#### RESEARCH ARTICLE



Check for updates

## From discomfort to desirable: The effect of embarrassment on prosocial consumption

Vaishali Sangwan<sup>1</sup> | Moutusy Maity<sup>2</sup> | Sanjeev Tripathi<sup>3</sup> | Anirban Chakraborty<sup>4</sup>

#### Correspondence

Vaishali Sangwan, Department of Marketing, Jindal Global Business School, O.P Jindal Global University, Sonipat Narela Rd, Near Jagdishpur, Sonipat, Haryana 131001, India. Email: Vaishali.sangwan@jgu.edu.in

#### **Abstract**

Embarrassment plays a pivotal role in the consumer landscape by significantly influencing consumers' purchase and consumption experiences. While marketing scholarship has primarily focused on the undesirable facets of embarrassment, the present research examines the positive outcomes of embarrassment for consumers, firms, and the environment. Based on costly signaling theory, this research seeks to determine the effect of embarrassment on consumer preferences toward prosocial products. Using six experimental studies (including one in the Supporting Information: Appendix), we demonstrate that embarrassment positively influences the purchase intention for environment-friendly and sustainable products. Using lab and consequential studies, we show that the motivation to repair the social image mediates the effect of embarrassment on prosocial product preference. We also identify that public self-consciousness moderates this effect, such that embarrassed individuals with high (vs. low) public self-consciousness exhibit higher prosocial product preference. We also show that our core predictions on the effect of embarrassment on prosocial products is contingent upon the social context, such that embarrassment leads to enhanced intentions to repair social image and prosocial product preference in public but not in private purchase context. The results hold for various product categories. The findings contribute to a greater theoretical understanding of embarrassment by revealing a prosocial facet of the phenomenon.

#### KEYWORDS

consumer embarrassment, green products, image concerns, prosocial consumption

## 1 | INTRODUCTION

Embarrassment is the experience of an aversive emotion that consumers may experience across diverse purchase and consumption situations (Herter et al., 2021). Such an experience can occur when

buying products, such as condoms and weight loss items, receiving personalized and preferential service, or witnessing aggressive behavior in the marketplace (Krishna et al., 2019). The ramifications of embarrassment extend beyond individuals and can impact firms and the environment (Hamerman et al., 2018).

This paper is based on the dissertation of the first author.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Authors. Psychology & Marketing published by Wiley Periodicals LLC.

<sup>&</sup>lt;sup>1</sup>Department of Marketing, Jindal Global Business School, O.P Jindal Global University, Sonipat, India

<sup>&</sup>lt;sup>2</sup>Department of Marketing, Southampton Business School, University of Southamption, Southampton, UK

<sup>&</sup>lt;sup>3</sup>Department of Marketing, Indian Institute of Management, Indore, India

<sup>&</sup>lt;sup>4</sup>Department of Marketing, Indian Institute of Management, Lucknow, India

Embarrassment can have a negative influence on consumers' well-being and finances. It can deter consumers from purchasing medically relevant products, such as incontinence pads and hearing aids (e.g., Krishna et al., 2019). Consumers may also shy away from using discount coupons (Brumbaugh & Rosa, 2009). Consumer embarrassment poses a considerable challenge to firms by adversely influencing consumers' purchase intentions (Kilian et al., 2018) and satisfaction with these organizations (Otterbring & Lu, 2018). Further, fear of public embarrassment leads to resource overconsumption and wastage (Hamerman et al., 2018).

Embarrassed individuals often attempt to mend the damage to their social image through consumption choices, such as buying conspicuous brands (Song et al., 2017) and face-restorative cosmetics (Dong et al., 2013). Embarrassment may affect an individual's conduct towards others, for example, by enhancing intrapersonal friendly (Kilian et al., 2018) and prosocial behavior (Apsler, 1975; van Kleef & Lelieveld, 2022). The reparative and prosocial behavior helps counter the central concern of embarrassed individuals, that is, to re-establish their social standing in the eyes of others (Goffman, 1956).

Despite recognizing the desirable consequences of embarrassment by the social psychology domain, marketing scholarship has a limited understanding of embarrassment-related prosocial outcomes (Kilian et al., 2018). Embarrassment engenders behavioral motivations that benefit the self, such as indulging in physical activity, dieting, and avoiding smoking (Herter et al., 2021). However, whether embarrassment can have a positive effect, such as enhancing the motivation to benefit others, such as the environment, over self, remains to be examined. At a first glance, it does not appear so. A review of the literature shows overwhelming evidence that embarrassment has detrimental consequences for firms and the environment (Hamerman et al., 2018; Krishna et al., 2019). The research on advantageous outcomes of embarrassment is limited, and it is important to theoretically deepen the understanding related to such outcomes.

In this research, we address this gap by testing positive outcomes of embarrassment—the preferences toward prosocial products, such as environment-friendly products—that benefit others. The theoretical paradigm supporting our assertion is costly signaling theory, which states that an altruistic act (e.g., green consumption) is a communicative signal that helps to mend the reputational concerns of individuals (Grafen, 1990; Griskevicius et al., 2010). Since embarrassment heightens interpersonal prosocial behavior (van Kleef & Lelieveld, 2022), we propose that embarrassed individuals may display a higher preference toward prosocial products.

Embarrassment is a social repair emotion (van Kleef & Lelieveld, 2022). Flustered individuals' agreeable and helpful behaviors often help restore face or social image and pleases others (Goffman, 1956; Keltner & Buswell, 1997). Therefore, we propose that embarrassment enhances prosocial tendencies due to the underlying motivation to repair self image, which may act as a mediator. Song et al. (2017) have demonstrated that motivation to restore social standing heightens intentions to show self-promoting attributes through conspicuous consumption (e.g., preferred brands). Whether the urge

to repair social image may lead to choices that benefit others remains to be tested. We further propose that the trait variable of public self-consciousness and the context of the purchase of a prosocial product are likely to act as important qualifiers of the effect of embarrassment on prosocial product preference. We undertake six (including one in Supporting Information: Appendix) experimental studies to test the hypothesized effects in our conceptual model. Our findings hold crucial implications for managers and society as we demonstrate that when individuals experience heightened embarrassment, it accentuates their desire to purchase prosocial products.

The structure of the rest of the papers is as follows. We first present the theoretical background, then we theorize on our core predictions and identify various boundary conditions. Next, we present a series of experimental studies to test the direct effect in study 1 (and study 1a in Supporting Information: Appendix), the mediation mechanism in study 2 and in study 3 an incentive-compatible experiment. Studies four and five demonstrate two boundary conditions for our hypothesized effects. After presenting the empirical package, we present a general discussion of our findings and then expand on the theoretical and managerial implications of our research. We conclude this research by identifying the limitations of this work and suggest future research directions.

# 2 | CONCEPTUAL BACKGROUND AND HYPOTHESES DEVELOPMENT

#### 2.1 | Embarrassment

Embarrassment is an acutely disagreeable emotion involving a sense of exposure and awkward self-consciousness (Keltner & Buswell, 1997; Miller, 2007). Embarrassment is experienced when people fail to sustain their desired public image due to unwanted social predicaments (Goffman, 1956), such as slipping in public and publicly purchasing itch creams (Dahl et al., 2001). While experiencing embarrassment, individuals may worry about the negative impressions that others form about their presented self (Modigliani, 1971). Embarrassment can result in individuals feeling humiliated, shocked, foolish, and the center of unwanted attention (Keltner & Anderson, 2000).

Theorists examining embarrassment from a functional perspective argue that embarrassment probably evolved to promote smooth group relations among individuals by maintaining social order (Goffman, 1956; Keltner & Anderson, 2000; Miller, 2007; Tracy et al., 2007). Due to fear of rejection or social ostracization, individuals avoid embarrassment inducing social transgressions and follow social norms of conduct (Goffman, 1956; Modigliani, 1971).

## 2.2 | Embarrassment and remedial behavior

Evidence shows that the image-related discrepancies aroused by embarrassing situations may be overcome by preferring and

procuring conspicuous brands and face-restorative products (Dong et al., 2013; Song et al., 2017) (see Supporting Information S1: Appendix Table A1, for details of extant studies). Flustered individuals are willing to sacrifice monetary rewards to improve their social standing (Brown, 1970). Even when some ways to restore social image are blocked or inaccessible, individuals adopt other ways to enhance their image (Keltner & Buswell, 1997).

The desire to regain social standing often manifests in how flustered individuals behave with others. Embarrassment acts as a social repair emotion (van Kleef & Lelieveld, 2022), such that individuals act in an agreeable and pacifying manner after experiencing embarrassment (Miller, 2004). Such behavior often helps restore an embarrassed individual's face or social image and smoothens ongoing social interactions (Goffman, 1956; Keltner & Buswell, 1997). Miller (1996, p. 175) notes that "most of the time when we're embarrassed, we are contrite, humble, and eager to please." Although embarrassed individuals, at times, may opt for shortterm strategies, such as running away or avoiding the situation (Miller, 2007; Song et al., 2017), more often than not, embarrassment leads individuals to seek to repair their public identities and act amicably (Miller, 2004), for instance by helping others (Apsler, 1975). The physiology of embarrassment often functions to save ongoing social situations and restore face (Goffman, 1956). Further, people attribute more prosocial tendencies to individuals displaying embarrassment after a transgression and may entrust them with more resources (Feinberg et al., 2012).

## 2.3 | Embarrassment and prosocial consumption

This research argues that prosocial consumption may compensate for the social image deficit created by embarrassing transgressions. In this research context, we define a *prosocial product* as "a product where its purchase and/or consumption lowers the negative impact or has a positive impact on the environment and society in general. Prosocial product offerings can include environment-friendly products and cause-related products." (Johnson et al., 2018, p. 345). Since individuals often acquire products for symbolic meanings (Song et al., 2017), we posit that embarrassed customers may be more inclined towards prosocial products than nonembarrassed customers.

To this end, we draw on costly signaling theory (CST) (Zahavi, 1995). CST offers an evolutionary perspective to explain why individuals may engage in altruistic or prosocial behavior towards nonkin others (Grafen, 1990; Zahavi, 1995). CST has been widely applied as a theoretical foundation across diverse disciplines, including anthropology, biology, and psychology, to explain the hidden motives of generous and prosocial behavior (Griskevicius et al., 2010; Park et al., 2017).

CST propounds that an altruistic act is a communicative signal (Grafen, 1990; Griskevicius et al., 2010). By engaging in a prosocial act, a person signals desirable attributes, such as generosity, kindness, and care for others (Park et al., 2017; Puska et al., 2018). Such signals, manifested through prosocial consumption, attend to the reputational and impression management concerns of individuals (Johnson et al., 2018; Peloza et al., 2013; Puska et al., 2018). Observers, in response, discern the signals and perceive green product users as altruistic, honest, and high-status individuals (Luomala et al., 2020). Green signallers get social recognition

and favorable treatment in social interactions (Berger, 2019). Consequently, these findings indicate that embarrassed customers seeking to restore their image may likely choose a prosocial product.

However, the prosocial product signal is likely to be perceived as reliable if it indicates a personal sacrifice with respect to energy use, expenditure, and risk potential (Luomala et al., 2020) for the welfare of others. Prosocial products, such as green products, are often more expensive, have limited availability, and may result in a cognitive load on customers to decipher the content of eco-labels (Borau et al., 2021; Griskevicius et al., 2010). People purchasing prosocial products can effectively signal to others a personal sacrifice for the common good. Given the motivation to restore social standing, we argue that embarrassed customers may prefer prosocial products more than nonembarrassed customers. Accordingly, we hypothesize that:

**H1:** Embarrassed (vs. nonembarrassed) customers will exhibit a greater preference for prosocial products.

**H2:** Greater preference towards prosocial products by embarrassed (vs. nonembarrassed) customers is mediated through motivation to repair image.

## 2.4 | Moderating role of self-consciousness

Consumer's behavior can be guided by their self-conciousness. Self-consciousness is the tendency to "direct attention toward themselves" (Fenigstein, 1979, p. 76), with two distinct dimensions: public self-consciousness and private self-consciousness (Fenigstein et al., 1975). Private self-consciousness refers to a propensity to be aware of one's thoughts and feelings, whereas public self-consciousness (hereafter PUBSC) is the proneness to see oneself as a social object and to attend to the aspects of self that are a matter of public display (e.g., "I am very concerned about the way I present myself") (Fenigstein et al.,1975; Scheier & Carver, 1985).

High public self-consciousness (HPUBSC) individuals closely attend to self-directed actions, thoughts, and feelings of relevant others and strategically alter or regulate their public behavior to create favorable impressions (Gould & Barak, 1988; Scheier & Carver, 1985). HPUBSC individuals use self-presentation strategies, such as self-handicapping (Shepperd & Arkin, 1989) and wearing make-up (by HPUBSC females) to appear physically attractive. Likewise, HPUBSC consumers are more inclined toward public charitable options than individuals with low PUBSC (LPUBSC) (White & Peloza, 2009). Moreover, to maintain their reputation, HPUBSC customers are more likely to use coping strategies to avoid embarrassment (Blair & Roese, 2013; Lau-Gesk & Drolet, 2008). Therefore, we assert that HPUBSC consumers will likely make a prosocial choice after experiencing embarrassment. This effect might not be exhibited for LPUBSC individuals as they have little concern about others' evaluations. Accordingly:

**H3:** Embarrassed (vs. nonembarrassed) consumers with high (vs. low) public self-consciousness will exhibit a greater preference towards prosocial products.

## 2.5 | Moderating role of purchase context

A host of prosocial behaviors, such as green purchases (Griskevicius et al., 2010) and donations (White & Peloza, 2009), are influenced by public visibility and recognition of prosocial acts. Accordingly, customers might be more willing to enhance their public status by purchasing environment-friendly products in public rather than private (Griskevicius et al., 2010; Peloza et al., 2013; Puska et al., 2018). As such, the image-restoring benefits of a signal are contingent upon the visibility or conspicuousness of the signal (Puska et al., 2018). While embarrassment can happen in a private context due to the fear of imagined others (Dahl et al., 2001) and selfdirected negative appraisals (Krishna et al., 2015), the aftereffect of such embarrassment, the image-restoration signal is more likely to occur in a public context. An embarrassed consumer looking to restore a harmed social image through prosocial consumption may choose prosocial products in a public consumption context where others may easily observe such preferences (Figure 1).

**H4:** Embarrassed (vs. nonembarrassed) consumers will prefer prosocial products in public (vs. private) purchase contexts.

**H5:** Embarrassed (vs. nonembarrassed) consumers will prefer prosocial products more due to motivation to repair image in public (vs. private) purchase contexts.

## 3 | RESEARCH OVERVIEW

We tested our theoretical predictions through six experiments across a variety of samples. Study 1 (and study 1a in Supporting Information: Appendix) tested for the effect of embarrassment on prosocial product preference using utilitarian and hedonic product categories. Study 2 investigated whether the motivation to repair image mediates the effect of embarrassment on prosocial product preference. Study 3 replicated the findings of study 2 using an incentive-compatible design and ruled out

various alternative mediating mechanisms. Study 4 investigated the moderating effect of the trait of public self-consciousness. Studies 1–4 were investigated in a public purchase context. In study 5, we investigated the moderation by purchase context. Thus, study 5 was a moderation study (with purchase context public vs. private as a moderator). Studies 2, 3, 4, and 5 used nonoverlapping US samples recruited through Prolific. Figure 2 illustrates the study-wise plan to test the proposed hypotheses.

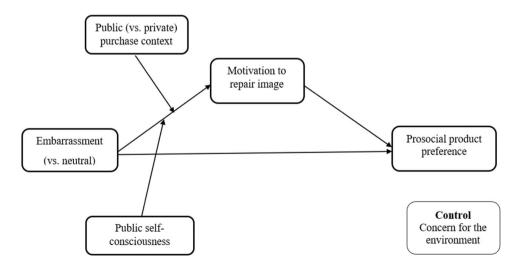
## 3.1 | Study 1

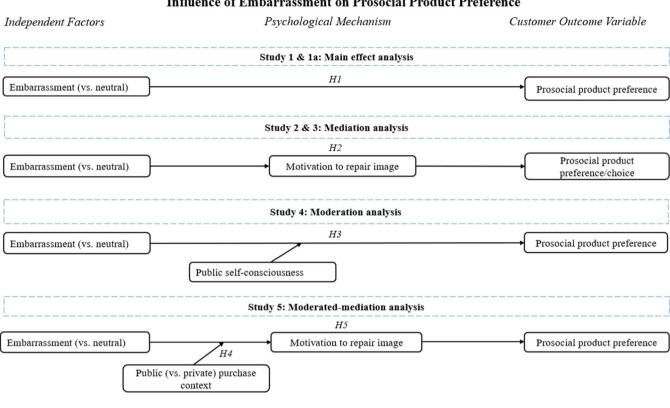
#### 3.1.1 Design and method

Working professionals (N = 106, average age 34.5 years; 73.58% male) enrolled in an Executive Education program at a major Asian university voluntarily participated in a one-way (two levels of embarrassment: present vs. neutral) between-subjects study. The participants were randomly assigned to one of the two experimental conditions. They were approached at a preassigned time in their classrooms and were administered a paper-and-pen format instrument.

The participants participated in two ostensibly unrelated tasks. In the first task, they participated in a study that was aimed at understanding their perceptions about general life events. However, the actual purpose of the task was to manipulate embarrassment. We manipulated embarrassment through a recall test, an approach followed in many recent studies (e.g., Song et al., 2017). Participants in the embarrassment condition recalled and wrote about an incident from their past life in which they felt very embarrassed. Participants in the neutral condition wrote about how they spend a typical day.

The efficacy of this manipulation was later tested using a manipulation check. The participants responded to how they felt on a set of four adjectives (*embarrassed*, *uncomfortable*, *awkward*, and *self-conscious*; adapted from Dahl et al., 2001) (a = 0.81, Supporting Information S1: Appendix Table A2). To rule out any alternative explanation of mood state driving prosocial choices, we collected the





**FIGURE 2** Study-wise plan to test the hypotheses.

measures of mood (positive mood-happy, joyful; negative mood-sad, angry) (adapted from Song et al., 2017). All the measures were collected on a 7-point scale (1 = strongly disagree, 7 = strongly agree).

Next, the participants completed a product evaluation task. The questionnaire consisted of pictorial print advertisement (ad) copies of two versions of apple juice adopted from Peloza et al. (2013) (Supporting Information S1: Appendix A.3). The two versions of apple juice were positioned as prosocial and non-prosocial apple juice. The order of presentation of both versions of juices was counterbalanced. We measured product preference using an existing scale (Lee & Shrum, 2012) (a = 0.89, Supporting Information S1: Appendix Table A2) that had the two versions of apple juice anchored on the endpoints of the scale. In the last part of the experiment, the participants shared their demographic information, including age and gender.

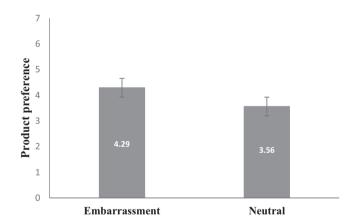


FIGURE 3 Effect of embarrassment on prosocial product preference (study 1).

#### 3.1.2 Results

Manipulation checks: A one-way ANOVA revealed that recalling embarrassing situations did increase embarrassment (M<sub>Embarrassment</sub> = 4.74 vs.  $M_{\text{Neutral}}$  = 2.85; F (1, 104) = 62.67, p < 0.001). The manipulation of embarrassment was therefore deemed successful.

Hypothesis tests: A one-way ANOVA with embarrassment (present vs. neutral) condition as an IV and product preference towards apple juice with prosocial appeal as the DV showed a main effect of embarrassment  $(M_{Embarrassment} = 4.29 \text{ vs. } M_{Neutral} = 3.56; F (1, 104) = 5.72, p < 0.02)$ (Figure 3), providing support for H1.

While this study did not test for our hypothesized mediatior, we did test for some of the alternate process variables, such as positive and negative mood states. We used Hayes' PROCESS macro (model 4) (Preacher & Hayes, 2008) based on 5000 bootstrapped samples with a 95% confidence interval (CI). The results indicated no significant indirect effect of embarrassment on prosocial product preference through positive mood (CI95 [-0.632, 0.480]) and negative mood (Cl<sub>95</sub> [-0.159, 0.353]), indicating that the mood state did not mediate the process.



## 3.1.3 | Discussion

Study 1 indicates that embarrassed individuals prefer prosocial products more than individuals who are not embarrassed. The study used the context of a utilitarian product, apple juice (Costa et al., 2016). Study 1a (see Supporting Information S1: Appendix A.4) demonstrates the same effect with a more hedonic product. The subsequent study (study 2) tests our proposed mediation mechanism for the hypothesized main effect.

## 3.2 | Study 2

## 3.2.1 | Design and method

The participants were US residents (*N* = 127, mean age: 30.14; 60.62% male; two (2) participants chose not to reveal their gender) recruited through Prolific. They participated in a one-way (two levels of embarrassment: present vs. neutral) between-subjects design experiment. The design of this study was similar to that of study 1, where the participants participated in two ostensibly unrelated tasks. In the first part, the participants recalled incidents regarding an embarrassing/neutral situation.

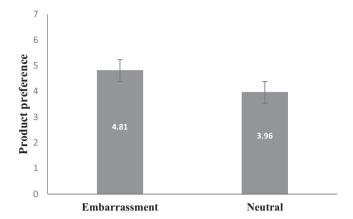
In Section 2 of the study, the participants imagined that they were out shopping for a laundry detergent. The participants were provided with two versions of a laundry detergent—super clean laundry detergent (nonprosocial version) and eco-wash laundry detergent (prosocial version) (see Supporting Information S1: Appendix A.3 for details). The presentation of the detergents was counterbalanced. The product preference measure of the dependent variable was similar to study 1 ( $\alpha$  = 0.947, Supporting Information S1: Appendix Table A2), with the two versions of the laundry detergent anchored on the endpoints of the scale.

Next, we measured the predicted mediator, motivation to repair image (scale from Song et al., 2017; a = 0.815, Supporting Information S1: Appendix Table A2) on a 7-point scale (1 = strongly disagree, 7 = strongly agree). As embarrassment may also engender avoidance tendencies (Modigliani, 1971; Song et al., 2017), we additionally measured motivation to avoid social attention (scale from Song et al., 2017; a = 0.897) as an alternative mediator. Next, similar to study 1, participants responded to a manipulation check for embarrassment (a = 0.946).

Extant literature has shown that environmental concern positively influences environmentally conscious behavior (Antonetti & Maklan, 2014). Accordingly, we measured participants' concern for the environment (control variable) using a single item, "I am strongly concerned about the environment," on a 7-point scale (1 = strongly disagree, 7 = strongly agree), adapted from Hamerman et al., 2018). At the end of the survey, participants responded to questions on demographic variables (age and gender).

## 3.2.2 | Results

Manipulation checks: A one-way ANOVA of the measure on the embarrassment scale revealed that only the recall of an embarrassing



**FIGURE 4** Effect of embarrassment on prosocial product preference (study 2).

(vs. neutral) situation has the intended impact on participants' perceived embarrassment ( $M_{\text{Embarrassment}} = 5.45$  vs.  $M_{\text{Neutral}} = 2.47$ ; F (1, 125) = 125.35, p < 0.001). The manipulation of embarrassment was therefore deemed successful.

Hypothesis test: A one-way ANCOVA (with concern for the environment as a covariate) with embarrassment (present vs. neutral) as an IV and product preference towards eco-wash laundry detergent as the DV showed a main effect of embarrassment ( $M_{\rm Embarrassment}$  = 4.81 vs.  $M_{\rm Neutral}$  = 3.96; F (1, 125) = 6.17, p < 0.05) (Figure 4). The effect of the covariate, concern for the environment, on prosocial product preference, was also significant (F (1, 125) = 5.04; p < 0.05), indicating that individuals with higher concern for the environment indeed preferred environment-friendly products (see Supporting Information S1: Appendix A.7 for results of studies 2–5 without the covariate).

*Mediation analysis*: We tested for the mediation effect of motivation to repair image on the relationship between embarrassment and the DV of prosocial product preference, using Hayes' PRO-CESS macro (model 4) (Preacher & Hayes, 2008) based on 5000 bootstrapped samples with a 95% CI. Concern for the environment was used as a covariate in the analysis. We dummy-coded the categorical variable of embarrassment (present vs. neutral) (1 = embarrassment, 0 = other). There was a significant indirect effect of embarrassment on preference toward prosocial product via motivation to repair image (B = 0.195, SE = 0.103,  $CI_{95}$  [0.019, 0.424]), while the direct effect became insignificant (B = 0.627,  $CI_{95}$  [-0.04, 1.29]). We also ran a test for the alternative explanation, the motivation to avoid attention, the results indicated that the alternative path was not significant, t (124) = -1.19; p > 0.1.

#### 3.2.3 | Discussion

In line with CST, the results of study 2 support our argument (H2) that embarrassed (vs. nonembarrassed) individuals prefer prosocial products due to the underlying motivation to repair the image. The

Psychology WILEY 7

next study uses an incentive-compatible design to test the robustness of our assertion. This study was also aimed at ruling out various alternative mediators.

## 3.3 | Study 3

## 3.3.1 | Design and method

The objective of this study was to show that embarrassment results in a prosocial product choice using an incentive-compatible design. The incentive compatibility was achieved by informing participants that they could get a free coupon for the product they chose for purchase.

US residents (*N* = 117; mean age: 28.25; 41.37% male; one participant chose not to reveal their gender) recruited through Prolific participated in a one-way (two levels of embarrassment: present vs. neutral) between-subjects design experiment. Concern for the environment was captured as a covariate. A different priming mechanism for inducing embarrassment was used in this study to achieve the generalizability of our results. The embarrassment condition asked the participants to imagine accidentally bumping into a glass partition in a crowded store; in the neutral condition, the participants imagined themselves in a general shopping situation (see Supporting Information S1: Appendix A.5 for details). Participants also summarized how they might feel in the given situation in two to three lines before they answered the subsequent questions.

The DV for this study was a choice across two T-shirts: an ecofriendly (prosocial variant) versus a comfort T-shirt (nonprosocial variant). The choice in this study had an incentive consequential element, the participants were informed that a few randomly selected participants would have a chance to get the coupon for the T-shirt they chose (for a similar design, see Huang et al., 2023). Both prosocial and non-prosocial variants of T-shirts were priced at \$14. Participants responded to the question, "Which of these two T-shirts would you choose?" (see Supporting Information S1: Appendix A.5 for details).

Next, the participants responded to the measure of the proposed mediator, motivation to repair image (a = 0.835). We also collected measures of several other potential mediators. Embarrassing situations may evoke various emotions, including anger, hurt, shame, and guilt (Krishna et al., 2015). Therefore, we measured the stated emotions to test whether they lead to prosocial choices. In particular, we asked participants to respond to a measure of guilt (adapted from Allard & White, 2015; a = 0.885), anger, hurt, and shame. Moreover, social-relational emotions, such as embarrassment, may elicit a threat of belongingness or rejection by others (Leary, 2007; Miller, 2004). It is plausible that social exclusion, loneliness, and a feeling of lack of belongingness with others after experiencing embarrassment are driving the prosocial choice (e.g., Schultz et al., 2023). Therefore, we also captured the measures of loneliness (adapted from Russell et al., 1980; a = 0.821), a sense of small self (adapted from Piff et al., 2015; a = 0.748), belongingness (adapted from Lambert et al., 2013;

a = 0.786), and social exclusion (adapted from Su et al., 2017; a = 0.881). All the measures were captured on a 7-point scale (1 = strongly disagree, 7 = strongly agree).

Lastly, participants responded to the five-item scale of concern for the environment (adapted from Pagiaslis & Krontalis, 2014; a = 0.921) and to questions on demographic variables (age and gender).

#### 3.3.2 | Results

Manipulation check: To test for the effectiveness of priming of embarrassment (vs. neutral) condition on perceived embarrassment, we asked an independent coder, blind to the purpose of the study, to read the summaries across both conditions. The coder rated the scenarios on a measure of embarrassment—"Does the individual appear embarrassed/uncomfortable/awkward as he/she summarized their feelings about being in the given situation" (a = 0.92) on a  $\overline{2}$ -point scale (1 = strongly disagree, 7 = strongly agree). A one-way ANOVA revealed that the experimental condition, embarrassment (present vs. neutral), had a significant effect on participants' perceived embarrassment ( $M_{Embarrassment} = 4.42 \text{ vs. } M_{Neutral} = 2.0; F (1, 116) = 78.43, <math>p < 0.01$ ), as rated by the coder. The manipulation of embarrassment was therefore deemed successful.

Hypothesis test: A  $\chi^2$  test was conducted to test the effect of embarrassment (present vs. neutral) on prosocial product choice. Results revealed a significant Chi-square statistic ( $\chi^2$  = 4.48, df = 1, p < 0.05). A significantly higher number of participants in the embarrassment condition chose prosocial T-shirts (61.7%) than participants in the neutral condition (38.3%). The choice of the T-shirt in this study was consequential. Therefore, the results indicate rigorous support for H1.

*Mediation analysis:* First, we tested for the mediating effect of motivation to repair image on the relationship between embarrassment and prosocial product choice using Hayes' PROCESS macro (Model 4) (Preacher & Hayes, 2008) based on 5000 bootstrapped samples with a 95% Cl. Concern for the environment was used as a covariate in the analysis. We dummy-coded the categorical variable of embarrassment (present vs. neutral) (1 = embarrassment, 0 = other). The analysis indicated that there was a significant indirect effect of embarrassment on the preference toward prosocial product via motivation to repair image (B = 0.296, SE = 0.173,  $Cl_{95}$  [0.013, 0.696]), with a nonsignificant direct effect of embarrassment (B = 0.785,  $Cl_{95}$  [-0.059, 1.63]) on prosocial product preference.

Although the effect of embarrassment on guilt (t (114) = 2.07; p < 0.05), hurt (t (114) = 4.98; p < 0.01), shame (t (114) = 6.0; p < 0.01), social exclusion (t (114) = 3.64; p < 0.01), and anger (t (114) = 3.06; p < 0.01) was significant, there was no significant indirect effect of guilt, hurt, shame, social exclusion, and anger on prosocial product choice (refer to Supporting Information S1: Appendix A.6 for results). Further, the indirect effect of a sense of small self, loneliness, and belongingness on prosocial product choice was also insignificant (refer to Supporting Information S1: Appendix A.6 for results).



## 3.3.3 | Discussion

The incentive-compatible design of study 3 validates the robustness of our main argument and demonstrates that embarrassed (vs. nonembarrassed) individuals are more likely to choose prosocial products (H2). This study also ruled out various alternative explanations and could demonstrate that a motivation to repair the image drives the effects of embarrassment on prosocial product choice. In the next study, we test for a potential boundary condition of the direct effect of the trait variable of public self-consciousness.

## 3.4 | Study 4

#### 3.4.1 | Design and method

The objective of this study was to show that the trait variable of public self-consciousness (PUBSC) moderates the effect of embarrassment on prosocial product preference. The participants were US residents (*N* = 249; mean age: 25.19; 61.63% male; four participants chose not to reveal their gender) recruited from Prolific, who participated in a one-way (two levels of embarrassment: present vs. neutral) between-subjects design experiment. The participants were informed that the study had four unrelated sections. Unknown to the participants, the objective of the first section was to manipulate embarrassment, while the second section captured the DVs, the third was an anagram task to reduce the carry-over effects, and the fourth section captured the trait of public self-consciousness. Similar to studies 1 and 2, we manipulated embarrassment using a recall task.

In Section 2 of the study, participants completed the product preference task. They were asked to imagine that they were shopping for a backpack in a store of a brand at a prominent shopping center. The store was crowded, and you could see others shopping around you. The participants were provided with two versions of a backpack—a durable backpack (nonprosocial version) and an ecolife backpack (prosocial version) (see Supporting Information S1: Appendix A.3 for details). The presentation of the backpacks was counterbalanced. Similar to study 1, the measure of the DV variable included product preference ( $\alpha = 0.945$ ) with the two backpacks on the endpoints of the scale. Next, similar to study 1, the participants responded to a manipulation check for embarrassment ( $\alpha = 0.955$ ).

To reduce any carry-over effect, before moving to the fourth section, the participants completed a few simple anagram tasks, which included rearranging three jumbled words into meaningful words. For instance, TSATE was a jumbled word for taste. In the next section, the participants responded to a trait measure of public self-consciousness (PUBSC) on a 7-point scale ( $1 = strongly \ disagree$ ,  $7 = strongly \ agree$ ), with items such as "I am very concerned about the way I present myself" (adapted from Scheier & Carver, 1985; a = 0.893, Supporting Information S1: Appendix Table A2). At the end of the survey, participants responded to a measure of concern for the environment (similar to study 2) and questions on demographic variables (age and gender).

#### 3.4.2 | Results

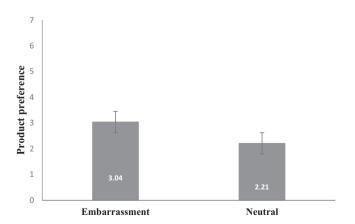
*Manipulation checks*: A one-way ANOVA of the data on embarrassment revealed that the experimental condition, embarrassment (present vs. neutral), had a significant effect on participants' perceived embarrassment ( $M_{Embarrassment} = 5.15$  vs.  $M_{Neutral} = 2.5$ ; F (1, 247) = 173.81, p < 0.001). The manipulation of embarrassment was therefore deemed successful.

*Hypothesis test:* A one-way ANCOVA (with concern for the environment and PUBSC as covariates) with embarrassment (present vs. neutral) as an IV and product preference towards eco-life backpack as the DV, showed a main effect of embarrassment ( $M_{\rm Embarrassment}$  = 3.04 vs.  $M_{\rm Neutral}$  = 2.21; F (1, 246) = 23.08, p < 0.01) (Figure 5). The effect of the covariate, concern for the environment, on prosocial product preference was significant (F (1, 246) = 55.5; p < 0.01).

Moderation analysis: Next, we analyzed the moderating effect of PUBSC by using Hayes' PROCESS macro (model 1) based on 5000 bootstrap samples with 95% CI. Embarrassment was the IV, the continuous moderating variable, PUBSC, was entered as a moderator, prosocial product preference was the DV, and concern for the environment was a covariate. There was a significant two-way interaction effect between embarrassment and the trait variable of PUBSC on prosocial product preference (B = 0.391, SE = 0.148,  $Cl_{95} = 0.098$ , 0.685). Importantly, for high PUBSC (+1 S.D), there was a significant effect of embarrassment on prosocial product preference (L = 0.391), the effect of embarrassment on prosocial product preference was not significant (L = 0.391), L = 0.191 (Figure 6).

#### 3.4.3 | Discussion

The results of study 4 support our argument that individuals high in public self-consciousness have a higher inclination to choose prosocial products after experiencing embarrassment (H3). In this study, we tested for a trait tendency to focus on aspects of the self



**FIGURE 5** Effect of embarrassment on prosocial product preference (study 4).

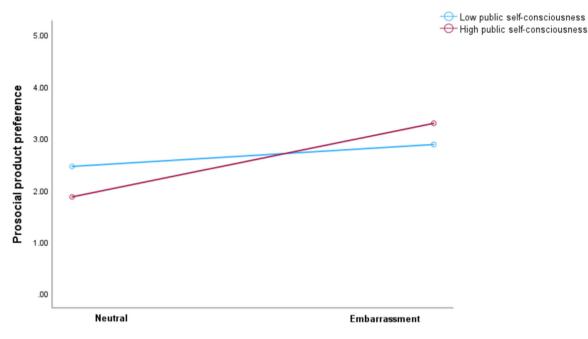


FIGURE 6 The Interaction effect of embarrassment and public self-consciousness (study 4).

that are socially visible. In the subsequent study, we attempt to capture the concerns toward the social self by manipulating a situational variable, the public (vs. private) purchase context, and demonstrate the moderated mediation effects.

#### 3.5 | Study 5

## 3.5.1 | Design and method

The participants (N = 201) were US residents (Mean age = 25.2; 57.22% male; one participant did not disclose gender), recruited from Prolific, who were randomly assigned to one of the four cells of a 2 (embarrassment: present vs. neutral) × 2 (purchase context: public vs. private) between-subjects experimental design.

Similar to the previous studies, embarrassment was manipulated through a recall task. After the recall task, participants completed the product preference task and were assigned to either to a public or a private purchase scenario. Specifically, participants were asked to imagine that they have decided to purchase a T-shirt (same as in study 3, Supporting Information S1: Appendix A.3) from the retail store of a brand located at a prominent shopping center (vs. online from the website of a brand, while at home) (i.e., public vs. private purchase contexts). Further, participants were asked to imagine that the retail store was crowded and that they could see others shopping around them (vs. shopping in privacy on their laptop without being disturbed by others). This instruction was followed by the details of the T-shirts. Then, the participants responded to "Which of these two lines of T-shirt would you choose to purchase?" on a 7-point scale with the two T-shirts as the endpoint of the scale. The order of T-shirts was counterbalanced.

Next, participants responded to the measure of motivation to repair image (a = 0.89). Due to embarrassing transgressions, individuals lose face or positive social value (Goffman, 1956). Since low status engenders preference toward green products in public purchase contexts (e.g., Griskevicius et al., 2010), embarrassed individuals may prefer green or prosocial products to enhance their social status. Accordingly, we measured the need for status (adapted from Flynn et al., 2006; a = 0.77) as another potential process measure.

Further, the participants responded to the manipulation check questions for embarrassment (similar to study 1, a = 0.95) and for the purchase context (public vs. private; a = 0.84, Supporting Information S1: Appendix Table A2). Finally, the participants indicated their concern for the environment (similar to study 2) and shared the demographics.

#### 3.5.2 Results

Manipulation checks: A two-way ANOVA with embarrassment (present vs. control) and purchase context (public vs. private) conditions as IVs and perceived embarrassment as DV revealed that only the embarrassment condition had a significant effect on participants' perceived embarrassment (F (1, 197) = 206.42, p < 0.001). Neither the purchase context (public vs. private) condition (F (1, 197) = 1.39, p > 0.5) nor the interaction effect between the embarrassment and purchase context conditions (F (1, 197) = 0.085; p > 0.5) significantly affect perceived embarrassment. The manipulation of embarrassment was therefore deemed successful.

Next, we tested whether the manipulation of purchase context was successful. A two-way ANOVA of the measure on purchase

context revealed that the manipulation of purchase context was successful (F (1, 197) = 64.13, p < 0.001), with means in the intended direction. Neither the embarrassment condition (F (1, 197) = 3.68; p > 0.05) nor the interaction between embarrassment and purchase context conditions (F (1, 197) = 2.69; p > 0.1) had a significant effect on purchase context.

Hypothesis test: We tested for the main effect of embarrassment and purchase context conditions and their interaction effect on prosocial product preference. We used participants' environmental concerns as a control variable. A two-way ANCOVA revealed the main effect of the embarrassment condition (present vs. neutral) on prosocial product preference, F (1, 199) = 4.53, p < 0.05. Prosocial product preference for the participants in the embarrassed condition ( $M_{\rm Embarrassment}$  = 4.41) was higher than in the neutral ( $M_{\rm Neutral}$  = 3.91) condition. The main effect of purchase context (public vs. private) on prosocial product preference is not significant ( $M_{\rm Public}$  = 4.27 vs.  $M_{\rm Private}$  = 4.05; F (1, 199) = 0.741, p > 0.1). However, as predicted, the two-way interaction effect between embarrassment (present vs. neutral) and purchase context (public vs. private) on prosocial product preference was significant, F (1, 199) = 5.33, p < 0.05 (Figure 7).

In the public purchase context, embarrassed participants displayed a significantly higher preference toward prosocial products ( $M_{\rm Embarrassment \times Public}$  = 4.82) than the participants in the neutral condition ( $M_{\rm Neutral \times Public}$  = 3.75), t (197) = 2.92, p < 0.01. However, in the private purchase context, there was no significant difference for prosocial product preference between the participants in the embarrassed condition ( $M_{\rm Embarrassment \times Private}$  = 4.00) and the neutral condition ( $M_{\rm Neutral \times Private}$  = 4.11), t (197) = -0.275; p > 0.5. The effect of the covariate, concern for the environment, was also significant F (1, 199) = 26.92, p < 0.001. For participants in the neutral condition, our results show a marginally higher preference for the prosocial

product while shopping in private ( $M_{\text{Neutral} \times \text{Private}} = 4.10$ ) vis-a-vis in public ( $M_{\text{Neutral} \times \text{Public}} = 3.75$ ); however, the effect was not significant (t (197) = -0.95; p > 0.10).

Moderated mediation analysis: Next, we tested for the effect of embarrassment as influenced by the purchase context on participants' preference toward prosocial products through motivation to repair image. We used the Hayes' PROCESS macro (model 7) based on 5000 bootstrapped samples (with a 95% CI). We dummy-coded the categorical variable of embarrassment (present vs. neutral) (1 = embarrassment, 0 = other) and purchase context (public vs. private) (1 = public purchase context, 0 = other). The analysis generated CIs for the indexes of moderated mediation of motivation to repair image (B = 0.266; SE = 0.171, CI<sub>95</sub> [0.01, 0.674]), whereas the direct main effect was not significant (B = 0.348,  $Cl_{95}$  [-0.14, 0.838]). Specifically, for the private context, the motivation to repair image did not mediate the main effect ( $Cl_{95}$  [-0.13, 0.253]). However, for the public purchase context, the motivation to repair image mediated the effect of embarrassment on prosocial product preference (CI<sub>95</sub> [0.084, 0.655]). Further, the results with the need for status as mediator did not yield significant results (CI<sub>95</sub> [-0.304, 0.163]).

### 3.5.3 | Discussion

In line with the CST, our research results show that embarrassment enhanced prosocial behavioral preferences only when participants knew that others could observe such choices (H4). In a public purchase situation, the image repairing benefits of prosocial choices can easily be observed by others (H5). The analysis shows that embarrassed participants do not attempt to repair their image in the context of private purchases.

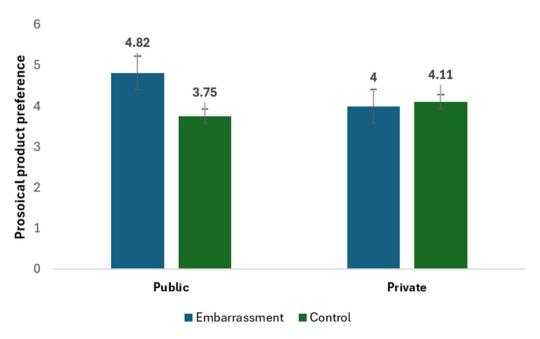


FIGURE 7 Interaction effect between embarrassment and purchase context conditions (study 5).

#### 4 | GENERAL DISCUSSION

There is a sizeable research on the effects of emabrassment (refer Supporting Information S1: Appendix A.1). Based on the CST, the present research investigates the impact of the complex yet commonplace emotion of embarrassment on preference towards prosocial products. As demonstrated, embarrassed customers are more likely to prefer prosocial products, such as environmentfriendly products, than customers not experiencing this adverse emotion. CST provides a novel perspective that individuals attempt to increase their social standing by acting in a way that benefits others (Zahavi, 1995). The present research applies CST to bridge the gap between selfish motives (repairing social image harmed due to embarrassment) and altruistic behavior (environment-friendly product choices). Unlike the self-conscious emotions of guilt and pride that lead to sustainable choices through an elevated sense of personal responsibility (Antonetti & Maklan, 2014), the present research centers on the inclination to assess one's actions through others' perspectives following the experience of self-conscious emotions, such as embarrassment (Leary, 2007), resulting in sustainable product choices.

Through six empirical studies, we demonstrate that the data support our proposed hypotheses. Study 1 (and study 1(a) in Supporting Information S1: Appendix A.4) show the main proposed effect of embarrassment on prosocial product preference. Such effects are consistent for utilitarian and hedonic product categories, print and pictorial advertisements, and distinct age category participants. Studies 2 and 3 demonstrate that the motivation to repair social image mediates the effect of embarrassment on preference toward environment-friendly products and rules out various alternative explanations. Moreover, the incentive-compatible design of study 3 validates the robustness of our central assertion.

Study 4 identifies a boundary condition and demonstrates that HPUBSC individuals (vs. LPUBSC individuals) are more inclined to prefer environment-friendly products upon experiencing embarrassment. Finally, study 5 shows a situational boundary condition, that is, the context of purchasing prosocial products. In a public purchase context, embarrassment leads to motivation to repair image and prosocial product preference. Such effects are diminished in the private purchase context. In line with extant literature, embarrassment leads to various affective states, including anger, shame, and hurt (e.g., Krishna et al., 2015). However, as shown, the urge to restore social standing drives the proposed main effect.

Extant work has attempted to demystify the intention-behavior gap in ethical consumption (e.g., green/sustainable consumption) (Carrington et al., 2014), suggesting that ethical concerns and values may have a limited role in influencing green consumption (Davies & Gutsche, 2016; Peloza et al., 2013), with reputation or status enhancement influencing ethical behavior as suggested by CST. Our research shows that ethical preferences are attractive not only to those looking to bolster their status but also to consumers looking to rebuild their harmed/damaged reputation.

## 4.1 | Theoretical contributions

Our study makes critical theoretical contributions to several streams of research. Many positive affective states, such as awe (Piff et al., 2015), lead to prosocial or ethical behavior. Research associates a limited number of negative emotions, such as guilt, with ethical consumption (e.g., Peloza et al., 2013). The current investigation presents and empirically establishes a novel antecedent of prosocial or sustainable consumption-embarrassment. Extant work on consumer embarrassment largely focuses on the detrimental effects of consumer embarrassment (e.g., Brumbaugh & Rosa, 2009), with some exceptions, such as Herter et al. (2021). Our research examines embarrassment by focusing on the social adaptive functions of embarrassment (Miller, 2004) and demonstrates a novel positive outcome of embarrassment. While the majority of literature focuses on identifying the antecedents of consumer embarrassment (e.g., Blair & Roese, 2013; Dahl et al., 2001), the current research adds to nascent work on embarrassment-related coping strategies (e.g., Dong et al., 2013; Krishna et al., 2015; Song et al., 2017).

Extant studies focused on preemptive action tendencies of HPUBSC individuals to safeguard their social image, for example, by expressing reluctance to recommend second-hand clothes (Lo et al., 2019) and not purchasing embarrassing products (Blair & Roese, 2013). This research extends the investigation to the reparative actions of PUBSC individuals following an experience of an adverse emotion, thereby enhancing our understanding of the PUBSC trait.

Conforming to the CST prediction that signaling behavior is likely to happen in a public situation, this research demonstrates the significance of social context in restoring harmed social image. Prior research has primarily demonstrated that the social context is known to influence the type and intensity of embarrassment (e.g., Krishna et al., 2019) and not embarrassment-related coping motivations. Our research extends the current understanding of coping motivations.

## 4.2 | Managerial implications

Our findings that embarrassment leads to a preference toward green or environment-friendly products hold critical implications for managers and the environment. In a marketplace, customers buy additional products along embarrassing products to project an overall positive identity (Blair & Roese, 2013). Managers can facilitate the co-purchase of environment-friendly products along with embarrassing items, such as sexual wellness and personal hygiene products, by placing environment-friendly products near embarrassing products in a retail set-up. Cross-bundling of embarrassing and environment-friendly products may facilitate sales with a positive environmental impact and mitigate customers' social image concerns. Marketers can ensure that environment-friendly products are identifiable to facilitate their choice over other nonsustainable products.

Our findings show the effect of embarrassment on prosocial choices that may restore one's social image in a public purchase context rather than a private purchase context. Managers may ethically and sensitively leverage the public embarrassment of customers by developing in-store campaigns that promote sustainable choices over others. Social stigma is associated with the purchase of resale or reused products (Lo et al., 2019). Our findings offer insights into marketing strategies that may effectively tackle such situations where managers can design campaigns emphasizing the positive reputational and social image benefits of buying reused products.

# 5 | LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The present research has several limitations that await further investigation. First, we manipulated embarrassment using recall tasks and scenario-based approaches. Such approaches may not evoke emotions of similar intensity to an experienced emotion (Krishna et al., 2019). Nevertheless, given the difficulty of evoking negative emotions in a lab or online studies (Krishna et al., 2019), the utilized methods are proven to be robust and used commonly in consumer behavior research (e.g., Herter et al., 2021; Krishna et al., 2015).

Second, across all studies, we relied on one type of prosocial product, that is, environment-friendly products. It would be interesting to see whether the image-repairing effect of embarrassment extends to other prosocial behaviors, such as donations, where participants would be making a sacrifice without any materialistic gain, unlike in the current research, where participants did get to choose one product over the other.

Lastly, CST holds that a signal is more reliable when the behavior is costly (Zahavi, 1995). Although green products are considered more expensive than their regular variants (Borau et al., 2021), we did not explicitly manipulate the price of the products. We leave it to future studies to explore the influence of price variability postembarrassment on prosocial choices. Notwithstanding the limitations, the current study reveals a desirable outcome of embarrassment entailing benefits to various stakeholders, encompassing customers, firms, and the environment.

## CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

## ORCID

Moutusy Maity http://orcid.org/0000-0002-8900-1311
Sanjeev Tripathi http://orcid.org/0000-0003-1507-5761

#### **REFERENCES**

Allard, T., & White, K. (2015). Cross-domain effects of guilt on desire for self-improvement products. *Journal of Consumer Research*, 42(3), 401–419.

- Antonetti, P., & Maklan, S. (2014). Feelings that make a difference: How guilt and pride convince consumers of the effectiveness of sustainable consumption choices. *Journal of Business Ethics*, 124, 117–134.
- Apsler, R. (1975). Effects of embarrassment on behavior toward others. *Journal of Personality and Social Psychology*, 32(1), 145–153.
- Berger, J. (2019). Signaling can increase consumers' willingness to pay for Green products. Theoretical model and experimental evidence. *Journal of Consumer Behaviour*, 18(3), 233–246.
- Blair, S., & Roese, N. J. (2013). Balancing the basket: The role of shopping basket composition in embarrassment. *Journal of Consumer Research*, 40(4), 676–691.
- Borau, S., Elgaaied-Gambier, L., & Barbarossa, C. (2021). The green mate appeal: Men's pro-environmental consumption is an honest signal of commitment to their partner. *Psychology & Marketing*, 38(2), 266–285.
- Brown, B. R. (1970). Face-saving following experimentally induced embarrassment. *Journal of Experimental Social Psychology*, 6(3), 255–271
- Brumbaugh, A. M., & Rosa, J. A. (2009). Perceived discrimination, cashier metaperceptions, embarrassment, and confidence as influencers of coupon use: An ethnoracial–socioeconomic analysis. *Journal of Retailing*, 85(3), 347–362.
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2014). Lost in translation: Exploring the ethical consumer intention-behavior gap. *Journal of Business Research*, *67*(1), 2759–2767.
- Costa, C., Carneiro, J., & Goldszmidt, R. (2016). A contingent approach to country-of-origin effects on foreign products evaluation: Interaction of facets of country image with product classes. *International Business Review*, 25(5), 1066–1075.
- Dahl, D. W., Manchanda, R. V., & Argo, J. J. (2001). Embarrassment in consumer purchase: The roles of social presence and purchase familiarity. *Journal of Consumer Research*, 28(3), 473–481.
- Davies, I. A., & Gutsche, S. (2016). Consumer motivations for mainstream "ethical" consumption. *European Journal of Marketing*, 50(7/8), 1326–1347.
- Dong, P., Huang, X., & Wyer, R. S. Jr. (2013). The illusion of saving face: How people symbolically cope with embarrassment. *Psychological Science*, 24(10), 2005–2012.
- Feinberg, M., Willer, R., & Keltner, D. (2012). Flustered and faithful: Embarrassment as a signal of prosociality. *Journal of Personality and Social Psychology*, 102(1), 81–97.
- Fenigstein, A. (1979). Self-consciousness, self-attention, and social interaction. *Journal of Personality and Social Psychology*, *37*(1), 75–86.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private selfconsciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43(4), 522–527.
- Flynn, F. J., Reagans, R. E., Amanatullah, E. T., & Ames, D. R. (2006). Helping one's way to the top: Self-monitors achieve status by helping others and knowing who helps whom. *Journal of Personality* and Social Psychology, 91(6), 1123–1137.
- Goffman, E. (1956). Embarrassment and social organization. American Journal of Sociology, 62, 264–271.
- Gould, S. J., & Barak, B. (1988). Public self-consciousness and consumption behavior. The Journal of Social Psychology, 128(3), 393-400.
- Grafen, A. (1990). Biological signals as handicaps. *Journal of Theoretical Biology*, 144(4), 517–546.
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98(3), 392–404.
- Hamerman, E. J., Rudell, F., & Martins, C. M. (2018). Factors that predict taking restaurant leftovers: Strategies for reducing food waste. *Journal of Consumer Behaviour*, 17(1), 94–104.

- Herter, M. M., Borges, A., & Pinto, D. C. (2021). Which emotions make you healthier? The effects of sadness, embarrassment, and construal level on healthy behaviors. Journal of Business Research, 130, 147-158.
- Huang, Y., Song, W., & Yang, L. (2023). Avoiding through glossiness and approaching through matte: The effect of visual finish on perceived product effectiveness. Psychology & Marketing, 40(2), 262-273.
- Johnson, C. M., Tariq, A., & Baker, T. L. (2018). From Gucci to green bags: Conspicuous consumption as a signal for pro-social behavior. Journal of Marketing Theory and Practice, 26(4), 339-356.
- Keltner, D., & Anderson, C. (2000). Saving face for Darwin: The functions and uses of embarrassment. Current Directions in Psychological Science, 9(6), 187-192.
- Keltner, D., & Buswell, B. N. (1997). Embarrassment: Its distinct form and appeasement functions. Psychological Bulletin, 122(3), 250-270.
- Kilian, T., Steinmann, S., & Hammes, E. (2018). Oh my gosh, I got to get out of this place! A qualitative study of vicarious embarrassment in service encounters. Psychology & Marketing, 35(1), 79-95.
- van Kleef, G. A., & Lelieveld, G. J. (2022). Moving the self and others to do good: The emotional underpinnings of prosocial behavior. Current Opinion in Psychology, 44, 80-88.
- Krishna, A., Herd, K. B., & Aydınoğlu, N. Z. (2015). Wetting the bed at twenty-one: Embarrassment as a private emotion. Journal of Consumer Psychology, 25(3), 473-486.
- Krishna, A., Herd, K. B., & Aydınoğlu, N. Z. (2019). A review of consumer embarrassment as a public and private emotion. Journal of Consumer Psychology, 29(3), 492-516.
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. Personality and Social Psychology Bulletin, 39(11), 1418-1427.
- Lau-Gesk, L., & Drolet, A. (2008). The publicly self-consciousness consumer: Prepared to be embarrassed. Journal of Consumer Psychology, 18(2), 127-136.
- Leary, M. R. (2007). Motivational and emotional aspects of the self. Annual Review of Psychology, 58, 317-344.
- Lee, J., & Shrum, L. J. (2012). Conspicuous consumption versus charitable behavior in response to social exclusion: A differential needs explanation. Journal of Consumer Research, 39(3), 530-544.
- Lo, C. J., Tsarenko, Y., & Tojib, D. (2019). To tell or not to tell? The roles of perceived norms and self-consciousness in understanding consumers' willingness to recommend online secondhand apparel shopping. Psychology & Marketing, 36(4), 287-304.
- Luomala, H., Puska, P., Lähdesmäki, M., Siltaoja, M., & Kurki, S. (2020). Get some respect-Buy organic foods! When everyday consumer choices serve as prosocial status signaling. Appetite, 145, 104492.
- Miller, R. S. (1996). Embarrassment: Poise and peril in everyday life. The Guilford Press.
- Miller, R. S. (2004). Emotion as adaptive interpersonal communication: The case of embarrassment. In L. Tiedens, & C. W. Leach (Eds.), The social life of emotions (pp. 87-104). Cambridge University Press.
- Miller, R. S. (2007). Is embarrassment a blessing or a curse? In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), The self-conscious emotions: Theory and research (pp. 245-262). The Guilford Press.
- Modigliani, A. (1971). Embarrassment, facework and eye contact: Testing a theory of embarrassment. Journal of Personality and Social Psychology, 17(1), 15-24.
- Otterbring, T., & Lu, C. (2018). Clothes, condoms, and customer satisfaction: The effect of employee mere presence on customer satisfaction depends on the shopping situation. Psychology & Marketing, 35(6), 454-462.

- Pagiaslis, A., & Krontalis, A. K. (2014). Green consumption behavior antecedents: Environmental concern, knowledge, and beliefs. Psychology & Marketing, 31(5), 335-348.
- Park, J., Chae, H., & Choi, J. N. (2017). The need for status as a hidden motive of knowledge-sharing behavior: An application of costly signaling theory. Human Performance, 30(1), 21-37.
- Peloza, J., White, K., & Shang, J. (2013). Good and guilt-free: The role of self-accountability in influencing preferences for products with ethical attributes. Journal of Marketing, 77(1), 104-119.
- Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. Journal of Personality and Social Psychology, 108(6), 883-899.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods, 40(3), 879-891.
- Puska, P., Kurki, S., Lähdesmäki, M., Siltaoja, M., & Luomala, H. (2018). Sweet taste of prosocial status signaling: When eating organic foods makes you happy and hopeful. Appetite, 121, 348-359.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. Journal of Personality and Social Psychology, 39(3), 472–480.
- Scheier, M. F., & Carver, C. S. (1985). The Self-Consciousness Scale: A revised version for use with general populations. Journal of Applied Social Psychology, 15(8), 687-699.
- Schultz, A. E., Newman, K. P., & Wright, S. A. (2023). The negative effect of low belonging on consumer responses to sustainable products. Journal of Business Ethics, 187(3), 473-492.
- Shepperd, J. A., & Arkin, R. M. (1989). Self-handicapping: The moderating roles of public self-consciousness and task importance. Personality and Social Psychology Bulletin, 15(2), 252-265.
- Song, X., Huang, F., & Li, X. (2017). The effect of embarrassment on preferences for brand conspicuousness: The roles of self-esteem and self-brand connection. Journal of Consumer Psychology, 27(1), 69-83.
- Su, L., Jiang, Y., Chen, Z., & DeWall, C. N. (2017). Social exclusion and consumer switching behavior: A control restoration mechanism. Journal of Consumer Research, 44(1), 99-117.
- Tracy, J. L., Robins, R. W., & Tangney, J. P. (Eds.). (2007). The self-conscious emotions: Theory and research. Guilford Press.
- White, K., & Peloza, J. (2009). Self-benefit versus other-benefit marketing appeals: Their effectiveness in generating charitable support. Journal of Marketing, 73(4), 109-124.
- Zahavi, A. (1995). Altruism as a handicap: The limitations of kin selection and reciprocity. Journal of Avian Biology, 26, 1-3.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Sangwan, V., Maity, M., Tripathi, S., & Chakraborty, A. (2024). From discomfort to desirable: The effect of embarrassment on prosocial consumption. Psychology & Marketing, 1-13.

https://doi.org/10.1002/mar.22012