EXAMINING THE ANTECEDENTS OF COCREATED SERVICE RECOVERY AND ITS RELATIONSHIP WITH CUSTOMER SATISFACTION

ABSTRACT

Objective: This study aimed to investigate the impact of initial consumer involvement in service delivery and customer engagement on cocreated service recovery, and how this form of service failure resolution influences post-recovery customer satisfaction.

Design / Methodology / Approach: A descriptive research with a quantitative approach was conducted using a survey method, involving 189 Brazilian consumers from the hospitality sector. Data were analyzed using Structural Equation Modeling with Partial Least Squares (PLS) estimation.

Results: Findings demonstrate that recovery situations are not merely treatments for service process-related failures, but should be viewed as a social process wherein providers and consumers need to be engaged for mutual benefits. The results suggest that highly engaged customers who participate in the initial service delivery exhibit a greater willingness to collaborate in the recovery process.

Originality: This research investigates a typology of service failure recovery that is currently gaining popularity in studies on the subject. Additionally, it incorporates two antecedents of cocreated recovery that have been underexplored previously, especially in the Brazilian context, and that could provide pertinent information for effective failure resolutions.

Keywords: Initial involvement. Satisfaction. Engagement. Attribution of failure.
RESUMO

Objetivo: Este estudo teve como objetivo investigar o impacto da participação inicial do consumidor na entrega de serviço e do engajamento do cliente sobre a recuperação de serviço cocriada, e como tal forma de reparação de falhas influi sobre a satisfação do consumidor pós-recuperação.

Design / Metodologia / Abordagem: Realizou-se uma pesquisa descritiva, de abordagem quantitativa a partir do método survey, com 189 consumidores brasileiros do setor de hospitalidade. Os dados foram analisados por meio da Modelagem de Equações Estruturais, por estimativa PLS.

Resultados: Os achados demonstram que as situações de recuperação não se tratam apenas de tratamentos para falhas decorrentes do processo de serviço, mas devem ser observadas como um processo social, em que os prestadores e consumidores precisam estar envolvidos para a obtenção de benefícios mútuos. Os resultados permitem inferir que o cliente altamente engajado e que participa da entrega inicial do serviço apresenta maior disposição para colaborar com o processo de recuperação.

Originalidade: A pesquisa investiga uma tipologia de recuperação de falhas de serviços que vem atualmente ganhando popularidade nos estudos sobre a temática. Além disso, incorpora dois antecedentes da recuperação co-criada que foram pouco explorados anteriormente, sobretudo, no contexto brasileiro, e que podem trazer informações pertinentes para eficientes reparações de falhas.


RESUMEN

Objetivo: Este estudio tuvo como objetivo investigar el impacto de la participación inicial del consumidor en la prestación del servicio y el compromiso del cliente en la recuperación del servicio creado conjuntamente, y cómo esa forma de reparación de fallas influye en la satisfacción del consumidor posterior a la recuperación.

Procedimientos Metodológicos: Se realizó una investigación descriptiva, con enfoque cuantitativo, basada en el método de encuesta, con 189 consumidores brasileños en el sector de la hostelería. Los datos fueron analizados usando el Modelado de Ecuaciones Estructurales, por estimación PLS.

Resultados: Los hallazgos demuestran que las situaciones de recuperación no son solo tratamientos para fallas resultantes del proceso de servicio, sino que deben ser vistas como un proceso social, en el que los proveedores y consumidores deben involucrarse para obtener beneficios mutuos. Los resultados nos permiten inferir que el cliente altamente comprometido que participa en la entrega inicial del servicio está más dispuesto a colaborar con el proceso de recuperación.

Originalidad: La investigación indaga en una tipología de recuperación de fallas de servicio que actualmente está ganando popularidad en los estudios sobre el tema. Además, incorpora dos antecedentes de recuperación co-creada que han sido poco explorados antes, especialmente en el contexto brasileño, y que pueden proporcionar información relevante para reparaciones eficientes de fallas.

1. INTRODUCTION

Service recovery occurs when an organization fails to meet consumers’ expectations regarding a specific service, and it involves the company’s actions to mitigate and/or rectify the losses experienced by customers (Hazée, Van Vaerenbergh & Armiriotto, 2017). These reconciliatory actions are based on three distinct phases (pre-recovery, recovery, and post-recovery of services) that collectively constitute what Van Vaerenbergh, Varga, de Keyser, and Orsingher (2019) refer to as the service recovery journey.

While the field of service failure and recovery is prolific within service science (Grégoire & Mattila, 2021), the literature has predominantly focused its efforts on understanding the recovery phase. Specifically, the effects of recovery strategies on consumer intentions, attitudes, and purchasing behaviors have been extensively explored, leaving gaps in the understanding of the pre- and post-recovery moments of services (Van Vaerenbergh et al., 2019).

The scarcity of investigations in these domains is even more pronounced when attempting to comprehend the role of highly participative consumers in failure recovery, that is, in cocreated service recovery or joint recovery (Wei, Ang & Anaza, 2019). Cocreated recovery adheres to the principles of the Service-Dominant Logic (S-D Logic), which posits that consumers and clients actively share their resources to cocreate mutual value (Vargo & Lusch, 2004). Therefore, cocreated recovery refers to consumer involvement in joint coordination with the organization to complete the service recovery journey (Roggeveen, Tsiros & Grewal, 2012). In essence, it involves the customer’s participation in shaping or customizing the content of service failure recovery (Van Vaerenbergh, Hazée & Costers, 2018).

Bagherzadeh et al. (2020) elucidate that, in cocreated recovery, organizations seek the preferences of affected consumers to achieve the best outcome in the repair process. Meeting customer expectations is the primary objective for service providers in this process, as individuals not only expect the rectification of failures but also anticipate organizations to address their unique needs and preferences during recovery (Hoffman & Kelley, 2000). Consequently, it is understood that customers are willing to cocreate as a means to gain control over the recovery evolution, enhancing their social self-esteem in the consumer-company relationship (Guo, Lotz, Tang & Gruen, 2016).

Previous studies demonstrate that the intensity of consumer participation is pivotal and impacts customer evaluation and satisfaction in service value co-creation (Haumann, Güntürkün, Schons & Wieseke, 2015). Similar outcomes can be anticipated concerning service failures. Thus, cocreated recovery has recently gained researchers’ attention (Bagherzadeh et al., 2020; Park & Ha, 2022; Zhang, Yuan & Shao, 2022; Alotaibi et al., 2023), revealing its positive impact on post-recovery satisfaction, repurchase intentions, and positive word-of-mouth (Guo et al., 2016; Hazée, Van Vaerenbergh & Armiriotto, 2017). Consequently, it is evident that some studies focus on comprehending the impacts and immediate consequences of customer participation in service recovery (Skourtis, Décaudin, Assiouras & Karaosmanoglu, 2019; Park & Ha, 2022; Zhang, Yuan & Shao, 2022), neglecting preceding moments, such as customer engagement with the company and initial service delivery.

Focusing on consumer participation in pre-recovery moments proves essential when considering that customers who actively engage in the initial service delivery process tend to be more open to collaborating in rectifying failures, as they develop a perception of shared responsibility towards the service and, consequently, its failure (Bagherzadeh et al., 2020). However, this involvement may have negative impacts, such as decreased satisfaction and negative word-of-mouth, in case of unsatisfactory outcomes, due to the generation of high recovery expectations (Bagherzadeh et al., 2020).

On the other hand, customer engagement refers to a construct that has been relatively underexplored concerning its relationship with cocreated service recovery, but is demonstrating itself as a significant determinant of value co-creation in services (Cheung & To, 2021; Nangpiire, Silva & Alves, 2022; Rather & Hollebeek, 2022;
Shoukat & Ramkissoon, 2022; Dewarani & Alversia, 2023). The choice of customer engagement as a construct capable of inciting consumer participation in joint recovery stems from the Marketing Science Institute’s assertion that this concept is a key research area for understanding consumer behavior in highly interactive, complex, and cocreative environments (Marketing Science Institute, 2010), as is the case with service failure recovery.

As a relationship between customer and provider is established through the integration of resources of these actors, a fundamental premise of co-creation (Roggeveen, Tsiros & Grewal, 2012), customers develop a greater perception of value regarding their contributions to service processes and begin to view themselves as integral to the company. This customer engagement renders consumer participation more proactive and rapid (Jin, DiPietro & Fan, 2020). Accordingly, it is conceivable that, akin to serving as an incentive for participation in co-creation, customer engagement could function as a stimulus or antecedent for embracing cocreated service recovery—an hypothesis to be tested by this study, one that would contribute to organizations’ understanding of effective strategies for involving consumers as co-creators across various service encounters.

Although noteworthy findings have been observed regarding determinants of cocreated service recovery, a deeper exploration of how preceding levels of consumer-company interaction exert effects on cocreated service recovery and how the latter influences consumer behavioral outcomes appears opportune. Hence, the study aims to investigate the impact of initial consumer involvement in service delivery and customer engagement on cocreated service recovery, and how this form of failure resolution influences post-recovery customer satisfaction.

Considering the examination of the effects of novel constructs such as engagement on service recovery is believed to provide insights into alternative mechanisms that can elucidate consumers’ agreement to participate in joint processes of service failure recovery. Moreover, it is believed that this investigation could respond to the call made by Van Vaerenbergh et al. (2019) for studies that assess whether co-developed process recoveries with customers have a greater impact on relational outcomes than recoveries exclusively orchestrated by organizations, while also considering the pre-recovery journey phases of service failure.

Beyond this introduction, the article is structured such that it proceeds to present the literature review and the study’s hypotheses. Finally, the methodology, data analysis, and concluding remarks of the study are detailed.

2. THEORETICAL REVIEW
2.1 COCREATED SERVICE RECOVERY

Considering its theoretical understanding, value co-creation has been applied in various contexts within marketing and consumer behavior studies (Galvagno & Dalli, 2014), also being recognized as a construct capable of enhancing insights into service failure recovery (Dong, Evans & Zou, 2008). In the realm of service failures, customer co-creation for recovery is defined as “the ability of customers to shape or customize the content of service recovery through joint collaboration with the provider” (Roggeveen, Tsiros & Grewal, 2012, p. 772). Consequently, cocreated, or joint, recovery can be understood as a process-oriented recovery, distinct from others that are outcome-based (Bagherzadeh et al., 2020).

Cocreated service failure recovery is founded upon the participation of consumers in rectifying issues to achieve the optimal process and, consequently, the best outcome. The organization or service provider strives to prioritize customer preferences in order to discern their demands (Bagherzadeh et al., 2020). Therefore, it is understood that in joint recovery, the company and the customer collaborate actively to maximize the gains of recovery, sharing their resources (information, knowledge, and skills) and the division of control, thus making consumers co-producers of the service (Guo et al., 2016; Bagherzadeh et al., 2020).

Recent research offers evidence that joint recovery fosters a greater perception of fairness in the treatment provided by the company to resolve service-related issues (Guo et al., 2016;
Hazée, Van Vaerenbergh & Armirotto, 2017; Balaji et al., 2018; Bagherzadeh et al., 2020). More specifically, the process dimension is positively related to cocreated recovery (Roggeveen, Tsiros & Grewal, 2012; Xu, Marshall, Edvardsson & Tronvoll, 2014; Wei, Ang & Anaza, 2019). This is because, by being directly engaged in the recovery of the acquired service and having their interests involved, the customer is capable of scrutinizing aspects that were previously restricted mainly to, or more explicitly with, the service providers. This attenuates potential uncertainties and misconceptions, rendering the recovery process transparent, honest, and reliable (Guo et al., 2016; Balaji et al., 2018), thereby enhancing their assessments of the company’s competence (Wei, Ang & Anaza, 2019).

2.2 THEORETICAL ANTECEDENTS OF CO-CREATED SERVICE RECOVERY AND STUDY HYPOTHESES

Cocreated recovery is established as a potential means of addressing service failures, primarily predicated on the direct, active, and joint involvement of both customers and the company in devising optimal solutions (Roggeveen, Tsiros & Grewal, 2012). Recent research focuses on the effects of this recovery strategy for consumers and identifies factors that can stimulate consumer involvement in addressing failures (Park & Ha, 2022; Zhang, Yuan & Shao, 2022; Alotaibi et al., 2023). Among these factors, the model proposed in this study considers initial participation in service delivery and customer engagement as stimuli for individual participation in cocreated service recovery.

In highly collaborative environments, such as those of co-creation, service processes are reflective of joint efforts, involving the exchange of resources among all involved parties (Vargo & Lusch, 2004), thus leading to enhanced consumer satisfaction due to increased value generation and various benefits afforded to customers (Heidenreich et al., 2015; Yeo, Amenuvor, & Boateng, 2021). Elevated consumer involvement also heightens their demand for superior quality outcomes. In the event of service failures, these expectations are not met, resulting in increased dissatisfaction with the company and the service to be consumed (Heidenreich et al., 2015).

The dissonance between expectations and the poor performance of cocreated services generates distinct psychological processes and judgments regarding the treatment required for recovery. Customers who are active during the initial service phase tend to hold higher expectations for recovery and exhibit greater motivation to co-create during this phase (Heidenreich et al., 2015; Bagherzadeh et al., 2020). These co-creators believe they possess valuable information that enables corrective actions for failures, also perceiving that motivations for co-creation failure might stem from the integration of their resources with the organization’s (Sugathan, Ranjan & Mulky, 2017).

Therefore, customer participation stands as a central element in the service recovery process, and the extent of consumer involvement is determined by their assumption of responsibility for service failures (Köcher & Paluch, 2019). Consequently, it can be inferred that customers take partial responsibility for failures and seek solutions to the issues identified in service delivery.

Other studies also support the notion that customer involvement in failure recovery amplifies the perception of control over the situation (Guo et al., 2016; Jin, DiPietro & Fan, 2020; Park & Ha, 2022), which can enhance customers’ willingness to collaborate. Therefore, it is proposed that customer participation during the initial service delivery phase constitutes a factor capable of determining adherence to cocreated service recovery. This proposition is based on self-accountability, heightened expectations of corrective actions, and the customer’s perceived control. Thus, we posit:

H1. Initial customer participation positively impacts cocreated service recovery, such that greater customer involvement in the initial service delivery phase results in a higher willingness to contribute to fault correction during the recovery process.

The second factor considered in this study pertains to customer engagement, which concerns the motivational state of the consumer.
to participate in the interactive activities of a company and is delineated into five attributes (So, King & Sparks, 2014). Engagement encompasses a consumer’s identification and frequent interactive and co-creative experiences with a company, considering the psychological, emotional, and physical investments that the customer undertakes in exchanges with the service provider (Behnam, Hollebeek, Clark & Farabi, 2021). Brodie, Hollebeek, Jurić, and Ilić (2011) clarify that engagement can be developed at different levels and plays a pivotal role in the nomological network of service relationships, akin to involvement and loyalty.

Engagement has been recognized as a determinant of value co-creation in services (Conduit & Chen, 2017; Nangpiire, Silva & Alves, 2022; Rather & Hollebeek, 2022; Shoukat & Ramkissoon, 2022; Dewarani & Alversia, 2023), with practitioners showing interest in involving consumers in co-creative processes to enhance customer value (Nangpiire, Silva & Alves, 2022).

The high involvement of consumers with organizations facilitates the exchange of information, preferences, feedback, and expectations that can shape the service offering. In light of this, engagement is indicated as a facilitator for customers to co-create effectively with companies (Jaakkola & Alexander, 2014; Behnam et al., 2021; Cheung & To, 2021) and with other consumers (Rather & Hollebeek, 2022). Cheung and To (2021) suggest that this tends to occur as highly engaged customers who are closely connected to the company might possess a strong sense of belonging and trust to exchange proposals and information, leading to tailor-made services. Additionally, it’s observed that as engagement develops, consumers are more inclined to share positive brand-related experiences and perceptions with other customers (Rather & Hollebeek, 2022).

Although not directly associated in previous research on joint service recovery, considering that engaged customers demonstrate a greater willingness to engage deeply with the company (So, King & Sparks, 2014; Samala & Katkam, 2019; Behnam et al., 2021), and that cocreated recovery entails consumer contributions to the recovery of failures (Roggeveen, Tsiros & Grewal, 2012), it is conceivable that customers might engage directly as co-responsible for the failure and as actors capable of aiding in the recovery process.

Consequently, it is believed that customer engagement and their willingness to interact with the company will lead to a greater sense of empowerment and control over the resource integration process. This could also be related to a higher acceptance of participation in cocreated service recovery. The relationship between engagement and cocreated recovery is underexplored in the literature, prompting this study to evaluate whether the level of customer engagement can act as a stimulus for participation in co-created recovery strategies. In this regard, we hypothesize:

**H2.** Customer engagement positively impacts cocreated service failure recovery, such that higher customer engagement with the company leads to a greater willingness to contribute to fault correction during the recovery process.

The theory of attribution posits that individuals seek to discover the motivations behind the occurrence of a particular event in order to understand why it happened (Weiner, 1985), especially in relation to experiences that yield negative outcomes (Choi & Matilla, 2008). Additionally, attribution aids in shaping the level of customer engagement and behavior towards a company, offering support and comprehension regarding future brand relationships and perceptions of control (Weiner, 1985).

Concerning products and services co-produced with consumer resources, service failures have highlighted the generation of internal attributions as customers employ their internal resources, such as physical efforts, financial resources, skills, and knowledge, during interactions with the company, which ascribes them a share of responsibility for the occurrence of failures (Heidenreich et al., 2015; Sugathan, Ranjan & Mulky, 2017; Sugathan & Ranjan, 2020).

In co-creation contexts, justifications and clarifications regarding service delivery failures are more perceptible to the consumer due to their direct involvement in information exchange and service creation (Sugathan, Ranjan & Mulky, 2017). The use of operant resources (Vargo &
Lusch, 2004) elevates the consumer’s judgment of their importance in constructing the offering, increasing the relevance of these resources and the customer’s willingness to attribute the occurrence of adversities in the service process to their own lack of skills or efforts (Sugathan, Ranjan & Mulky, 2017). Similarly, as interactions with consumers increase, there’s a greater likelihood that they comprehend the resources and efforts exerted by the company to rectify failures, resulting in less dissatisfaction towards the organization (Park & Ha, 2022).

Co-creation allows consumers to identify more strongly and commit to the service they are collaborating on, while also accentuating the perception of ownership in what they are acquiring, thereby enhancing engagement and association between the product’s story and the consumer’s personal experience (Jaakkola & Alexander, 2014). Given this, it becomes evident that service co-creation alters the attribution of failure from the company to the customer. In this context, customers are willing to assume responsibility for the failure and contribute to future collaborative actions with the company (Sugathan, Ranjan & Mulky, 2017). Given the aforementioned, this study proposes:

**H3.** Attribution of blame moderates the effect of customer engagement on co-created service recovery, such that customers who perceive the service failure as a result of their collaboration with the company are more inclined to engage in co-creating the service recovery.

No the context of service failure management, satisfaction serves as a connecting element between the assessment of recovery and post-complaint behaviors (Santos & Fernandes, 2008). Satisfaction with recovery arises from the consumer’s evaluation that their complaints have been addressed through a coherent and prompt process that yields the most appropriate outcome. In other words, it stems from evaluations of service recovery (Bagherzadeh et al., 2020; Sidhu, Ong & Balaji, 2023). In this study, building on the research of Shams, Rather, Rehman, and Lodhi (2020), satisfaction with recovery pertains to the consumer’s overall affective feeling towards the process adopted by the company and the results of recovering a service failure.

Regarding co-created recovery, Cheung and To (2016) elucidate that consumer satisfaction increases when organizations provide opportunities for their participation in the process of rectifying failures, as this form of recovery is perceived as an alternative that generates fairer outcomes (Hazée, Van Vaerenbergh & Armirotto, 2017). Moreover, when consumers actively partake in the service delivery process, they perceive their involvement as highly valuable, which enhances their ability to comprehend the occurrence of failures and results in a higher level of satisfaction (Yi, Yeo, Amenuvor & Boateng, 2021). This principle is equally applied to the context of joint recovery, where consumers gain greater clarity about motivations and recovery strategies, thereby boosting their satisfaction with the service (Dong, Evans & Zou, 2008).

Furthermore, co-created recovery is seen as a positive action by the organization, leading to favorable judgments by consumers who believe they have received the best solution to the problem at hand. Hence, co-created recovery, especially when initiated by the company itself (Xu et al., 2014), can positively influence consumer outcomes (Hazée, Van Vaerenbergh & Armirotto, 2017; Bagherzadeh et al., 2020). Based on these premises, the following research hypotheses are proposed:

**H4.** Co-created service recovery positively impacts post-recovery consumer satisfaction.

Based on the presented hypotheses, the following conceptual model is proposed:
3. METHODOLOGY

With the purpose of achieving the objective, a descriptive and quantitative approach was employed, carried out through a survey (Hair, Celsi, Ortinau & Bush, 2014). The research focused on consumers in the hospitality sector, which includes tourism and hotel industries. This context was selected considering previous studies that indicate service failures are common occurrences in the hospitality sector (Xu et al., 2014; Shams et al., 2020), largely due to the intangible nature, variability, and intensive interaction between customers and service staff in this industry (Koc, 2019). Common examples of service failures in this sector that require ongoing performance improvement for recovery include check-in/check-out problems, unavailable rooms during check-in, dirty rooms, unavailable services during the customer’s stay, issues with internet bookings, etc. (Lee, Singh & Chan, 2011).

The choice of the hospitality sector also eliminates the possibility of recovery being solely carried out by consumers themselves, such as in cases of self-service-based service delivery, or solely by the company (Xu et al., 2014). Furthermore, this context demands that consumers engage extensively in service delivery through sharing their needs, opinions, and other forms of resource integration, facilitating the measurement of perceptions and behavior regarding customers’ initial participation in service delivery.

Considering the significant population of consumers in the chosen sector, the research aimed to gain insights into the phenomenon through a sample. Therefore, the study employed non-probability convenience sampling (Hair et al., 2014) for participant selection. Data was collected through online questionnaires using the Google Forms platform. To reach the target population, the survey link was distributed in tourism, lodging, and hospitality groups on the social media platform Facebook, as these environments are likely to have various consumer profiles.

To participate in the survey, individuals needed to be regular consumers of services within the hospitality sector. To ensure this criterion was met, a screening question was placed at the beginning of the questionnaire to identify participants who were consumers of hospitality services. Those who answered positively were invited to continue with the survey.

The research instrument consisted of a self-administered questionnaire with nineteen objective questions, including scales used in previous studies, three demographic profile questions, and the screening question. While this study is not characterized as an experimental design, the instrument was constructed based on a hospitality consumption scenario, following the example and adaptation of previous studies (Sugathan, Ranjan & Mulky, 2017; Bagherzadeh et al., 2020). Respondents were asked to...
imagine a scenario where they were choosing a family vacation package, describing the entire initial service customization process, allowing respondents to indicate their preferences. After making the purchase, participants were informed that they needed to contact the company to confirm their reservation.

Before answering the questions in the instrument, participants were asked to consider a real tourism company with which they usually conducted their purchases. This was because customer engagement involves the motivational state of the consumer to participate in interactive activities with a company (So, King & Sparks, 2014). It was essential for participants to base their responses on past experiences with a real company with which they might have an ongoing relationship. This approach aimed to ensure that respondents’ opinions genuinely reflected their stance toward a company with which they had a certain level of engagement.

Subsequently, four questions adapted from Bagherzadeh et al. (2020) were presented to measure the initial participation in service delivery. In contrast, five items adapted from the scale developed by Hollebeek, Glynn & Brodie (2014) were used to assess consumer engagement towards the travel agency. The questionnaire then introduced a service failure scenario, represented by an error in booking the accommodation where the customer and their family were supposed to stay. This failure was attributed to problems on the agency’s website and exacerbated by the lack of contact the consumer needed to make with the company for reservation confirmation. In response to this failure scenario, participants were asked to indicate their perceptions about who was to blame for the problem (the company or the consumer) and their willingness to participate in problem resolution.

During this stage, participants were also asked to rate the likelihood of the presented failure scenario occurring during online booking of travel packages on a five-point agreement scale. This question aimed to assess whether participants viewed the failure as a realistic possibility, thereby enhancing the internal validity of the research.

Following this, considering the potential for consumers to collaborate on choosing a solution for the described problem in the hypothetical scenario, five questions were used to measure respondents’ willingness to participate in cocreated service recovery. These items were adapted from Dong, Evans & Zou (2008). Finally, after the description of the solution devised for the failure, four questions were presented to measure post-recovery satisfaction (Bagherzadeh et al., 2020). The measurement of constructs was carried out using five-point Likert-type agreement scales.

It is important to highlight that the adaptations of the scales employed in the study encompassed a process of cross-cultural adaptation of the research instruments, including translation, synthesis, back-translation, expert evaluation in the field of marketing, and pre-testing for equivalence. This process followed the guidelines set by Beaton, Bombardier, Guillemin, and Ferraz (2000), and also involved the contextualization of scales to measure respondents’ perceptions about hospitality services, specifically online booking of travel packages, apart from the translation to Brazilian Portuguese.

Prior to the field research, a pre-test was conducted with marketing researchers who indicated the need for wording changes in some items. After revising the feedback and making necessary adjustments, a pilot study was conducted with 32 consumers having profiles similar to the desired study participants. This was done to meticulously evaluate the data collection instrument and assess the internal consistency of the scales. Upon achieving satisfactory results, the final questionnaire was used for the field research.

For the sample selection, the criterion suggested by Hair, Babin, Money, and Samouel (2005) was adopted, which recommends a practical rule of choosing 10 observations per variable in the research instrument for structural path analysis. Thus, based on the eighteen variables used to measure the constructs of the structural model, a minimum database of 180 questionnaires was collected. Data collection took place over a month, and at the end, 202 responses were obtained.

The data were analyzed using IBM SPSS 22.0 and SmartPLS 3.3.7 software. Demographic
characteristics of participants were analyzed using descriptive statistics. Before analyzing the structural model, the presence of missing data was evaluated, and 10 responses were identified for exclusion from the analysis. Additionally, using the Mahalanobis’ $D^2$ measure, the absence of outlier observations was confirmed, as p-values lower than 0.05 were found. Data normality was assessed using the Shapiro-Wilk test, resulting in a p-value of < 0.05 (calculated statistic = 0.854; $p = 0.001$), leading to the rejection of the null hypothesis of normality.

Based on these results, the use of a non-parametric test was deemed necessary to ensure greater security in the analysis of the structural model. Therefore, Partial Least Squares (PLS) Path Modeling was selected to analyze the measurement model and test the hypotheses proposed by the study. The PLS approach is commonly used for models with data that do not conform to a normal distribution. This approach was employed in this study because it allows for the simultaneous estimation of multiple predictive relationships between one or more independent variables and different dependent variables. Additionally, the PLS approach allowed for assessing whether the effect of customer engagement on cocreated service recovery is altered due to blame attribution (H3). To do this, a Multigroup Analysis technique was used, dividing the sample into two subgroups of respondents: 0 - consumers who attribute blame for the failure to themselves, and 1 - consumers who attribute blame for the failure to the company.

4. RESULTS AND DISCUSSIONS

From the field research, 202 observations were collected. Out of these responses, three participants reported not regularly consuming hospitality services and were thus excluded from the analysis. Furthermore, as previously highlighted, there were missing data in 10 observations, which were also excluded from the analysis. Ultimately, the final sample of the study comprised 189 observations.

4.1 RESPONDENTS’ PROFILE

The study sample consisted of 90 female respondents (47.6%) and an equal number of male individuals (90), with the remaining 4.8% representing those who did not identify their gender classification. Regarding age, the study sample ranged between individuals aged 18 and 61 years, with the most predominant age group being consumers aged 21 to 30, accounting for 102 respondents (54%). Additionally, 49.2% had completed high school as their highest level of education, while 44 respondents held postgraduate degrees (23.3%), and 27.5% had completed their bachelor’s degrees.

4.2 MEASUREMENT MODEL

The results for the measurement model, in its initial version, indicated that the model required some adjustments, as two variables had factor loadings below the standard minimum value of 0.50. In this regard, one variable from the “Initial Participation” construct (“I believe I am very involved in decisions about how the services I am contracting should be provided”) and one from the latent variable “Post-Recovery Satisfaction” (“I believe I had control over the outcome received for the issue faced at the hotel”) were eliminated. Subsequently, all variables exhibited loadings above the acceptable threshold.

The Composite Reliability (CR) values and Cronbach’s Alpha for each construct surpassed the critical value of 0.70, recommended by Hair, Risher, Sarstedt, and Ringle (2019) for both indices. Similarly, the specific reliability measure for PLS-SEM context, namely the rho_A index (Dijkstra & Henseler, 2015), exceeded the minimum value of 0.70 for all latent variables. Concerning Average Variance Extracted (AVE), all constructs surpassed the threshold of 0.50. The presented indices ensure the reliability and convergent validity of the model (Table 1).
Table 1. Measurement Evaluation

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<tr>
<th>Item</th>
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<th>AVE</th>
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<td><strong>Initial Participation</strong></td>
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<tr>
<td>I consider that I spend a lot of time sharing information about my needs and opinions while booking travel packages.</td>
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<td>0.886</td>
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<td>I make a lot of effort to express and seek the best ways to meet my personal needs when booking travel packages.</td>
<td></td>
<td>0.931</td>
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<tr>
<td>I believe I have a high level of participation when booking travel packages.</td>
<td></td>
<td>0.834</td>
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<tr>
<td><strong>Engagement</strong></td>
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<tr>
<td>When I want to book travel packages, I think about making the purchase from this company because I already have a relationship with it.</td>
<td></td>
<td>0.650</td>
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<td>Using this company’s services stimulates my interest in learning more about it.</td>
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<td>0.600</td>
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<tr>
<td>I use more products (travel packages) from this company compared to those offered by other companies.</td>
<td></td>
<td>0.730</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing products from this company (travel packages) gives me good feelings.</td>
<td></td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am proud to purchase products (travel packages) from this company.</td>
<td></td>
<td>0.756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Co-Created Recovery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to rectify the error in my reservation together with the hotel.</td>
<td></td>
<td>0.589</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think my participation in choosing a solution for the error in my hotel reservation is the best solution.</td>
<td></td>
<td>0.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to contribute with information and suggestions so that it is possible to solve the error in my reservation.</td>
<td></td>
<td>0.874</td>
<td></td>
<td></td>
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<tr>
<td>I am willing to collaborate with my time so that it is possible to solve the error in my reservation.</td>
<td></td>
<td>0.893</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I consider my participation in choosing a solution for the error in my hotel reservation essential.</td>
<td></td>
<td>0.897</td>
<td></td>
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</tr>
<tr>
<td><strong>Post-Recovery Satisfaction</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>I am satisfied with the way my issue was handled and resolved.</td>
<td></td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the treatment given by employees to me and my family.</td>
<td></td>
<td>0.935</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the procedure (way of working) and the resources used to solve the problem (consultation at other hotels in the network).</td>
<td></td>
<td>0.923</td>
<td></td>
<td></td>
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</tbody>
</table>

The discriminant validity of the measures was determined by Fornell and Larcker’s (1981) criteria and HTMT ratio so that it could be verified whether each reflective construct has the strongest relationships with its own indicators. As shown in Table 2, the square root of the AVE of each construct was more significant than the correlation between any pair of factors. Regarding HTMT, following the recommendations by Hair et al. (2019) for conceptually different constructions, it was found that the correlations between the constructs were below 0.85, confirming the discriminant validity of the model.
Next, the results of the hypotheses proposed by the study are analyzed.

4.3 STRUCTURAL MODEL AND DISCUSSION OF RESULTS

To estimate the model, the Bootstrapping method with 5,000 resampling iterations was adopted. The model’s quality was determined by SRMR, NFI, and RMS_Theta. SRMR values below 0.08 indicate good fit of the data to the model, RMS_Theta values below 0.12 suggest a well-fitted model (Henseler et al., 2014), and for NFI, values closer to 1 indicate better fit. As shown in Table 3, the fit indicators demonstrate the quality of the model. The coefficient of determination value indicated that initial participation and consumer engagement, together, account for 32.3% of the variance in cocreated service recovery. Meanwhile, cocreated service recovery explains 61.3% of the variation in post-recovery satisfaction. The observed coefficient of determination values (Table 3) demonstrate moderate relationships between the constructs (Hair et al., 2019).

Regarding the hypothesis testing, the PLS-SEM results (Table 3) empirically confirm that the initial participation of the consumer in service delivery has positive and significant effects on cocreated recovery ($\beta = 0.176$, t-value = 2.563; $p < 0.010$), thus supporting Model Hypothesis H1. Customer participation refers to the extent to which consumers are engaged, through their resources, in the development and delivery of services (Zhang & Shao, 2018), and in recent years, this construct has attracted interest from marketing professionals and academics as it’s associated with increased psychological and emotional relationships with the target audience (Betzing, Kurtz & Becker, 2020).

In the context of service recovery, the results presented here allow the inference that the greater the customer’s participation in the initial phase of service provision, the more willing they are to contribute to error correction during the recovery process. This result may stem from customers’ perception that their involvement with the service, through the application of their knowledge, information, and skills, will ensure a better balance of power and control between customers and employees over the problem situation (Guo et al., 2016; Jin DiPietro & Fan, 2020), thereby increasing the customer’s willingness to collaborate with the organization to address service process-related failures.

Köcher & Paluch (2019) found that active consumers during the service provision process tend to react less negatively when unsatisfactory outcomes occur. The authors also found that, even though the overall satisfaction level in relation to the service might decrease when compared to individuals who didn’t participate
in the collaborative process, customers who work together in the service process are more inclined to use it again. Thus, it’s possible to recognize that customers who participate in service delivery assume (internal attribution) part of the responsibility for the occurred failures (Köcher & Paluch, 2019), leading to increased involvement in seeking resolutions for problems identified during service delivery.

Furthermore, considering that individuals’ willingness to participate in the initial stages of service delivery is determined by social and structural ties—meaning the extent to which the consumer seeks to interact and integrate with the organization and its employees, and how the company strengthens its relationships with its customers (Yi et al., 2021)—it’s plausible to suggest that active involvement from the initial service phase can be beneficial in capturing the customer’s attention and provoking favorable reactions regarding their contribution to creating solutions for experienced failures and problems during the service.

Similarly to initial participation, customer engagement positively and significantly influenced the consumer’s willingness to participate in the cocreated recovery process ($\beta = 0.543$, t-value = 9.080; $p < 0.001$), confirming the relationship proposed in Model Hypothesis H2. Moreover, considering the path coefficients ($\beta$), it can be asserted that customer engagement has the most significant relationship with the cocreated recovery strategy.

Engagement represents the consumer’s motivational state to participate in interactive activities with an organization (So, King & Sparks, 2014), recognizing that a highly engaged individual is more likely to collaborate with the company to enhance their relationship with service providers, improve their experiences, and build mutual value (Cheung & To, 2016; Cheung & To, 2021). In this sense, it’s plausible to observe that an engaged customer values maintaining an active and ongoing relationship with the company to sustain emotional bonds with the providers. Furthermore, it’s known that more engaged and involved customers also exhibit a greater tendency to cocreate with the company (Dewarani & Alversia, 2023).

Likewise, it can be considered that coproduction processes can fulfill relational needs. As evidenced in this study through the positive impact of engagement on cocreated service recovery, customers with more pronounced relational needs may aspire to work collaboratively with the provider to achieve solutions that enhance perceptions of fairness and effectively improve the experienced failure situation (Ringberg et al., 2007), while simultaneously intensifying their relationships with the providers. Supporting this, Hoffman and Kelley (2000) and Wei, Ang, and Anaza (2019) elucidate that customizing responses to failures and approaching affected customers in this process become crucial due to the customer’s emphasis on emotional bonds with the company, aspects that can underpin the results of this study.

Therefore, knowing that strongly engaged individuals exhibit a high sense of belonging and trust for the exchange of resources with service providers (Behnam et al., 2021; Cheung & To, 2021), and that joint recovery demands active contribution and a deep relationship with the company (Roggeveen, Tsissou & Grewal, 2012), it was possible to demonstrate that the higher the customer’s engagement with the company, the more willing they are to contribute to correcting the failure during the recovery process.

Regarding Model Hypothesis H4, it was found that cocreated service recovery had positive effects on post-recovery satisfaction ($\beta = 0.783$, t-value = 20.752; $p < 0.001$). This result aligns with previous investigations conducted with other populations (Dong, Evans & Zou, 2008; Cheung & To, 2016; Hazée, Van Vaerenbergh & Armirotto, 2017).

Studies that consider consumer involvement during service recovery indicate that customer participation in this process leads them to perceive the solutions they receive as the most favorable for the failures (Hazée, Van Vaerenbergh & Armirotto, 2017), resulting in a higher perception of fairness and satisfaction with the service (Dong, Evans & Zou, 2008; Cheung & To, 2016; Van Vaerenbergh, Hazée & Costers, 2018). This is because consumers involved in solution production processes perceive an increase in their abilities related to the service
(Dong, Evans & Zou, 2008). Moreover, the active participation of the customer triggers a crucial and determinant factor of consumers’ affective and behavioral responses in recovery, namely the perception of control (Jin, DiPietro & Fan, 2020), which shapes evaluations of justice regarding how the failure was resolved, thus enhancing these individuals’ satisfaction. Therefore, this research aligns with previous knowledge that cocreated service recovery positively impacts post-recovery customer satisfaction.

Finally, to identify the effect of blame attribution on the relationship between customer engagement and cocreated service recovery, a multigroup analysis by partial least squares (PLS-MGA) was conducted. The MGA was performed for the proposed model, considering blame attribution as the moderating variable. The two analyzed groups were divided between consumers who attribute blame for the failure to themselves, accounting for 77 respondents, and those consumers who attribute blame for the failure to the service-providing company, representing 112 observations. The obtained values can be observed in Table 4.

<table>
<thead>
<tr>
<th>Table 4. Result of the multigroup analysis (MGA)</th>
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<tbody>
<tr>
<td>Coef. CONS</td>
</tr>
<tr>
<td>-----------</td>
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<tr>
<td>H3</td>
</tr>
</tbody>
</table>

Subtitle: CONS – Consumer; EMP – Company.

It was found that both consumers who directed blame for the failure at themselves and those who believed that the service-providing organization was responsible for the failure exhibited significant and positive coefficients in the proposed relationship (t > 1.96; p < 0.05). The results also demonstrated a significant difference between consumers who attributed blame for the failure to themselves and those who attributed blame to the tourism company (p = 0.04).

When considering the path coefficient values, it can be observed that respondents who perceived the service failure as resulting from their collaboration with the company were more willing to engage in cocreating service recovery due to their engagement with the service provider (β = 0.676), providing statistical support for Hypothesis 3 of the study.

In contexts of high participation, such as in services where customers are strongly engaged with the organization, the consumer contributes to the delivery and personalization of the service by leveraging their resources. When they observe a service failure in which they participated with their competencies, customers tend to attribute the failure of cocreation to their involvement (Sugathan, Ranjan & Mulky, 2017). Consequently, this internal attribution of failure increases expectations about recovery and intensifies consumer motivation to cocreate during the process (Heidenreich et al., 2015; Sugathan, Ranjan & Mulky, 2017).

Therefore, when examining the moderating effect of blame attribution on the relationship between customer engagement and cocreated service recovery, it’s reasonable to assume that customer engagement with the company elevates their judgment of their importance in service development and execution, while also fostering a greater sense of responsibility for potential issues (Sugathan, Ranjan & Mulky, 2017). The cocreative process, represented by joint recovery, stimulates greater commitment of the individual to solutions for the experienced failures.

5. CONCLUSION

The current study aimed to investigate the impact of initial consumer participation in service delivery and customer engagement on cocreated
service recovery, and how this form of fault repair influences post-recovery customer satisfaction. After the field research, the hypotheses were supported, highlighting the factors affecting customers’ willingness to participate in service recovery.

The discussed findings indicate several contributions to the field of service recovery and relationship marketing. Theoretically, this study incorporates two antecedents of joint recovery that had been little explored before. The findings demonstrate that recovery situations are not merely treatments for failures resulting from the service process but should be seen as a social process, where service providers and consumers need to be involved to obtain mutual benefits.

Upon analyzing the initial service phase participation and customer engagement, it becomes evident that service companies should consistently prioritize cooperative activities between providers and consumers. The more engaged a customer is with the company, the more likely they are to participate in the service recovery process. The observed results also suggest that joint consumer participation in solving failures leads to increased post-recovery satisfaction, which could encourage repeat purchases and customer loyalty.

The constructs employed in the theoretical model relate to relational aspects, indicating that prior to planning strategies and compensations for failures, organizations need to strongly focus on customer-centered indicators such as commitment and engagement to ensure full customer satisfaction. Consequently, a good relationship can enhance customers’ willingness to provide voluntary contributions and apply their resources in conflict situations.

Therefore, from a managerial perspective, marketing professionals need to work on and develop organizational capabilities so that employees can identify customer profiles, considering the level of customer involvement from the initial service phase and the degree of customer engagement with the company. This will allow the organization to correctly indicate the most effective recovery approach for each type of customer, recognizing that customers who do not yet have strong connections with the company might have less inclination to participate in cocreative processes, and the results of such strategies may not be as high for these individuals. Additionally, the organization could establish different models of cocreated recovery based on different levels of customer relationship.

Furthermore, by recognizing the impact of initial participation and engagement on cocreated service recovery and, consequently, on post-recovery satisfaction, it becomes clear that managers and other marketing and management professionals should emphasize to customers that their participation is valued and recognized as impactful for the company. For instance, the company could use its digital social media platforms to run advertising campaigns illustrating how, in previous instances, customer participation contributed to the improvement of the company’s service operations and the experiences of other customers. This would showcase the importance given to customer perceptions and demands in the company’s processes and potentially increase customer participation in various service encounters.

Despite achieving the objectives of this study, there are some limitations and suggestions for future research that should be highlighted. First, since the data used in the investigation were obtained through cross-sectional research and self-reports from participants, causal inferences should not be made based solely on the results. Therefore, research with experimental designs could be employed to complement and deepen the findings.

Although the study identified the relationship between cocreated recovery and satisfaction, the types of compensations were not considered to analyze whether such strategies have distinct effects on cocreated recovery and their influences on customer satisfaction. This limitation could be addressed by future research.

It’s also important to note that this article was conducted with a convenience sample that was to some extent homogeneous. Thus, the findings cannot be generalized. In the future, new research should be conducted with a larger portion of the population to gain a deeper understanding of cocreated recovery. Additionally, demographic
variables such as education level, gender, and age were not considered and controlled for in the model, which is a limitation of this study. The impact of demographic variables on cocreated service recovery could be further explored in other research.

Other factors not considered in this investigation include the role of employees during the service recovery process and how employee trust in the organization impacts cocreated service recovery. While customer participation in value cocreation is known to be important, not all customers have the necessary resources to improve service processes (Boadi et al., 2020), which may lead to value codestruction during recovery from failures. In response, organizations expect their employees to engage and empower customers to cocreate value (Boadi et al., 2022). However, due to the high expectations companies have for employee roles, employees may exhibit problematic behaviors during service failures and recoveries (Boadi et al., 2022).

Employee behavioral aspects such as their credibility, benevolence, and loyalty are positively related to customers’ voluntary participation (Bove, Pervan, Beatty & Shiu, 2009). Similarly, customer participation may increase employee stress and hinder their job satisfaction (Chan, Yim & Lam, 2010). Therefore, exploring the role of employees, the effects of service failures on their well-being, and how one entity can impact the other could be fruitful areas that still lack attention (Grégoire & Mattila, 2021).

For further investigation and discussions on how employee support and trust in organizational processes interfere with value cocreation in the context of service failures and the service recovery process within the triad of company-employees-consumers, the use of theoretical constructs such as Organizational Justice Theory is suggested.

Lastly, despite identifying the moderating effect of blame attribution on the relationship between customer engagement and cocreated recovery, other variables should be considered in future research. Respondents’ gender, for example, could be evaluated as a moderator of this relationship. Given that women prioritize the relational dimension of service interactions more than men (Luong, 2007), it’s possible that even when considering customer participation in recovery, the compensations targeted in this process to remedy the failure and customer engagement might differ based on individual characteristics. Future research could provide support for this hypothesis.

REFERENCES


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Endnotes

1 The translation of the article is the responsibility of the authors.