22-35.
- Kim, K., & Kim, J. (2019). The Role of Perceived Fairness in Consumer Responses to Brand Jealousy. *Journal of Business Research*, 103, 275-284.
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343-364. <https://doi.org/10.1177/073428299801600407>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford Press.
- Lee, Y.-S. (2017). Cognitive dissonance theory. *Encyclopedia of Management Theory*, 38-43.
- Lin, H., Gursoy, D., & Zhang, M. (2020). Impact of customer-to-customer interactions on overall service experience: A social servicescape perspective. *International Journal of Hospitality Management*, 87, 102376. <https://doi.org/10.1016/j.ijhm.2019.102376>
- Lin, Y. T., Chen, S. C., & Hung, C. S. (2011). The impacts of brand equity, brand attachment, product involvement and repurchase intention on bicycle users. *African Journal of Business Management*, 5(14), 5910-5919. <https://doi.org/10.5897/AJBM10.862>
- Liu, Y., & Johnson, M. D. (2019). Consumer envy and jealousy. *Journal of Consumer Research*, 45(3), 586-603.
- Loureiro, S. M. C., Ruediger, K. H., & Demetris, V. (2012). Brand emotional connection and loyalty. *Journal of Brand Management*, 20, 13-27.
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123-146. <http://doi.org/10.1109/TPC.2014.2312452>
- Ludwig, N. L., Barnes, D. C., & Gouthier, M. (2017). Observing delightful experiences of other customers: The double-edged sword of jealousy and joy. *Journal of Service Theory and Practice*, 27(1), 145-163. <http://doi.org/10.1108/JSTP-07-2015-0171>
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: stress, emotions and health. *New Technology, Work and Employment*, 18(3), 196-211. <http://doi.org/10.1111/1468-005X.00121>
- Mattingly, B. A., Whitson, D., & Mattingly, M. J. (2012). Development of the romantic jealousy-induction scale and the motives for inducing romantic jealousy scale. *Current Psychology*, 31(3), 263-281. <http://doi.org/10.1007/s12144-012-9144-3>
- McCraty, R., Atkinson, M., Tiller, W. A., Rein, G., & Watkins, A. D. (1995). The effects of emotions on short-term power spectrum analysis of heart rate variability. *The American journal of cardiology*, 76(14), 1089-1093. [https://doi.org/10.1016/s0002-9149\(99\)80309-9](https://doi.org/10.1016/s0002-9149(99)80309-9)
- Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: issues and guidelines. *Journal of Applied Structural Equation Modeling*, 3(1), 1-11. [http://doi.org/10.47263/JASEM.3\(1\)01](http://doi.org/10.47263/JASEM.3(1)01)
- Mick, D. G., & Fournier, S. (1998). Paradoxes of technology: Consumer cognizance, emotions, and coping strategies. *Journal of Consumer Research*, 25(2), 123-143. <https://doi.org/10.1086/209531>

- Mick, D. G., Pettigrew, S., Pechmann, C., & Ozanne, J. L. (2012). Origins, qualities, and envisionments of transformative consumer research. In *Transformative consumer research for personal and collective well-being* (pp. 31-52). Routledge.
- Moussa, S. (2015). I may be a twin but I'm one of a kind: Are brand attachment and brand love different names for the same construct? *Qualitative Market Research: An International Journal*, 18(1), 69-85. <http://doi.org/10.1108/QMR-05-2013-0028>
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105(3), 430-445. <http://doi.org/10.1037/0033-2909.105.3.430>
- Narayanan, K. & Moon, C. (2023). A multigroup SEM analysis of the antecedents and moderating influence of culture on workplace deviance behavior. *Cross Cultural & Strategic Management*, 30(2), 169-196. <https://doi.org/10.1108/ccsm-06-2021-0103>
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209-224. [https://doi.org/10.1016/S0148-2963\(01\)00303-4](https://doi.org/10.1016/S0148-2963(01)00303-4)
- Neu, J. (1980). Jealous thoughts. In A.O. Rorty (Ed.), *Explaining emotions* (pp. 425-464). Berkeley: University of California Press.
- Newberry, M. A. (2010). The positive and negative effects of jealousy on relationship quality: A meta-analysis. *UNF Graduate Theses and Dissertations*. 380.
- Nguyen, B., & Simkin, L. (2014). It's just not fair: Exploring the effects of firm customization on unfairness perceptions, trust and loyalty. *Journal of Services Marketing*, 28(6), 484-497. <https://doi.org/10.1108/JSM-05-2013-0113>
- Nunnally, J. C. (1994). *Psychometric theory 3E*. Tata McGraw-Hill Education.
- Ong, M. H. A., & Puteh, F. (2017). Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social science research. *International Interdisciplinary Journal of Scientific Research*, 3(1), 14-25.
- Panksepp, J. B., & Lahvis, G. P. (2011). Rodent empathy and affective neuroscience. *Neuroscience & Biobehavioral Reviews*, 35(9), 1864-1875. <https://doi.org/10.1016/j.neubiorev.2011.05.013>
- Park, C. W., MacInnis, D. J., & Priester, J. (2008). Brand attachment: Constructs, consequences, and causes. *Foundations and Trends® in Marketing*, 1(3), 191-230. <http://doi.org/10.1561/17000000006>
- Park, C. W., Macinnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1-17. <http://dx.doi.org/10.2307/25764280>
- Parker, J. G., Low, C. M., Walker, A. R., & Gamm, B. K. (2005). Friendship jealousy in young adolescents: Individual differences and links to sex, self-esteem, aggression, and social adjustment. *Developmental Psychology*, 41(1), 235-250. <https://doi.org/10.1037/0012-1649.41.1.235>
- Parrott, W. G. (1991). The emotional experiences of envy and jealousy. In P. Salovey (Ed.), *The Psychology of Jealousy and Envy*, (pp. 3-30). Guilford Press.
- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *Journal of Personality and Social Psychology*, 64(6), 906-920. <http://doi.org/10.1037//0022-3514.64.6.906>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Rauthmann, J. F. (Ed.). (2021). *The handbook of personality dynamics and processes*. Academic Press.
- Rosita, N. H., & Ratandika, Y. (2019). Brand love and brand jealousy mediating electronic word of mouth on online hotel reservation intention. *International Journal of Organizational Innovation (Online)*, 11(4), 150-161.
- Rumsey, D. J. (2015). *U Can: Statistics for dummies*. John Wiley & Sons.
- Saini, A., Kashif, M., & Platania, S. (2023). Temporary love: A love-hate transition among luxury fashion consumers in a mediation of brand jealousy and moderation of value-expressiveness. *Journal of Global Scholars of Marketing Science*, 33(4), 513-535. <http://doi.org/10.1080/21639159.2023.2209104>
- Salehzadeh, R., AdelPanah, A., & Mirmehdi, S. M. (2023). Factors influencing electronic brand love and e-loyalty. *Journal of Information Technology Management*, 15(2), 138-163. <https://doi.org/10.22059/jitm.2022.326875.2853>
- Salehzadeh, R., Sayedan, M., Mirmehdi, S. M. & Heidari Aqagoli, P. (2023). Elucidating green branding among Muslim consumers: The nexus of green brand love, image, trust and attitude. *Journal of Islamic Marketing*, 14(1), 250-272. <http://doi.org/10.1108/JIMA-08-2019-0169>
- Sarkar, A. (2013). Romantic brand love: A conceptual analysis. *The Marketing Review*, 13(1), 23-37. <http://doi.org/10.1362/146934713X13590250137709>

- Sarkar, A., & Sreejesh, S. (2014). Examination of the roles played by brand love and jealousy in shaping customer engagement. *Journal of Product and Brand Management*, 23(1), 24-32. <http://doi.org/10.1108/JPBM-05-2013-0315>
- Sarkar, A., Krishna, G. R., & Rao, K. S. (2014). Brand desire and brand jealousy: Routes to persuasion. *The Marketing Review*, 14(3), 265-278. <http://doi.org/10.1362/146934714X14024779061910>
- Shahid Sameeni, M., Qadeer, F., Ahmad, W., & Filieri, R. (2024). An empirical examination of brand hate influence on negative consumer behaviors through NeWOM intensity. Does consumer personality matter? *Journal of Business Research*, 173, 114469. <https://doi.org/10.1016/j.jbusres.2023.114469>
- Sharpsteen, D. J. (1993). Romantic jealousy as an emotion concept: A prototype analysis. *Journal of Social and Personal Relationships*, 10(1), 69-82. <https://doi.org/10.1177/0265407593101005>
- Sharpsteen, D. J., & Kirkpatrick, L. A. (1997). Romantic jealousy and adult romantic attachment. *Journal of Personality and Social Psychology*, 72(3), 627-640. <https://doi.org/10.1037//0022-3514.72.3.627>
- Shaw, S. D., & Bagozzi, R. P. (2018). The neuropsychology of consumer behavior and marketing. *Consumer Psychology Review*, 1(1), 22-40. <http://doi.org/10.1002/arcp.1006>
- Siddique, S., & Rajput, A. (2022). Self-expressiveness and hedonic brand affect brand love through brand jealousy. *Future Business Journal*, 8(1), 23. <http://doi.org/10.1186/s43093-022-00136-6>
- Siegel, D., & Hartzell, M. (Eds.). (2019). *Attachment theory*. WW Norton & Company.
- Singh, J., & Rothschild, M. L. (2006). Consumer and brand-level routes to market share growth. *Journal of the Academy of Marketing Science*, 34(4), 433-447.
- Steinmetz, H., Schmidt, P., Tina-Booh, A., Wieczorek, S., & Schwartz, S. H. (2009). Testing measurement invariance using multigroup CFA: Differences between educational groups in human values measurement. *Quality and Quantity*, 43(4), 599-616. <http://doi.org/10.1007/s11135-007-9143-x>
- Sternberg, R. J. (2003). A duplex theory of hate: Development and application to terrorism, massacres, and genocide. *Review of General Psychology*, 7(3), 299-328. <https://doi.org/10.1037/1089-2680.7.3.299>
- 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. https://doi.org/10.1207/s15327663jcp1501_10
- van Kleef, G. A., & Côté, S. (2022). The social effects of emotions. *Annual Review of Psychology*, 73, 629-658. <https://doi.org/10.1146/annurev-psych-020821-010855>
- Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing*, 41(5/6), 487-511. <http://doi.org/10.1108/03090560710737570>
- Weintraub, M., Segal, R. M., & Beck, A. T. (1974). An investigation of cognition and affect in the depressive experiences of normal men. *Journal of Consulting and Clinical Psychology*, 42(6), 911. <https://doi.org/10.1037/h0037522>
- White, G. L. (1981). Some correlates of romantic jealousy. *Journal of Personality*, 49(2), 129-145. <https://doi.org/10.1111/j.1467-6494.1981.tb00733.x>
- Wu, C. H. J. (2007). The impact of customer-to-customer interaction and customer homogeneity on customer satisfaction in tourism service—the service encounter prospective. *Tourism Management*, 28(6), 1518-1528. <https://doi.org/10.1016/j.tourman.2007.02.002>
- Xu, J. (2020). Unintended effects of advertising: An updated qualitative review. *Review of Communication Research*, 8, 1-16. <http://dx.doi.org/10.12840/ISSN.2255-4165.021>
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology*, 9(2), 79-94. <http://doi.org/10.20982/tqmp.09.2.p079>
- Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce*, 2(1), 31-45. http://doi.org/10.1007/978-3-319-11885-7_129
- Yoshimura, S. M. (2004). Emotional and behavioral responses to romantic jealousy expressions. *Communication Reports*, 17(2), 85-101. <https://doi.org/10.1080/08934210409389378>
- Zahrah, A. O. (2023). Peran brand love & brand jealousy memediasi nilai emosional terhadap minat beli ulang konsumen apple. *Neraca: Jurnal Ekonomi, Manajemen dan Akuntansi*, 1(4), 318-330. <https://doi.org/10.572349/neraca.v1i4.337>
- Zarantonello, L., Romani, S., Grappi, S., & Bagozzi, R. P. (2016). Brand hate. *Journal of Product and Brand Management*, 25(1), 11-25. <http://doi.org/10.1108/JPBM-01-2015-0799>