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## **Dealing with Poor Online Ratings in the Hospitality Service Industry: The Mitigating Power of Corporate Social Responsibility Activities**

Florent Girardin  
Assistant professor of marketing  
Ecole hôtelière de Lausanne, HES-SO University of Applied Sciences and Arts Western  
Switzerland.  
Route de Cojonnex 18  
1000 Lausanne 25  
Switzerland  
[florent.girardin@ehl.ch](mailto:florent.girardin@ehl.ch)

Valéry Bezençon  
Professor of marketing  
University of Neuchâtel  
Rue A.-L. Breguet 2  
2000 Neuchâtel  
Switzerland  
+41 32 718 13 67  
[valery.bezencon@unine.ch](mailto:valery.bezencon@unine.ch)

Renaud Lunardo (corresponding author)  
Associate professor of marketing  
Kedge Business School  
680 Cours de la Libération  
33405 Talence  
France  
[renaud.lunardo@kedgebs.com](mailto:renaud.lunardo@kedgebs.com)

# **Dealing with Poor Online Ratings in the Hospitality Service Industry: The Mitigating Power of Corporate Social Responsibility Activities**

## **Abstract**

Hospitality service providers' reputation and sales can be strongly damaged by low ratings on platforms such as Tripadvisor, Booking, or Yelp. In this research, we investigate how the potential damaging effects of poor ratings of a hospitality service providers' can be mitigated by corporate social responsibility (CSR) activities. Building on the self-affirmation theory, we suggest and provide evidence for the notion that CSR (vs. non-CSR) cues affect more positively guests' evaluation of a service provider when online ratings are low. When the ratings increase, CSR cues are not better than other cues to improve evaluations. Further, we detail the underlying mechanism whereby guests allocate more weight to CSR (vs. non-CSR) cues when they form an evaluation of a low-rated (vs. higher-rated) service provider, which increases the warm-glow feelings that they anticipate and, eventually, their evaluation. We test our model with two experiments on two different samples (US and European), involving different CSR cues (environmental and social) and different types of service provider (hotel and restaurant). We then discuss the theoretical and managerial implications of our research for hospitality professionals, as well as for policy makers.

**Keywords:** Corporate social responsibility (CSR), ratings, weighting, warm-glow feelings, self-affirmation

## **1. Introduction**

Online ratings have become an important source of information for consumers (Engler, Winter and Schulz, 2015; Li, Chen and Zhang, 2020). In the tourism and hospitality industry, the prevalence of social media platforms, such as Tripadvisor or Yelp has led consumers to increasingly rely on such online ratings when searching for information about hotels, restaurants, or, more generally, hospitality service providers (Bigné, William, & Soria-Olivas, 2020; Zhang, Zhang, & Yang, 2016). Online ratings represent the second most frequently used source after search engines (Yang, Park, and Hu, 2018), making them important sources of information for decision-making.

Despite consumers' widespread reliance on ratings and the growing body of research on this topic (e.g., Bigné et al., 2020; Yang, Park, & Hu, 2018; Zhang et al., 2016), research has however left underexamined the effects of poor ratings, especially in the tourism and hospitality industry, for at least two reasons. First, although user online ratings are not representative of objective quality (De Langhe, Fernbach, & Lichtenstein, 2016), they exert a pervasive influence on decision making, especially when they are poor. This negative influence of low ratings is such that bad ratings are more trusted than good ratings (Filieri, 2016; Filieri, Vitari, & Raguseo, 2020), even when the number of ratings is small (Gavilan, Avello, & Martinez-Navarro, 2018). Second and importantly, research has left unexamined the question of how damage caused by bad ratings—even if not representative of the hotel's objective quality—on consumers' evaluations could be compensated for. Yet, in light of the hospitality industry's heavy dependence on responsible business practices and sustainable tourism (Sheldon & Park, 2011), one may wonder whether sustainability principles and, more concretely, corporate social responsibility (CSR hereafter) could help to mitigate the effects of bad ratings.

Therefore, the goal of this research is to address the effects of bad ratings on guests' evaluations of hospitality service providers (hotels, restaurants, etc.) and, more specifically, the question of the potential power of CSR activities to compensate for those bad ratings. Specifically, we build on research on sustainability cues and their interaction with product ratings (Bezençon, Girardin, and Lunardo, 2020) to examine if CSR activities can improve consumer evaluations of hospitality service providers with bad online user ratings. The hospitality context appears to be particularly appropriate due to its importance within the overarching service industry, and the widespread emphasis on CSR in the hospitality industry (Hall, 2019), not to mention the high number of user rating platforms. In particular, we propose a theoretical model whereby ratings (low vs. higher) moderate the effects of CSR cues on guests' evaluations of a service provider, with CSR cues having more positive effects on evaluations for poorly rated service providers than for those receiving higher online ratings. Building on self-affirmation theory (Steele, 1988), we also propose that guests allocate more weight to CSR (vs. non-CSR) cues when user ratings are low (vs. higher), which leads them to anticipate more warm-glow feelings and to form better evaluations of the hospitality service provider.

The remainder of the article builds on the literature on online ratings and CSR cues as well as the self-affirmation theory to justify our predictions. Then, we test and provide evidence for these predictions using two experiments, one with a hotel as the service provider and the other with a restaurant. Each study manipulates one dimension of sustainability practice as CSR cue (the environmental sustainability of the provider in study 1 and its social sustainability in study 2). We then discuss the theoretical and managerial contributions of this research. Specifically, we discuss how we extend prior research related to bad ratings and CSR activities in the tourism and hospitality industry, notably by highlighting the mitigating role of CSR cues evidenced. Then,

from a managerial perspective, we provide insights for the hospitality industry into how CSR activities can be used to mitigate the effects of bad ratings.

## **2. Theoretical background**

### *1.1 Corporate social responsibility in the hospitality sector*

Corporate Social Responsibility consists of “actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams & Siegel, 2001, 117). Those sustainability practices have been extensively studied, be it in the retailing (Loussaïef et al., 2014), branding (Luchs et al., 2010; Mantovani, de Andrade and Negrão, 2017), or hospitality sector (e.g., Sheldon & Park, 2011; Soteriou & Coccossis, 2010). What emerges from these pieces of research is a ‘sustainability liability’ effect (Luchs et al., 2010), whereby the performance of sustainable products, services or brands is questioned. Specifically, the positive effect of sustainable practices on choice decreases as the performance trade-off increases (Barone, Miyazaki, & Taylor, 2000). Put differently, functional performance is preferred to sustainability when the goal of the consumer requires a product with both functional performance and sustainability (Luchs, Brower, & Chitturi, 2012).

Against this background, in the tourism and hospitality industry, CSR activities are often considered as having positive effects on guests’ evaluations of hospitality services (Peiró-Signes et al., 2014). For instance, CSR have been evidenced as positively affecting variables such as consumer-company identification, consumer satisfaction and brand loyalty (Deng & Xu, 2017). Nevertheless, previous literature shows that consumer responses to CSR cues vary. A wide range of factors – such as the perception of the CSR motive (Gao & Mattila, 2014), the framing of the CSR message (Randle, Kemperman, & Dolnicar, 2019), the media coverage of the CSR

initiatives (Rhou, Singal, & Koh, 2016), or the strength of the brand (Li, Liu, & Huan, 2019) – can affect consumer perceptions and behaviors. Therefore, we here suggest that consumer responses to a CSR cue may also vary, and more specifically depending on how other online users rated the service. We provide rationales for this prediction below.

### *1.2 The importance of user online ratings*

Online user ratings, also referred to as peer-to-peer ratings or consumer ratings, are voluntary evaluations of a specific product, service, destination, or activity by consumers who have already experienced the offer and decided to give feedback by rating it afterward (Engler et al., 2015). As opposed to third-party ratings, made by experts and usually based on systematic testing, user ratings are based on consumers' own perceptions, which are subjective and heavily influenced by the situation in which the product or service is consumed (de Langhe, Fernbach, & Lichtenstein, 2016). Thanks to their wide availability on websites such as Google, Booking, Expedia, Tripadvisor, and Yelp, online user ratings have become an important element of companies' communication mix strategy, since they can deeply influence consumer evaluations of products and services (Chen & Xie, 2008). Actually, user ratings significantly impact sales in a variety of product categories, such as books (Chevalier & Mayzlin, 2006), TV shows (Godes & Mayzlin, 2004), and beauty products (Moe & Trusov, 2011).

The influence of online user ratings is particularly important in the hospitality industry because hospitality services typically involve high levels of uncertainty and intangibility. Accordingly, recent literature acknowledges the important use of online user ratings to evaluate hospitality service providers (Gavilan, Avello, & Martinez-Navarro, 2018). As a result, user ratings have also been shown to significantly impact hospitality service purchase intentions

(Sparks & Browning, 2011) and sales (Ye, Law, & Gu, 2009). Despite the influence of online user ratings, they are not the best indicator of a service's objective quality because they 1) rely partly on aesthetic and symbolic dimensions to rate a product, and 2) are subjectively biased by others' ratings and brand image (de Langhe et al., 2016).

### *1.3 Understanding the effects of online user ratings and corporate social responsibility cues through self-affirmation theory*

Online user ratings represent a form of social influence, whereby one relies on the judgments of others to make a purchase decision (Gavilan et al. 2018). According to self-affirmation theory (Steele, 1988), individuals try to maintain their self-integrity, or the moral judgement that they are a good person, behaving as others would expect within a certain culture or social group (Cialdini and Goodstein, 2004). On top of moral adequacy, self-integrity is about adaptive adequacy. Accordingly, following the evaluations of others (e.g., by purchasing a highly rated service) – and thus, online ratings – can help consumers maintain their self-integrity. By contrast, intending to purchase or purchasing a service that received low ratings can be perceived as a failure to meet the standards or expectations of others and, thus, threaten the self (Leary and Baumeister, 2000). When self-integrity is called into question, individuals try to restore it by using different coping mechanisms, one of which involves the use of alternative self-resources that are not related to the threat (Sherman and Cohen, 2006). Such self-resources can take on many forms, such as the affirmation of the important values in one's life (Sherman & Cohen, 2006; Steele, 1988). CSR cues emanating from a poorly rated service could constitute an ideal candidate for affirming important values and restoring one's self integrity.

Consistent with self-affirmation theory and our reasoning, Trudel et al. (2020) find that when

consumers feel their self is threatened, they are more likely to choose a product with a sustainable attribute than a larger or better-quality product without such a sustainable attribute, this sustainable choice serving a self-restorative function. In addition, Gao and Mattila (2016) show that a “green” hospitality service can serve as a solution in consumers’ self-affirmation. We therefore propose that, when a service provider communicates about a CSR activity, consumers will attend to the CSR cue relatively more when the service’s online ratings are low than when they are higher. Therefore, consumers will evaluate poorly rated services relatively better when a CSR cue is present than when another cue is present, because the latter would not enable self-affirmation. This effect is not expected when the service is better rated, because there is then no need for self-affirmation. Hence, we propose the following:

**H1:** The presence of CSR cues moderates the effect of online ratings on consumer evaluations. Specifically, low (vs. high) online ratings will positively influence consumer evaluations of a service provider when CSR (vs. non-CSR) cues are present.

#### *1.4 Weight allocation and anticipated warm-glow feelings*

Previous research shows that product choice can be a conduit for self-affirmation, because of specific product attributes (Townsend & Sood, 2012). As aforementioned, self-affirmation theory (Steele, 1988) suggests that, when service ratings are low, consumers form better evaluations of it if there is a CSR cue, because the values underlying CSR offer a way to reaffirm the self. However, the question remains as to what could be the mechanism underlying this effect. Self-affirmation theory posits that individuals process information defensively, but, when they are self-affirmed, this effect tends to disappear (Townsend & Sood, 2012). Therefore, when consumers face potential social disapproval through poor online ratings, a way for them to



reaffirm their values lies in choosing hospitality service providers that promote CSR. Hence, we suggest that such consumers will allocate more weight to a value-reinforcing cue such as a CSR cue when forming their evaluation of the service provider, and less weight to a self-threatening cue, here the ratings. This differential weight allocation effect should weaken as the service provider's ratings increase, because higher ratings do not threaten consumers considering a purchase.

The allocation of more weight to CSR cues in the evaluation process should lead consumers to anticipate more warm-glow feelings. Indeed, warm-glow feelings represent intrinsic rewards that consumers experience when they believe they are doing the right thing, such as acting in an environmentally friendly manner (Giebelhausen et al. 2016) or giving to charity (Andreoni, 1990). Warm-glow feelings involve moral satisfaction derived from the act of giving or doing something good and can affect consumer attitudes and behaviors. Previous research shows that such feelings are also generated when consumers use (Tezer & Bodur, 2020), purchase, or anticipate the purchase of products and services that are imbued with moral value through sustainable attributes or CSR cues (Bezençon et al., 2020; Chang & Chu, 2020; Habel et al., 2016). Thus, giving greater weight to CSR cues should increase the warm-glow feelings that consumers anticipate, and thus improve consumer evaluations. Therefore, we propose the following:

**H2:** Low (vs. high) online ratings will positively affect the relative weight that consumers allocate to CSR cues (vs. non-CSR cues), which will increase anticipated warm-glow feelings and service provider evaluation.

Figure 1 illustrates our theoretical model. We test the two hypotheses across two studies applied to the hospitality industry, involving a restaurant and a hotel, respectively. Study 1 tests H1 with an incentive compatible dependent variable. Study 2 tests the whole theoretical model, which includes the serial mediation through the relative weight of the CSR cue and warm-glow feelings (H2).

[Insert Figure 1 about here]

## **2. Study 1**

Study 1 aims to test H1 by providing evidence that online ratings and CSR cues interact to affect evaluation. Here, in order to demonstrate that this effect can occur in a real-life situation, evaluation is assessed through actual choice. We designed an experiment in which participants had to decide whether to fill in a questionnaire to participate in a random drawing to win a meal at a restaurant. We manipulated the ratings of the restaurant as well as the cues (CSR vs non-CSR) and measured, as a dependent variable, the proportion of participants who filled the questionnaire to win the meal in the restaurant in each condition.

### *2.1 Design and procedure*

Participants ( $N = 514$ , students from a Swiss university, 44.7% women,  $M_{\text{Age}} = 24.2$  years) were asked by email to participate in a 2 (rating: low vs. higher)  $\times$  2 (cues: CSR vs. non-CSR) between-subjects experiment. An email was sent to the students asking them to fill out a short questionnaire. In order to encourage students to fill in the questionnaire, we explained that each person who completed the questionnaire could potentially win a meal for two (worth \$100) at a local restaurant. The university being located near the city center, there are many restaurants in

which students are used to going for lunch or dinner, making students a suitable sample for the study. Participants randomly received one of four e-mails. The online rating of the restaurant was manipulated through a Tripadvisor rating (two stars vs. four stars) and ranking (33 of 132 vs. 122 of 132 restaurants; see Appendix 1). The name of the restaurant was not mentioned. Under the CSR cue condition, we explained that \$10 would be donated to the Make-A-Wish Foundation, in addition to the meal offered. Under the non-CSR cue condition, we stated that, in addition to the meal offered, the winner would receive two free drinks, with a value of \$10.

## 2.2 Results

Our dependent variable is the percentage of respondents who decided to fill in the questionnaire to participate in the random drawing. Chi-square tests reveal no main effect of ratings (low rating, 83 out of 257, or 32.3%; higher rating, 76 out of 257, or 29.6%;  $\chi^2 = .446$ ,  $p = .504$ ) and a marginal positive main effect of the CSR cue (CSR cue, 90 out of 258, or 34.9%; non-CSR cue, 69 out of 256, or 27.0%;  $\chi^2 = .3.783$ ,  $p = .052$ ). More interestingly, in the low-rating CSR cue condition, 52 out of 129 (4.3%) respondents tried to win the restaurant voucher, whereas only 31 out of 128 (24.2%) did so in the low-rating non-CSR cue condition ( $\chi^2 = 7.608$ ,  $p = .006$ ). When the ratings are better, no significant difference is observed between the CSR and non-CSR cue conditions (CSR cue, 38 out of 129, or 29.5%; non-CSR cue, 38 out of 128, 29.7%;  $\chi^2 = .002$ ,  $p = .968$ ; see Figure 2).

[Insert Figure 2 about here]

## 2.3 Discussion

Study 1 provides initial results showing that consumers are more inclined to fill out a survey

when they can win a voucher for a restaurant that communicates about a CSR (vs. non-CSR) action only when that restaurant has poor online user ratings. Such result indicates that, in the case of low ratings, a CSR cue has a stronger positive effect on consumer choice than a non-CSR cue has, whereas this effect is not present when the ratings are higher. Study 2 addresses the question as to if such an effect could be explained by weight allocation and anticipated warm-glow feelings.

### **3. Study 2**

In order to provide evidence for the generalizability of the results, Study 2 aims to provide further evidence for H1 and to test H2 using another setting. To reach this goal, we designed an experiment in which participants had to evaluate a fictitious hotel in Thailand in the context of a holiday destination. A fictitious hotel was chosen to avoid any potential bias due to prior knowledge. The decision to use of a hotel as the core setting for this study was also made on the basis that the evaluation process of a hospitality service provider based on user-generated ratings seems to be similar for hotels and restaurants (Ong, 2012). Further, by presenting the same cues across conditions but in different orders, Study 2 investigates the positive effect of adding a set of CSR cues (vs. non-CSR cues). In doing so, we identify the contribution of each set of cues to the evaluation of the service provider and show that the contribution of CSR cues (vs. non-CSR cues) is greater under conditions of low ratings than higher ratings (H1). Second, Study 2 tests H2, or the notion that when exposed to a low-rated (vs. higher-rated) service provider, consumers rely relatively more on CSR cues than on non-CSR cues to form their evaluation of the service provider, increasing anticipated warm-glow feelings and subsequent evaluation. Finally, in order to show that our effect is present across service categories, segments and

countries, Study 2 tests our hypotheses using a different type of hospitality service provider (hotel instead of restaurant) and a different sample (non-student focused and U.S.-based). By doing so, we provide evidence for the external validity of our effects.

### *3.1 Design and procedure*

This experiment used a 2 (hotel ratings: low vs. high)  $\times$  3 (cues order of presentation: “CSR cues first followed by non-CSR cues” vs. “non-CSR cues first followed by CSR cues” vs. “non-CSR cues only”) between-subjects design. Respondents (728 U.S. citizens, 55.5% women,  $M_{\text{Age}} = 37.6$  years) were asked on MTurk to evaluate a holiday hotel in Thailand. In line with Kim et al. (2021) who found that pictures are essential determinants of online ratings, participants were first shown an aerial view of an island together with the Tripadvisor ratings of the target hotel. Unlike what was done in Study 1 where the rating was associated with a ranking – potentially confounding the manipulation –, only the rating changes across conditions here, and the hotel was rated two stars in the low online rating condition and four stars in the high online rating condition (see Appendix 2). Then, participants were shown either a list of top hotel amenities (non-CSR cues) or a list of three sustainability labels obtained by the hotel (CSR cues)—Sustainable Tourism Education Program, Eco Hotels Certified, and Green Tick (see Appendix 3).

Regarding measures of the focal variables, and in line with our design, evaluation of the service provider was assessed twice for people who were exposed to CSR cues. After the first CSR or non-CSR cues, participants were asked to report a first time their evaluation of the hotel on a four-item, seven-point semantic differential scale (dislike/like, bad/good, unfavorable/favorable, negative/positive;  $\alpha = .98$ ; Rashid and Byun, 2018). Then, they were

shown the other type of cues, sustainability labels or top hotel amenities, respectively, and asked to give their evaluation using the same scale ( $\alpha = .99$ ). It is only in the “non-CSR cues only” condition that respondents were not shown any sustainability labels, and thus asked to express their evaluation of the hotel only once.

Participants then gave their anticipated warm-glow feelings by responding to the question, “How would you feel if you booked this hotel?” using a four item, seven-point scale (ashamed/proud, in the wrong/in the right, wicked/virtuous, unethical/ethical;  $\alpha = .92$ ; Giebelhausen et al., 2016). In order to check the manipulation of the hotel ratings, we also measured the perceived quality of the hotel on a scale from zero (extremely poor quality) to 100 (excellent quality). To measure the weight participants allocate to the cues, we followed the procedure used by Sokolova & Krishna (2020), and participants were asked to rate the importance of the sustainability labels and top amenities when forming their evaluation of the hotel on a five-point scale (1 = “Not important at all”, 5 = “Extremely important”). To obtain a measure of the relative weight of the CSR cues, the importance rating of the top hotel amenities was subtracted from the importance rating of the sustainability labels.

## 3.2 Results

### 3.2.1 Manipulation checks

A 2×3 between-subject analysis of variance (ANOVA) with hotel ratings and cues as fixed factors and perceived quality as the dependent variable reveals a main effect of hotel ratings on perceived quality ( $M_{\text{LowRating}} = 47.28$ ;  $SD = 25.35$ ;  $M_{\text{HigherRating}} = 81.96$ ;  $SD = 11.49$ ;  $F(1, 722) = 578.45$ ,  $p < .001$ ,  $\eta_p^2 = .445$ ). This result provides support for our manipulation of online ratings, which induced variance in perceived quality. In line with prior literature, a main effect of cues

type was also observed ( $M_{\text{CSRFirst}} = 64.18$ ,  $SD = 25.79$ ;  $M_{\text{Non-CSRFirst}} = 68.21$ ,  $SD = 25.05$ ;  $M_{\text{Non-CSROnly}} = 61.30$ ,  $SD = 27.42$ ;  $F(2, 722) = 9.421$ ,  $p < .001$ ,  $\eta_p^2 = .025$ ), and, as expected, no interaction effect ( $F(2, 722) = 1.356$ ,  $p = .258$ ,  $\eta_p^2 = .004$ ). Overall, the manipulation of online ratings was thus successful.

### 3.2.2 *Effect on evaluations*

Replicating the effect of study 1 and in line with the literature, a  $2 \times 3$  between-subjects ANOVA with online ratings and cues as fixed factors and final evaluation as the dependent variable first revealed a main effect of online ratings ( $F(1, 722) = 533.65$ ,  $p < .001$ ,  $\eta_p^2 = .425$ ) on hotel evaluations (Table 1). Results also revealed a main effect of CSR cues ( $F(2, 722) = 1.841$ ,  $p < .001$ ,  $\eta_p^2 = .029$ ), as well as a marginally significant interaction of such CSR cues with online ratings ( $F(2, 722) = 2.724$ ,  $p = .066$ ,  $\eta_p^2 = .007$ ). In order to probe this interaction, a focus in each online ratings condition was made. In the low online ratings condition, planned contrasts revealed that the order of the cues (i.e., CSR cues presented before or after non-CSR cues) has no effect on the final evaluation ( $M_{\text{CSRFirst}} = 4.02$ ;  $SD = 1.52$ ;  $M_{\text{NonCSRFirst}} = 4.32$ ;  $SD = 1.60$ ;  $F(1, 722) = 2.32$ ,  $p = .128$ ,  $\eta_p^2 = .003$ ). However, and importantly, not presenting CSR cues at all (i.e., “non-CSR cues only” condition) leads to lower evaluations ( $M_{\text{NonCSROnly}} = 3.53$ ;  $SD = 1.66$ ) than presenting either CSR cues first ( $F(1, 722) = 1.94$ ,  $p = .001$ ,  $\eta_p^2 = .015$ ) or not (i.e., “non-CSR cues first”;  $F(1, 722) = 23.92$ ,  $p < .001$ ,  $\eta_p^2 = .032$ ). Such result indicates that the addition of CSR cues to a low-rated offering improves its evaluation. By contrast and as predicted, in the higher online ratings condition, the service provider evaluation did not differ across conditions ( $M_{\text{NonCSROnly}} = 6.00$ ;  $SD = .81$ ;  $M_{\text{CSRFirst}} = 6.11$ ;  $SD = .86$ ;  $M_{\text{NonCSRFirst}} = 6.23$ ;  $SD = .74$ ;  $p > .1$ ). These results are in line with our predictions and the notion that the addition of CSR cues to a

service offering improves consumer evaluations to a greater extent when the service offering receives low ratings, thus supporting H1.

[Insert Table 1 here]

We further explore the incremental effect of each set of cues on evaluations. To reach this goal, we created a variable representing the difference between the final and intermediate evaluations. In the condition “CSR cues first”, this variable measured the increase in evaluation due to the addition of non-CSR cues; in the “non-CSR cues first” condition, the variable assessed the increase in evaluation due to the addition of CSR cues. In the “non-CSR cues only” condition, the CSR cues were not presented. There was no second measure of evaluation, to avoid asking respondents to answer the same questions twice in a row. The variable was therefore coded as zero in this condition.

A 2×3 between-subject ANOVA with cues order and hotel ratings as fixed factors and hotel evaluation as dependent variable revealed a main effect of the hotel ratings ( $F(1, 722) = 2.90, p < .001, \eta_p^2 = .028$ ) and a main effect of cues order ( $F(2, 722) = 37.65, p < .001, \eta_p^2 = .094$ ). Importantly, a significant interaction was also observed ( $F(2, 722) = 6.29, p = .002, \eta_p^2 = .017$ ). Planned contrasts indicated that in the low-rating condition, the improvement in evaluations ( $M = .67, SD = .92$ ) due to the addition of CSR cues (“non-CSR cues first” condition) is higher than the improvement ( $M = .46, SD = .94$ ) due to the addition of non-CSR cues (“CSR cues first” condition;  $F(1, 722) = 7.43, p = .007, \eta_p^2 = .010$ ). In the higher-rating condition, no significant difference between “non-CSR cues first” condition ( $M = .28, SD = .58$ ) and “CSR cues first” condition ( $M = .22, SD = .54; F < 1$ ) was observed. These results indicate that when online ratings are low, the effect on evaluations of adding CSR cues is greater than the



effect of adding non-CSR cues. Interestingly and as predicted, this effect disappears when the ratings are better. Overall, these results bring further support to H1.

### 3.2.3 *Serial mediation through cues weight and warm-glow feelings*

To test H2, a serial mediation (Hayes, 2017; model 6; 5,000 bootstrap samples) analysis was performed. The product ratings manipulation was included as the independent variable, the relative weight of the cues and warm-glow feelings as the mediators, the final evaluation as the dependent variable, and the cues order as a covariate. We predicted that CSR cues will be weighted less when hotel ratings are better, which will decrease warm-glow feelings, resulting in a less favorable evaluation. Note that for this test of H2, the data from respondents in the “non-CSR cues only” condition were not used, because these respondents were not presented with any CSR cues, making the relative weight of CSR cues in their hotel evaluation unable to be assessed. Therefore, the sample size for the following analysis was 476 (55% women,  $M_{\text{Age}} = 37.7$  years).

The results from this serial mediation support our hypotheses: hotel ratings have a negative effect on the CSR cue weight ( $B = -.46$ ; 95% CI =  $-.69; -.23$ ), and – even though not predicted – a positive direct effect on warm-glow feelings ( $B = 1.23$ ; 95% CI =  $1.04; 1.42$ ), and a positive direct effect on evaluations ( $B = 1.11$ ; 95% CI =  $.91; 1.31$ ). The CSR cue weight has a significant direct effect on warm-glow feelings ( $B = .18$ ; 95% CI =  $.10; .25$ ), but not on evaluations ( $B = -.04$ ; 95% CI =  $-.11; .03$ ). Warm-glow feelings have a significant positive direct effect on evaluations ( $B = .78$ ; 95% CI =  $.70; .86$ ). Finally, the CSR cue weight and warm-glow feelings have a negative sequential indirect effect on evaluations ( $B = -.06$ ; 95% CI =  $-.12; -.03$ ), whereby hotel ratings decrease CSR cue importance, negatively impacting warm-glow feelings

and resulting in less favorable evaluations. If the order of the two mediators is reversed, the serial mediation becomes non-significant. Of note, the results are similar without the covariate. Table 2 provides a summary of the serial mediation results.

[Insert Table 2 about here]

### 3.3 *Discussion*

The results of Study 2 provide support to H1 and H2. The results show that, for a service with both CSR and non-CSR cues, the contribution of CSR cues to consumer evaluation is greater than that of non-CSR cues when the service is poorly rated. When the service is better rated, the improvement in evaluation due to the addition of CSR cues is not different from that due to the addition of non-CSR cues. These results extend the findings of Study 1 to another hospitality service category (i.e., hotels). While the purchase decision-making process might be different across hotels and restaurants, the evaluation process based on user-generated ratings actually appears to be similar for hotels and restaurants, equating previous research findings (Ong, 2012). This study also goes a step further in documenting the underlying process. First, it supports the hypothesis that warm-glow feelings mediate the effect of CSR cues when online user ratings are low. Second, it shows that, when online user ratings are low, consumers allocate more importance to CSR cues (vs. non-CSR cues), which increases the anticipated warm-glow feelings and the evaluation of the service.

## 4. **General discussion**

Considering the growing attention devoted to CSR cues in tourism (Loussaïef et al., 2014; Mantovani et al., 2017) and the importance of online ratings for consumers (Bezençon et al.,

2020; Engler et al., 2015; Kim et al., 2021; Li et al., 2020), the current research aimed to examine the potential mitigating power of CSR cues for tourism or hospitality service providers that receive poor ratings. Study 1 shows that this phenomenon arises with actual behaviors: a larger number of participants filled out a survey when the prospect of winning a voucher for a restaurant included a CSR (vs. non-CSR) cue, but they only did so when the restaurant's online ratings were low. In Study 2, we replicated this effect with evaluations being measured. Our results support our prediction that when the service provider is rated poorly (low online ratings, vs. higher online ratings), communicating about CSR activities is beneficial to consumer evaluations. Further, we highlight that consumers allocate more weight to the CSR (vs. non-CSR) cue when online user ratings are low (vs. higher), which leads consumers to anticipate more warm-glow feelings and to form better evaluations of the service. This process finds support in self-affirmation theory (Steele, 1988), which posits that consumers seek to maintain their self-integrity. When their self is threatened, consumers will reaffirm an overall self-concept of worth. In our case, when consumers diverge from others by anticipating the purchase of a service with low online ratings, they will place additional weight on a CSR cue, which will increase anticipated warm-glow feelings and improve service evaluations.

#### *4.1 Theoretical contributions*

From a theoretical standpoint, this research sheds light on how CSR ratings can compensate for low online ratings in the hospitality industry. Specifically, we identify conditions under which bad online ratings can partly be compensated for by CSR cues. Extending to the hospitality domain prior research showing that sustainability cues and quality cues interact at different levels (Bezençon et al., 2020; Kirmani et al., 2017), we show that, when evaluating hospitality

service providers with low ratings, such as a hotel or a restaurant, people tend to evaluate the provider better in the presence of positive CSR cues. By doing so, we contribute to the recent growing tourism literature on low ratings that has identified product quality signals as moderators of the relation between ratings and evaluations (Filieri, Raguseo, & Vitari, 2019; Filieri et al., 2020) and identify CSR activities as a novel cue that acts as such a moderator.

Interestingly and delving more deeply into the moderating effect of CSR cues, the results show that such cues mitigate the detrimental effect of low ratings. Specifically, our results show that, when the ratings of the hospitality service provider are low, the presence of positive CSR cues weakens the negative effects of the low ratings. More importantly, this research further contributes to the literature on ratings in the hospitality industry by explaining why this effect is observed. Drawing on self-affirmation theory (Steele, 1988), the proposed model and the results of Study 2 indicate two constructs that play the role of underlying mechanisms in the effects of low ratings on evaluations across conditions of CSR cues: weight allocation and warm-glow feelings. Regarding the latter, our results are in line with recent research in the branding literature which shows that a poorly rated product evaluation is better when an ethical attribute is featured (Bezençon et al., 2020).

An important contribution of this research lies in the identification of the underlying mechanism explaining why warm-glow feelings arise as a response to low online ratings and CSR cues. Specifically, the results show that a weighting process occurs, such that, when the service ratings are low, consumers allocate more weight to CSR cues than to non-CSR cues. This greater weight on CSR cues under the condition of low ratings is presumably explained by the ability of CSR cues to contribute to a reaffirmation of the self. In other words, because low ratings threaten consumers' self when they consider a purchase, these consumers tend to use

CSR cues as a means of reaffirming their self-worth due to the underlying values the CSR cues convey. By allocating more weight to these CSR cues, consumers experience warm-glow feelings, which subsequently favor their evaluation of the hospitality service provider. This phenomenon supports the relevance of self-affirmation theory in examining the interaction of CSR and quality cues. It also adds to the prior tourism literature that investigates the effects of low ratings. Filieri et al. (2020) find that very low ratings are more useful to guests when the service provider is of higher quality. Beyond usefulness, we show that low ratings are less influential when service providers communicate about their CSR activities. CSR cues shield service providers from low guest evaluations because CSR cues provide a way for guests to reaffirm their values and cope with the threat triggered by low ratings.

#### *4.2 Practical and ethical implications*

This research has important managerial implications. There is converging evidence that ratings are of great value to the hospitality industry, affecting important outcomes such as sales and profitability (Ye et al., 2009) and the size of online transactions (Torres, Singh, & Robertson-Ring, 2015). In this vein, the current research examines the effects of low ratings on evaluations and identifies CSR cues as a variable that affects this relation. By doing so, this research offers concrete guidelines to managers of hospitality service providers. In particular, the results suggest that managers can use CSR cues to compensate for potential low ratings. These results indicate that, if a hotel, a restaurant, a café or a bar receives bad reviews on the Internet, the managers of these businesses can engage in activities that improve its sustainability, if they haven't already done so. Communicating about these activities can contribute to compensating for their low ratings, ultimately leading to better evaluations of their service. Our

recommendation is supported by previous research showing that service companies can use CSR to mitigate detrimental effects of a service failure (Joireman et al., 2015), or that firms with higher levels of CSR experience less-severe declines in financial performance in case of a negative event (Peloza, 2006).

Such a recommendation could prove even more important if one adopted a longitudinal perspective. Research shows that prior ratings can bias future ratings (Aral, 2014; Aral & Walker, 2012). If a new hospitality service provider receives low ratings after its opening—due to lack of proper preparation, high customer expectations, or some other reason—new customers could become difficult to attract. In such a situation, CSR activities can help attract a new clientele and eventually obtain better ratings, provided the issues at the origin of the low ratings have been fixed and the CSR activities are perceived as credible, and not greenwashing.

To this regard, we highlight here the need for companies that receive low ratings not to be tempted to communicate about flattering but unsubstantiated CSR activities. As evidenced by Parguel, Benoît-Moreau, and Larceneux (2011), the profusion of CSR claims has prompted confusion among consumers, who have trouble identifying truly responsible firms. These authors inform about the negative effect of a poor sustainability rating for corporate brand evaluations in the case of CSR communications, indicating that only credible CSR activities can contribute to compensating for low ratings. Hence, one recommendation for managers in the hospitality sector in handling low ratings could be to avoid featuring CSR activities that are not fully credible. Partnerships with trusted social or environmental organizations, donations (e.g., cause-related marketing), or independent third-party labeling could, for instance, be used instead. Fixing the problems that caused the low ratings should also obviously be a top priority.

### *4.3 Limitations and future research*

Our research opens new avenues for further research. First, our focus is on low ratings and how CSR cues could contribute to compensate for them. The CSR activity used in Study 1 relates to credible environmental certification, whereas, in Study 2, the CSR activity relates to a social cause, namely, a gift to a foundation. The replication of the results with the two different types of CSR activities provides support for the external validity of the results, probably because the CSR cues are credible. Nevertheless, additional research could examine the effects of less credible CSR cues. Following (Parguel et al., 2011), research could for instance examine the effects of CSR cues that are not legitimated by a third-party organization, but directly explain the CSR activities of the hospitality service provider itself (e.g., detail efforts to reduce waste). Such research would explore the role of the source associated with the CSR cue in consumer evaluations of the service provider (in relation to online ratings).

Furthermore, we predict and provide evidence for the mediating role of warm-glow feelings in the effects of low ratings on service evaluation, especially under the condition of CSR (vs. non-CSR) cues. Those warm-glow feelings may not be generated under all circumstances or by all people. For instance, there can be people who do not care much about CSR activities and, more generally, people who are moderately interested in the environment and society's well-being society. Therefore, future research may gain in examining the moderating role of variables related to consumers' involvement in the environment—such as environmental concern (Dunlap & Van Liere, 1978; Xiao, Dunlap, & Hong, 2019)—and how such a variable moderates the mediating role of warm-glow feelings. People who have low levels of environmental concern can disregard CSR cues, which would remove the compensatory effect we observe when ratings are low.

In addition, future research could explore other measures for the processes under examination here. In particular, the weighting process could be measured using eye-tracking experiments. Because much research using eye tracking has been conducted in an advertising context (for a review, see Wedel & Pieters, 2008), websites that present hospitality service providers offer an interesting platform, using eye tracking, to examine how CSR cues receive attention from consumers. Eye tracking would enable assessment of the exact time, and thus amount of attention, that people spend on CSR cues online when evaluating a hospitality service provider. Such a measure would help to test the current theoretical model using that specific measure.

Finally, future research could explore the role that service level might play in mitigating the effect of CSR activities in the case of poor ratings. In our studies, we kept the hospitality service level constant across conditions (i.e. we did not manipulate the number of stars neither the price level). It opens an avenue for future research to investigate if the effect of CSR cues on service evaluation vary depending on the service level. In this regard, the findings from Torelli, Monga, and Kaikati (2012) suggest that CSR activities cause a decline in evaluations for luxury brands. We could thus expect that the mitigating effect of CSR cues in case of poor ratings is lower for a luxury service compared to a more affordable one.



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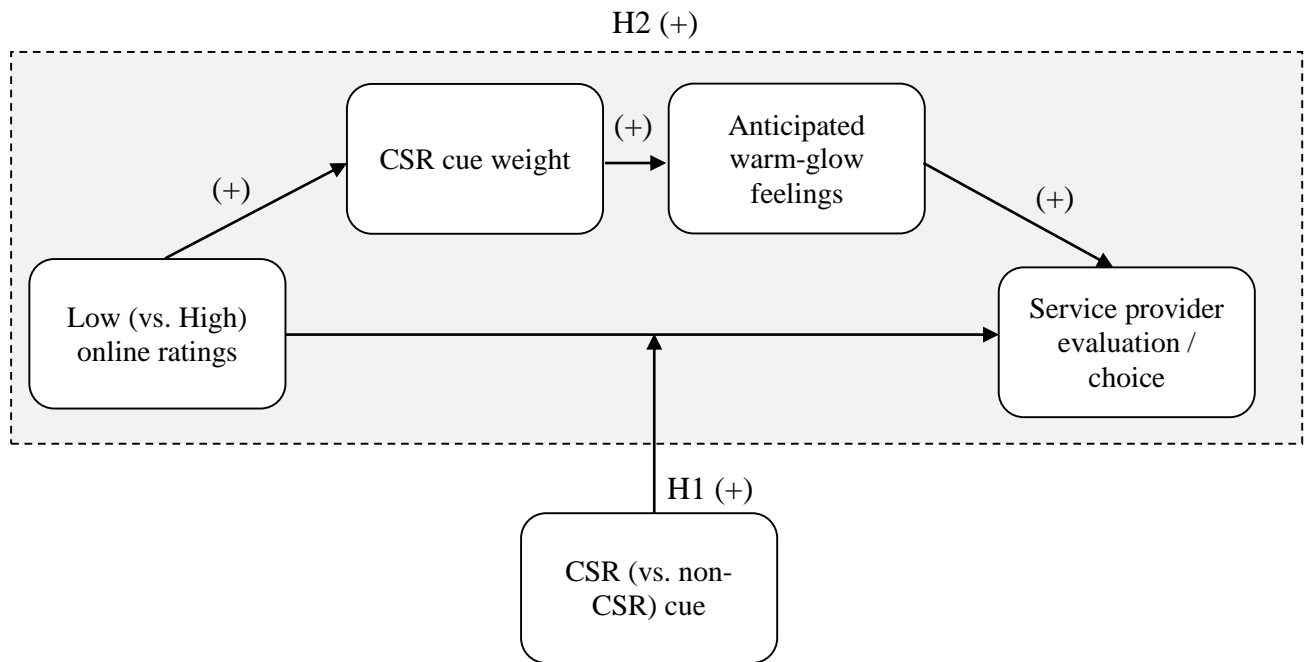
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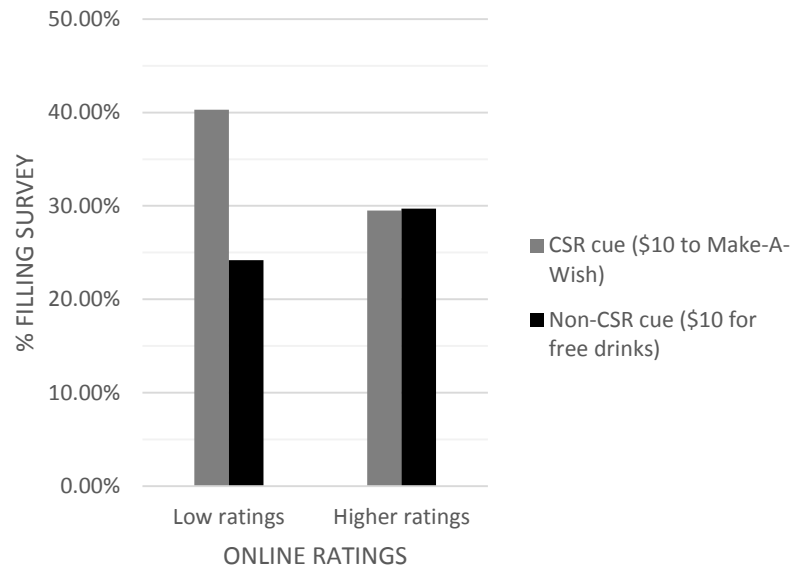
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**Figure 1:** The theoretical model





**Figure 2: The interaction of CSR cues and online ratings on choice (Study 1)**



Note: The ordinate axis represents the percentages of participants filling out the survey, depending on the characteristics of the prize: the possibility of winning a \$100 voucher for a restaurant with either low or higher ratings and an ethical or non-CSR cue.


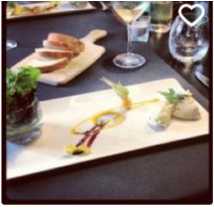
**Table 1:** Descriptive statistics (Study 2)

Final evaluation	Low online ratings			High online ratings		
	3.95 (1.62)			6.12 (.81)		
	CSR cues		Non-CSR cues	CSR cues		Non-CSR cues
	CSR cues 1st	Non-CSR cues 1st		CSR cues 1st	Non-CSR cues 1st	
Final evaluation	4.02 (1.52)	4.32 (1.60)	3.53 (1.66)	6.11 (.86)	6.23 (.74)	6.00 (.81)
$\Delta$ (Final-Intermediate) evaluation	.46 (.94)	.67 (.92)	-	.22 (.54)	.28 (.58)	-
Warm-glow feelings	4.39 (1.20)	4.62 (1.15)	3.90 (1.18)	5.53 (.91)	5.76 (.92)	5.30 (1.08)
Weighting of CSR cues	-.65 (1.31)	-.48 (1.23)	-	-1.22 (1.31)	-.83 (1.38)	-



**Table 2:** Summary of the serial mediation results (Study 2)

	Outcomes								
	<i>M1:</i>			<i>M2:</i>			<i>Y:</i>		
	CSR cue weight			Warm-glow feelings			Evaluation		
	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
Constant	-.57	.08	.00	4.62	.07	.00	.61	.20	.00
X: High (vs. low) ratings	-.46	.12	.00	1.23	.10	.00	1.11	.10	.00
<i>M1</i> : CSR cue weight				.18	.04	.00	-.04	.04	.29
<i>M2</i> : Warm-glow feelings							.78	.04	.00
	Indirect effect			95% bootstrap CI					
$X \rightarrow M1 \rightarrow Y$	.02			-.020; .050					
$X \rightarrow M2 \rightarrow Y$	.96			.078; 1.150					
$X \rightarrow M1 \rightarrow M2 \rightarrow Y$	-.07			-.120; -.030					




**Appendix 1:** The stimuli used in Study 1 (restaurant study)

<p>Low online ratings condition</p>	 <p>●●●●○ 142 avis N° 122 sur 132 Restaurants à Neuchâtel €€ - €€€, Européenne, Europe centrale, Française, Végétariens bienvenus</p>
<p>High online rating condition</p>	 <p>●●●●● 142 avis N° 33 sur 132 Restaurants à Neuchâtel €€ - €€€, Européenne, Europe centrale, Française, Végétariens bienvenus</p>

**Appendix 2:** The online rating manipulation used in Study 2 (hotel study)

<p>Low online ratings condition</p>	<div><div><h3>Sunset Hotel</h3><p>Koh Tao, Thailand</p></div><div><div><div>Overview</div><div><div>2.0</div><div><div></div><div></div><div></div><div></div><div></div></div><div>528 reviews</div></div><div><div>Excellent</div><div></div><div>4%</div></div><div><div>Very good</div><div></div><div>14%</div></div><div><div>Average</div><div></div><div>19%</div></div><div><div>Poor</div><div></div><div>21%</div></div><div><div>Terrible</div><div></div><div>42%</div></div></div></div><div><div>All photos (456)</div></div></div>
<p>High online rating condition</p>	<div><div><h3>Sunset Hotel</h3><p>Koh Tao, Thailand</p></div><div><div><div>Overview</div><div><div>4.0</div><div><div></div><div></div><div></div><div></div><div></div></div><div>528 reviews</div></div><div><div>Excellent</div><div></div><div>33%</div></div><div><div>Very good</div><div></div><div>46%</div></div><div><div>Average</div><div></div><div>11%</div></div><div><div>Poor</div><div></div><div>3%</div></div><div><div>Terrible</div><div></div><div>7%</div></div></div></div><div><div>All photos (456)</div></div></div>

### Appendix 3: The CSR cues manipulation used in Study 2 (hotel study)

<p>CSR Cues</p>	<p><b>Sustainable Tourism Education Program (STEP)</b></p>  <p>The Sustainable Tourism Education Program, or STEP, is a sustainability management program designed by the tourism industry. STEP is based on a framework that measures all aspects of sustainability for tourism businesses and serves as a practical tool for assessment, benchmarking and education. Participating businesses learn how to manage their triple bottom line more effectively by discovering how to effectively make an investment in sustainability.</p> <p>STEP begins with an entry-level self-assessment tool, and also offers businesses the opportunity to receive a globally recognized eco-certification. STEP requires independent, third-party verification of business practices.</p> <p><b>Eco Hotels Certified</b></p>  <p>This certification stands for more ecology, more sustainability and more regionality in a business. It is certification of sustainably operating tourism businesses and takes account of their total resource use.</p> <p>The CO2 data are collected and evaluated against similar businesses, using an anonymous benchmark system, and this means they can be compared with the best in the particular segment/category (class). This evaluation also identifies where specific improvements could be made.</p> <p>This ongoing benchmark evaluation system ensures that participating businesses are constantly improving in terms of resource use and sustainable operations.</p> <p><b>Green Tick</b></p>  <p>Independent sustainability certification of products, services, and corporations based on a life-cycle audit of performance against the Green Tick Sustainability Standards.</p> <p>GreenTick also certifies for Climate-Friendly, Natural, GE-Free, Organic, and Fair Trader brands.</p>
<p>Non CSR cues</p>	<p><b>Amenities</b></p> <p>TOP AMENITIES</p> <p>Pool</p> <p>Room Service</p> <p>Free Internet</p> <p>Free Parking</p> <p>Restaurant</p> <p>Beachfront</p> <p>Bar/Lounge</p> <p>Spa</p> <p>Breakfast included</p>