

Buffering transgressions: role of anthropomorphism, attachment orientations and brand role in shaping advocacy intentions

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Abstract

Purpose – This study aims to examine the role of anthropomorphism in mitigating the effects of brand transgression from the perspectives of attachment theory and role theory. It also investigates the underlying mechanism of brand attachment orientations (secure and dismissive) and boundary conditions of brand role (partner vs servant) in these relationships.

Design/methodology/approach – Three experiments were conducted to test the proposed relationships. Study 1 examined how anthropomorphizing brands influences advocacy intentions. Study 2 explored the underlying mechanisms of secure and dismissive brand attachment orientations. Study 3 investigated the boundary condition of brand role.

Findings – The findings suggest that advocacy intentions are higher for anthropomorphized brands compared to non-anthropomorphized brands following a transgression. Secure brand attachment orientation explains the relationships between brand anthropomorphism and advocacy intentions. For non-anthropomorphized brands, using a partner role framing leads to higher advocacy intentions compared to using a servant role framing. For anthropomorphized brands, no significant difference in advocacy intentions was found between servant and partner roles.

Originality/value – This study offers novel insights by integrating the literature on brand anthropomorphism, attachment orientations and brand role in the context of brand transgression. While previous studies have predominantly examined brand anthropomorphism in positive contexts, there is limited research about its effectiveness in negative contexts, such as brand transgression. The brand transgression literature calls for research on the role of relational mechanisms in managing negative outcomes. This study addresses these calls for research by adopting a relational mechanism, using brand attachment orientations and brand role, to show that brand anthropomorphism mitigates the negative outcomes of brand transgression through secure brand attachment orientations. Furthermore, a partner role helps manage consumer advocacy for non-anthropomorphized brands after a transgression.

Keywords Anthropomorphism, Transgression, Brand attachment, Brand role, Advocacy, Experimental design

Paper type Research paper

1. Introduction

Consumers form relationships with brands in ways that mirror interpersonal relationships (Kervyn *et al.*, 2012). To strengthen these relationships, brands frequently use anthropomorphism, which endows them with human-like traits or personalities (e.g. Mr Planters Peanut, Mr Muscle or the Michelin Man) (Puzakova *et al.*, 2009). Extant research consistently demonstrates that anthropomorphism generates favorable outcomes for both brands and consumers, including purchase intention, trust, adoption, satisfaction, attitude, engagement and eudemonic well-being (Bhalla and Zeba, 2025; Kim *et al.*, 2024; Vernuccio *et al.*, 2025; Vinuales and Sheinin, 2026;

Xie *et al.*, 2025; Zhang *et al.*, 2025). However, most of these studies focus on positive brand contexts. Comparatively, there is limited understanding of how anthropomorphized brands are evaluated following a transgression.

Brand transgressions that violate customers' expectations have become increasingly visible in the marketplace due to heightened consumer scrutiny and the amplifying effect of social media (Kennedy and Guzmán, 2021; Khamitov *et al.*, 2020). Such transgressions erode trust and damage

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consumer–brand relationships, often triggering retaliation, avoidance and brand hate (Ahmed *et al.*, 2024; Mazzoli *et al.*, 2024; Tolunay and Veloutsou, 2025). While prior studies suggest that communication strategies, design elements and emotional connections can attenuate these effects (Brandão and Popoli, 2023; Davvetas *et al.*, 2024; Septianto and Kwon, 2022), recent papers call for greater focus on relational mechanisms to explain how consumers maintain or restore brand relationships following a transgression (Banerjee *et al.*, 2023; Rosendo-Rios *et al.*, 2025).

In response to these calls, this study adopts a relational perspective to examine whether and how brand anthropomorphism mitigates the negative effect of transgressions. When a brand is anthropomorphized, consumers may interpret its actions through a moral and relational lens, which can either reduce or intensify their reactions to wrongdoing (Dalman *et al.*, 2021; Han *et al.*, 2023). Specifically, this research investigates the effect of brand transgressions on consumer advocacy intentions, a voluntary behavior that involves recommending or defending a brand. Consumer advocacy is a critical indicator of relationship strength and reflects a willingness to act on behalf of the brand even when its image is threatened (Shimul *et al.*, 2025). Given this context, the present study examines whether consumers' advocacy intentions increase or decrease following a transgression by an anthropomorphized brand.

Drawing on attachment theory (Bowlby, 1979), this research proposes that anthropomorphism influences advocacy intentions by activating brand attachment orientations. While attachment orientations have traditionally been viewed as individual traits, recent research suggests they can also be context-dependent, with consumers forming or updating them in response to situational cues or brand strategies (Hemsley-Brown, 2023; Japutra *et al.*, 2022; Sarkar *et al.*, 2018). This study examines how secure or dismissive attachment orientations explain the relationship between brand anthropomorphism and consumer advocacy following a transgression. This study also examines brand role (partner vs servant) as a boundary condition. Guided by role theory (Koenig and Eagly, 2014), it is proposed that brand role framing shapes relational expectations and moderates the effect of brand anthropomorphism on advocacy following a transgression.

This research makes three key contributions to the literature. It advances the understanding of how brand anthropomorphism functions in negative contexts by examining its role during brand transgressions, extending beyond the predominant focus on positive contexts. The study integrates attachment theory with anthropomorphism to explain how relational orientations shape consumer responses to these transgressions. The research identifies the brand role as an important boundary condition that determines when anthropomorphism drives consumer advocacy.

2. Theoretical background

2.1 Brand anthropomorphism

Brand anthropomorphism refers to attributing human-like characteristics, motives or emotions to non-human agents such as brands (Puzakova *et al.*, 2009). It involves endowing brands

with a perceived mind, emotions and intentional behavior, making them appear socially relatable to consumers (Guido and Peluso, 2015). These human-like cues enable anthropomorphized brands to connect with consumers and foster strong relationships. Marketers frequently take advantage of this by anthropomorphizing brands through mascots, brand characters or spokespersons (Aggarwal and McGill, 2012). Anthropomorphism makes consumers feel more competent, comfortable and emotionally secure (Kwok *et al.*, 2018). This perceived social connection enhances trust, emotional connection and engagement, reinforcing the relational value of brands (Ma *et al.*, 2023; Sharma and Rahman, 2022).

Recently, research on anthropomorphism has expanded to consider the relational role that brands adopt (Zhang and Rau, 2023). An anthropomorphized brand may be perceived as adopting a distinct role, such as a partner or a servant, depending on its design and interaction patterns (Teng *et al.*, 2024; Ho *et al.*, 2021; Xiang and Park, 2025). For example, a servant-like brand that follows instructions can increase self-efficacy while partner brands that collaborate with consumers induce fewer privacy concerns (Han *et al.*, 2020; Mou and Meng, 2024). Furthermore, these roles convey distinct effort beliefs for consumers (Rai *et al.*, 2024). This suggests that the effectiveness of brand anthropomorphism depends not only on a brand's human-like qualities and characteristics, but also on its relational role, which may shape how consumers perceive and evaluate the brand following a transgression.

2.2 Attachment theory

Attachment theory posits that childhood experiences of emotional bonding with primary caregivers shape adults' expectations and behaviors in relationships throughout life (Bowlby, 1979). These early bonds create internal working models or mental representations that guide how people perceive themselves and others in emotionally charged situations (Shaver and Mikulincer, 2005). When individuals experience threat or distress, they seek proximity to attachment figures to restore a sense of safety and security (Mende and Bolton, 2011). If the figures are unavailable or unresponsive, they activate secondary attachment strategies, such as hyperactivation, which involves intensified efforts to gain closeness to the attachment figure, or deactivation, which involves emotional suppression and the discounting of threats, thereby reducing dependence on the attachment figure (Shaver and Mikulincer, 2005).

Building on this foundation, attachment theory identifies distinct attachment orientations that reflect individual differences in regulating closeness and dependence. These orientations emerge from two underlying dimensions, namely, avoidance and anxiety (Mende and Bolton, 2011). Attachment avoidance is the extent to which individuals maintain distance from others due to a lack of self-reliance and fear of dependence in the relationship. Attachment anxiety reflects the extent to which individuals worry about rejection or abandonment by others during a time of need (Mende *et al.*, 2013). Based on these two dimensions, four attachment orientations have been identified (Bartholomew and Horowitz, 1991). Secure individuals low on both avoidance and anxiety hold positive views of both self and others. Dismissive individuals are high on

avoidance but low on anxiety, value independence and feel uncomfortable with closeness to others. Preoccupied individuals are low on avoidance but high on anxiety, seek approval and fear abandonment. Finally, fearful individuals are high on both avoidance and anxiety, showcase contradictory or ambivalent behavior and desire relationships yet fear intimacy (Frydman and Tena, 2023; Mikulincer and Shaver, 2010).

While individuals possess chronic, trait-based attachment tendencies (Fraley and Shaver, 2000; Richards and Schat, 2011), recent marketing literature posits that these orientations are also context-dependent, triggered by specific situations and cues (Bidmon, 2017; Sarkar *et al.*, 2018). As highlighted in a recent systematic review by Hemsley-Brown (2023), situational factors, such as shifts in the service environment, emotionally charged events or relational threats, act as critical antecedents that activate specific attachment responses. Consequently, consumers develop attachment orientations toward brands, emerging directly from their perceptions of a brand's specific actions, strategies or transgressions.

To capture these contextual dynamics, the present study focuses on secure and dismissive brand attachment orientations as the underlying mechanisms explaining the relationship between brand anthropomorphism and advocacy intentions following a transgression. These two orientations were selected because they best represent the fundamental dichotomy of consumer coping strategies under threat: moving toward the brand (secure) versus pulling away to maintain self-reliance (dismissive). This selection ensures theoretical parsimony and avoids the conceptual overlap observed in previous studies that attempted to measure all four orientations simultaneously (Frydman and Tena, 2023; Pozharliev *et al.*, 2021).

The application of attachment theory to consumer–brand relationships highlights how brands can function as attachment figures (Mende and Bolton, 2011). In modern consumer societies, where traditional sources of emotional security, such as families, religion and communities, play a reduced role, brands increasingly act as substitutes that provide comfort, security and stability (Bidmon, 2017). However, not all consumers are equally driven to form these bonds (Mende and Bolton, 2011). Consequently, brand attachment orientations help explain differences in consumers' relational tendencies toward brands. Previous research shows that these attachment orientations influence diverse outcomes, including customer interaction (Pozharliev *et al.*, 2021), pro-environmental consumption (Hasni *et al.*, 2025), long-term relationship building (Frydman and Tena, 2023), brand forgiveness (Alnawas *et al.*, 2023) and overall satisfaction (Sidhu *et al.*, 2023). Ultimately, attachment theory provides a robust theoretical framework for understanding how consumer–brand relationships navigate and survive brand transgressions.

3. Hypothesis development

3.1 Brand anthropomorphism and advocacy intentions

Consumers tend to respond favorably to brands they perceive as similar to themselves (Kirmani, 2009). When brands are anthropomorphized, their human-like cues trigger a human schema, allowing consumers to process and relate to them as social entities (Aggarwal and McGill, 2007). This perceived similarity enhances emotional connection, leading to a more

favorable evaluation of anthropomorphized brands than non-anthropomorphized brands. Prior research shows that the strength of the consumer–brand relationship can buffer the negative effects of brand transgressions (Park and John, 2018) and foster advocacy intentions (Shimul and Phau, 2023).

Attachment theory (Bowlby, 1982) further suggests that individuals seek proximity to attachment figures even when disappointed, often instinctively defending these figures against external threats (Mikulincer and Shaver, 2010). In a brand context, anthropomorphism prompts consumers to apply human moral reasoning to corporate failures. This results in consumers interpreting an anthropomorphized brand's transgression as an unintentional mistake rather than a deliberate or malicious failure or betrayal. This reduces blame attribution, allowing consumers to maintain brand relationships and advocate for the brand to others even after a transgression.

In contrast, non-anthropomorphized brands lack perceived intentionality and fail to activate this human scheme, leaving them judged by transactional corporate standards. This results in little motivation for consumers to justify or defend them following a transgression. Consequently, advocacy intentions will be higher following transgressions for anthropomorphized brands than for non-anthropomorphized ones:

H1. Advocacy intentions will be higher for anthropomorphized brands compared to non-anthropomorphized brands following a transgression.

3.2 Mediating role of brand attachment

This study proposes that secure and dismissive brand attachment orientations are the underlying mechanisms explaining the relationship between brand anthropomorphism and advocacy intentions following a brand transgression.

Secure attachment reflects confidence in the brand's reliability and a desire for a close relationship with the brand (Mende and Bolton, 2011). Anthropomorphized brands can activate secure attachments because their human-like cues heighten emotional connection, encouraging consumers to view them as trustworthy partners. Previous research suggests that secure orientations enhance satisfaction, trust and commitment toward the attachment figure (Warnock *et al.*, 2024) and help individuals remain emotionally stable during distress by fostering comfort and gratitude for the attachment figure's support (Mikulincer and Shaver, 2003). Research has also shown that consumers with secure attachment tend to attribute less blame to brands following a failure (Whelan and Dawar, 2016). They prefer closeness and continuity in their relationships (Mende *et al.*, 2013), which motivates them to promote or defend the brand even after a negative experience, such as a brand transgression.

Attachment theory (Bowlby, 1982) further supports this relationship by proposing that in times of need, secure individuals not only seek support from attachment figures but also protect them from harm (Mikulincer and Shaver, 2009). Consumers with a secure attachment orientation are more likely to help their brand during difficulties because of their prior positive experiences. They show empathy, maintain optimism and perceive brands positively during negative events

(Mikulincer and Shaver, 2009). Based on the above discussion, this research posits that brand anthropomorphism fosters a secure brand attachment orientation, which subsequently acts as a psychological buffer, driving consumers to maintain their advocacy intentions even after a brand transgression:

H2a. Secure attachment orientation mediates the relationship between brand anthropomorphism and advocacy intentions following a transgression.

Conversely, dismissive brand attachment orientation reflects an avoidant relationship with a brand in which consumers prefer psychological distance, autonomy and self-reliance, rather than dependency on the brand (Mende and Bolton, 2011). Consumers exhibiting this orientation tend to engage with brands primarily for instrumental reasons and downplay the significance of the relationship (Shaver and Mikulincer, 2005). When a brand fails, these consumers typically cope with the threat by detaching from the brand, thereby maintaining control and independence (Bartholomew and Horowitz, 1991).

This study proposes that brand anthropomorphism can attenuate this dismissive brand attachment orientation following a transgression. By attributing human-like cues to a brand, anthropomorphism elicits perceptions of warmth, intentionality and social responsibility, thereby reducing the perceived threat and relational uncertainty that often follow a failure (Huang *et al.*, 2020). In contrast to purely functional brand representations, anthropomorphized brands may be perceived as more predictable and morally accountable, thereby reducing avoidant tendencies or disengagement.

Prior research suggests that individuals high in avoidant attachment may exhibit greater comfort with anthropomorphized objects, as these entities allow relational engagement without compromising autonomy (Neave *et al.*, 2016). In this sense, anthropomorphized brands provide a relational format that feels less intrusive and more controllable. While some studies indicate that avoidant individuals may resist anthropomorphization cues (Kwok *et al.*, 2018), the present research argues that following a transgression, human-like brand cues mitigate threat perceptions, thereby weakening the activation of dismissive attachment tendencies.

Attachment theory further suggests that avoidance is not synonymous with complete relational withdrawal. Rather, dismissively oriented individuals prefer relationships that are low in emotional intensity and high in personal control (Bartholomew and Horowitz, 1991). Accordingly, when dismissive attachment toward a brand is attenuated by anthropomorphism, consumers remain sufficiently engaged with the brand to express supportive behavioral intentions. This reduced dismissive attachment following a transgression may facilitate a greater willingness to speak positively about the brand or defend it, even in the absence of strong emotional dependence. This research posits that brand anthropomorphism attenuates dismissive attachment orientation, which in turn influences consumers' willingness to advocate for the brand following a transgression:

H2b. Dismissive attachment orientation mediates the relationship between brand anthropomorphism and advocacy intentions following a transgression.

3.3 Moderating effect of brand role

This study proposes that brand roles moderate the effects of brand anthropomorphism on advocacy intentions and attachment orientations. Specifically, it examines how anthropomorphized brands, framed as partners versus servants, influence consumer evaluations following a brand transgression. A partner brand acts as a co-producer, collaborating with consumers to fulfill shared goals (Aggarwal and McGill, 2012). For example, Toyota's slogan "Let's Go Places" reflects a partner role. Conversely, servant brands are positioned as subordinates or assistants who serve consumers to satisfy their needs (Aggarwal and McGill, 2012). For example, the Burger King slogans "Be the King" and "Your way, Right Away" convey the brand's intention to serve.

The partner brands evoke collaborative motivations, leading consumers to perceive them as allies contributing to shared outcomes (Han *et al.*, 2020; Kim and Kramer, 2015). Servant brands evoke agentic motivations, leading consumers to view them as instruments or tools for personal goal attainment (Gruenfeld *et al.*, 2008). These differences in motivations, control and power dynamics influence the relational schema consumers adopt for partner and servant brands (Cheng *et al.*, 2025).

This study argues that brand roles provide consumers with cues about how the brand will behave and what kind of relationship to expect (Aggarwal and McGill, 2012). These role-based cues influence how consumers interpret brand actions, particularly following a transgression. Existing studies have consistently shown that consumers respond more positively to brands or objects framed in a partner role; such evaluations are more often context-dependent.

For example, Huang *et al.* (2025) found that when AI was framed as a partner, it fostered self-expression and relational engagement. Still, it backfired after a service failure as consumers attributed greater blame, leading to lower reuse intentions. Similarly, Lei and Xie (2025) showed that partner framing increases consumer entitlement, leading to deviant behavior, whereas in privacy-sensitive contexts, partner framing reduces consumer resistance (Mou and Meng, 2024). Hsieh *et al.* (2021) found that interdependent consumers are more likely to purchase partner brands, as they afford greater social connection than servant brands. Extending this logic, the present study proposes that the effectiveness of brand roles depends on the brand anthropomorphism.

Non-anthropomorphized brands lack human-like characteristics, which limits consumers' ability to determine intentions or agency (Zhang and Rau, 2023). In such cases, adopting a partner role can serve as a compensatory social and relational signal that influences consumers' evaluations. A partner role communicates collaboration and shared responsibility, which encourages consumers to perceive the brand transgression as co-produced. Consumers are more likely to attribute the transgression to internal factors, thereby buffering its negative effects. As a partner brand fosters shared responsibilities and mutual engagement increases secure brand attachment orientations by providing a sense of emotional connection and the ability to rely on the brand even after a transgression.

Conversely, when a non-anthropomorphized brand adopts a servant role, it reinforces hierarchy and control, encouraging

consumers to view the brand as a tool that takes responsibility for the outcomes (Aggarwal and McGill, 2012; Xiang and Park, 2025). In such cases, when transgression occurs, consumers externally blame failure on the servant brand, leading to reduced advocacy intentions. This may activate dismissive attachment orientation as consumers distance themselves and attribute full blame to the non-anthropomorphized servant brand for the transgression.

In case of anthropomorphized brands, human-like cues such as warmth and empathy already elicit secure attachment orientations and relational cues similar to those conveyed by partner brands. The present study proposes that framing an anthropomorphized brand as a partner provides an incremental benefit. The literature on signaling theory (Spence, 1973) suggests that multiple cues that convey overlapping information or meaning may not provide additive value, as they fail to increase the overall signal's diagnosticity.

For example, Balaji *et al.* (2021) showed that multiple signals do not improve consumers' evaluations of mega-influencers' messages with different construals. Similarly, Jha *et al.* (2020) demonstrated that when consumers can access reliable information from retailer image, additional signals conveying similar information may not improve consumer decisions. When an anthropomorphized brand adopts a servant role, it can prompt consumers to assert autonomy and emotional distance, increasing a dismissive attachment orientation. Thus, it is proposed that brand roles may not provide additional relational information or signal beyond what is communicated through human-like cues of brand anthropomorphism, resulting in similar advocacy intentions across partner and servant framings following a transgression:

- H3a.* Brand role will moderate the relationship between brand anthropomorphism and advocacy intentions, such that the partner (vs servant) brand will have higher advocacy intentions for a non-anthropomorphized (vs anthropomorphized) brand following a transgression.
- H3b.* Brand role will moderate the relationship between brand anthropomorphism and secure attachment such that the partner (vs servant) brand will have higher (lower) secure attachment in brand non-anthropomorphized (vs anthropomorphized) brand following a transgression.
- H3c.* Brand role will moderate the relationship between brand anthropomorphism and dismissive attachment such that the partner (vs servant) brand will have lower (higher) dismissive attachment in brand non-anthropomorphized (vs anthropomorphized) following a transgression.

Figure 1 presents the conceptual framework of the study.

Ethical approval was obtained prior to data collection. To test the proposed hypotheses, three studies were conducted using US participants aged 18 or older recruited via Prolific Academic. Informed consent was obtained from all participants, and they were compensated fairly for their time. To ensure high data quality, screening criteria required a minimum of 100 prior task completions and an approval rating of $\geq 90\%$ (Douglas *et al.*, 2023; Peer *et al.*, 2022). To maintain

sample independence, participants were restricted to taking part in only one of the three studies. Anyone who completed a prior study was automatically excluded from subsequent ones.

4. Study 1: Main effects of brand anthropomorphism on advocacy intentions

Study 1 examined whether brand anthropomorphism leads to higher advocacy intentions following a transgression compared to brand non-anthropomorphism (*H1*).

4.1 Method

A total of 200 (50.0% female, 41.0% aged 18–29 years) Prolific Academic panel members participated in a one-factor (brand anthropomorphism: anthropomorphism vs non-anthropomorphism) between-subjects design.

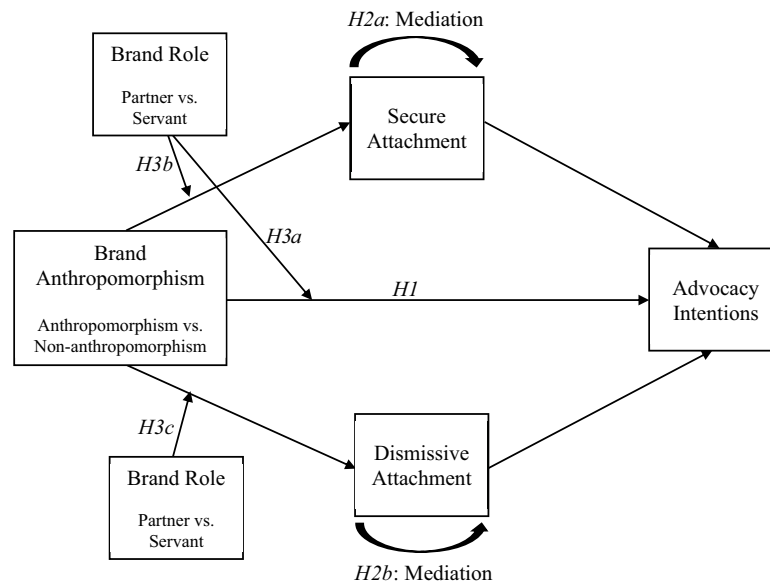
Participants were randomly assigned to a one-factor (brand anthropomorphism: present vs absent) between-subjects design. They imagined planning a trip and purchasing luggage from Zippi (a fictitious brand name). Participants then viewed an advertisement where brand anthropomorphism was manipulated. The anthropomorphized ad featured first-person communication and a human-like face, whereas the non-anthropomorphized ad used third-person communication and a standard logo (Puzakova and Aggarwal, 2018; Schroll, 2023; see Web Appendix A in online supplementary materials). Finally, participants imagined traveling by air with their new Zippi luggage before reading the following brand transgression scenario:

Upon check-in, you found that you had an additional 5 pounds of luggage packed in your Zippi luggage. Unfortunately, the lock on your Zippi luggage is jammed, and you are not able to open it at the airport. It causes a lot of delay for you and other passengers in the queue. Having been unable to open the lock on the Zippi luggage for almost 30 min, you were required to pay \$30 to let your bag in and complete the check-in process. By then, you only had 30 min to complete immigration, security checks and boarding procedures.

Following the brand transgression scenario, participants answered questions on advocacy intention ($\alpha = 0.96$), measured on a three-item scale adapted from Hsiao *et al.* (2015). Following this, participants answered questions on the manipulation check questions for brand anthropomorphism (two items adapted from Puzakova and Aggarwal, 2018, $r = 0.82$), perceived realism (one item), assumption check for brand transgression (one item) and demographic information (age, gender) and travel behavior (frequency of travel and what they mostly travel for). See Web Appendix B in online supplementary materials for the scales. All items were measured on a seven-point scale.

4.2 Results

The brand anthropomorphism manipulation was effective because respondents in the brand anthropomorphism condition ($M = 4.02$, $SD = 1.46$) evaluated the stimuli as being more alive and possessing humanlike qualities than respondents in the brand non-anthropomorphism condition ($M = 2.15$, $SD = 1.30$, $F_{1,198} = 91.41$, $p < 0.001$, partial $\eta^2 = 0.316$).

Figure 1 Conceptual framework of the study

Source: Authors' own work

Participants rated the stimuli as highly plausible ($M = 5.41$, $SD = 1.32$), and no difference in perceived realism was observed across the two conditions ($M_{\text{anthropomorphism}} = 5.46$, $SD = 1.31$ vs $M_{\text{non-anthropomorphism}} = 5.37$, $SD = 1.34$; $F_{1,198} = 0.23$, $p = 0.631$, partial $\eta^2 = 0.001$).

Participants in both conditions perceived the brand experience as negative and bad and did not show significant difference between the conditions ($M_{\text{anthropomorphism}} = 1.91$, $SD = 1.01$ vs $M_{\text{non-anthropomorphism}} = 1.78$, $SD = 1.03$, $F_{1,198} = 0.82$, $p = 0.368$, partial $\eta^2 = 0.004$).

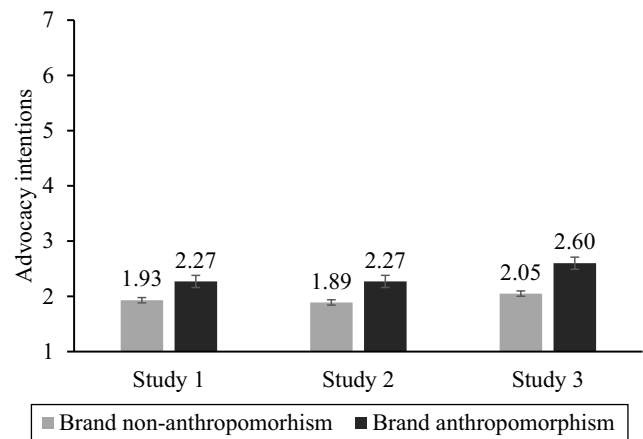
Perceived realism of brand transgression was high and did not differ across the conditions ($M_{\text{anthropomorphism}} = 5.46$, $SD = 1.31$ vs $M_{\text{non-anthropomorphism}} = 5.37$, $SD = 1.34$, $F_{1,198} = 0.23$, $p = 0.63$, partial $\eta^2 = 0.001$).

A one-way analysis of variance (ANOVA) with advocacy intention as the dependent variable showed that respondents in the brand anthropomorphism condition ($M = 2.27$, $SD = 1.28$) reported a higher level of advocacy intention following a transgression than those in the brand non-anthropomorphism condition ($M = 1.93$, $SD = 0.83$, $F_{1,198} = 4.95$, $p = 0.027$, partial $\eta^2 = 0.024$). This supports *H1*. **Figure 2** plots the advocacy intention for the two conditions across three studies.

Including control variables (age, gender, frequency of travel and nature of travel) did not change the significance of brand anthropomorphism conditions on advocacy intention ($F_{1,194} = 5.79$, $p = 0.017$, partial $\eta^2 = 0.029$). None of the control variables had a significant effect on advocacy intention ($ps > 0.07$).

4.3 Discussion

Study 1 supports *H1* by demonstrating that brand anthropomorphism mitigates the negative impact of a transgression on advocacy intentions. While the failure was

Figure 2 Role of brand anthropomorphism on advocacy intentions

Source: Authors' own work

perceived as equally severe across both conditions, brand anthropomorphism acted as a buffer, resulting in significantly higher advocacy compared to the non-anthropomorphized brand. Study 2 further explores this effect by examining the mediating roles of secure and dismissive brand attachment orientations.

5. Study 2: The mediating roles of secure and dismissive attachment orientations

Study 2 examines the mediating roles of secure and dismissive brand attachment orientations in the relationship between brand anthropomorphism and advocacy intentions in a different product context of mobile phones.

5.1 Method

A total of 200 Prolific panel members (63.5% female, 36.0% aged 30–39 years) participated in a one-factor (brand anthropomorphism: anthropomorphism vs non-anthropomorphism) between-subjects design.

This study followed a similar procedure to Study 1, with three major modifications. First, a fictitious mobile phone brand (ZestM) was used as the study context. Participants were asked to imagine they were looking to buy a new smartphone with 3D imaging technology for work purposes. They then viewed an advertisement for the Zest MT model (a fictitious brand name) and decided to purchase it. This advertisement manipulated the brand presentation to be either anthropomorphized or non-anthropomorphized. In the anthropomorphism condition, the ad featured first-person communication and human-like facial features. In the non-anthropomorphism condition, the ad used third-person communication and standard product imagery (see Web Appendix C in online supplementary materials for the stimuli). Following this, participants read the following brand transgression scenario:

Consider that you are on a business trip with your new ZEST MT phone. The boss asked you to take 3D images of certain buildings and landscapes at a specified location to be presented to the client. You are excited about taking pictures with the ZEST MT's 3D camera. Unfortunately, you cannot open the 3D camera app on the ZEST MT phone. You tried to restart the app and the phone, but still the 3D camera app does not open. You had to send 2D pictures of buildings and landscapes to your boss.

Finally, along with advocacy intention ($\alpha = 0.93$), manipulation check questions for brand anthropomorphism ($r = 0.78$), assumption check question for brand transgression and perceived realism, this study measured secure attachment ($\alpha = 0.83$) and dismissive attachment ($\alpha = 0.77$) with a three-items each adapted from Brennan *et al.* (1991). Secure and dismissive brand attachment orientations did not share a high correlation ($r = -0.22$, $p = 0.002$).

5.2 Results

The manipulations worked as intended. Participants in the brand anthropomorphism condition ($M = 5.18$, $SD = 1.24$) rated ZestM as being more alive and possessing human-like qualities than those in the brand non-anthropomorphism condition ($M = 3.06$, $SD = 1.40$, $F_{1,198} = 127.90$, $p < 0.001$, partial $\eta^2 = 0.392$).

The assumption check of brand transgression was also successful as respondents rated the brand experience to be negative ($M = 3.07$, $SD = 1.27$) and not different across conditions ($M_{\text{anthropomorphism}} = 3.11$, $SD = 1.38$ vs $M_{\text{non-anthropomorphism}} = 3.02$, $SD = 1.16$, $F_{1,198} = 0.251$, $p = 0.617$, partial $\eta^2 = 0.001$).

The stimuli were assessed as realistic ($M = 5.01$) and did not differ across the conditions ($M_{\text{anthropomorphism}} = 5.08$, $SD = 1.46$ vs $M_{\text{non-anthropomorphism}} = 4.95$, $SD = 1.50$, $F_{1,198} = 0.385$, $p = 0.54$, partial $\eta^2 = 0.002$).

Supporting *H1*, the findings show that following a brand transgression, advocacy intention was higher for the anthropomorphized brand ($M = 2.27$, $SD = 1.36$) than for the non-anthropomorphized brand ($M = 1.89$, $SD = 0.96$), $F_{1,198} = 5.33$, $p = 0.022$, partial $\eta^2 = 0.026$ (see Figure 2).

Including gender and age as covariates did not change the significance of the brand anthropomorphism conditions on

advocacy intention ($F_{1,196} = 4.89$, $p = 0.028$, partial $\eta^2 = 0.024$).

H2 was tested using SPSS PROCESS Model 4 with 5,000 bootstrapping resamples (Version 5, Hayes, 2018). Brand advocacy was used as the dependent variable, brand anthropomorphism condition (0 = non-anthropomorphism, 1 = anthropomorphism) as the independent variable, and both secure and dismissive attachment as mediators. The findings provide support for the total mediating effect of both secure and dismissive attachment orientation as the 95% confidence interval for the indirect effect did not include zero (indirect = 0.39, $SE = 0.12$, 95%CI = 0.19–0.63). The results support the mediating role for secure attachment (indirect = 0.38, $SE = 0.11$, 95%CI = 0.18–0.62) but not for dismissive attachment orientation (indirect = 0.02, $SE = 0.03$, 95%CI = -0.04–0.08). The findings provide support for *H2a* but not for *H2b*. Figure 3 presents the mediating role of secure attachment and dismissive attachment in the relationship between brand anthropomorphism and advocacy intention.

Post hoc analysis revealed that brand anthropomorphism has a direct effect on secure brand attachment orientation ($F_{1,198} = 21.25$, $p < 0.001$, partial $\eta^2 = 0.097$), such that respondents in the brand anthropomorphism condition ($M = 2.73$, $SD = 1.36$) reported a higher level of secure attachment following a brand transgression than those in the brand non-anthropomorphism condition ($M = 1.98$, $SD = 0.87$). The inclusion of control variables (age and gender) did not change the significance of the main effect ($F_{1,196} = 19.87$, $p < 0.001$, partial $\eta^2 = 0.092$).

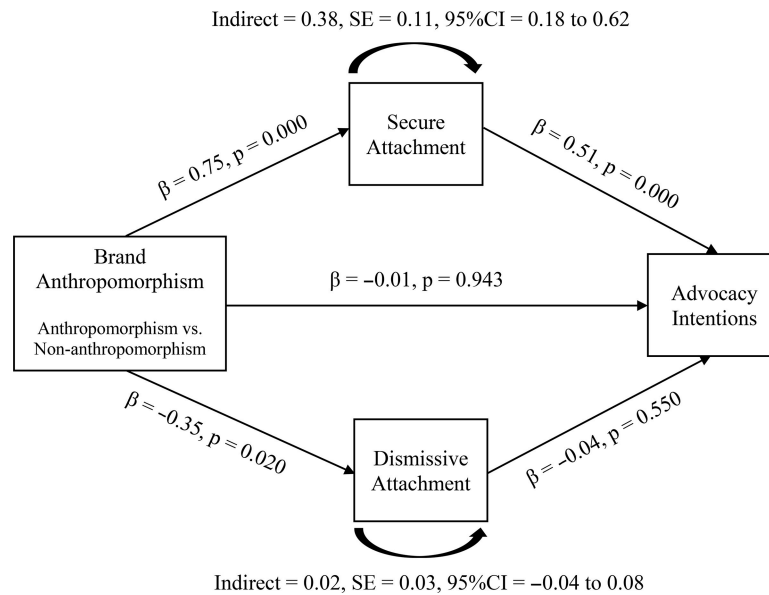
The results of another ANOVA revealed that dismissive attachment ($F_{1,198} = 5.47$, $p = 0.020$, partial $\eta^2 = 0.027$) was significantly higher following a brand transgression in the brand non-anthropomorphism condition ($M = 6.02$, $SD = 0.92$) than in the brand anthropomorphism condition ($M = 5.67$, $SD = 1.18$). Including gender and age in the model did not change the significance of the effect of brand anthropomorphism on dismissive attachment ($F_{1,196} = 4.51$, $p = 0.035$, partial $\eta^2 = 0.022$).

5.3 Discussion

Study 2 findings reveal that secure attachment is the key underlying mechanism through which brand anthropomorphism influences advocacy intentions following a brand transgression. This study did not find support for the role of dismissive attachment. While anthropomorphism significantly reduced dismissive attachment (as shown in the post hoc analysis), this reduction does not influence advocacy intentions. A plausible reason is that while consumers may not completely dismiss their relationship with an anthropomorphized brand following a failure, remaining with the brand is not sufficient to trigger active advocacy. Instead, the willingness to recommend the brand following a transgression may likely depend on the satisfactory recovery the brand undertakes.

6. Study 3: Boundary condition of brand role

Study 3 examined the moderating role of brand role (partner vs servant) in the effects of brand anthropomorphism on advocacy intentions, secure brand attachment and dismissive brand attachment.

Figure 3 Mediation effect of secure attachment and dismissive attachment (Study 2)

Source: Authors' own work

6.1 Method

A total of 251 Prolific panel members (64.1% females and 36.3% aged between 30 and 39) participated in the study.

Study 3 followed a similar research design to Study 2, with two key differences. The study context was a health drink (Xuel), and we used a 2 (brand anthropomorphism: anthropomorphism vs non-anthropomorphism) $\times$ 2 (brand role: partner vs servant) between-subjects design.

Two pretests were carried out to test the manipulation checks for brand anthropomorphism and brand role. The results of the pretest 1 ($n = 50$) showed that participants in the brand anthropomorphism condition ($M = 5.04$, $SD = 1.70$) evaluated Xuel to possess more humanlike qualities than in the brand non-anthropomorphism condition ($M = 2.85$, $SD = 1.22$), $F_{1,48} = 28.11$, $p < 0.01$, partial $\eta^2 = 0.369$.

The results of another pretest ($n = 50$) revealed that respondents in the partner role condition ($M = 2.78$, $SD = 1.01$) evaluate the Xuel brand as more partner like than those in the servant role condition ($M = 4.35$, $SD = 1.40$), $F_{1,48} = 21.03$, $p < 0.01$, partial $\eta^2 = 0.305$.

Participants were asked to imagine shopping for a fresh, healthy beverage and deciding to purchase a brand called Xuel (a fictitious brand name) after seeing its advertisement. They then viewed the ad, which manipulated the brand to appear as either anthropomorphized or non-anthropomorphized, and acting in either a partner or servant role (see Web Appendix D in online supplementary materials for the stimuli). The participants were randomly assigned to one of the four conditions. Following this, they read the following brand transgression scenario:

Imagine you ordered a 6-pack Xuel a few days ago and it has just been delivered to you. Upon inspecting the cans, you notice that some of the cans looks beat up and weighed less than normal, even though they are sealed. You found a foul smell and something inside. You thought that this could be the result of poor-quality check or faulty packaging.

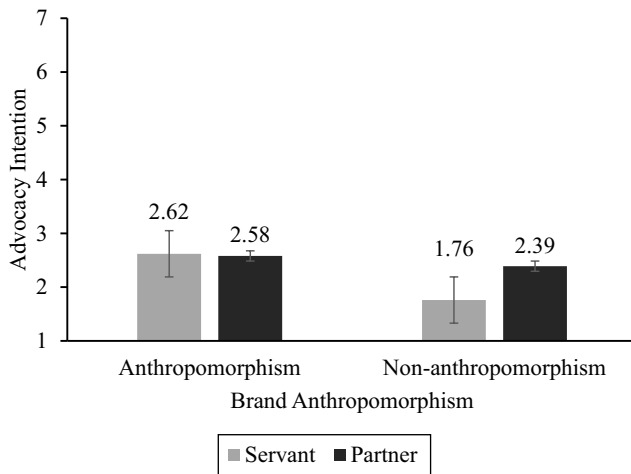
Participants answered questions on advocacy intention ($\alpha = 0.94$), secure attachment ($\alpha = 0.86$), dismissive attachment ($\alpha = 0.89$), and provided demographic information (gender and age).

6.2 Results

An ANOVA was carried out with advocacy intention as the dependent variable and brand anthropomorphism and brand role as independent variables. The results revealed a significant main effect of brand anthropomorphism ($M_{\text{anthropomorphism}} = 2.60$, $SD = 1.38$ vs $M_{\text{non-anthropomorphism}} = 2.05$, $SD = 1.15$, $F_{1,247} = 11.037$, $p = 0.001$, partial $\eta^2 = 0.043$). Brand role did not have a significant main effect on advocacy intention ($F_{1,247} = 3.44$, $p = 0.065$, partial $\eta^2 = 0.014$). More importantly, a significant interaction effect of brand anthropomorphism and brand role on advocacy intention was found ($F_{1,247} = 4.39$, $p = 0.04$, partial $\eta^2 = 0.017$).

Simple slope analysis revealed that in the brand anthropomorphism condition, no significant difference in advocacy intention was found across brand role conditions ($M_{\text{partner}} = 2.58$, $SD = 1.34$ vs $M_{\text{servant}} = 2.62$, $SD = 1.42$, $t_{127} = 0.16$, $p = 0.875$, Cohen's $d = 0.028$). However, in the brand non-anthropomorphism condition, a partner brand role ($M = 2.39$, $SD = 1.19$) was associated with higher advocacy intention than a servant brand role ($M = 1.76$, $SD = 1.03$), $t_{120} = 3.12$, $p = 0.002$, Cohen's $d = 0.566$. Figure 4 presents the interaction plot. This supports H3a.

Another ANOVA with secure attachment as a dependent variable revealed a significant main effect of brand anthropomorphism ($M_{\text{anthropomorphism}} = 2.66$, $SD = 1.28$ vs $M_{\text{non-anthropomorphism}} = 2.29$, $SD = 1.17$, $F_{1,247} = 5.01$, $p = 0.026$, partial $\eta^2 = 0.020$), brand role ($M_{\text{partner}} = 2.77$, $SD = 1.22$ vs $M_{\text{servant}} = 2.19$, $SD = 1.19$, $F_{1,247} = 14.78$, $p < 0.001$, partial $\eta^2 = 0.056$) and interaction effect of brand

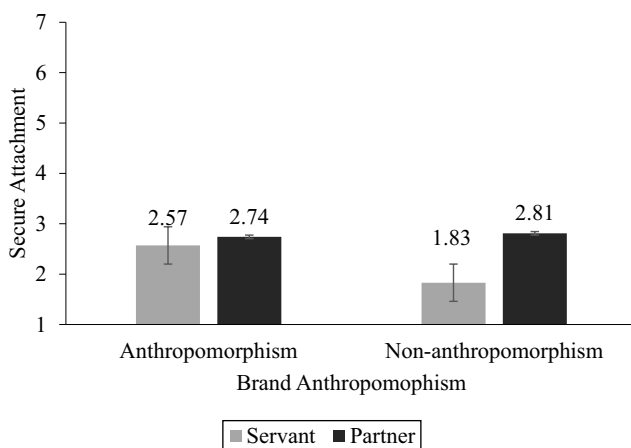
Figure 4 Interaction of brand anthropomorphism and brand role on advocacy intention (Study 3)

Source: Authors' own work

anthropomorphism and role ($F_{1,247} = 7.12$, $p = 0.008$, partial $\eta^2 = 0.028$).

A simple slope analysis for brand non-anthropomorphism revealed a significant difference between brand role conditions ($t_{120} = 5.03$, $p < 0.001$, Cohen's $d = 0.913$) such that a partner brand ($M_{\text{partner}} = 2.81$, $SD = 1.14$) resulted in a higher level of secure attachment than a servant brand ($M_{\text{servant}} = 1.83$, $SD = 1.00$). However, no significant difference was observed between the two brand role conditions for anthropomorphized brand ($M_{\text{partner}} = 2.74$, $SD = 1.30$ vs $M_{\text{servant}} = 2.57$, $SD = 1.27$, $t_{127} = 0.78$, $p = 0.438$, Cohen's $d = 0.137$). This supports *H3b*. Figure 5 presents the interaction plot.

Regarding dismissive attachment, no significant main effects (brand anthropomorphism: $F_{1,247} = 0.32$, $p = 0.570$, partial $\eta^2 = 0.001$; brand role: $F_{1,247} = 2.26$, $p = 0.134$, partial $\eta^2 = 0.009$) and interaction effect ($F_{1,247} = 0.36$, $p = 0.550$,

Figure 5 Interaction of brand anthropomorphism and brand role on secure attachment (Study 3)

Source: Authors' own work

partial $\eta^2 = 0.001$) were observed. This does not provide support for *H3c*.

The inclusion of control variables did not change the significance of the effects of brand anthropomorphism and brand role on advocacy intention, secure attachment and dismissive attachment.

6.3 Discussion

The findings of Study 3 showed that brand role moderates the effect of brand anthropomorphism on advocacy intention and secure attachment. More specifically, the study revealed that a partner (vs servant) brand role increases advocacy intention and secure attachment following a transgression in a non-anthropomorphized condition. However, for anthropomorphized brands, no significant difference in outcomes was found between partner and servant brand roles.

7. General discussion

This study examines how brand anthropomorphism influences consumer advocacy and attachment following a brand transgression. Across three studies, we demonstrate that anthropomorphism buffers against the negative effects of brand transgression. Specifically, consumers expressed higher, though still below neutral, advocacy intentions toward anthropomorphized brands than toward non-anthropomorphized ones.

Crucially, secure attachment mediated this effect, while dismissive attachment did not. This indicates that these attachment orientations do not function as opposite ends of a single continuum. Instead, they are shaped by distinct relational processes: anthropomorphism directly fosters secure attachment, whereas dismissive attachment depends on post-failure interventions, such as service recovery.

Brand role moderated the relationship between brand anthropomorphism, secure brand attachment and advocacy intentions. For non-anthropomorphized brands, adopting a partner role rather than a servant role resulted in significantly higher secure attachment and advocacy intentions. In contrast, for brands that were anthropomorphized, the partner and servant roles did not result in significantly different outcomes.

7.1 Theoretical contribution

This study contributes to the literature in several ways. Brand anthropomorphism has been examined in positive brand contexts (Xie *et al.*, 2025), while its role in negative contexts remains limited (Kwak *et al.*, 2025; Liu *et al.*, 2024). By examining anthropomorphism in the context of brand transgression, this study extends this nascent stream of literature and demonstrates that anthropomorphizing a brand can serve as a buffer, helping consumers maintain positive evaluations even after a transgression. This study also contributes to research on brand transgression and anthropomorphism (Klütz and Albrecht, 2025; Ma *et al.*, 2023; Puzakova *et al.*, 2009). The findings highlight that anthropomorphism is a significant mechanism through which consumers maintain an emotional connection toward erring brands. This corroborates Bidmon's (2017) proposition that emotional bonding is key to brand resilience and that

anthropomorphism is an effective means of reinforcing such relationships.

While attachment theory has often been applied to explain individual differences in consumers' attachment orientations (Bowlby, 1979; Frydman and Tena, 2023; Mende *et al.*, 2019), this study extends the theory by examining attachment as a context-dependent mechanism that is shaped by brand cues such as anthropomorphism (Japutra *et al.*, 2018; Sarkar *et al.*, 2018). Specifically, the findings reveal that anthropomorphism enhances perceptions of secure brand attachment, which in turn fosters advocacy intentions following a brand transgression. By extending attachment theory to the contexts of brand anthropomorphism and transgression, this study advances our understanding of how consumers' relational tendencies interact with brand anthropomorphism to influence their post-transgression behavior, specifically advocacy intentions. The findings of this study provide novel insights into how anthropomorphism activates relational perceptions in situational rather than dispositional ways. In doing so, the study contributes to the growing body of research exploring the role of relational processes in managing brand transgressions (Banerjee *et al.*, 2023; Rosendo-Rios *et al.*, 2025).

Another contribution of this study lies in exploring the moderating effect of the brand's relational role on the effects of anthropomorphism on brand attachment orientation and advocacy intentions following a transgression. While prior research on role theory (Koenig and Eagly, 2014) has examined consumer evaluation of brand role (Aggarwal and McGill, 2012; Ho *et al.*, 2021; Koenig and Eagly, 2014), this study finds that it plays a key role in evaluating brand anthropomorphism and transgression. Specifically, for non-anthropomorphized brands, partner role framing helps mitigate the negative outcomes of a transgression. Because anthropomorphized brands communicate human-like cues that evoke warmth and empathy, brand roles do not offer incremental value in influencing consumer outcomes. This finding further contributes to signaling theory about how multiple signals influence consumer perceptions and responses (Balaji *et al.*, 2021; Jha *et al.*, 2020).

7.2 Practical implications

This study offers actionable insights for brand managers and marketing practitioners, particularly in crisis management and brand communication. The results demonstrate that anthropomorphizing a brand serves as an effective buffer against the negative effects of a transgression. To leverage this, managers should proactively design anthropomorphic cues to build a human-like connection before a crisis occurs. This can be achieved by using first-person communication in customer service interactions, adopting a relatable tone consistent with the brand's personality, sharing authentic narratives about the brand's origins and incorporating human-like visual cues across digital touchpoints. By establishing this humanized foundation, brands can better shield themselves from severe consumer backlash when service or product failures happen.

The study's findings also indicate that simply preventing customers from dismissing the brand is insufficient to sustain their advocacy. Managers must cultivate secure attachment orientations. During a brand transgression, communication strategies and service recovery efforts should explicitly convey

empathy, reliability and emotional availability. By issuing apologies that sound genuinely human, and by reassuring customers that the brand is dependable and actively resolving the issue, managers can encourage constructive coping. This targeted approach to crisis communication ensures that customers are retained and remain willing to actively advocate for the brand.

This study also provides guidelines for positioning brands based on their level of anthropomorphism, enabling managers to allocate marketing resources more efficiently. For traditional, non-anthropomorphized brands, positioning the brand as a partner rather than a servant is highly effective. Managers should use collaborative, partner-oriented language to signal shared goals, thereby strengthening secure attachment and increasing advocacy intentions. Conversely, managers should be cautious about assigning specific partner or servant roles to brands that are already highly anthropomorphized, as doing so does not generate significant additional benefits. This allows managers to optimize their budgets by selectively deploying role positioning.

7.3 Limitations and future research

While the study offers valuable insights into how and when brand anthropomorphism and brand role influence consumer perceptions and responses following a transgression, it also highlights certain limitations that warrant further research. The underlying mechanisms of secure and dismissive attachment orientations were the primary focus of this study. Future studies should examine the role of other attachment orientations, such as insecure and preoccupied attachment styles, in the anthropomorphism–advocacy relationship to provide a more comprehensive understanding of how different attachment orientations influence consumer responses to brand transgressions. In interpreting the non-significant mediation for dismissive brand attachment, it is important to note that we operationalized this construct only at the consumer–brand level. Future research could explicitly incorporate potential compensatory ties with other customers or general individual attachment orientations.

The severity of the brand transgression may influence how attachment orientations are assessed in relation to the brand. Future research should examine how the severity of a transgression moderates the relationship between brand anthropomorphism and advocacy intentions, as various levels of transgression may elicit varying attachment-driven responses.

Future research should also examine the role of relationship tenure as a moderator in the relationship between anthropomorphism and advocacy intentions. The strength and duration of a prior consumer–brand relationship can shape consumers' willingness to maintain secure or dismissive attachment orientations toward the brand. This study did not measure relationship strength and used fictitious brands to avoid familiarity bias. Recruiting respondents from online panels led to a greater representation of Gen Z and millennials, potentially limiting the generalizability of the results. Future studies should avoid this bias and enhance the generalizability of the results using a diverse sample.

The present study used experimental scenarios, which, while useful for establishing internal validity, may limit the external

validity of the findings. Future research could examine brand anthropomorphism and attachment processes in real-world transgression contexts or through longitudinal designs to assess how consumer–brand relationships evolve over time following a transgression.

References

- Aggarwal, P. and McGill, A.L. (2007), “Is that car smiling at me? Schema congruity as a basis for evaluating anthropomorphized products”, *Journal of Consumer Research*, Vol. 34 No. 4, pp. 468–479, doi: [10.1086/518544](https://doi.org/10.1086/518544).
- Aggarwal, P. and McGill, A.L. (2012), “When brands seem human, do humans act like brands? Automatic behavioral priming effects of brand anthropomorphism”, *Journal of Consumer Research*, Vol. 39 No. 2, pp. 307–323, doi: [10.1086/662614](https://doi.org/10.1086/662614).
- Ahmed, A., Raza, A., Talpur, Q.U.A., Ishaq, M.I. and Shafqat, T. (2024), “Brand transgression in corporate social responsibility era: empirical evidence from hospitality industry”, *The Service Industries Journal*, Vol. 45 Nos 9–10, pp. 874–898, doi: [10.1080/02642069.2024.2361469](https://doi.org/10.1080/02642069.2024.2361469).
- Alnawas, I., Al Khateeb, A., Abu Farha, A. and Ndubisi, N.O. (2023), “The effect of service failure severity on brand forgiveness: the moderating role of interpersonal attachment styles and thinking styles”, *International Journal of Contemporary Hospitality Management*, Vol. 35 No. 5, pp. 1691–1712, doi: [10.1108/IJCHM-06-2022-0758](https://doi.org/10.1108/IJCHM-06-2022-0758).
- Balaji, M.S., Jiang, Y. and Jha, S. (2021), “Nanoinfluencer marketing: how message features affect credibility and behavioral intentions”, *Journal of Business Research*, Vol. 136, pp. 293–304, doi: [10.1016/j.jbusres.2021.07.049](https://doi.org/10.1016/j.jbusres.2021.07.049).
- Banerjee, S., Ratnakaram, S. and Lohan, A. (2023), “Customers’ relationship maintenance and loyalty intentions after a brand transgression: a moderated mediation approach”, *Journal of Strategic Marketing*, Vol. 31 No. 3, pp. 693–717, doi: [10.1080/0965254X.2021.1971283](https://doi.org/10.1080/0965254X.2021.1971283).
- Bartholomew, K. and Horowitz, L.M. (1991), “Attachment styles among young adults: a test of a four-category model”, *Journal of Personality and Social Psychology*, Vol. 61 No. 2, p. 226, doi: [10.1037/0022-3514.61.2.226](https://doi.org/10.1037/0022-3514.61.2.226).
- Bhalla, S. and Zeba, F. (2025), “The effect of brand anthropomorphism on consumers’ eudaimonic well-being in collaborative consumption services”, *Journal of Product & Brand Management*, Vol. 35 No. 4, doi: [10.1108/JPBM-06-2024-5231](https://doi.org/10.1108/JPBM-06-2024-5231).
- Bidmon, S. (2017), “How does attachment style influence the brand attachment–brand trust and brand loyalty chain in adolescents?”, *International Journal of Advertising*, Vol. 36 No. 1, pp. 164–189, doi: [10.1080/02650487.2016.1167923](https://doi.org/10.1080/02650487.2016.1167923).
- Bowlby, J. (1979), “The Bowlby–Ainsworth attachment theory”, *Behavioral and Brain Sciences*, Vol. 2 No. 4, pp. 637–638, doi: [10.1017/S0140525X00064955](https://doi.org/10.1017/S0140525X00064955).
- Bowlby, J. (1982), “Attachment and loss: retrospect and prospect”, *American Journal of Orthopsychiatry*, Vol. 52 No. 4, p. 664, doi: [10.1111/j.1939-0025.1982.tb01456.x](https://doi.org/10.1111/j.1939-0025.1982.tb01456.x).
- Brandão, A. and Popoli, P. (2023), “I will always hate you”! An investigation of the impact of anthropomorphism in online anti-brand communities”, *European Business Review*, Vol. 35 No. 3, pp. 444–466, doi: [10.1108/EBR-09-2022-0194](https://doi.org/10.1108/EBR-09-2022-0194).
- Brennan, K.A., Shaver, P.R. and Tobey, A.E. (1991), “Attachment styles, gender and parental problem drinking”, *Journal of Social and Personal Relationships*, Vol. 8 No. 4, pp. 451–466, doi: [10.1177/026540759184001](https://doi.org/10.1177/026540759184001).
- Cheng, L.K., Toung, C.L. and Ho, C.M. (2025), “The peril of perfection: how consumer power diminishes brand attitudes toward flawless virtual influencers”, *International Journal of Advertising*, doi: [10.1080/02650487.2025.2576961](https://doi.org/10.1080/02650487.2025.2576961).
- Dalman, M.D., Agarwal, M.K. and Min, J. (2021), “Impact of brand anthropomorphism on ethical judgment: the roles of failure type and loneliness”, *European Journal of Marketing*, Vol. 55 No. 11, pp. 2917–2944, doi: [10.1108/EJM-10-2019-0788](https://doi.org/10.1108/EJM-10-2019-0788).
- Davvetas, V., Ulqinaku, A. and Katsikeas, C.S. (2024), “Brand transgressions: how, when, and why home country bias backfires”, *Journal of the Academy of Marketing Science*, Vol. 52 No. 4, pp. 976–997, doi: [10.1007/s11747-024-01018-9](https://doi.org/10.1007/s11747-024-01018-9).
- Douglas, B.D., Ewell, P.J. and Brauer, M. (2023), “Data quality in online human-subjects research: comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA”, *Plos One*, Vol. 18 No. 3, p. e0279720, doi: [10.1371/journal.pone.0279720](https://doi.org/10.1371/journal.pone.0279720).
- Fraley, R.C. and Shaver, P.R. (2000), “Adult romantic attachment: theoretical developments, emerging controversies, and unanswered questions”, *Review of General Psychology*, Vol. 4 No. 2, pp. 132–154, doi: [10.1037/1089-2680.4.2.132](https://doi.org/10.1037/1089-2680.4.2.132).
- Frydman, S. and Tena, M.A.M. (2023), “Attachment styles and customers’ long-term relationships in a service context”, *International Journal of Consumer Studies*, Vol. 47 No. 1, pp. 267–284, doi: [10.1111/ijcs.12834](https://doi.org/10.1111/ijcs.12834).
- Gruenfeld, D.H., Inesi, M.E., Magee, J.C. and Galinsky, A.D. (2008), “Power and the objectification of social targets”, *Journal of Personality and Social Psychology*, Vol. 95 No. 1, pp. 111–127, doi: [10.1037/0022-3514.95.1.111](https://doi.org/10.1037/0022-3514.95.1.111).
- Guido, G. and Peluso, A.M. (2015), “Brand anthropomorphism: conceptualization, measurement, and impact on brand personality and loyalty”, *Journal of Brand Management*, Vol. 22 No. 1, pp. 1–19, doi: [10.1057/bm.2014.40](https://doi.org/10.1057/bm.2014.40).
- Han, B., Wang, L. and Li, X. (2020), “To collaborate or serve? Effects of anthropomorphized brand roles and implicit theories on consumer responses”, *Journal of Hospitality Quarterly*, Vol. 61 No. 1, pp. 53–67, doi: [10.1177/1938965519874879](https://doi.org/10.1177/1938965519874879).
- Han, J., Wang, D. and Yang, Z. (2023), “Acting like an interpersonal relationship: cobrand anthropomorphism increases product evaluation and purchase intention”, *Journal of Business Research*, Vol. 167, p. 114194, doi: [10.1016/j.jbusres.2023.114194](https://doi.org/10.1016/j.jbusres.2023.114194).
- Hasni, M.J.S., Konuk, F.A. and Otterbring, T. (2025), “Anxious altruism: virtue signaling mediates the impact of attachment style on consumers’ green purchase behavior and prosocial responses”, *Journal of Business Ethics*, Vol. 196 No. 3, pp. 603–637, doi: [10.1007/s10551-024-05734-8](https://doi.org/10.1007/s10551-024-05734-8).
- Hayes, A.F. (2018), “Partial, conditional, and moderated mediation: quantification, inference, and interpretation”, *Communication Monographs*, Vol. 85 No. 1, pp. 4–40, doi: [10.1080/03637751.2017.1352100](https://doi.org/10.1080/03637751.2017.1352100).

- Hemsley-Brown, J. (2023), "Antecedents and consequences of brand attachment: a literature review and research agenda", *International Journal of Consumer Studies*, Vol. 47 No. 2, pp. 611-628, doi: [10.1111/ijcs.12853](https://doi.org/10.1111/ijcs.12853).
- Ho, C.M., Lin, S.H. and Wyer, R.S. Jr. (2021), "The downside of purchasing a servant brand: the effect of servant brand consumption on consumer charitable behavior", *Psychology & Marketing*, Vol. 38 No. 11, pp. 2019-2033, doi: [10.1002/mar.21544](https://doi.org/10.1002/mar.21544).
- Hsiao, C.H., Shen, G.C. and Chao, P.J. (2015), "How does brand misconduct affect the brand-customer relationship?", *Journal of Business Research*, Vol. 68 No. 4, pp. 862-866, doi: [10.1016/j.jbusres.2014.11.042](https://doi.org/10.1016/j.jbusres.2014.11.042).
- Hsieh, M.H., Li, X.B., Jain, S.P. and Swaminathan, V. (2021), "Self-construal drives preference for partner and servant brands", *Journal of Business Research*, Vol. 129, pp. 183-192, doi: [10.1016/j.jbusres.2021.02.054](https://doi.org/10.1016/j.jbusres.2021.02.054).
- Huang, R., Zhou, X., Ye, W. and Guo, S. (2020), "Think versus feel: two dimensions of brand anthropomorphism", *Journal of Product & Brand Management*, Vol. 29 No. 7, pp. 955-969, doi: [10.1108/JPBM-11-2018-2125](https://doi.org/10.1108/JPBM-11-2018-2125).
- Huang, L., Zou, W. and Huang, Y. (2025), "He is my savior, my guiding light in the dark": imagination and domestication in Chinese women's romantic relationships with AI companions", *Frontiers in Psychology*, Vol. 16, p. 1571707, doi: [10.3389/fpsyg.2025.1571707](https://doi.org/10.3389/fpsyg.2025.1571707).
- Japutra, A., Ekinci, Y. and Simkin, L. (2018), "Positive and negative behaviours resulting from brand attachment: the moderating effects of attachment styles", *European Journal of Marketing*, Vol. 52 Nos 5-6, pp. 1185-1202, doi: [10.1108/EJM-10-2016-0566](https://doi.org/10.1108/EJM-10-2016-0566).
- Japutra, A., Ekinci, Y. and Simkin, L. (2022), "Discovering the dark side of brand attachment: impulsive buying, obsessive-compulsive buying and trash talking", *Journal of Business Research*, Vol. 145, pp. 442-453, doi: [10.1016/j.jbusres.2022.03.020](https://doi.org/10.1016/j.jbusres.2022.03.020).
- Jha, S., Balaji, M.S., Peck, J., Oakley, J. and Deitz, G.D. (2020), "The effects of environmental haptic cues on consumer perceptions of retailer warmth and competence", *Journal of Retailing*, Vol. 96 No. 4, pp. 590-605, doi: [10.1016/j.jretai.2020.04.003](https://doi.org/10.1016/j.jretai.2020.04.003).
- Kennedy, E. and Guzmán, F. (2021), "No matter what you do, I still love you: an examination of consumer reaction to brand transgressions", *Journal of Product & Brand Management*, Vol. 30 No. 4, pp. 594-608, doi: [10.1108/JPBM-07-2019-2450](https://doi.org/10.1108/JPBM-07-2019-2450).
- Kervyn, N., Fiske, S.T. and Malone, C. (2012), "Brands as intentional agents framework: how perceived intentions and ability can map brand perception", *Journal of Consumer Psychology*, Vol. 22 No. 2, pp. 166-176, doi: [10.1016/j.jcps.2011.09.006](https://doi.org/10.1016/j.jcps.2011.09.006).
- Khamitov, M., Grégoire, Y. and Suri, A. (2020), "A systematic review of brand transgression, service failure recovery and product-harm crisis: integration and guiding insights", *Journal of the Academy of Marketing Science*, Vol. 48 No. 3, pp. 519-542, doi: [10.1007/s11747-019-00679-1](https://doi.org/10.1007/s11747-019-00679-1).
- Kim, H.C. and Kramer, T. (2015), "Do materialists prefer the 'brand-as-servant'? The interactive effect of anthropomorphized brand roles and materialism on consumer responses", *Journal of Consumer Research*, Vol. 42 No. 2, pp. 284-299, doi: [10.1093/jcr/ucv015](https://doi.org/10.1093/jcr/ucv015).
- Kim, K., Ryoo, Y., Manika, D., Yoon, N. and Yoon, S. (2024), "From ugly to attractive: leveraging anthropomorphism to increase demand for irregular-appearing produce", *Psychology & Marketing*, Vol. 41 No. 9, pp. 2033-2056, doi: [10.1002/mar.22025](https://doi.org/10.1002/mar.22025).
- Kirmani, A. (2009), "The self and the brand", *Journal of Consumer Psychology*, Vol. 19 No. 3, pp. 271-275, doi: [10.1016/j.jcps.2009.05.011](https://doi.org/10.1016/j.jcps.2009.05.011).
- Klütz, A.M. and Albrecht, C.M. (2025), "Travelling bumpy roads: how consumers experience brand transgressions in the online environment", *Journal of Product & Brand Management*, Vol. 34 No. 7, pp. 1111-1133, doi: [10.1108/JPBM-05-2024-5143](https://doi.org/10.1108/JPBM-05-2024-5143).
- Koenig, A.M. and Eagly, A.H. (2014), "Evidence for the social role theory of stereotype content: observations of groups' roles shape stereotypes", *Journal of Personality and Social Psychology*, Vol. 107 No. 3, pp. 371-392, doi: [10.1037/a0037215](https://doi.org/10.1037/a0037215).
- Kwak, H., Puzakova, M., McGill, A.L. and Kim, J. (2025), "When previous relationships limit the new: the interplay between product anthropomorphism and used products", *Journal of the Academy of Marketing Science*, Vol. 53 No. 5, pp. 1335-1355, doi: [10.1007/s11747-025-01086-5](https://doi.org/10.1007/s11747-025-01086-5).
- Kwok, C., Crone, C., Arden, Y. and Norberg, M.M. (2018), "Seeing human when feeling insecure and wanting closeness: a systematic review", *Personality and Individual Differences*, Vol. 127, pp. 1-9, doi: [10.1016/j.paid.2018.01.037](https://doi.org/10.1016/j.paid.2018.01.037).
- Lei, S. and Xie, L. (2025), "Servant" versus "partner": investigating the effect of service robot personas on customer misbehavior", *Journal of Business Research*, Vol. 199, p. 115549, doi: [10.1016/j.jbusres.2025.115549](https://doi.org/10.1016/j.jbusres.2025.115549).
- Liu, X., Wang, L., Liu, X. and Zhai, X. (2024), "The impact of privacy violations on subsequent consumer preferences for anthropomorphized products", *Journal of Business Research*, Vol. 174, p. 114505, doi: [10.1016/j.jbusres.2024.114505](https://doi.org/10.1016/j.jbusres.2024.114505).
- Ma, J., Tu, H., Zhou, X. and Niu, W. (2023), "Can brand anthropomorphism trigger emotional brand attachment?", *The Service Industries Journal*, Vol. 43 Nos 7-8, pp. 555-578, doi: [10.1080/02642069.2021.2012163](https://doi.org/10.1080/02642069.2021.2012163).
- Mazzoli, V., Donvito, R. and Zarantonello, L. (2024), "Brand transgressions in advertising related to diversity, equity and inclusion: implications for consumer-brand relationships", *Journal of Product & Brand Management*, Vol. 33 No. 5, pp. 516-532, doi: [10.1108/JPBM-02-2023-4352](https://doi.org/10.1108/JPBM-02-2023-4352).
- Mende, M. and Bolton, R.N. (2011), "Why attachment security matters: how customers' attachment styles influence their relationships with service firms and service employees", *Journal of Service Research*, Vol. 14 No. 3, pp. 285-301, doi: [10.1177/1094670511411](https://doi.org/10.1177/1094670511411).
- Mende, M., Bolton, R.N. and Bitner, M.J. (2013), "Decoding customer-firm relationships: how attachment styles help explain customers' preferences for closeness, repurchase intentions, and changes in relationship breadth", *Journal of Marketing Research*, Vol. 50 No. 1, pp. 125-142, doi: [10.1509/jmr.10.0072](https://doi.org/10.1509/jmr.10.0072).
- Mende, M., Scott, M.L., Garvey, A.M. and Bolton, L.E. (2019), "The marketing of love: how attachment styles affect romantic consumption journeys", *Journal of the Academy of*

- Marketing Science*, Vol. 47 No. 2, pp. 255-273, doi: [10.1007/s11747-018-0610-9](https://doi.org/10.1007/s11747-018-0610-9).
- Mikulincer, M. and Shaver, P.R. (2003), "The attachment behavioral system in adulthood: activation, psychodynamics, and interpersonal processes", *Advances in Experimental Social Psychology*, Vol. 35, pp. 56-152, doi: [10.1016/S0065-2601\(03\)01002-5](https://doi.org/10.1016/S0065-2601(03)01002-5).
- Mikulincer, M. and Shaver, P.R. (2009), "An attachment and behavioral systems perspective on social support", *Journal of Social and Personal Relationships*, Vol. 26 No. 1, pp. 7-19, doi: [10.1177/0265407509105](https://doi.org/10.1177/0265407509105).
- Mikulincer, M. and Shaver, P.R. (2010), *Attachment in Adulthood: Structure, Dynamics, and Change*, Guilford Publications, New York, NY.
- Mou, Y. and Meng, X. (2024), "Alexa, it is creeping over me—exploring the impact of privacy concerns on consumer resistance to intelligent voice assistants", *Asia Pacific Journal of Marketing and Logistics*, Vol. 36 No. 2, pp. 261-292, doi: [10.1108/APJML-10-2022-0869](https://doi.org/10.1108/APJML-10-2022-0869).
- Neave, N., Tyson, H., McInnes, L. and Hamilton, C. (2016), "The role of attachment style and anthropomorphism in predicting hoarding behaviours in a non-clinical sample", *Personality and Individual Differences*, Vol. 99, pp. 33-37, doi: [10.1016/j.paid.2016.04.067](https://doi.org/10.1016/j.paid.2016.04.067).
- Park, J.K. and John, D.R. (2018), "Developing brand relationships after a brand transgression: the role of implicit theories of relationships", *Journal of the Association for Consumer Research*, Vol. 3 No. 2, pp. 175-187, doi: [10.1086/697081](https://doi.org/10.1086/697081).
- Peer, E., Rothschild, D., Gordon, A., Evernden, Z. and Damer, E. (2022), "Data quality of platforms and panels for online behavioral research", *Behavior Research Methods*, Vol. 54 No. 4, pp. 1643-1662, doi: [10.3758/s13428-021-01694-3](https://doi.org/10.3758/s13428-021-01694-3).
- Pozharliev, R., De Angelis, M., Rossi, D., Romani, S., Verbeke, W. and Cherubino, P. (2021), "Attachment styles moderate customer responses to frontline service robots: evidence from affective, attitudinal, and behavioral measures", *Psychology & Marketing*, Vol. 38 No. 5, pp. 881-895, doi: [10.1002/mar.21475](https://doi.org/10.1002/mar.21475).
- Puzakova, M. and Aggarwal, P. (2018), "Brands as rivals: consumer pursuit of distinctiveness and the role of brand anthropomorphism", *Journal of Consumer Research*, Vol. 45 No. 4, pp. 869-888, doi: [10.1093/jcr/ucy035](https://doi.org/10.1093/jcr/ucy035).
- Puzakova, M., Kwak, H. and Rocereto, J.F. (2009), "Pushing the envelope of brand and personality: antecedents and moderators of anthropomorphized brands", *Advances in Consumer Research*, Vol. 36, pp. 413-420.
- Rai, D., Lin, C.W., Yang, C.M. and Saint Clair, J.K. (2024), "Work with me or work for me: the effect of brand roles depends on implicit theories of self-change", *Journal of Consumer Psychology*, Vol. 34 No. 4, pp. 551-569, doi: [10.1002/jcpy.1374](https://doi.org/10.1002/jcpy.1374).
- Richards, D.A. and Schat, A.C. (2011), "Attachment at (not to) work: applying attachment theory to explain individual behavior in organizations", *Journal of Applied Psychology*, Vol. 96 No. 1, pp. 169-182, doi: [10.1037/a0020372](https://doi.org/10.1037/a0020372).
- Rosendo-Rios, V., Trott, S. and Shukla, P. (2025), "The impact of brand transgression on consumer choice: the role of moral identity", *Journal of Product & Brand Management*, Vol. 34 No. 8, doi: [10.1108/JPBM-01-2024-4943](https://doi.org/10.1108/JPBM-01-2024-4943).
- Sarkar, A., Sarkar, J.G., S. S. and Mr. A. (2018), "A qualitative investigation of e-tail brand affect", *Marketing Intelligence & Planning*, Vol. 36 No. 3, pp. 365-380, doi: [10.1108/MIP-09-2017-0198](https://doi.org/10.1108/MIP-09-2017-0198).
- Schroll, R. (2023), "'Ouch!' When and why food anthropomorphism negatively affects consumption", *Journal of Consumer Psychology*, Vol. 33 No. 3, pp. 561-574, doi: [10.1002/jcpy.1316](https://doi.org/10.1002/jcpy.1316).
- Septianto, F. and Kwon, J. (2022), "Too cute to be bad? Cute brand logo reduces consumer punishment following brand transgressions", *International Journal of Research in Marketing*, Vol. 39 No. 4, pp. 1108-1126, doi: [10.1016/j.ijresmar.2021.12.006](https://doi.org/10.1016/j.ijresmar.2021.12.006).
- Sharma, M. and Rahman, Z. (2022), "Anthropomorphic brand management: an integrated review and research agenda", *Journal of Business Research*, Vol. 149, pp. 463-475, doi: [10.1016/j.jbusres.2022.05.039](https://doi.org/10.1016/j.jbusres.2022.05.039).
- Shaver, P.R. and Mikulincer, M. (2005), "Attachment theory and research: resurrection of the psychodynamic approach to personality", *Journal of Research in Personality*, Vol. 39 No. 1, pp. 22-45, doi: [10.1016/j.jrp.2004.09.002](https://doi.org/10.1016/j.jrp.2004.09.002).
- Shimul, A.S., Faroque, A.R. and Quader, E. (2025), "Brand advocacy: a scoping review and future research agenda", *Journal of Product & Brand Management*, Vol. 35 No. 1, doi: [10.1108/JPBM-10-2024-5537](https://doi.org/10.1108/JPBM-10-2024-5537).
- Shimul, A.S. and Phau, I. (2023), "The role of brand self-congruence, brand love and brand attachment on brand advocacy: a serial mediation model", *Marketing Intelligence & Planning*, Vol. 41 No. 5, pp. 649-666, doi: [10.1108/MIP-10-2022-0443](https://doi.org/10.1108/MIP-10-2022-0443).
- Sidhu, S.K., Ong, F.S. and Balaji, M.S. (2023), "Moderating role of consumers' attachment style on post-recovery satisfaction behavior", *Journal of Relationship Marketing*, Vol. 22 No. 4, pp. 354-380, doi: [10.1080/15332667.2023.2205280](https://doi.org/10.1080/15332667.2023.2205280).
- Spence, A.M. (1973), "Job market signaling", *The Quarterly Journal of Economics*, Vol. 87 No. 3, pp. 355-374, doi: [10.2307/1882010](https://doi.org/10.2307/1882010).
- Teng, L., Sun, C., Chen, Y., Lever, M.W. and Foti, L. (2024), "Partner or servant? The influence of robot role positioning on consumers' brand evaluations", *Journal of Business Research*, Vol. 180, p. 114698, doi: [10.1016/j.jbusres.2024.114698](https://doi.org/10.1016/j.jbusres.2024.114698).
- Tolunay, A. and Veloutsou, C. (2025), "Don't make me hate you, my love! Perceived brand betrayal and the love-becomes-hate phenomenon", *Journal of Business Research*, Vol. 187, p. 115060, doi: [10.1016/j.jbusres.2024.115060](https://doi.org/10.1016/j.jbusres.2024.115060).
- Vernuccio, M., Boccacini, S. and Patrizi, M. (2025), "Being' with the brand in the metaverse: strengthening brand anthropomorphism to foster brand love", *Journal of Retailing and Consumer Services*, Vol. 84, p. 104204, doi: [10.1016/j.jretconser.2024.104204](https://doi.org/10.1016/j.jretconser.2024.104204).
- Vinuales, G. and Sheinin, D. (2026), "Navigating brand activism: the role of brand betrayal and brand anthropomorphism in influencing consumer backlash", *Journal of Product & Brand Management*, doi: [10.1108/JPBM-10-2024-5541](https://doi.org/10.1108/JPBM-10-2024-5541).
- Warnock, K.N., Ju, C.S. and Katz, I.M. (2024), "A meta-analysis of attachment at work", *Journal of Business and*

- Psychology*, Vol. 39 No. 6, pp. 1239-1257, doi: [10.1007/s10869-024-09960-9](https://doi.org/10.1007/s10869-024-09960-9).
- Whelan, J. and Dawar, N. (2016), "Attributions of blame following a product-harm crisis depend on consumers' attachment styles", *Marketing Letters*, Vol. 27 No. 2, pp. 285-294, doi: [10.1007/s11002-014-9340-z](https://doi.org/10.1007/s11002-014-9340-z).
- Xiang, L. and Park, H.J. (2025), "Influence of mortality threats on anthropomorphized brand attitude: role of control and connectedness motives", *Journal of Product & Brand Management*, Vol. 34 No. 3, pp. 417-431, doi: [10.1108/JPBM-05-2023-4528](https://doi.org/10.1108/JPBM-05-2023-4528).
- Xie, Z., Wang, J., Qin, H. and Zhao, J. (2025), "Stupid is as stupid does? The influence of anthropomorphic stupidity on consumers' product purchase intention", *Journal of Product & Brand Management*, Vol. 34 No. 5, pp. 606-617, doi: [10.1108/JPBM-12-2023-4874](https://doi.org/10.1108/JPBM-12-2023-4874).
- Zhang, A. and Rau, P.L.P. (2023), "Tools or peers? Impacts of anthropomorphism level and social role on emotional attachment and disclosure tendency towards intelligent agents", *Computers in Human Behavior*, Vol. 138, p. 107415, doi: [10.1016/j.chb.2022.107415](https://doi.org/10.1016/j.chb.2022.107415).
- Zhang, F., Zhou, Z. and Sheng, D. (2025), "Explore the anthropomorphism of service bots in tourism: a MASEM analysis based on stereotype content model", *Current Issues in Tourism*, doi: [10.1080/13683500.2025.2486549](https://doi.org/10.1080/13683500.2025.2486549).
- underdog brands", *Psychology & Marketing*, Vol. 36 No. 1, pp. 28-40, doi: [10.1002/mar.21155](https://doi.org/10.1002/mar.21155).
- Patrizi, M., Šerić, M. and Vernuccio, M. (2024), "Hey Google, I trust you! The consequences of brand anthropomorphism in voice-based artificial intelligence contexts", *Journal of Retailing and Consumer Services*, Vol. 77, p. 103659, doi: [10.1016/j.jretconser.2023.103659](https://doi.org/10.1016/j.jretconser.2023.103659).
- Paulssen, M. and Fournier, S. (2005), *Understanding Consumer Heterogeneity in Relationship Marketing Response: An Attachment Theoretic Perspective*, Humboldt-Univ., Wirtschaftswiss. Fak.
- Proksch, M., Orth, U.R. and Bethge, F. (2013), "Disentangling the influence of attachment anxiety and attachment security in consumer formation of attachments to brands", *Journal of Consumer Behaviour*, Vol. 12 No. 4, pp. 318-326, doi: [10.1002/cb.1434](https://doi.org/10.1002/cb.1434).
- Rauschnabel, P.A. and Ahuvia, A.C. (2014), "You're so lovable: anthropomorphism and brand love", *Journal of Brand Management*, Vol. 21 No. 5, pp. 372-395, doi: [10.1057/bm.2014.14](https://doi.org/10.1057/bm.2014.14).
- Tan, T.M., Balaji, M.S., Oikarinen, E.L., Alatalo, S. and Salo, J. (2021), "Recover from a service failure: the differential effects of brand betrayal and brand disappointment on an exclusive brand offering", *Journal of Business Research*, Vol. 123, pp. 126-139, doi: [10.1016/j.jbusres.2020.09.056](https://doi.org/10.1016/j.jbusres.2020.09.056).

Further reading

- Kim, S. and McGill, A.L. (2011), "Gaming with Mr. Slot or gaming the slot machine? Power, anthropomorphism, and risk perception", *Journal of Consumer Research*, Vol. 38 No. 1, pp. 94-107, doi: [10.1086/658148](https://doi.org/10.1086/658148).
- Kim, Y., Park, K. and Stacey Lee, S. (2019), "The underdog trap: the moderating role of transgression type in forgiving

Supplementary material

The supplementary material for this article can be found online.

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