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To cite this article: Katja Anna Stadlthanner, Luisa Andreu, Manuel Alector Ribeiro, Xavier Font & Anna S. Mattila (2022) The effects of message framing in CSR advertising on consumers' emotions, attitudes, and behavioral intentions, Journal of Hospitality Marketing & Management, 31:7, 777-796, DOI: [10.1080/19368623.2022.2065399](https://doi.org/10.1080/19368623.2022.2065399)

To link to this article: <https://doi.org/10.1080/19368623.2022.2065399>



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Published online: 28 Apr 2022.



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# The effects of message framing in CSR advertising on consumers' emotions, attitudes, and behavioral intentions

Katja Anna Stadlthanner<sup>a</sup>, Luisa Andreu <sup>a</sup>, Manuel Alector Ribeiro <sup>b,c,d</sup>, Xavier Font <sup>b,e</sup>, and Anna S. Mattila <sup>f</sup>

<sup>a</sup>Faculty of Economics, University of Valencia, Valencia, Spain; <sup>b</sup>School of Hospitality and Tourism Management, University of Surrey, Guildford UK; <sup>c</sup>School of Tourism and Hospitality, University of Johannesburg, Johannesburg, South Africa; <sup>d</sup>Research Centre for Tourism, Sustainability and Wellbeing (Cinturs), Faculty of Economics, University of Algarve, Faro, Portugal; <sup>e</sup>Department of Business and Economics, UiT the Arctic University of Norway, Tromsø, Norway; <sup>f</sup>School of Hospitality Management, The Pennsylvania State University, University Park, Pennsylvania, USA

## ABSTRACT

While recent research on sustainability communication demonstrates the relevance of message framing, research on the effects of message framing on consumers' emotions is scant. Using the Stimulus-Organism-Response (S-O-R) framework, this paper examines the impact of environmental advertisements (stimuli) on two discrete emotions – hope and guilt – (organism) and how these emotions influence consumers' behavioral intentions (responses). Relying on the prospect theory, this study focuses on positive (gain) and negative (loss) frames. Study 1 shows that, in the context of Corporate Social Responsibility (CSR), a gain message elicits hope while a loss-message triggers guilt. Study 2 shows that both emotions positively influence consumers' attitudes toward the cause; however, only hope affects attitude toward the company. Attitudes toward the cause and the company, in turn, influence consumers' behavioral intentions.

虽然最近关于可持续性传播的研究证明了信息框架的相关性，但关于信息框架对消费者情绪的影响的研究却很少。利用刺激-有机体反应 (S-O-R) 框架，本文考察了环境广告 (刺激) 对两种离散情绪——希望和愧疚 (有机体) 的影响，以及这些情绪如何影响消费者的行为意图 (反应)。基于前景理论，本研究主要关注正 (增益) 和负 (损耗) 帧。研究1表明，在企业社会责任 (CSR) 的背景下，收益信息引发希望，而损失信息引发愧疚。研究2表明，两种情绪都会积极影响消费者对原因的态度；然而，只有希望会影响人们对公司的态度。对事业和公司的态度反过来会影响消费者的行为意图。

## KEYWORDS

Message framing; emotions; environmental behavior; experimental design; stimulus-organism-response framework; prospect theory

## Introduction

Individuals and companies are increasingly coming under pressure to exhibit responsible behaviors (Ettinger et al., 2021; White et al., 2019), thus making Corporate Social Responsibility (CSR) more important than ever (DiRusso & Myrick, 2021; Vitell, 2015). Not surprisingly, research on CSR in the hospitality context has received considerable attention over the last decade (García de Los Salmones et al., 2021; Grazzini et al., 2018; Guzzo et al., 2020; Qian et al., 2021; Rhou & Singal, 2020; Xu & Jeong, 2019). Environmental

**CONTACT** Manuel Alector Ribeiro  [m.ribeiro@surrey.ac.uk](mailto:m.ribeiro@surrey.ac.uk)  School of Hospitality and Tourism Management, University of Surrey, Guildford, UK

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CSR, and its impact on consumers, are among the dominant themes in the hospitality literature (for a review, see, Rhou & Singal, 2020). Given the importance of climate change, which is challenging humanity (White et al., 2019), environmental communication campaigns aim to encourage pro-environmental behaviors (Chi et al., 2021; Grazzini et al., 2018). In this paper, we examine how companies can effectively frame sustainability messages to increase consumer participation in pro-environmental activities.

Kahneman and Tversky (1979) refer to framing as the presentation of messages in terms of positive gains or negative losses. However, research findings about the effectiveness of the two frames (gain vs. loss) are mixed (Homar & Cvelbar, 2021). For example, while gain-framed carbon offsetting options for travelers are more effective than loss-framed messages (Chi et al., 2021), gain-framed and loss-framed messages result in similar levels of perceived CSR, food waste reduction intention and re-patronage intentions in a restaurant context (Huang & Liu, 2020). This suggests the existence of affective, as well as contextual, mediators and moderators that might influence the persuasion outcomes of these frames (Nabi et al., 2018; Roeser, 2012). In this paper, we examine emotions as a potential mediator.

There is a notable lack of hospitality research on message framing and emotions. Using the Stimulus-Organism-Response (S-O-R) framework (Mehrabian & Russell, 1974) and prospect theory (Kahneman & Tversky, 1979), we examine the effect of message framing (stimuli) on consumers' emotions (organism) and subsequent evaluations (responses). Study 1 investigates the effectiveness of message framing (gain vs. loss) in evoking two discrete emotions (hope and guilt) in the context of CSR advertising. Study 2 examines the impacts of hope and guilt on: i) consumers' attitudes toward the cause and the company; and ii) consumers' behavioral intentions.

## Literature review and research framework

### *CSR message framing*

Previous research shows that environmental CSR communications influence company image and profitability (Du et al., 2010; Vitell, 2015). A systematic review of studies investigating CSR communications in the hospitality industry highlights a need to understand the effects of environmental messages on consumer responses (Table 1). The main theoretical framework used for message framing is the prospect theory (Grazzini et al., 2018; Huang et al., 2021; Kim & Kim, 2014; Randle et al., 2019; Topcuoglu et al., 2022). However, past research has given mixed results. In the context of online accommodation bookings, Randle et al. (2019) find that negatively framed CSR messages are more effective than positively framed messages. Kim and Kim (2014) find that positively framed messages are more effective in the context of green hotels. Other studies do not find significant differences between gain-framed and loss-framed messages, such as Huang et al.'s (2021) study on food waste reduction intentions and Topcuoglu et al.'s (2022) research on hotel customers' green brand image perceptions and behavioral intentions. Given these mixed findings, further research in framing effects is warranted.

Previous hospitality research on environmental CSR communication has mainly focused on five areas: i) consumers' attitudes toward the company (García de Los Salmones et al., 2021; Line et al., 2016); ii) visiting intentions (Kim & Kim, 2014; Xu & Jeong, 2019); iii)

**Table 1.** Studies on environmental CSR communication in the hospitality industry.

Authors	CSR communication topic	Theoretical background	Dependent variables	Methodology	Research application	Main findings
Kim and Kim (2014)	Effects of message framing and source credibility on hotel customers' attitudes, behavioral intentions, attention, and environmentally friendly activities	Prospect theory	Attitude, visit intention, environmentally friendly activities	2 (message frame: positive vs. negative) x 2 (type of source: credible vs. noncredible) between-subject design	Online survey with panel members using 4 printed messages for a fictitious hotel	Messages from a credible source that are positively framed led to the most positive attitudes toward the messages themselves, visit intention, and environmentally friendly activities.
Line et al. (2016)	The effect of message construals on consumers' attitudes toward green restaurants	Construal level theory, information processing theory	Attitude to the company	2 (temporal: current vs. future benefits) x 2 (social: in-group vs. outgroup benefits) x 2 (spatial: local vs. global benefits)	Scenario manipulations in electronic survey, MTurk for data collection.	Consumers process information differently according to variations in the construals of a company's sustainability message.
Grazzini et al. (2018)	Message framing (gain vs. loss) influences recycling of hotel guests	Prospect theory, construal level theory and social cognitive theory	Perceived self-efficacy, recycling intentions	Field experiment and lab experiment: Gain vs. loss frame messages; Abstract vs. concrete messages	Field study conducted in one hotel of a specific country. Convenience sample in the laboratory study.	Hotel guests are more likely to engage in recycling behavior when a concrete message is paired with a loss-framed message because of a greater perceived self-efficacy.
Randle et al. (2019)	How different presentations of cause-related CSR initiatives affect the choice of holiday accommodation bookings	Prospect theory	Community involvement, pro-environmental attitude	State choice experiment in the context of online holiday accommodation purchases	Online self-completion questionnaire with 12 choice sets.	Overall, negatively-framed CSR messages emerge as more effective.
Dhanesh and Nekmat (2019)	How issue involvement and positive affect are related to attitude and behavioral intention in the context of episodically and thematically framed CSR messages	Attribution and exemplification theory, elaboration likelihood model	Positive affect, attitude toward organization, behavioral intention	After reading information about the fictitious company a U.S. online survey was conducted.	A fictitious food and beverages company so that prior knowledge and reputation of a real company would not influence respondents' evaluations.	Issue involvement was positively correlated with positive affect and, consequently, with attitude and behavioral intention.

(Continued)



Table 1. (Continued).

Authors	CSR communication topic	Theoretical background	Dependent variables	Methodology	Research application	Main findings
Xu and Jeong (2019)	Attribute-based vs. benefit-based appeal messages	Construal level theory	Attitude and visiting intention toward green restaurants	2 (messages: attribute-based vs. benefit-based) x 2 (food-focused vs. environment-focused green practices) x 2 (restaurants: fast casual vs. fine dining) experimental design	Green practices in restaurants (environment-focused green practices vs. food-focused types of restaurants and different dining vs. fast casual dining). MTurk for data collection.	Benefit-based messages are generally more persuasive than attribute-based messages in green restaurant advertisements.
Huang and Liu (2020)	Effectiveness of donation appeals in hospitality CSR marketing	Visual design literature	Brand trust, donation intention, brand loyalty	2 (message framing: warmth-focused vs. competence-focused) x 2 (typeface: handwritten vs. machine-written)	U.S. adult consumers recruited through MTurk.	Donation appeals featuring warmth-focused messages/handwritten typeface and competence-focused messages/machine-written typeface lead to higher donation intention and brand loyalty.
Kapoor et al. (2021)	Effects of message appeal and message source on the perceived environmental CSR and the intention to stay at the eco-friendly hotel.	McGuire's communication-persuasion matrix	Intention to stay at the eco-friendly hotel and perceived environmental CSR	3 studies using experimental design: Message appeal (sensual vs. guilt) x message source (hotel vs. influencer)	A fictitious hotel brand name using Instagram as study context: Prolific Academic for data collection.	Sustainability messages with the sensual (vs. guilt) appeal are more persuasive when the eco-friendly hotel (vs. social media influencer) posts it on social media.
García de Los Salmones et al. (2021)	Effectiveness of a CSR communication on Facebook by the hospitality industry (hotel)	Affect Transfer Hypothesis (ATH)	Improvement of the attitude toward the company, attitude toward the post, intention to share content	Stimulus-based method about an environmental initiative (i.e., fictitious post) before respondents answered a questionnaire – structural equations model	Quantitative study based on a structured questionnaire using a fictitious post by a hotel chain about an environmental initiative.	The intention to share a post about an environmental initiative is explained by both the attitude toward the company and the attitude toward the information.
Topcuoglu et al. (2022)	Effects of green message types (abstract/concrete and gain/loss frame) on hotel customers' green brand image perceptions and behavioral intentions.	Information processing theory, prospect theory	Brand image, revisit intention, WOM, intention to reuse towel	2 (green message abstractness: abstract vs. concrete) x 2 (green message framing: gain vs. loss)	A convenience sample of U.S. adults collected by Qualtrics.	Hotel green message effectiveness is influenced not by the positive or negative aspects but the general or specific aspect of the message.

(Continued)

**Table 1. (Continued).**

Authors	CSR communication topic	Theoretical background	Dependent variables	Methodology	Research application	Main findings
Huang et al. (2021)	How message framing strategies impact buffet diners' food waste	Prospect theory, construal level theory, CSR literature	Perceived CSR, food waste reduction intention, repatronage intention	Three experimental studies: study 1 (loss-framed vs. gain-framed vs. no message); studies 2 and 3 (message framing and point of reference)	Consumers recruited via MTurk. Participants had buffet restaurant dining experience within the prior 12 months.	When the point of reference is the environment (vs. self-referencing or to others), gain-framed and loss-framed messages produce no significant difference in customers' responses.

recycling intentions (Grazzini et al., 2018); iv) food waste reduction intentions (Huang et al., 2021); and v) donation intentions (Huang & Liu, 2020). Dhanesh and Nekmat (2019, p. 30) state that:

Most research on the effect of message frames on attitudes and behavioral intentions has focused on cognitive processes rather than affective processes. Findings of these studies bolster the emergent body of research that examines the role of affect in evaluating message-framing outcomes.

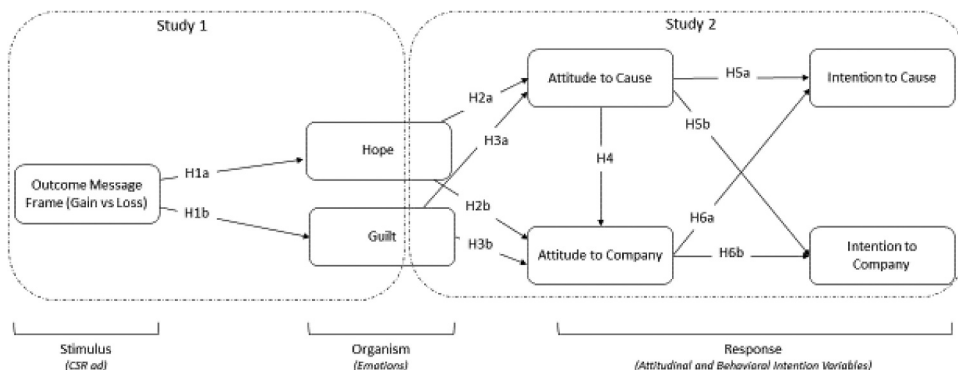
In summary, we identify the following gaps in CSR communication studies in the hospitality industry: i) a lack of clarity on which is better, positive or negative message framing, and ii) a lack of research on consumers' emotional responses to CSR communication.

### Research framework: stimulus-organism-response (S-O-R)

In this study, we use the Stimulus-Organism-Response (S-O-R) framework as a theoretical lens (Mehrabian & Russell, 1974). We posit that exposure to a CSR advertisement induces discrete emotions (i.e., of hope or guilt), which in turn lead to attitudinal and behavioral responses, i.e., consistent with the framework, an advert (stimulus) leads to an emotion (organism), which leads to a behavior (response). Specifically, drawing on the prospect theory (Kahneman & Tversky, 1979), this study investigates the role of loss or gain-framing in CSR messages and its effect on consumers' responses. Our conceptual model is shown in Figure 1.

### Stimulus: message framing in CSR advertising

Message framing refers to a technique whereby objectively equivalent information is described in different ways to elicit distinct responses and choices from audiences by making a specific aspect of a perceived reality more pertinent (Segev et al., 2015). Framing has the potential to influence behavioral outcomes via emotions, yet message framing in CSR communications remains under-researched (Han et al., 2019; Overton, 2018). Messages can be positively or negatively framed (Meyers-Levy & Maheswaran, 2004;



**Figure 1.** Conceptual framework for the effect of CSR outcome message frame (gain vs. loss) on consumers' emotions, attitudes and behavioral intentions.

Segev et al., 2015). Those that are positively framed stress either the benefits to be gained or the negative consequences avoided (e.g., “If you reuse towels, you conserve natural resources.”). Negatively framed messages stress either the negative consequences to be incurred or the benefits foregone (e.g., “If you do not reuse towels, natural resources will not be conserved.”).

According to the prospect theory (Kahneman & Tversky, 1979), loss-framed (negative) messages are more effective at encouraging behaviors that involve risk, while gain-framed (positive) messages are more effective at encouraging cautious behaviors (Loroz, 2007; Segev et al., 2015). As most sustainable behaviors (for example, using reusable coffee cups) can be classified as low-risk and preventive, the prospect theory suggests that gain-framed messages might be more effective in environmental communications (Loroz, 2007).

### **Organism: emotions in response to CSR advertising**

To better understand the effectiveness of CSR advertising, it is important to consider the role of emotions. Previous advertising research has shown that affect mediates the relationship between cognition and behavior (Holbrook & Batra, 1987; Vakratsas & Ambler, 1999), while Poels and Dewitte (2019) indicate that there is a paucity of research on discrete emotions.

In CSR advertising, understanding emotions is important as emotions can influence consumers' attitudes toward the cause and the company (Lu, 2016). Emotions clearly influence people's environmental attitudes and behaviors (Nabi et al., 2018), and they help generate a sense of urgency regarding the consequences of climate change, which are often distant and, therefore, somewhat abstract to the individual (Bilandzic et al., 2017).

### **Effects of message framing on hope and guilt**

Previous research suggests that hope and guilt are particularly relevant within the context of CSR advertising (Bilandzic et al., 2017). Hope is a future-oriented, discrete emotion (Winterich & Haws, 2011) induced by cognitive appraisal of an uncertain, goal-congruent future result that is important to the individual (Chadwick, 2015). Guilt arises when a person believes himself to have engaged in morally deficient behaviors; even more so if such behaviors have harmed others (Kapoor et al., 2021; Lazarus, 1991).

A gain-framed message emphasizes the positive consequences of an (in)action while a loss-framed message highlights the negative consequences of an (in)action (Segev et al., 2015). As gain-framed messages highlight the potentially positive outcomes of an action, or omission to act, they are likely to evoke positive emotions, particularly hope. In the context of CSR communications, Bilandzic et al. (2017) show that a positive, gain-framed message (i.e., one that outlines the desirable effects of engaging in climate protection) generates hope, while a loss-framed message (i.e., one that outlines the undesirable effects of not engaging in climate protection) decreases feelings of hope while strengthening feelings of guilt and fear. Similarly, for climate change, Nabi et al. (2018) show that gain-framed (vs. loss-framed) messages induce hope, while loss-framed (vs. gain-framed) messages generate fear. Taken together, we posit the following predictions:

*Hypothesis 1a: Gain-framed messages elicit higher levels of hope than loss-framed messages.*



*Hypothesis 1b: Loss-framed messages elicit higher levels of guilt than gain-framed messages.*

## **Response: effects on attitude and behavioral intentions**

### **Effects of hope and guilt on attitudes**

Empirical evidence is mixed regarding the effects of hope and guilt on consumers' attitudes. Ojala (2012) establishes that a constructive type of hope on climate change issues, which is not based on denial, significantly increases engagement in pro-environmental behavior. Similarly, Nabi et al. (2018) find hope to be a key mediator between gain-framed messages and consumers' attitudes toward climate change policies. Chadwick (2015) demonstrates that hope increases a person's interest in climate protection but does not have a significant effect on that person's behavioral intentions. Conversely, Bilandzic et al. (2017) conclude that hope has a negative effect on behavioral intentions as gain-framed messages reduce an individual's willingness to make sacrifices for a climate change cause. They found that loss-framed messages have a positive influence on an individual's willingness to make sacrifices, due to higher levels of fear and guilt. Considering the mixed results, based on the findings of Ojala (2012) and Nabi et al. (2018), we suggest that hope positively influences consumers' evaluations and, based on Bilandzic et al. (2017), we suggest that guilt also positively influences consumers' evaluations. Consequently, the following hypotheses are posited:

*Hypothesis 2: Hope positively influences: (a) consumers' attitudes toward the environmental cause, and (b) consumers' attitudes toward the company.*

*Hypothesis 3: Guilt positively influences: (a) consumers' attitudes toward the environmental cause, and (b) consumers' attitudes toward the company.*

### **Effects of attitude on behavioral intentions**

Behavioral intentions are an individual's readiness to perform the behavior and, as such, encompass an individual's motivations (Ajzen, 1991). Previous studies in the CSR context (Dhanesh & Nekmat, 2019; Grau & Folse, 2007; Inoue et al., 2017; Johnson-Young & Magee, 2019; Overton, 2018) have called for further research into demonstrating a direct link between attitudinal and behavioral intention variables.

In a meta-analysis of behavioral intentions toward environmentally friendly initiatives in the hospitality sector, attitudes are considered to be one of the consumers' internalized perceptions (Gao et al., 2016). García de Los Salmones et al. (2021) find that an individual's attitude toward a social media post (e.g., attitude toward the cause) has a double influence: first, it improves the individual's attitude toward the company and, second, it increases their behavioral intentions to act (e.g., their intention to share the post). Ertz et al. (2017) show that pro-environmental attitudes have a significant influence on behavioral intentions toward reusable containers. Wang and Anderson (2011) find that brand attitude acts as a mediator between an individual's assessment of CSR practices and their purchase intentions. Dhanesh and Nekmat (2019) demonstrate that attitude toward an organization

positively influences an individual's behavioral intentions toward that organization. Based on the outlined empirical findings, it is proposed that:

*Hypothesis 4: A favorable attitude toward the cause has a positive impact on attitude toward the company.*

*Hypothesis 5: A favorable attitude toward the cause has a positive impact on behavioral intentions toward: (a) the cause, and (b) the company.*

*Hypothesis 6: A favorable attitude toward the company has a positive impact on behavioral intentions toward: (a) the cause, and (b) the company.*

## Method

Given the numerous empirical challenges in CSR research, it was crucial to conduct experiments to establish a causal relationship between message framing, emotions, attitudes, and behaviors (Shadish et al., 2002). We used two sequential studies, as discussed later. In Study 1, we analyzed the direct effects of message framing (gain vs. loss) on hope and guilt (Hypotheses 1a and 1b). In Study 2, we examined the impacts of hope and guilt on consumer attitudes toward the environmental cause and toward the company (Hypotheses 2a, 2b, 3a and 3b). In addition, we examined the effect of attitude toward the cause on attitude toward the company (Hypothesis 4). Lastly, we analyzed the impact of the two attitudinal measures (toward the cause and toward the company) on behavioral intentions toward the cause and toward the company (Hypotheses 5a, 5b, 6a and 6b).

### **Study 1: message framing in CSR advertising**

#### **Design and sampling**

This study adopted a single-factor, between-subjects design (message framing: gain vs. loss). Participants were randomly assigned to one of the two experimental conditions. Participants were exposed to a social media post (Figure 2) that promoted reusable coffee cups (RCCs). We used a fictitious company to mitigate any potentially confounding effects of previous brand experiences (Geuens & De Pelsmacker, 2017) and we also controlled for gender, age, and level of education (Ribeiro et al., 2022).

Respondents were recruited online via Amazon Mechanical Turk (MTurk) and offered a small monetary compensation for completing a survey. Various CSR studies, published in reputable journals, have used this platform (e.g., Xu & Jeong, 2019; Zhang & Yang, 2019). Prior research suggests that online panels allow for fast data collection and participants tend to be more diverse than other sampling methods, such as college student samples (Buhrmester et al., 2011).

A total of 978 participants took part in Study 1. We removed responses of 20 participants who failed the attention check (i.e., "The Facebook post I just read was primarily about the following topic: Disposable and reusable coffee cups; Advertisement for a new product from Atlas; None of the above"). A one-way ANOVA showed that there were no significant differences between the two conditions (loss- or gain-framed message) in terms of age

**Gain Message Frame****Loss Message Frame**

**Figure 2.** CSR social media stimuli.

( $M_{\text{age}} = 38.1$ ), gender (male: 50.7%), education (undergraduate degree: 26.7%) and ethnicity (non-Hispanic white: 73.4%). Thus, subsample equivalence was met as the two samples were homogeneous and comparable (Geuens & De Pelsmacker, 2017).

### Measures

Following their exposure to the CSR message, the participants were asked to rate their emotional responses to the ad. Hope was measured using three items (optimistic, encouraged, and hopeful), adapted from Richins (1997). Guilt was measured using three items (remorseful, guilty, and conscience-stricken), adapted from Bilandzic and Sukalla (2019). All the responses were rated on seven-point Likert-type scales (1 = *strongly disagree*; 7 = *strongly agree*). To assess perceived message framing (i.e., potential loss or potential gain of the message), the 958 remaining participants were then asked to rate the extent to which they believed: “The Facebook post I just saw included information that primarily focused on gains or losses (1 = potential losses; 7 = potential gains).” Lastly, demographic information was collected.

### Results

*Manipulation check:* A one-way ANOVA on the manipulation check question indicated that the manipulation was successful; participants in the loss-framed message condition revealed having felt potential loss, compared to those in the gain-framed message condition ( $M_{\text{potentialLoss}} = 1.61$ ,  $SD = 0.727$  vs.  $M_{\text{potentialGain}} = 6.30$ ,  $SD = .736$ ;  $F(1, 955) = 9703$ ,  $p < .001$ ,  $\eta^2 = 0.910$ ). This suggested the manipulation worked as intended.

*Hypothesis testing:* We predicted that the gain-framed message would elicit hope (H1a), while the loss-framed message would induce guilt (H1b). To test H1a and H1b, an ordinary least square (OLS) regression was undertaken with message framing (gain vs. loss) as the independent variable and with hope and guilt as dependent variables, while controlling for age, gender and level of education. To test H1a we used a dummy coding message frame (gain = 1; loss = 0). To test H1b the dummy code was swapped (gain = 0; loss = 1; Hayes & Preacher, 2014). The results indicated that the gain-framed message elicited hope ( $\beta = 0.47$ ,  $t = 26.63$ ,  $p < .001$ ), while the loss-framed message triggered feelings of guilt ( $\beta = 0.27$ ,  $t = 17.03$ ,  $p < .001$ ). Taken together, these results provide support for H1a and H1b.

## **Study 2: effects of emotions on consumer responses**

### **Design and sampling**

As in Study 1, a between-subjects design (message framing: gain vs. loss) was adopted, and participants were randomly assigned to one of the two experimental conditions. A total of 472 participants were recruited using MTurk and offered a small monetary compensation for completing a survey. Six responses were removed due to failed attention checks resulting in a final sample of 466 participants (Gain 234 and Loss 232). Similar to Study 1, a one-way ANOVA showed that there were no significant differences between the two groups in terms of age ( $M_{\text{age}} = 39.9$ ), gender (male: 50.6%; female: 48.7%; prefer not say: 0.7%), education (undergraduate degree: 43.8%; some college degree = 26.7%; high school degree or less = 11.8%; postgraduate degree = 10.2%, other: 7.5%) and ethnicity (non-Hispanic white: 73.6%, African or Black American = 11.3%, Asian = 6.7, Hispanics = 6%; other: 2.4%).

### **Measures**

After their exposure to the same message frames as in Study 1 (see, Figure 2), participants were asked to indicate their emotional responses to six items (three related to hope and three to guilt) using the same Likert-type scales (see, Table 2). Attitude toward the environmental cause was measured on a 7-point Likert scale using three items adapted from Johnson-Young and Magee (2019). Attitude toward the company was measured using four items, following the semantic differential scale adapted from K. Kim et al. (2015). The items used to measure behavioral intention toward the cause were adapted from Price and Arnould (1999); the questions measured the likelihood of the participants to use RCCs. A 2-item scale was used to measure behavioral intention toward the company (Price & Arnould, 1999; Putrevu & Lord, 1994). Finally, the last section of the survey contained demographic questions.

As a cross-sectional survey was used to collect the data, common method bias (CMB) needed to be ruled out. We used Harman's single factor test, with all 17 of the items loaded into a single, unrotated, exploratory factor. The results demonstrated that 41.42% of the variance of the items could be explained through a single factor, suggesting that common method variance (CMV) was not a pervasive issue in our study (Jordan & Troth, 2020; Ribeiro et al., 2021).

**Table 2.** Descriptive Statistics and results of the measurement model for Study 2.

Constructs and indicators	Mean <sup>a</sup>	SD	Std. $\beta^b$	t-value
Hope				
optimistic	4.57	1.697	0.926***	N/A
encouraged	4.90	1.720	0.883***	41.047
hopeful	4.76	1.749	0.912***	45.802
Guilt				
remorseful	3.61	1.902	0.859***	N/A
guilty	3.61	1.944	0.905***	34.987
conscience-stricken	4.03	1.908	0.842***	32.216
Attitude to Cause				
I am concerned about the use of disposable cups for beverages like coffee	5.12	1.659	0.859***	N/A
The campaign about reducing the use of disposable cups is very important to me.	4.94	1.767	0.905***	39.085
It is important to assist in supporting the cause of reducing the use of disposable cups.	5.37	1.575	0.842***	39.220
Attitude to Company				
... negative – positive	5.91	1.246	0.931***	N/A
... good – bad	5.98	1.183	0.922***	52.114
... unfavorable – favorable	5.89	1.265	0.934***	54.595
... not likeable – likeable	5.95	1.277	0.936***	55.042
Behavior to Cause				
... using reusable coffee cups now?	5.41	1.625	0.825***	N/A
... recommending using reusable coffee cups to family and friends?	5.29	1.710	0.968***	33.273
Behavior to Company				
I will definitely try an Atlas coffee shop	5.05	1.451	0.891***	N/A
I would recommend this coffee shop to others	5.02	1.443	0.918***	36.760

Note: <sup>a</sup>All items measured on 7-points scales. <sup>b</sup> Std.  $\beta$  = Standardized factor loadings.

\*\*\* $p < 0.001$  level (Two-tailed).

N/A – In Amos, one loading has to be fixed to 1; hence, t-value cannot be calculated for this item.

Results of the measurement model:  $\chi^2 = 243.032$ ,  $df = 102$ ,  $\chi^2/df = 2.383$ , CFI = 0.991, TLI = 0.998, RMSEA = 0.038, SRMR = 0.035.

## Results

Before testing the structural model, a confirmatory factor analysis (CFA) was conducted following a two-step approach (Anderson & Gerbing, 1988). Results of the CFA (provided by IBM AMOS v27 software) indicated that the model showed a good fit to the data: chi-square ( $\chi^2 = 243.032$ ,  $df = 102$ ,  $\chi^2/df = 2.383$ ), comparative fit index (CFI) = 0.991, Tucker-Lewis index (TLI) = 0.998, root mean square error of approximation (RMSEA) = 0.038, standardized root mean square residual (SRMR) = 0.035 (Hu & Bentler, 1999), which demonstrates the accuracy of the model (Kline, 2016). As presented in Table 2, the factor loadings were higher than 0.80 and significant ( $p < .001$ ). Table 3 shows that the average variance extracted (AVE) exceeded the 0.50 cutoff value for all constructs and was higher

**Table 3.** Reliability and discriminant validity: Fornell and Larcker criterion.

	$\alpha$	CR	AVE	1	2	3	4	5	6
1. Hope	0.95	0.933	0.823	0.907					
2. Guilt	0.90	0.903	0.756	-0.045	0.869				
3. Attitude to Cause	0.96	0.925	0.805	0.441	0.422	0.897			
4. Attitude to Company	0.94	0.963	0.866	0.558	0.161	0.553	0.931		
5. Behavior to Cause	0.90	0.900	0.818	0.582	0.285	0.641	0.711	0.905	
6. Behavior to Company	0.92	0.894	0.809	0.409	0.312	0.786	0.542	0.644	0.899

Note:  $\alpha$  = Cronbach alpha; CR = composite reliability; AVE = average variance extracted. The bold elements in the diagonal matrix are the square root of the average variance extracted (AVE). Interconstruct correlations are shown off-diagonal. All correlations are significant at  $p < 0.001$  level

than the squared correlation between the constructs. These results provided evidence for both convergent and discriminant validity of all the constructs (Fornell & Larcker, 1981). Cronbach’s alpha and composite reliability (CR) values for all the constructs were greater than the recommended threshold of 0.70 (Table 3), which evidenced the reliability of the construct (Hair et al., 2019). Overall, these results revealed that the measurement model was adequate to assess the latent variables used in the study’s structural model.

After assessing the validity and reliability of the measurement model, the structural model was tested. Fit indices showed that the model fit the data reasonably well ( $\chi^2 = 285.131$ ,  $df = 109$ ,  $\chi^2/df = 2.616$ , CFI = 0.990, TLI = 0.975, RMSEA = 0.059, SRMR = 0.052; Hu & Bentler, 1999) and was strong enough to test the proposed hypotheses.

Table 4 shows the results of the structural model with standardized paths of the proposed relationships. The results indicate that eight out of the nine hypotheses are supported. Specifically, hope positively influences both attitude toward the cause ( $\beta = 0.48$ ,  $p < .001$ ) and attitude toward the company ( $\beta = 0.40$ ,  $p < .001$ ); thus, H3a and H3b are supported. Similarly, guilt significantly influences attitude toward the cause ( $\beta = 0.42$ ,  $p < .001$ ) but does not influence attitude toward the company ( $\beta = 0.02$ ,  $p > .05$ ). Thus, H4a is supported while H4b is rejected. Additionally, attitude toward the cause positively affects attitude toward the company ( $\beta = 0.37$ ,  $p < .001$ ) as well as behavioral intentions toward the cause ( $\beta = 0.70$ ,  $p < .001$ ) and the company ( $\beta = 0.64$ ,  $p < .001$ ); therefore, H5, H6a and H6b are supported. Lastly, attitude toward the company positively influences behavioral intentions toward the cause ( $\beta = 0.15$ ,  $p < .001$ ) and the company ( $\beta = .45$ ,  $p < .001$ ), lending support to H7a and H7b.

**Post hoc analysis**

Further analyses were performed to estimate separate structural models for each of the message frame conditions (gain and loss) to see if there were any substantive differences in their structural relationships (Vandenberg & Lance, 2000). A structural invariance test was performed to determine whether structural invariance existed in the model (emotions → attitudes → behaviors) when exposed to outcome message framing (i.e., gain and loss) in CSR advertising. A baseline (unconstrained) model with maximum Likelihood (ML) estimation was generated. The results of the baseline model (where all the loadings across the two message frames were constrained to be equivalent) demonstrated that the model fit

**Table 4.** Standardized regression weights for structural model.

Standardized hypothesized relationship	Std. Estimates	t-value	Result
H2a: Hope → Attitude to Cause	0.48***	16.922	Supported
H2b: Hope → Attitude to Company	0.40***	12.060	Supported
H3a: Guilt → Attitude to Cause	0.42***	14.315	Supported
H3b: Guilt → Attitude to Company	0.02 <sup>ns</sup>	0.719	Not Supported
H4: Attitude Cause → Attitude to Company	0.37***	10.205	Supported
H5a: Attitude Cause → Intention to Cause	0.70***	23.681	Supported
H5b: Attitude Cause → Intention to Company	0.64***	12.546	Supported
H6a: Attitude to Company → Intention to Cause	0.15***	5.526	Supported
H6b: Attitude to Company → Intention to Company	0.45***	14.382	Supported

Note: Ns = not significant. \*\*\* $p < 0.001$ . Variance Explained: R<sup>2</sup> Attitude to Cause = 0.39.

Explained variance:  
 R<sup>2</sup> Attitude to Cause = 0.39.  
 R<sup>2</sup> Attitude to Company = 0.45.  
 R<sup>2</sup> Intention to Cause = 0.73.  
 R<sup>2</sup> Intention to Company = 0.65

**Table 5.** Multigroup analysis of message framing in CSR advertising.

Relationships	Gain message framing $\beta$	Loss message framing $\beta$	$\Delta \beta$	Message framing difference $p$ value
Hope $\rightarrow$ Attitude to Cause	$\beta = 0.631^{***}$	$\beta = 0.349^{***}$	$\Delta \beta = .0282$	$p = .000$
Hope $\rightarrow$ Attitude to Company	$\beta = 0.587^{***}$	$\beta = 0.276^{***}$	$\Delta \beta = 0.310$	$p = .001$
Guilt $\rightarrow$ Attitude to Cause	$\beta = 0.225^{***}$	$\beta = 0.576^{***}$	$\Delta \beta = -0.352$	$p = .000$
Guilt $\rightarrow$ Attitude to Company	$\beta = 0.021^{ns}$	$\beta = 0.052^{ns}$	$\Delta \beta = -0.030$	$p = .676$
Attitude to Cause $\rightarrow$ Attitude to Company	$\beta = 0.213^{**}$	$\beta = 0.440^{***}$	$\Delta \beta = -0.226$	$p = .003$
Attitude to Cause $\rightarrow$ Behavior to Cause	$\beta = 0.820^{***}$	$\beta = 0.770^{***}$	$\Delta \beta = 0.050$	$p = .838$
Attitude to Cause $\rightarrow$ Behavior to Company	$\beta = 0.473^{***}$	$\beta = 0.373^{***}$	$\Delta \beta = 0.100$	$p = .474$
Attitude to Company $\rightarrow$ Behavior to Cause	$\beta = 0.090^{ns}$	$\beta = 0.114^*$	$\Delta \beta = -0.024$	$p = .956$
Attitude to Company $\rightarrow$ Behavior to Company	$\beta = 0.455^{***}$	$\beta = 0.501^{***}$	$\Delta \beta = -0.046$	$p = .497$

$\beta$  = Standardized Regression Coefficient;  $p$  = Statistical Significance;  $\Delta$  = Difference; \*  $p < 0.050$ ; \*\*  $p < 0.010$ ; \*\*\*  $p < 0.001$ ; ns = not significant

the data reasonably well ( $\chi^2 = 374.400$ ,  $df = 212$ ,  $\chi^2/df = 1.766$ ,  $p < .001$ , TLI = 0.976; CFI = 0.981; RMSEA = 0.041; SRMR = 0.065). As summarized in Table 5, the baseline model, where paths were allowed to vary freely (i.e., gain and loss), was compared to nine constrained models in which the paths were equally constrained in sequence across the two message framing groups. As anticipated, results of the  $\chi^2$  difference test revealed that the two message framing groups varied at the model level ( $\Delta\chi^2(9) = 62.213$ ,  $p < .001$ ), indicating that there were differences in the path relationships between gain and loss outcome message framing in CSR advertising.

To understand which path estimates varied between the two message framing conditions, we calculated the statistical differences. The results, depicted in Table 5, demonstrate that the effect of hope on both attitude toward the cause and attitude toward the company was stronger in the gain (vs. loss) message condition. Conversely, the effect of guilt on attitude toward the cause was stronger in the loss (vs. gain) message condition. However, the effect of guilt on attitude toward the company did not differ across the two framing conditions. In addition, the positive effect of attitude toward the cause on company attitude was stronger in the loss (vs. gain) message condition. However, the effect of attitude toward the cause on behavioral intention toward the cause and toward the company did not differ between the two message framed conditions. Lastly, the effect of attitude toward the company on behavioral intention toward the cause was significant only in the loss message condition.

## Conclusions and implications

The contributions of this paper are two-fold: first, our study demonstrates how message framing elicits two discrete emotions of hope and guilt; second, we examine how such emotions influence consumer attitudes and behavioral intentions toward the cause and the company. This study adds to the body of literature on the effects of discrete emotions on consumer responses to advertising stimuli (Poels & Dewitte, 2019), particularly in the context of message framing of CSR ads (Segev et al., 2015).

## **Theoretical implications**

Research on emotions, in the context of message framing, has only emerged relatively recently and remains rather atheoretical (Nabi et al., 2018). Prior research in climate change communication highlighted the relevance of message framing and emotions when examining perceived threats and people's willingness to make sacrifices for the environment (Bilandzic et al., 2017; Nabi et al., 2018). However, previous hospitality research on environmental CSR communication has largely ignored consumers' emotional responses. In response to the call to examine the effectiveness of message framing strategies (Segev et al., 2015), there has been an increase in research on the impact of message framing on consumers' responses to CSR communication. However, the findings have been mixed. Several studies have suggested that negatively framed CSR messages are more effective (Grazzini et al., 2018; Randle et al., 2019), while others have concluded that positively framed messages lead to more positive evaluations (Kim & Kim, 2014).

This research offers two main contributions. First, to reconcile the mixed findings on message framing, we examine the impact of message framing on consumers' emotional responses (particularly, hope and guilt). Second, we demonstrate the relevance of the S-O-R framework in the context of CSR communications, supporting the influence of advertising stimuli (i.e., message framing) on the organism (i.e., consumers' emotions), which in turn influences consumers' responses (i.e., their attitudes and behavioral intentions).

Congruent with prior research in climate change communication (Bilandzic et al., 2017; Nabi et al., 2018), our findings from Study 1 show that message framing (gain vs. loss) induces hope and guilt (respectively) in the context of pro-environmental communications. We further demonstrate that loss-framed messages generate higher levels of negative emotions, such as guilt (Nabi et al., 2018), and that guilt is linked to consumers' attitudes toward the cause; this finding is consistent with prior research that shows the power of guilt at enhancing consumer participation in CSR initiatives (Bilandzic et al., 2017). Feelings of hope also influence consumers' attitude toward the CSR cause (Ahn, 2021). However, only hope has a positive effect on attitude toward the company. Guilt is triggered when an individual perceives him/herself to have engaged in a moral transgression (Lazarus, 1991) and, therefore, it is not surprising that guilt fails to influence consumer attitudes toward the company.

The impact of framing on environmental attitudes and behaviors remains inconclusive (Homar & Cvelbar, 2021). The evidence is mixed in relation to whether CSR messaging influences attitudinal, as well as behavioral, outcomes (Dhanesh & Nekmat, 2019; Grau & Folse, 2007; Inoue et al., 2017; Johnson-Young & Magee, 2019; Overton, 2018). Prior research suggests that consumers' perceptions of a company's CSR activities have a halo effect (Albus & Ro, 2017). A positive attitude toward a cause improves a consumer's attitude toward the company. Consistent with prior studies (García de Los Salmones et al., 2021), we demonstrate that favorable attitudes toward a CSR cause lead to positive attitudes toward the company. Additionally, our research shows the direct effects of attitudinal responses to behavioral intentions in the context of CSR. Specifically, consumers' attitudes toward both the CSR cause and the company have a positive effect on consumers' behavioral intentions (Ojala, 2012).



## **Practical implications**

The study provides practical insights for the hospitality industry to enhance the effectiveness of their CSR communication. As evidenced by National Geographic's Planet or Plastic campaign, it is relatively easy to incorporate cues inducing discrete emotions into CSR messages (DiRusso & Myrick, 2021). However, as only hope-inducing messages (i.e., gain-framed messages) have a positive effect on consumers' attitudes toward a company, hospitality firms are advised to stay away from loss-framed CSR messaging. To induce feelings of hope, companies can either highlight the positive outcomes of their CSR initiative or highlight the negative consequences avoided, that have resulted from the target behavior. Headlines such as "one reusable cup in your hand = 1,000 single-use cups not in landfill" or "reusable coffee saves our sea life," supported by evidence, can be used by companies to reinforce the positive impacts that their customers are having, or the negative impacts they are avoiding, with their purchase.

## **Limitations and avenues for future research**

The use of behavioral intention variables, instead of measuring actual behavior, is a limitation. There is a gap between intentions and actions in the CSR context, which is likely due to two reasons. First, actual purchase behaviors are more complex than intentions because numerous factors (e.g., price, situational circumstances) play a role in the decision-making process (Inoue et al., 2017). Second, topics such as responsible behaviors, which are loaded with societal expectations, create a social desirability bias whereby participants respond in accordance with general expectations (Babakhani et al., 2017). Consequently, future research in this realm should use behavioral data to validate previous findings on behavioral intentions. In addition, future research should investigate subjective norms and perceived behavioral controls, both of which are likely to have a major influence on behavioral intentions and actions. Lastly, this study used two online experiments to test the proposed hypotheses. Further research could combine lab experiments (i.e., electrodermal, facial reader recognition) with field experiments to examine the influence of CSR stimuli on consumers' emotions (e.g., Gómez-Carmona et al., 2021), attitudes, and behaviors.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).

## **Funding**

This work is partially financed by Portuguese Funds provided by FCT – Fundação para a Ciência e a Tecnologia (Foundation for Science and Technology, Portugal) through project UIDB/04020/2020.

## **ORCID**

Luisa Andreu  <http://orcid.org/0000-0001-8852-6506>

Manuel Alector Ribeiro  <http://orcid.org/0000-0003-4484-1082>

Xavier Font  <http://orcid.org/0000-0003-1770-6213>

Anna S. Mattila  <http://orcid.org/0000-0001-8872-5521>

## References

- Ahn, J. (2021). Role of hope and compulsion for CSR activities in hotel customers' engagement. *Current Issues in Tourism*, 24(14), 1958–1964. <https://doi.org/10.1080/13683500.2020.1806797>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Albus, H., & Ro, H. (2017). Corporate social responsibility: The effect of green practices in a service recovery. *Journal of Hospitality & Tourism Research*, 41(1), 41–65. <https://doi.org/10.1177/1096348013515915>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Babakhani, N., Ritchie, B. W., & Dolnicar, S. (2017). Improving carbon offsetting appeals in online airplane ticket purchasing: Testing new messages, and using new test methods. *Journal of Sustainable Tourism*, 25(7), 955–969. <https://doi.org/10.1080/09669582.2016.1257013>
- Bilandzic, H., Kalch, A., & Soentgen, J. (2017). Effects of goal framing and emotions on perceived threat and willingness to sacrifice for climate change. *Science Communication*, 39(4), 466–491. <https://doi.org/10.1177/1075547017718553>
- Bilandzic, H., & Sukalla, F. (2019). The role of fictional film exposure and narrative engagement for personal norms, guilt and intentions to protect the climate. *Environmental Communication*, 13(8), 1069–1086. <https://doi.org/10.1080/17524032.2019.1575259>
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3–5. <https://doi.org/10.1177/1745691610393980>
- Chadwick, A. E. (2015). Toward a theory of persuasive hope: Effects of cognitive appraisals, hope appeals, and hope in the context of climate change. *Health Communication*, 30(6), 598–611. <https://doi.org/10.1080/10410236.2014.916777>
- Chi, O. H., Denton, G., & Gursoy, D. (2021). Interactive effects of message framing and information content on carbon offsetting behaviors. *Tourism Management*, 83, 104244. <https://doi.org/10.1016/j.tourman.2020.104244>
- Dhanesh, G. S., & Nekmat, E. (2019). Facts over stories for involved publics: Framing effects in CSR messaging and the roles of issue involvement, message elaboration, affect, and skepticism. *Management Communication Quarterly*, 33(1), 7–38. <https://doi.org/10.1177/0893318918793941>
- DiRusso, C., & Myrick, J. G. (2021). Sustainability in CSR messages on social media: How emotional framing and efficacy affect emotional response, memory and persuasion. *Environmental Communication*, 15(8), 1045–1060. <https://doi.org/10.1080/17524032.2021.1933120>
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, 12(1), 8–19. <https://doi.org/10.1111/j.1468-2370.2009.00276.x>
- Ertz, M., Huang, R., Jo, M. S., Karakas, F., & Sarigöllü, E. (2017). From single-use to multi-use: Study of consumers' behavior toward consumption of reusable containers. *Journal of Environmental Management*, 193, 334–344. <https://doi.org/10.1016/j.jenvman.2017.01.060>
- Ettinger, A., Grabner-Kräuter, S., Okazaki, S., & Terlutter, R. (2021). The desirability of CSR communication versus greenhushing in the hospitality industry: The customers' perspective. *Journal of Travel Research*, 60(3), 618–638. <https://doi.org/10.1177/0047287520930087>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 8(1), 39–50. <https://doi.org/10.1177/002224378101800104>

- Gao, Y. L., Mattila, A. S., & Lee, S. (2016). A meta-analysis of behavioral intentions for environment-friendly initiatives in hospitality research. *International Journal of Hospitality Management*, 54, 107–115. <https://doi.org/10.1016/j.ijhm.2016.01.010>
- García de Los Salmones, M. M., Herrero, A., & Martínez, P. (2021). CSR communication on Facebook: Attitude toward the company and intention to share. *International Journal of Contemporary Hospitality Management*, 33(4), 1391–1411. <https://doi.org/10.1108/IJCHM-09-2020-1054>
- Geuens, M., & De Pelsmacker, P. (2017). Planning and conducting experimental advertising research and questionnaire design. *Journal of Advertising*, 46(1), 83–100. <https://doi.org/10.1080/00913367.2016.1225233>
- Gómez-Carmona, D., Muñoz-Leiva, F., Liébana-Cabanillas, F., Nieto-Ruiz, A., Martínez-Fiestas, M., & Campoy, C. (2021). The effect of consumer concern for the environment, self-regulatory focus and message framing on green advertising effectiveness: An eye tracking study. *Environmental Communication*, 15(6), 813–841. <https://doi.org/10.1080/17524032.2021.1914701>
- Grau, S. L., & Folse, J. A. G. (2007). Cause-related marketing (CRM): The influence of donation proximity and message-framing cues on the less-involved consumer. *Journal of Advertising*, 36(4), 19–33. <https://doi.org/10.2753/JOA0091-3367360402>
- Grazzini, L., Rodrigo, P., Aiello, G., & Viglia, G. (2018). Loss or gain? The role of message framing in hotel guests' recycling behavior. *Journal of Sustainable Tourism*, 26(11), 1944–1966. <https://doi.org/10.1080/09669582.2018.1526294>
- Guzzo, R. F., Abbott, J., & Madera, J. M. (2020). A micro-level view of CSR: A hospitality management systematic literature review. *Cornell Hospitality Quarterly*, 61(3), 332–352. <https://doi.org/10.1177/1938965519892907>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning EMEA.
- Han, N. R., Baek, T. H., Yoon, S., & Kim, Y. (2019). Is that coffee mug smiling at me? How anthropomorphism impacts the effectiveness of desirability versus feasibility appeals in sustainability advertising. *Journal of Retailing and Consumer Services*, 51, 352–361. <https://doi.org/10.1016/j.jretconser.2019.06.020>
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67(3), 451–470. <https://doi.org/10.1111/bmsp.12028>
- Helmer, J. (2020). *The massive impact of your takeout coffee cup*. Retrieved from: <https://foodprint.org/blog/environmental-impact-coffee-cup/>
- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 14(3), 404–420. <https://doi.org/10.1086/209123>
- Homar, A. R., & Cvelbar, L. K. (2021). The effects of framing on environmental decisions: A systematic literature review. *Ecological Economics*, 183, 106950. <https://doi.org/10.1016/j.ecolecon.2021.106950>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huang, H., & Liu, S. Q. (2020). Donate to help combat COVID-19! How typeface affects the effectiveness of CSR marketing? *International Journal of Contemporary Hospitality Management*, 32(10), 3315–3333. <https://doi.org/10.1108/IJCHM-05-2020-0462>
- Huang, Y., Ma, E., & Wang, D. (2021). Message framing strategies, food waste prevention, and diners' repatronage intentions: The mediating role of corporate social responsibility. *Journal of Sustainable Tourism*, 29(10), 1694–1715. <https://doi.org/10.1080/09669582.2020.1867151>
- Inoue, Y., Funk, D. C., & McDonald, H. (2017). Predicting behavioral loyalty through corporate social responsibility: The mediating role of involvement and commitment. *Journal of Business Research*, 75, 46–56. <https://doi.org/10.1016/j.jbusres.2017.02.005>

- Johnson-Young, E., & Magee, R. G. (2019). The CSR paradox: When a social responsibility campaign can tarnish a brand. *Corporate Communications: An International Journal*, 24(1), 179–196. <https://doi.org/10.1108/CCIJ-08-2018-0090>
- Jordan, P. J., & Troth, A. C. (2020). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management*, 45(1), 3–14. <https://doi.org/10.1177/0312896219871976>
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292. <https://doi.org/10.2307/1914185>
- Kapoor, P. S., Balaji, M. S., & Jiang, Y. (2021). Effectiveness of sustainability communication on social media: Role of message appeal and message source. *International Journal of Contemporary Hospitality Management*, 33(3), 949–972. <https://doi.org/10.1108/IJCHM-09-2020-0974>
- Kim, K., Cheong, Y., & Lim, J. S. (2015). Choosing the right message for the right cause in social cause advertising: Type of social cause message, perceived company–cause fit and the persuasiveness of communication. *International Journal of Advertising*, 34(3), 473–494. <https://doi.org/10.1080/02650487.2015.1006081>
- Kim, S. B., & Kim, D. Y. (2014). The effects of message framing and source credibility on green messages in hotels. *Cornell Hospitality Quarterly*, 55(1), 64–75. <https://doi.org/10.1177/1938965513503400>
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford.
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
- Line, N. D., Hanks, L., & Zhang, L. (2016). Sustainability communication: The effect of message construals on consumers' attitudes toward green restaurants. *International Journal of Hospitality Management*, 57, 143–151. <https://doi.org/10.1016/j.ijhm.2016.07.001>
- Loroz, P. S. (2007). The interaction of message frames and reference points in prosocial persuasive appeals. *Psychology & Marketing*, 24(11), 1001–1023. <https://doi.org/10.1002/mar.20193>
- Lu, H. (2016). The effects of emotional appeals and gain versus loss framing in communicating sea star wasting disease. *Science Communication*, 38(2), 143–169. <https://doi.org/10.1177/1075547015619173>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
- Meyers-Levy, J., & Maheswaran, D. (2004). Exploring message framing outcomes when systematic, heuristic, or both types of processing occur. *Journal of Consumer Psychology*, 14(1–2), 159–167. [https://doi.org/10.1207/s15327663jcp1401&2\\_18](https://doi.org/10.1207/s15327663jcp1401&2_18)
- Nabi, R. L., Gustafson, A., & Jensen, R. (2018). Framing climate change: Exploring the role of emotion in generating advocacy behavior. *Science Communication*, 40(4), 442–468. <https://doi.org/10.1177/1075547018776019>
- Ojala, M. (2012). Hope and climate change: The importance of hope for environmental engagement among young people. *Environmental Education Research*, 18(5), 625–642. <https://doi.org/10.1080/13504622.2011.637157>
- Overton, H. K. (2018). Examining the impact of message frames on information seeking and processing: A new integrated theoretical model. *Journal of Communication Management*, 22(3), 327–345. <https://doi.org/10.1108/JCOM-10-2017-0114>
- Poels, K., & Dewitte, S. (2019). The role of emotions in advertising: A call to action. *Journal of Advertising*, 48(1), 81–90. <https://doi.org/10.1080/00913367.2019.1579688>
- Price, L. L., & Arnould, E. J. (1999). Commercial friendships: Service provider–client relationships in context. *Journal of Marketing*, 63(4), 38–56. <https://doi.org/10.1177/002224299906300405>
- Putrevu, S., & Lord, K. R. (1994). Comparative and noncomparative advertising: Attitudinal effects under cognitive and affective involvement decisions. *Journal of Advertising*, 23(2), 77–90. <https://doi.org/10.1080/00913367.1994.10673443>
- Qian, J., Law, R., Wei, J., & Li, X. (2021). Progress of hotel corporate social responsibility research in terms of theoretical, methodological, and thematic development. *Journal of Hospitality Marketing & Management*, 30(6), 717–737. <https://doi.org/10.1080/19368623.2021.1883497>
- Randle, M., Kemperman, A., & Dolnicar, S. (2019). Making cause-related corporate social responsibility (CSR) count in holiday accommodation choice. *Tourism Management*, 75, 66–77. <https://doi.org/10.1016/j.tourman.2019.05.002>

- Rhou, Y., & Singal, M. (2020). A review of the business case for CSR in the hospitality industry. *International Journal of Hospitality Management*, 84, 102330. <https://doi.org/10.1016/j.ijhm.2019.102330>
- Ribeiro, M. A., Adam, I., Kimbu, A. N., Afenyo-Agbe, E., Adeola, O., Figueroa-Domecq, C., & Jong, A. D. (2021). Women entrepreneurship orientation, networks and firm performance in the tourism industry in resource-scarce contexts. *Tourism Management*, 86, 104343. <https://doi.org/10.1016/j.tourman.2021.104343>
- Ribeiro, M. A., Gursoy, D., & Chi, O. H. (2022). Customer acceptance of autonomous vehicles in travel and tourism. *Journal of Travel Research*, 61(3), 620–636. <https://doi.org/10.1177/0047287521993578>
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24(2), 127–146. <https://doi.org/10.1086/209499>
- Roeser, S. (2012). Risk communication, public engagement, and climate change: A role for emotions. *Risk Analysis: An International Journal*, 32(6), 1033–1040. <https://doi.org/10.1111/j.1539-6924.2012.01812.x>
- Segev, S., Fernandes, J., & Wang, W. (2015). The effects of gain versus loss message framing and point of reference on consumer responses to green advertising. *Journal of Current Issues & Research in Advertising*, 36(1), 35–51. <https://doi.org/10.1080/10641734.2014.912600>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Topcuoglu, E., Kim, H., Kim, S., & Kim, S. (2022). Green message strategies and green brand image in a hotel context. *Journal of Hospitality Marketing & Management*, 31(3), 3111–3325. <https://doi.org/10.1080/19368623.2021.1970071>
- Vakratsas, D., & Ambler, T. (1999). How advertising works: What do we really know? *Journal of Marketing*, 63(1), 26–43. <https://doi.org/10.1177/002224299906300103>
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4–70. <https://doi.org/10.1177/109442810031002>
- Vitell, S. J. (2015). A case for consumer social responsibility (CnSR): Including a selected review of consumer ethics/social responsibility research. *Journal of Business Ethics*, 130(4), 767–774. <https://doi.org/10.1007/s10551-014-2110-2>
- Wang, A., & Anderson, R. B. (2011). A multi-staged model of consumer responses to CSR communications. *Journal of Corporate Citizenship*, 41(41), 50–68. <https://doi.org/10.9774/GLEAF.4700.2011.sp.00005>
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
- Winterich, K. P., & Haws, K. L. (2011). Helpful hopefulness: The effect of future positive emotions on consumption. *Journal of Consumer Research*, 38(3), 505–524. <https://doi.org/10.1086/659873>
- Xu, Y., & Jeong, E. (2019). The effect of message framings and green practices on customers' attitudes and behavior intentions toward green restaurants. *International Journal of Contemporary Hospitality Management*, 31(6), 2270–2296. <https://doi.org/10.1108/IJCHM-05-2018-0386>
- Zhang, L., & Yang, W. (2019). Consumers' responses to invitations to write online reviews: The impact of message framing, power and need for status. *International Journal of Contemporary Hospitality Management*, 31(4), 1609–1625. <https://doi.org/10.1108/IJCHM-01-2018-0022>