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Unveiling the buffering effect of customer engagement on negative word-of-mouth in tourism and hospitality

Abstract

Previous research argues that customers tend to disseminate negative word-of-mouth (WOM) when encountering service failures. In contrast, this study reveals a buffering effect on negative WOM: high engagement tourists are less inclined to spread negative WOM in the co-creation failure context. Three experiments across various tourism scenarios were employed to evaluate the study hypotheses and rule out other explanations. The results show that heightened customer engagement diminishes tourists' intention to spread negative WOM when value co-creation fails (Study 1). The motivation to protect self-image mediates the buffering effect of customer engagement on negative WOM (Study 2), and this buffering effect is more pronounced on high social connectedness platforms (Study 3). The findings provide new insights into value co-creation, WOM, service failures, and marketing for tourist industry managers and researchers.

Keywords

Value co-creation, Co-creation failure, Customer engagement, Word-of-mouth, Platform social connectedness

1. Introduction

Value co-creation has become a prominent trend in tourism owing to the rising desire for personalized travel experiences (Nangpiire et al., 2022). Co-designing travel plans and handicrafts, and co-developing cuisine or hotel rooms have been implemented by many tourism firms (see Appendix A for examples). While customer engagement enhances tourists' experiences and enhances the appeal of products and services, it also increases the likelihood of co-creation failure (Lumivalo et al., 2024; Sthapit et al., 2023). Co-creation failure is a type of service failure that occurs when the co-created product or service fails to meet tourists' expectations (Sugathan et al., 2017). When tourists feel dissatisfied, they often spread negative WOM, which can rapidly spread in the age of social media and harm a firm's performance, image, and reputation (Ribeiro & Kalro, 2023; Sukhu & Bilgihan, 2023). Therefore, value co-creation functions as a business model entailing a combination of opportunities and risks for tourism firms (Zhang, 2023).

Value co-creation highlights that tourists are active co-creators of value rather than just users of it (Chathoth et al., 2016; Sthapit et al., 2023). This role shift may lead tourists to display different WOM in the context of co-creation failure. However, existing research on tourism co-creation has predominantly focused on its positive outcomes (Assiouras et al., 2023; Shoukat

& Ramkissoon, 2022), with limited attention paid to co-creation failure (Lumivalo et al., 2024). Scholars have mostly examined the connection between customer engagement and WOM in the context of co-creation failure in marketing and service literature drawing on theories of internal attribution and self-serving bias. Internal attribution theory posits that higher engagement leads consumers to perceive greater responsibility for the outcome, thereby fostering greater tolerance toward firms and a stronger tendency to spread positive WOM (Chen, 2018; Sugathan & Ranjan, 2020). By contrast, other studies argue that high engagement may trigger self-serving bias, in which consumers seek to maintain a positive self-concept by blaming firms for the failure and spreading negative WOM (Bendapudi & Leone, 2003; Zhu et al., 2024).

These studies deepen our understanding of value co-creation and highlight the intricate connection between consumer engagement and WOM. However, the influence of social motivation has been overlooked in previous studies. In today's social media age, social motivation exerts a more pronounced influence on WOM—particularly in tourism, an inherently social practice with high shareability (Liu et al., 2024). This gap has hindered the advancement of tourism co-creation.

Therefore, the goal of this research is to investigate how customer engagement influences tourists' negative WOM intention after co-creation failure from the perspective of social motivation. Specifically, this study addresses three research questions: (1) Does customer engagement influence tourists' negative WOM intention after co-creation failure? (2) Does the motivation to protect self-image play a mediating role therein? (3) How does platform social connectedness moderate the relationship? To address these questions, we adopted the scenario-based experimental method and conducted three experiments to test the hypotheses.

This study provides several contributions to tourism co-creation and WOM communication. First, this study challenges the traditional view that service failure inevitably triggers negative WOM (Dolan et al., 2019; Ribeiro & Kalro, 2023), as tourists with higher customer engagement demonstrate lower negative WOM intention after co-creation failure. This finding highlights the uniqueness of co-creation failure and enhances theoretical insights into value co-creation and WOM. Second, drawing upon impression management theory, we uncover the psychological mechanism through which customer engagement influences negative WOM intention in the social media context. It shows that highly engaged tourists tend to avoid spreading negative WOM to maintain a favorable social image—a socially motivated tendency that differs from cognitive-based explanations (e.g., internal attribution or self-serving bias; Bendapudi & Leone, 2003; Chen, 2018; Sugathan & Ranjan, 2020; Zhu et al., 2024). Third, by clarifying the moderating role of platform social connectedness, this study refines our grasp of the boundary conditions underlying the WOM buffering effect. These findings yield practical guidance to tourism businesses for developing co-creation services and managing WOM.

This is how the remainder of the paper goes. The following section creates the conceptual framework and produces study hypotheses after reviewing the literature on tourism value co-creation, customer engagement, and WOM. Three experiments that test the hypotheses and present the results come next. The theoretical contributions, management implications, limits,

and future research objectives are finally discussed in the paper's conclusion.

2. Theory Development

2.1 Tourism value co-creation

Value co-creation is a business model in which companies and clients collaborate to create value through collaborative product or service development (John & Supramaniam, 2024; Nangpiire et al., 2022). Specifically, this study focuses on value co-creation based on Service-Dominant Logic, in which the center of value creation is in collaborative engagement between firms and consumers—without restricting the specific forms or channels of such engagement (Saxena et al., 2024; Vargo & Lusch, 2004). Consumers may participate directly in product development and design, or contribute indirectly through sharing ideas and exchanging resources (Saxena et al., 2024; Vargo & Lusch, 2004).

Unlike other industries, tourism businesses attach greater importance to customers' experiences and interactive engagement, thereby rendering value realization more reliant on customer engagement (Campos et al., 2018). The concept of customer engagement is defined as follows: “occurs by virtue of interactive, cocreative customer experiences with a focal agent/object (e.g., a brand) in focal service relationships. It occurs under a specific set of context-dependent conditions generating differing CE levels; and exists as a dynamic, iterative process within service relationships that cocreate value.” (Brodie et al., 2011, p. 260). Tourists can participate in various stages of service production with different levels of effort based on their needs and preferences, thereby co-creating unique personalized travel experiences (Sugathan & Ranjan, 2019).

In tourism management, most empirical research has concentrated on the beneficial outcomes of value co-creation, highlighting that customer engagement yields mutual advantages for both tourists and businesses, drives innovation, and fosters sustainable development (Assiouras et al., 2023; Deng et al., 2021; Shoukat & Ramkissoon, 2022). For instance, engaging in hotel co-creation enriches guests' experiences (Assiouras et al., 2023), while participating in food co-creation enhances tourists' sense of happiness (Junaid et al., 2020). Furthermore, value co-creation has also been found to enhance perceived value, satisfaction, and revisit intents (Deng et al., 2021; Shoukat & Ramkissoon, 2022).

Nevertheless, differences in tourists' skills, knowledge, and communication capabilities make it challenging for firms to fully control product quality during co-creation, thereby increasing the likelihood of co-creation failure (Fu et al., 2017). Co-creation failure is referred to as a situation where outcomes of value co-creation fail to meet consumers' expectations (Sugathan et al., 2017). Existing research has mainly used qualitative methods (e.g., interviews, text analysis, and thematic analysis) to examine the causes and processes associated with co-creation failure in tourism (Järvi et al., 2020; Nangpiire et al., 2022; Sthapit et al., 2023). These studies underscore the prevalence and severity of co-creation failures in tourism. Yet, there are still few quantitative studies on co-creation failure. (Lumivalo et al., 2024). Consequently, it

remains unclear how customer engagement—a core construct in value co-creation—influences tourists’ psychological and behavioral responses after co-creation failure. This gap hinders the theoretical development of tourism co-creation and limits firms’ ability to identify and mitigate potential risks of co-creation failure.

2.2 Customer Engagement’s Effect on WOM in Co-Creation Failure Contexts

Prior research generally argues that service failure directly reduces tourist satisfaction, which in turn triggers negative WOM (Dolan et al., 2019; Ribeiro & Kalro, 2023). In the current social media era, the rapid dissemination of negative WOM can cause significant harm to firms (Sukhu & Bilgihan, 2023). However, this conclusion is based on conventional service failure contexts and may not fully apply to co-creation failure.

Scholars in marketing and service research have begun to bridge this gap through examining the impact of customer engagement upon tourists’ WOM in co-creation failure contexts, primarily by drawing on the perspectives of internal attribution and self-serving bias. Studies show that value co-creation enhances consumers’ involvement and sense of control over the product. When co-creation failure occurs, they often attribute the failure to themselves personally and bear accountability for the consequences (Chen, 2018; Pacheco et al., 2017; Sugathan & Ranjan, 2020). With such internal attributions, consumers adopt more tolerant attitudes, leading to higher satisfaction with the collaborating firm and lower likelihood and weaker intensity of negative WOM (Koc et al., 2017; Pacheco et al., 2017). Conversely, research anchored in the self-serving bias perspective presents the opposite pattern. When co-creation fails, customers frequently blame the company for failing to uphold their self-esteem and positive self-concept. They may express this defensiveness by disseminating negative WOM to alleviate frustration related to the failure (Bendapudi & Leone, 2003; Zhu et al., 2024).

In summary, research on internal attribution and self-serving bias has elucidated how customer engagement shapes WOM in co-creation failure contexts from the perspective of individual intrinsic motivation, thereby advancing theoretical understanding of value co-creation. However, these findings are inconsistent—indicating that tourists’ post-failure WOM is complex and requires further exploration. Notably, social motivation is critical to WOM formation (Berger, 2025). Yet, few existing studies have explored how customer engagement influences tourists’ negative WOM intention after co-creation failure through the lens of social motivation. To fill this research gap, this study examines whether, how, and under what circumstances customer engagement influences tourists’ negative WOM intention in tourism co-creation failure contexts using impression management theory.

2.3 Mechanism of Customer Engagement on Negative WOM Intention

Impression Management Theory argues that individuals are motivated to control how others perceive and evaluate them to maintain or enhance their social image (Leary & Kowalski, 1990). WOM is a common tool for consumers to engage in impression management (Berger, 2025). For example, consumers may share positive WOM about anthropomorphized products to convey a friendly image and gain social approval (Chen et al., 2023). Conversely, when a

consumption experience fails, consumers often refrain from spreading negative WOM to protect their social image from potential harm (Huang & Philp, 2021; Philp & Ashworth, 2020).

Co-created products provide both practical and symbolic value, as tourists invest many resources in them and imbue them with personal skills, preferences, and styles (Deng et al., 2021; John & Supramaniam, 2024). Value co-creation processes build a stronger connection between the product and the tourists, turning it into a means of self-expression (Atakan et al., 2014; Pallant et al., 2020). As customer engagement rises, tourists invest more resources into the co-created product—making the co-creation outcome more reflective of their personal image (Atakan et al., 2014; Belk, 1988). When co-creation failure occurs, high engagement tourists are face a greater threat to their social image than their low engagement counterparts (Philp & Ashworth, 2020). They are more likely to worry that that sharing negative WOM could lead others to judge them negatively—viewing them as unwise or incompetent consumers (McLuhan, 2020; Sugathan & Ranjan, 2020).

Drawing on impression management theory, high engagement tourists are more inclined to withhold bad experiences to protect their positive self-image (Berger, 2025). Accordingly, this study hypothesizes that when confronting co-creation failure, different levels of customer engagement will trigger different levels of motivation to protect self-image, thereby shaping tourists' negative WOM intention. Specifically, compared to low engagement tourists, those with high engagement exhibit a stronger motivation for self-image protection and have a lower inclination to share negative WOM associated with co-creation failure.

H1: After value co-creation failures, the higher tourists' customer engagement, the lower their negative WOM intention.

H2: The motivation to protect self-image mediates the relationship between customer engagement and negative WOM intention. Specifically, high engagement tourists exhibit a stronger motivation to protect their self-image, which in turn leads to lower negative WOM intention.

2.4 The Moderating Effect of Platform Social Connectedness

With the growing prominence of social media and digital web platforms, WOM has achieved significantly broader reach and greater impact (Sukhu & Bilgihan, 2023). Tourists now share their travel experiences not only through face-to-face communication but also by posting content on diverse online platforms—from review platforms (e.g., Yelp, Meituan) to social media platforms (e.g., Facebook, WeChat) (Park & Lee, 2025). However, these two types of platforms differ significantly in platform social connectedness (Liu et al., 2021). This study argues that platform social connectedness moderates the negative relationship between customer engagement and tourists' negative WOM intention after co-creation failure.

Platform social connectedness is defined as the degree to which individuals form and sustain social ties with others on a given platform (Cho & Son, 2019; Evans et al., 2023). On platforms with high social connectedness, users primarily interact with acquaintances, with frequent interactions rooted in stable social ties (Choi & Sung, 2018; Zhou & Zhang, 2019). Such relational networks strengthen tourists' awareness of self-presentation, making them more

concerned with managing their image within their social circles (Liu et al., 2021; Yan et al., 2018). For example, tourists often post polished or curated selfies on social media to project an idealized self-image (Li et al., 2023). High engagement tourists put more effort into the co-created result and feel a deeper personal connection to it when co-creation fails (Belk, 1988; Pallant et al., 2020). Thus, they have a greater probability to be concerned that disseminating unfavorable WOM could damage their image among acquaintances. Therefore, on platforms with high social connectedness, self-image threats are amplified, prompting them to suppress their negative WOM expression.

Conversely, on review platforms with low social connectedness, users primarily share information rather than maintain ongoing interpersonal relationships. Their interactions tend to be impersonal and transient (Liu et al., 2021; Park & Lee, 2025). On these platforms, tourists' self-presentation motivation is weaker. Instead, they tend to express opinions based on their authentic personal experiences (Liu et al., 2021; Mudambi & Schuff, 2010). Thus, on platforms with low social connectedness, even high engagement tourists are less concerned about potential image threats from co-creation failure. They tend to be more inclined to disclose their genuine negative experiences. In such contexts, the negative relationship between customer engagement and negative WOM intention is weakened. Accordingly, we propose:

H3: Platform social connectedness moderates the negative relationship between customer engagement and tourists' negative WOM intention after co-creation failure. Specifically, when platform social connectedness is high, the negative relationship is stronger; when it is low, the relationship is weaker.

The research model for this work is shown in Fig. 1.

 Insert Fig.1 about here

2.5 Overview of Studies

The hypotheses in this study were tested through scenario experiments. This method has been commonly utilized in co-creation research (Chen, 2018; Sugathan et al., 2017, 2020). As such, this method is well-suited for the current study. Three scenario experiments were conducted in this study, each centered on co-creation scenarios commonly encountered within the tourism and hospitality fields (see Table 1). All experiments were conducted on the Chinese online research platform Credamo.com between January 12, 2023, and August 5, 2025. All participants were Chinese citizens 18 years of age or older (see Appendix B for demographic information). Participants received a small financial reward after completing the study. All measurement scales are provided in Appendix C, and reliability and validity analyses are presented in Appendix D.

Insert Table.1 about here

3. Study 1

3.1 Design and Sample

A one-factor between-subjects design was used in Study 1 (consumer engagement: low vs. high). Participants were randomly allocated to one of the two experimental conditions. This study collected 120 valid responses (66.67% female, $M_{\text{age}} = 29.98$).

3.2 Procedure and Measurement

First, participants' co-creation knowledge and experience were measured before participants read the scenario. Next, in the low customer engagement condition, participants imagined co-creating a souvenir oil painting with the firm—with the firm completing most of the work. In contrast, those in the high customer engagement condition imagined taking an active role and investing substantial effort in creating. Then, all participants were informed that the co-creation had ultimately failed, and they were dissatisfied with the outcome. Additional details about the scenario design and customer engagement manipulation are provided in Appendix E.

After reading the scenario, participants completed a set of questionnaire items. Specifically, negative WOM intention tested with two items on a 7-point Likert scale ($\alpha = 0.79$, Leung et al., 2015). Customer engagement was assessed using a single 7-point item: scores closer to 1 indicate that the merchant made a greater contribution, while scores closer to 7 indicate greater personal contribution (Sugathan et al., 2017). Meanwhile, the control variables—co-creation knowledge, co-creation experience, satisfaction, and perceived failure severity—were each measured with a single 7-point item (see Appendix C). Subsequently, participants completed an attention check to verify their attention and ensure data validity. Finally, demographic information was acquired.

3.3 Results

(1) Manipulation Check

One-way ANOVA findings demonstrated that the high engagement group reported significantly higher customer engagement in the co-creation of the painting than the low engagement group ($M_{\text{high}} = 5.80$, $SD_{\text{high}} = 0.61$; $M_{\text{low}} = 3.75$, $SD_{\text{low}} = 1.27$, $F(1, 118) = 127.32$, $p < 0.001$, $\eta^2 = 0.52$), confirming the successful manipulation of customer engagement.

(2) Hypothesis Testing

ANOVA results further indicated that after a co-creation failure, participants in the high

engagement group were less willing to spread negative WOM than those in the low engagement group ($M_{\text{high}} = 3.75$, $SD_{\text{high}} = 1.60$; $M_{\text{low}} = 4.87$, $SD_{\text{low}} = 1.24$, $F(1, 118) = 18.23$, $p < 0.001$, $\eta^2 = 0.13$; see Fig. 1). In terms of co-creation knowledge ($F(1, 118) = 0.73$, $p = 0.40$), co-creation experience ($F(1, 118) = 0.56$, $p = 0.46$), satisfaction ($F(1, 118) = 0.04$, $p = 0.85$), and perceived failure severity ($F(1, 118) = 0.15$, $p = 0.70$), the results also revealed no significant differences between the two groups, indicating that these control variables do not influence the hypothesized effects. Thus, H1 is supported.

 Insert Fig.2 about here

3.4 Discussion

Study 1 confirms that higher customer engagement reduces tourists' inclination to spread negative WOM related to co-creation failure—i.e., it exhibits a buffering effect on negative WOM. Interestingly, the results show that tourist satisfaction was equally low in both the high and low engagement groups, with no significant difference ($M_{\text{high}} = 2.25$, $SD = 0.97$; $M_{\text{low}} = 2.22$, $SD = 0.98$, $F(1, 118) = 0.035$, $p = 0.85$). This finding contradicts previous research, which argues that low satisfaction triggers negative WOM (Yeh et al., 2020). This study shows that even though tourist satisfaction is low, their intention to spread negative WOM decreases as customer engagement increased. This suggests that negative WOM intention may not accurately reflect tourists' satisfaction in value co-creation contexts.

4. Study 2

4.1 Design and Sample

A single-factor between-subjects design was adopted in Study 2 (low vs. high customer engagement). Participants were randomly allocated to one of the two experimental conditions. A total of 120 valid responses were collected (65.00% female, $M_{\text{age}} = 30.60$).

4.2 Procedure and Measurement

Following a procedure similar to Study 1, Study 2 differed primarily in the experimental scenario, which involved co-creating a travel plan (see Appendix F). In addition to the variables from Study 1, Study 2 added measurements of the motivation to protect self-image and internal attribution. Motivation to protect self-image was assessed with four items on a 7-point Likert scale ($\alpha = 0.88$; White & Peloza, 2009). Internal attribution was assessed with four items on a 7-point Likert scale ($\alpha = 0.95$; Sugathan et al., 2017). Detailed measurement items are presented in Appendix C.

4.3 Results

(1) Manipulation Check

One-way ANOVA results indicated participants in the high engagement group have reported significantly higher customer engagement than those in the low engagement group ($M_{\text{high}} = 5.55$, $SD_{\text{high}} = 0.77$; $M_{\text{low}} = 3.02$, $SD_{\text{low}} = 1.27$, $F(1, 118) = 174.99$, $p < 0.001$, $\eta^2 = 0.60$), indicating successful manipulation of customer engagement.

(2) Hypothesis Testing

As predicted, participants in the high engagement group demonstrated a significantly lower willingness to spread negative WOM than those in the low engagement group ($M_{\text{high}} = 3.12$, $SD_{\text{high}} = 1.21$, $M_{\text{low}} = 5.82$, $SD_{\text{low}} = 0.70$, $F(1, 118) = 224.08$, $p < 0.001$, $\eta^2 = 0.66$). Similarly, no significant group differences were observed in co-creation knowledge ($F(1, 118) = 0.06$, $p = 0.81$), co-creation experience ($F(1, 118) = 0.21$, $p = 0.65$), satisfaction ($F(1, 118) = 0.29$, $p = 0.61$), or perceived failure severity ($F(1, 118) = 0.24$, $p = 0.59$). These results further confirmed that H1 was once again supported.

The study adopts PROCESS Bootstrapping Model 4 (Hayes, 2013) to analyze the mediating effect (5000 resamples). The indirect effect of customer engagement is supported, as the 95% confidence intervals exclude 0 ($\beta = -0.47$, $SE = 0.13$, 95% CI = [-0.7537, -0.2538]; see Fig. 2). This suggests that, after the co-creation failure, highly engaged customers have a stronger motivation to protect self-image, leading to a lower intention to spread negative WOM about the co-creation failure. Thus, H2 is supported. Contrary to prior research, we found no evidence of a mediating effect of internal attribution ($\beta = -0.34$, $SE = 0.24$, 95% CI = [-0.8861, 0.0710], including 0). This might be because the attribution process tends to occur in later stages of WOM behavior and has less influence on early-stage negative WOM intention. Therefore, the influence of internal attribution on our findings can be ruled out.

Insert Fig.3 about here

4.4 Discussion

Study 2 revealed that motivation to protect self-image mediates the relationship between customer engagement and tourists' negative WOM intention, while ruling out internal attribution as an alternative mechanism. This finding differs from prior research based on self-serving bias (Bendapudi & Leone, 2003; Jong-Kuk et al., 2010; Zhu et al., 2024), which argues that high engagement tourists tend to externalize blame to safeguard their self-esteem. In contrast, this study highlights the role of motivation to protection self-image among high engagement tourists. When co-creation failure occurs, these tourists may fear may fear being seen by others as lacking competence or taste; thus, they suppress negative WOM to manage their social impressions. This novel insight offers a fresh perspective on the link between customer engagement and negative WOM intention, enriching the existing work on value co-creation and WOM.

5. Study 3

5.1 Design and Sample

Study 3 employed a 2 (customer engagement: low vs. high) $\times$ 2 (platform social connectedness: low vs. high) between-subjects design, with all participants randomized to the four conditions. 330 valid responses were collected (65.50% female, $M_{age} = 33.33$).

5.2 Procedure and Measurement

First, participants' co-creation knowledge, co-creation experience, and digital literacy were measured with single-item 7-point Likert scales (see Appendix C). Next, customer engagement and platform social connectedness were manipulated in two separate stages (see Appendix G). In the initial phase, participants were told to imagine co-designing a travel plan with a firm. Study 3's co-creation scenario was adapted from the co-creation services of Blacktomato.com and Trip.com to enhance scenario realism (all $M_{realism} > 5$). Participants in the low engagement condition imagined limited involvement in the planning process, whereas those in the high engagement condition imagined more extensive and in-depth participation. All participants were then informed that the final travel plan failed to meet their expectations, and they were dissatisfied with the outcome.

The second stage focused on manipulating platform social connectedness: review platforms represented the low social connectedness condition, while social networking platforms represented the high social connectedness condition. Participants in the review platform condition read a description highlighting the platform's low social connectedness, whereas those in the social networking platform condition read a description emphasizing its high social connectedness.

Following the manipulations, participants completed the same measures of negative WOM intention ($\alpha = 0.89$) and the motivation to protect self-image ($\alpha = 0.93$) as Study 2. Customer engagement was measured with four 7-point Likert items ($\alpha = 0.91$; Xie et al., 2022). Platform social connectedness was measured with two 5-point Likert items ($\alpha = 0.69$; Evans et al., 2023). Meanwhile, platform usage, perceived failure severity, and satisfaction were each measured with single-item 7-point Likert scales (see Appendix C).

5.3 Results

(1) Manipulation Check

Two-way ANOVA results indicated that participants in the high engagement group reported higher customer engagement than those in the low engagement group ($M_{low} = 3.96$, $SD_{low} = 1.33$; $M_{high} = 5.75$, $SD_{high} = 0.76$, $F(1,326) = 230.00$, $p < 0.001$, $\eta^2 = 0.41$), and the interaction effect was non-significant ($F(1,326) = 0.98$, $p = 0.32$). Compared with the low social

connectedness platform, participants in the high social connectedness platform condition reported significantly higher platform social connectedness ($M_{\text{review}} = 4.40$, $SD_{\text{review}} = 1.39$; $M_{\text{social}} = 5.80$, $SD_{\text{social}} = 0.74$, $F(1, 326) = 126.86$, $p < 0.001$, $\eta^2 = 0.28$), and the interaction effect was non-significant ($F(1, 326) = 0.32$, $p = 0.57$).

(2) Hypothesis Testing

Results of the two-way ANOVA showed a significant interaction effect between customer engagement and social connectedness ($F(1, 326) = 65.48$, $p < 0.001$, $\eta^2 = 0.17$). Simple effects analysis revealed that in the high social connectedness platform, high engagement group reported significantly lower negative WOM intention than low engagement group ($M_{\text{low}} = 5.08$, $SD_{\text{low}} = 1.19$; $M_{\text{high}} = 3.31$, $SD_{\text{high}} = 1.31$, $F(1, 326) = 100.88$, $p < 0.001$, $\eta^2 = 0.24$; see Fig. 3). However, in the low social connectedness platform, there was no significant difference in negative WOM intention between the low- and high engagement groups ($M_{\text{low}} = 5.34$, $SD_{\text{low}} = 0.94$; $M_{\text{high}} = 5.56$, $SD_{\text{high}} = 1.01$, $F(1, 326) = 1.69$, $p = 0.20$, $\eta^2 = 0.01$; see Fig. 3).

In addition, the two-way ANOVA results demonstrated no significant differences across the four groups in terms of co-creation knowledge ($F(1, 326) = 0.03$, $p = 0.88$), co-creation experience ($F(1, 326) = 0.00$, $p = 0.98$), digital literacy ($F(1, 326) = 0.48$, $p = 0.49$), platform usage ($F(1, 326) = 0.07$, $p = 0.79$), satisfaction ($F(1, 326) = 0.51$, $p = 0.47$) or perceived failure severity ($F(1, 326) = 1.81$, $p = 0.18$), indicating these control variables were effectively controlled and did not influence the hypothesis tests.

Insert Fig.4 about here

Then, we used Model 8 of PROCESS Bootstrapping (Hayes, 2013) for moderated mediation analysis (5000 resamples). The results indicated a significant moderated mediation effect ($\beta = -0.61$, $SE = 0.14$, 95% CI = [-0.8993, -0.3525], excluding 0). The indirect effect of the motivation to protect self-image is significant on the high social connectedness platform ($\beta = -0.60$, $SE = 0.11$, 95% CI = [-0.8297, -0.3899], excluding 0). However, this effect did not hold on the low social connectedness platform ($\beta = 0.01$, $SE = 0.08$, 95% CI = [-0.1470, 0.1783], including 0). Hence, H3 is supported.

5.4 Discussion

The findings of Study 3 indicate that the buffering effect of customer engagement on travelers' negative WOM intention is only observed on high social connectedness platforms. In contrast, under the low social connectedness platforms, high- and low engagement tourists exhibit no notable difference with regard to negative WOM intention. These results align with prior studies on social media impression management (Li et al., 2023; Liu et al., 2021; Yan et al., 2018), which argues that tourists are more focused on managing their public image on social networking platforms. They often share positive content to construct an idealized persona—a behavior that is far less common on review platforms.

Furthermore, the results of this investigation differ from those of Xu et al. (2018). Xu et al. (2018) identified the moderating effect of context (private vs. public) on the link between

co-creation level and service evaluation. Specifically, they revealed that higher co-creation results in more favorable evaluations in private settings, but to more negative evaluations in public settings. This conclusion is completely opposite to that of Study 3. The discrepancy stems from the fact that Xu et al. (2018) examined scenarios with ambiguous co-creation outcomes, while this study focuses on this specific negative context where co-creation outcomes have explicitly failed.

Overall, Study 3 demonstrates the moderating role of platform social connectedness and further validates that motivation to protect self-image is a key mediating mechanism linking customer engagement and negative WOM intention. Notably, it underscores that this relationship is contingent upon the WOM transmission environment. These insights offer specific practical implications for firms to design platform-tailored marketing strategies.

6. General Discussion

6.1 Theoretical Implications

First, this study establishes that customer engagement exerts a buffering effect on tourists' negative WOM intention after co-creation failure. Value co-creation has long been recognized as a central focus in tourism (Chathoth et al., 2016; John & Supramaniam, 2024; Nangpiire et al., 2022; Xie et al., 2022). Previous research generally argues that active tourist engagement promotes value co-creation and generates positive outcomes (Assiouras et al., 2023; Deng et al., 2021; González-Mansilla et al., 2019; Junaid et al., 2020; Mohammadi et al., 2020; Shoukat & Ramkissoon, 2022; Sugathan & Ranjan, 2019). However, this study shifts focus to a distinct but understudied context: co-creation failure.

Prior research on service failure has consistently shown that service delivery failures typically trigger negative WOM (Dolan et al., 2019; Ribeiro & Kalro, 2023). In contrast, this study reveals a distinct pattern of results. Unlike findings in typical service failure contexts, our results indicate that high engagement tourists exhibit lower negative WOM intention after co-creation failure than their low engagement tourists. This finding advances existing research on value co-creation and WOM, underscoring that customer engagement can alleviate tourists' negative responses in co-creation failure contexts.

Second, leveraging Impression Management Theory, we uncover the underlying mechanism through which customer engagement influences negative WOM intentions. Scholars argue that customer engagement leads to a stronger bond between consumers and products, which is a key distinction between co-created products and non-co-created products, and a key driver of changes in consumer behavior (Atakan et al., 2014; Troye & Supphellen, 2012; Pallant et al., 2020). Marketing researchers have looked at how customer engagement affects WOM from two perspectives: internal attribution and self-serving bias (Bendapudi & Leone, 2003; Jong-Kuk et al., 2010; Koc et al., 2017; Sugathan et al., 2017; Sugathan & Ranjan, 2020; Zhu et al., 2024). However, both perspectives focus on consumers' individual self and overlook the social self. WOM is inherently a social behavior. In the social media era, shaping

and maintaining a positive social image has emerged as a critical motivation influencing WOM behavior (Liu et al., 2021; Sukhu & Bilgihan, 2023). In response to the limitations of existing studies, we identify the mediating effect of the motivation to protect self-image in the relationship between customer engagement and negative WOM intention. This study expands the application of Impression Management Theory to the field of co-creation failure and offers a fresh psychological and motivational perspective on tourism value co-creation.

Finally, this study establishes the moderating role platform social connectedness. Specifically, the findings reveal that on high social connectedness platforms, the indirect effect of customer engagement on suppressing negative WOM via motivation to protect self-image is strengthened. By contrast, this indirect effect is not significant on low social connectedness platforms.

Prior research by Xu et al. (2018) found that when co-creation outcomes are ambiguous, high-engagement consumers provide more negative service evaluations in public settings than in private ones to shirk responsibility. However, this study shows that platform social connectedness moderates customers' impression control behavioral techniques rather than their individual evaluation systems in the context of clearly unsuccessful co-creation outcomes. On high social connectedness platforms, high-engagement tourists tend to choose to remain silent to protect their self-image rather than voice public complaints. This finding identifies the key moderating variable in how customer engagement influences tourists' negative WOM and refines the mechanism underlying the negative WOM buffering effect.

6.2 Managerial Implications

This study helps managers develop a refreshed understanding of value co-creation. A successful co-creation can deliver extraordinary experiences to customers. However, customers typically spread negative WOM about the firm after failed co-creation attempts (Xu et al., 2018). In the age of widespread social media use, such negative WOM can easily trigger a corporate crisis. Hence, firms may be hesitant despite the attractive benefits of value co-creation. Nevertheless, this study reveals that even when co-creation fails, customer engagement acts as a buffer against negative WOM, giving firms an opportunity to reflect on and enhance their value co-creation services. Businesses should try promoting their value co-creation offers on social media channels and allowing customers to take part in the production process for products. This leverages the buffering effect of customer engagement and social platforms against potential negative WOM while allowing the firm to refine and optimize existing products and services according to customer feedback from the co-creation process. Thus, it can spur innovation in the travel and hospitality sector and result in more commercially viable goods.

The findings enable tourism and hospitality organizations to correctly evaluate tourists' attitudes and their product and service quality. In contrast to previous studies, we find that although a co-creation attempt fails, customers typically refrain from spreading negative WOM in more social contexts to protect their self-image. This may help firms avoid public relations crises during the short-term period. However, over the long term, it might create long-term risks to their sustainable growth. Firms may find it difficult to gather authentic feedback, and

product and service issues may go unnoticed, which undermines their sustainable development. This study highlights this risk for businesses and provides actionable solutions to help businesses manage risks more proactively. We recommend that businesses gather feedback from multiple channels (e.g., third-party review platforms, social platforms, corporate websites, customer surveys), analyze customers' underlying sentiments, and detect potential product and service quality issues before they escalate into crises.

Lastly, it offers practical guidance concerning the operations of tourism and hospitality industry platforms. When co-creation services fail, our findings suggest that high engagement customers are less willing to spread negative WOM on high social connectedness platforms (e.g., social networking platforms) than on low social connectedness platforms (e.g., review platforms). Thus, firms can develop tailored promotion strategies for their offerings based on platform-specific characteristics. On social platforms (e.g., Facebook, Instagram, and WeChat), tourists are typically more focused on managing their social image and how others perceive them and often refrain from sharing negative information. Therefore, businesses can consider using social media platforms as primary marketing channels for value co-creation initiatives, especially when launching new value co-creation offerings. Conversely, when customers share feedback on more anonymous platforms (e.g., Yelp, Trip Advisor, and Meituan), their motivation to protect self-image is weaker. They may spread negative WOM to offer neutral recommendations to other consumers or vent their negative emotions. In contrast, firms should exercise caution and prioritize launching more mature, polished value co-creation offerings to mitigate the risk of negative WOM spread.

6.3 Limitations and Future Directions

This study uses experimental approaches to examine the proposed hypotheses. The strength of this method lies in its ability to control for the influence of extraneous variables, securing the internal validity of the research results. Subsequent research could adopt diverse methods (e.g., field studies) to further improve the reliability and external validity of the findings. Second, though existing literature confirms that self-image protection through WOM management is a prevalent motivation (Berger, 2024), the participants in this study are Chinese, and the stimuli in Study 3 were derived from the most widely used platforms in the Chinese market. It therefore remains unclear whether the findings are generalizable across cultural contexts. Future research could further replicate and validate these findings in diverse cultural settings. Finally, the theoretical boundaries of this study merit further exploration. While we confirmed the moderating role of platform social connectedness, future studies could investigate individual-level characteristics as potential moderators. For instance, customers with high versus low self-esteem may perceive self-image threats differently when faced with co-creation failure. Additionally, customers' mindset - whether they primarily prioritize the co-creation process or the outcome - may also moderate the proposed relationships.

References

- Assiouras, I., Skourtis, G., Giannopoulos, A., Buhalis, D., & Karaosmanoglu, E. (2023). Testing the relationship between value co-creation, perceived justice and guests' enjoyment. *Current Issues in Tourism*, 26(4), 587-602. <https://doi.org/10.1080/13683500.2022.2030680>
- Atakan, S. S., Bagozzi, R. P., & Yoon, C. (2014). Make it your own: How process valence and self-construal affect evaluation of self-made products. *Psychology & marketing*, 31(6), 451-468. <https://doi.org/10.1002/mar.20707>
- Belk, R. W. (1988). Possessions and the extended self. *Journal of consumer research*, 15(2), 139-168. <https://doi.org/10.1086/209154>
- Bendapudi, N., & Leone, R. P. (2003). Psychological implications of customer participation in co-production. *Journal of marketing*, 67(1), 14-28. <https://doi.org/10.1509/jmkg.67.1.14.18592>
- Berger, J. (2025). What gets shared, and why? Interpersonal communication and word of mouth. *Annual Review of Psychology*, 76. <https://doi.org/10.1146/annurev-psych-013024-031524>
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of service research*, 14(3), 252-271. <https://doi.org/10.1177/1094670511411703>
- Campos, A. C., Mendes, J., Valle, P. O. D., & Scott, N. (2018). Co-creation of tourist experiences: A literature review. *Current Issues in Tourism*, 21(4), 369-400. <https://doi.org/10.1080/13683500.2015.1081158>
- Chathoth, P. K., Ungson, G. R., Harrington, R. J., & Chan, E. S. (2016). Co-creation and higher order customer engagement in hospitality and tourism services: A critical review. *International Journal of Contemporary Hospitality Management*, 28(2), 222-245. <https://doi.org/10.1108/IJCHM-10-2014-0526>
- Chen, C. Y. (2018). How customer participation influences service failure attribution: The moderating effect of self-efficacy. *Journal of Service Theory and Practice*, 28(3), 298-314. <https://doi.org/10.1108/JSTP-12-2016-0224>
- Chen, F., Sengupta, J., & Zheng, J. (2023). When products come alive: Interpersonal communication norms induce positive word of mouth for anthropomorphized products. *Journal of Consumer Research*, 49(6), 1032-1052. <https://doi.org/10.1093/jcr/ucac027>
- Cho, E., & Son, J. (2019). The effect of social connectedness on consumer adoption of social commerce in apparel shopping. *Fashion and Textiles*, 6(1), 14. <https://doi.org/10.1186/s40691-019-0171-7>
- Choi, T. R., & Sung, Y. (2018). Instagram versus Snapchat: Self-expression and privacy concern on social media. *Telematics and informatics*, 35(8), 2289-2298. <https://doi.org/10.1016/j.tele.2018.09.009>
- Deng, W., Lu, C., Lin, Y., & Chen, W. (2021). A study on the effect of tourists value co-creation on the perceived value of souvenirs: mediating role of psychological ownership and authenticity. *Asia Pacific Journal of Tourism Research*, 26(2), 200-214.

- <https://doi.org/10.1080/10941665.2020.1763411>
- Dolan, R., Seo, Y., & Kemper, J. (2019). Complaining practices on social media in tourism: A value co-creation and co-destruction perspective. *Tourism Management*, 73, 35-45. <https://doi.org/10.1016/j.tourman.2019.01.017>
- Evans, M., Glassman, M., Xu, M., & Gao, L. (2023). Social connection, social exploration, social and platform constraints: The construction and validation of a social media user perception scale. *Psychology of Popular Media*. <https://doi.org/10.1037/ppm0000515>
- Fu, W., Wang, Q., & Zhao, X. (2017). The influence of platform service innovation on value co-creation activities and the network effect. *Journal of Service Management*, 28(2), 348-388. <https://doi.org/10.1108/JOSM-10-2015-0347>
- González-Mansilla, Ó., Berenguer-Contrí, G., & Serra-Cantallops, A. (2019). The impact of value co-creation on hotel brand equity and customer satisfaction. *Tourism Management*, 75, 51-65. <https://doi.org/10.1016/j.tourman.2019.04.024>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Huang, B., & Philp, M. (2021). When AI-based services fail: examining the effect of the self-AI connection on willingness to share negative word-of-mouth after service failures. *The Service Industries Journal*, 41(13-14), 877-899. <https://doi.org/10.1080/02642069.2020.1748014>
- Järvi, H., Keränen, J., Ritala, P., & Vilko, J. (2020). Value co-destruction in hotel services: Exploring the misalignment of cognitive scripts among customers and providers. *Tourism Management*, 77, 104030. <https://doi.org/10.1016/j.tourman.2019.104030>
- John, S. P., & Supramaniam, S. (2024). Value co-creation research in tourism and hospitality management: A systematic literature review. *Journal of Hospitality and Tourism Management*, 58, 96-114. <https://doi.org/10.1016/j.jhtm.2023.11.008>
- Jong-Kuk, S., Min-Sook, P., Mi-Ok, O., & Mi-Ri, K. (2010). How do Customers Respond to Service Failure When They Participate in Service Co-creation. *International Journal of Arts and Sciences*, 3(7), 444-455.
- Junaid, M., Hussain, K., Asghar, M. M., Javed, M., & Hou, F. (2020). An investigation of the diners' brand love in the value co-creation process. *Journal of Hospitality and Tourism Management*, 45, 172-181. <https://doi.org/10.1016/j.jhtm.2020.08.008>
- Koc, E., Ulukoy, M., Kilic, R., Yumusak, S., & Bahar, R. (2017). The influence of customer participation on service failure perceptions. *Total Quality Management & Business Excellence*, 28(3-4), 390-404. <https://doi.org/10.1080/14783363.2015.1090290>
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological bulletin*, 107(1), 34.
- Leung, X. Y., Bai, B., & Stahura, K. A. (2015). The marketing effectiveness of social media in the hotel industry: A comparison of Facebook and Twitter. *Journal of hospitality & tourism research*, 39(2), 147-169. <https://doi.org/10.1177/1096348012471381>
- Li, N., Meng, F., & Martin, D. (2023). The influence of travel photo editing on tourists' experiences. *Tourism Management*, 98, 104762. <https://doi.org/10.1016/j.tourman.2023.104762>

- Liu, H., Jayawardhena, C., Osburg, V. S., Yoganathan, V., & Cartwright, S. (2021). Social sharing of consumption emotion in electronic word of mouth (eWOM): A cross-media perspective. *Journal of Business Research*, 132, 208-220. <https://doi.org/10.1016/j.jbusres.2021.04.030>
- Liu, X., Ren, P., Lv, X., & Li, S. (2024). Service experience and customers' eWOM behavior on social media platforms: The role of platform symmetry. *International Journal of Hospitality Management*, 119, 103735. <https://doi.org/10.1016/j.ijhm.2024.103735>
- Lumivalo, J., Tuunanen, T., & Salo, M. (2024). Value co-destruction: a conceptual review and future research agenda. *Journal of Service Research*, 27(2), 159-176. <https://doi.org/10.1177/10946705231177504>
- McLuhan, A. (2020). Adopting a cloak of incompetence: impression management techniques for feigning lesser selves. *Sociological Theory*, 38(2), 122-141. <https://doi.org/10.1177/0735275120926222>
- Mohammadi, F., Yazdani, H. R., Jami Pour, M., & Soltani, M. (2021). Co-creation in tourism: a systematic mapping study. *Tourism Review*, 76(2), 305-343. <https://doi.org/10.1108/TR-10-2019-0425>
- Mudambi, S. M., & Schuff, D. (2010). Research note: What makes a helpful online review? A study of customer reviews on Amazon. com. *MIS quarterly*, 185-200. <https://doi.org/10.2307/20721420>
- Nangpiire, C., Silva, J., & Alves, H. (2022). Customer engagement and value co-creation/destruction: The internal fostering and hindering factors and actors in the tourist/hotel experience. *Journal of Research in Interactive Marketing*, 16(2), 173-188. <https://doi.org/10.1108/JRIM-05-2020-0104>
- Pacheco, N. A., Becker, L. C. B., & Brei, V. A. (2017). A light in the dark: The benefits of co-production in service failures. *Journal of Retailing and Consumer Services*, 34, 95-101. <https://doi.org/10.1016/j.jretconser.2016.09.012>
- Pallant, J., Sands, S., & Karpen, I. (2020). Product customization: A profile of consumer demand. *Journal of Retailing and Consumer Services*, 54, 102030. <https://doi.org/10.1016/j.jretconser.2019.102030>
- Park, J. Y., & Lee, H. E. (2025). How consumer photo reviews and online platform types influence luxury hotel booking intentions through envy. *Journal of Travel Research*, 64(6), 1275-1291. <https://doi.org/10.1177/00472875241247317>
- Philp, M., & Ashworth, L. (2020). I should have known better!: When firm-caused failure leads to self-image concerns and reduces negative word-of-mouth. *Journal of Business Research*, 116, 283-293. <https://doi.org/10.1016/j.jbusres.2020.05.018>
- Ribeiro, D. A., & Kalro, A. D. (2023). Four decades of negative word-of-mouth and negative electronic word-of-mouth: A morphological analysis. *International Journal of Consumer Studies*, 47(6), 2528-2552. <https://doi.org/10.1111/ijcs.12962>
- Saxena, S., Amritesh, Mishra, S. C., & Mukerji, B. (2024). A multi-method bibliometric review of value co-creation research. *Management Research Review*, 47(2), 183-203. <https://doi.org/10.1108/MRR-09-2022-0646>
- Sthapit, E., Garrod, B., Stone, M. J., Björk, P., & Song, H. (2023). Value co-destruction in

- tourism and hospitality: a systematic literature review and future research agenda. *Journal of Travel & Tourism Marketing*, 40(5), 363-382. <https://doi.org/10.1080/10548408.2023.2255881>
- Sugathan, P., & Ranjan, K. R. (2019). Co-creating the tourism experience. *Journal of Business Research*, 100, 207-217. <https://doi.org/10.1016/j.jbusres.2019.03.032>
- Sugathan, P., & Ranjan, K. R. (2020). When co-production fails: The role of customer's internal attributions and impression management concerns. *Journal of Business Research*, 121, 535-548. <https://doi.org/10.1016/j.jbusres.2020.02.038>
- Sugathan, P., Ranjan, K. R., & Mulky, A. G. (2017). Atypical shifts post-failure: Influence of co-creation on attribution and future motivation to co-create. *Journal of Interactive Marketing*, 38(1), 64-81. <https://doi.org/10.1016/j.intmar.2017.01.002>
- Sukhu, A., & Bilgihan, A. (2023). Service recovery strategies: mitigating negative word-of-mouth in the hotel industry through enhanced customer engagement. *International Hospitality Review*. <https://doi.org/10.1108/IHR-05-2023-0025>
- Shoukat, M. H., & Ramkissoon, H. (2022). Customer delight, engagement, experience, value co-creation, place identity, and revisit intention: A new conceptual framework. *Journal of Hospitality Marketing & Management*, 31(6), 757-775. <https://doi.org/10.1080/19368623.2022.2062692>
- Troye, S. V., & Supphellen, M. (2012). Consumer participation in coproduction: "I made it myself" effects on consumers' sensory perceptions and evaluations of outcome and input product. *Journal of marketing*, 76(2), 33-46. <https://doi.org/10.1509/jm.10.0205>
- Vargo, S.L., & Lusch, R.F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17. <https://doi.org/10.1509/jmkg.68.1.1.24036>
- White, K., & Peloza, J. (2009). Self-benefit versus other-benefit marketing appeals: Their effectiveness in generating charitable support. *Journal of Marketing*, 73(4), 109-124. <https://doi.org/10.1509/jmkg.73.4.109>
- Xie, L., Guan, X., He, Y., & Huan, T. C. (2022). Wellness tourism: Customer-perceived value on customer engagement. *Tourism Review*, 77(3), 859-876. <https://doi.org/10.1108/TR-06-2020-0281>
- Xu, H., Liu, Y., & Lyu, X. (2018). Customer value co-creation and new service evaluation: the moderating role of outcome quality. *International Journal of Contemporary Hospitality Management*, 30(4), 2020-2036. <https://doi.org/10.1108/IJCHM-08-2016-0467>
- Yan, Q., Zhou, S., & Wu, S. (2018). The influences of tourists' emotions on the selection of electronic word of mouth platforms. *Tourism Management*, 66, 348-363. <https://doi.org/10.1016/j.tourman.2017.12.015>
- Zhang, Y. (2023). Tourist co-creation and tourism marketing outcomes: An inverted U-shaped relationship. *Journal of Business Research*, 166, 114105. <https://doi.org/10.1016/j.jbusres.2023.114105>
- Zhou, M., & Zhang, X. (2019). Online social networking and subjective well-being: Mediating effects of envy and fatigue. *Computers & Education*, 140, 103598. <https://doi.org/10.1016/j.compedu.2019.103598>
- Zhu, T., Zhang, L., Deng, H., Liu, C., & Liu, X. (2024). Consumer autonomy: A strategy to

alleviate the self-serving bias in tourism value co-creation. *Journal of Hospitality and Tourism Management*, 60, 72-81. <https://doi.org/10.1016/j.jhtm.2024.06.010>