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Exploring the Dimensions of Perceived Justice and the Moderating Effect of Brand Image in Service Recovery

Ajay Singh[a]

Abstract

In the context of the present research, the author aims to address gaps in the existing literature by exploring the dimensions of perceived justice and examining whether brand image plays a moderating role in the relationship between perceived justice and recovery satisfaction. The study is based on primary data collected from air passengers in a developing country, specifically India. The first model of the hierarchical regression analysis revealed that all three dimensions of perceived justice—distributive justice, procedural justice, and interactional justice—are positively related to recovery satisfaction. Among these, distributive justice had the strongest influence on recovery satisfaction, followed by interactional justice, which had a stronger effect than procedural justice. This indicates that how fairly outcomes are distributed (distributive justice) has a more significant impact on customer satisfaction after a service failure than how the process is handled (procedural justice) or the quality of interpersonal treatment (interactional justice). Moreover, the results confirmed that brand image plays a moderating role in the relationship between perceived justice and recovery satisfaction. All three interaction terms (distributive justice, procedural justice, and interactional justice) with brand image were significant, showing that a strong corporate or brand image can enhance the positive effects of perceived justice on customer satisfaction following a recovery effort. This suggests that companies with a favorable brand image are better able to mitigate the negative effects of service failures by influencing how customers perceive the fairness of their recovery processes.
Keywords: Perceived Justice, Recovery Satisfaction, Brand Image
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1. INTRODUCTION

In the service industry, it is nearly impossible to provide completely hassle-free service around the clock due to the unique and intangible nature of services. No matter how exceptional the service an organization strives to deliver, mistakes are inevitable, especially when dealing with increasingly demanding customers who expect more and exhibit less loyalty than in the past. As Bitner (1993) notes, it is impossible to guarantee error-free services because of the inherent complexities of service provision. Similarly, del Rio-Lanza et al. (2009) argue that even organizations with the most customer-focused approaches and robust quality programs are unlikely to eliminate all service failures. Service failures often result in customer dissatisfaction, which can manifest in various ways. Dissatisfied customers may choose to quietly leave the service provider, spread negative word-of-mouth, formally raise complaints, or continue using the service despite their dissatisfaction (Kim et al., 2009). These responses highlight the importance of understanding and addressing service failures effectively, as unresolved issues can harm an organization's reputation and customer retention.

Service recovery refers to the actions a company takes in response to a service failure. These failures can occur for a variety of reasons, such as the service being unavailable at the promised time, delays in delivery, unsatisfactory outcomes, or errors in execution. Additionally, employees may sometimes behave discourteously, further exacerbating the situation. Such failures often lead to negative emotions and responses from customers. If these issues are not promptly resolved, customers may abandon the company, share their negative experiences with others, or even pursue legal actions against the business. Research has consistently shown that effectively and efficiently resolving customer problems has a strong impact on customer satisfaction, loyalty, and overall business performance. Customers who experience a service failure but are ultimately satisfied with the company's recovery efforts tend to be more loyal than those whose issues remain unresolved. In fact, customers who raise complaints and have their problems addressed quickly are much more likely to return to the same service provider compared to those whose complaints go unanswered. Interestingly, customers who never voice their dissatisfaction are less likely to repatronize the business, indicating the importance of addressing grievances proactively. Smith and Bolton (2002) characterized service recovery as a "moment of truth" for companies, as it represents a crucial opportunity to satisfy customers and reinforce the relationship with them. Gronroos (1988) defined

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[a] Delhi School of Economics, University of Delhi, India

service recovery as the set of actions a company takes to rectify a service failure. Meanwhile, Sparks and McColl-Kennedy (2001) described service recovery strategies as the methods organizations and their employees employ to restore customer satisfaction following a failure. The ultimate goal of service recovery is to fully appease dissatisfied customers through appropriate actions, minimizing any potential harm to the customer relationship caused by the initial service failure (Ha and Jang, 2009). This underscores the importance of well-executed service recovery efforts in maintaining customer loyalty and safeguarding the company's reputation. Sparks and McColl-Kennedy (2001) argue that researchers globally have often utilized justice theory as the main framework for understanding service recovery procedures, particularly to gain deeper insights into what makes service recovery efforts more effective. Justice theory posits that perceived justice is a multi-dimensional concept, comprising three key dimensions: distributive justice, procedural justice, and interactional justice. While recent advancements have been made in understanding the effects of perceived justice on post-recovery satisfaction, there remains a need to explore how a service provider's recovery efforts influence customers' overall satisfaction with the recovery process. Del Rio-Lanza et al. (2009) highlighted the importance of examining the relative impact of each dimension of perceived justice on recovery satisfaction, noting that these dimensions do not contribute equally to customer satisfaction. Their study emphasized the need to analyze the dimensions of perceived justice separately, rather than as a combined measure, to better understand their individual effects on recovery satisfaction. Additionally, they recommended the inclusion of moderating factors, such as the customer's perception of the company's brand image, their overall satisfaction with the company, and their attributions of blame for the service failure, in future research. Despite the recognized importance of brand image in shaping customer perceptions, little research has been conducted on the role of brand image in moderating the relationship between perceived justice and recovery satisfaction. Furthermore, Chebat and Slusarczyk (2005) examined the diverse effects of the three dimensions of perceived justice on customer loyalty, but literature examining the impact of these justice dimensions on satisfaction with service recovery remains limited. Maxham and Netemeyer (2002) explored the overall effects of perceived justice on recovery satisfaction, yet their study did not address the relative importance of each justice dimension individually. In light of this, the current study aims to bridge these gaps in the literature by investigating the individual effects of the perceived justice dimensions—distributive, procedural, and interactional—on recovery satisfaction. Additionally, the study seeks to examine whether brand image plays a moderating role in the relationship between perceived justice and recovery satisfaction, providing a more nuanced understanding of how customers' perceptions of a brand influence their satisfaction with service recovery efforts.

2. LITERATURE REVIEW

Service providers and customers cannot entirely avoid incidents during exchange processes, and as a result, both parties anticipate fair behavior from one another. They evaluate these exchanges based on perceived justice. According to Adam's (1963) justice theory, individuals assess the inputs they contribute against the outcomes they receive, and they compare these results with others in similar situations. When there is an equilibrium between inputs and outcomes, the exchange is perceived as fair. However, if the outcomes fall short of expectations, individuals may feel discriminated against or unfairly treated. The literature on service failure and recovery offers substantial evidence supporting the relevance of justice theory in understanding service recovery processes and outcomes (Smith et al., 1999; Tax, Brown, and Chandrashekaran, 1998; Blodgett et al., 1997; Godwin and Ross, 1992). Del Rio-Lanza (2009) defines distributive justice as the allocation of tangible resources by a company to resolve and compensate for a service failure. Walster et al. (1973) posited that when individuals perceive that benefits have not been distributed equitably, they experience distress, which motivates them to restore a sense of distributive justice. Various empirical studies by authors such as Godwin and Ross (1992), Hoffman et al. (1995), and Smith et al. (1999) have shown that perceived fairness in tangible outcomes positively influences customers' evaluations of service recovery. Distributive justice in service recovery is often measured using variables such as justice, fairness, need, value, and rewards (Chebat and Slusarczyk, 2005; Wirtz and Mattila, 2004; Smith et al., 1999). These variables capture how customers perceive the fairness of the compensation or tangible outcomes they receive in response to service failures.

Procedural justice refers to the methods a company uses to address service delivery issues, including accessibility, timing, speed, process control, delay management, and flexibility in adapting to customers' recovery needs (del Rio-Lanza, 2009). Davidow (2003) further elaborates that procedural justice includes the policies, procedures, and tools firms use to facilitate communication with customers, particularly in terms of complaint handling and the speed at which decisions are made. Mattila (2001) defines procedural justice within service recovery as the customer's perception of the various stages and processes required to correct a failed service. Past literature supports several sub-dimensions of procedural justice, including flexibility, accessibility, process control, decision control, response speed, and acceptance of responsibility (del Rio-Lanza, 2009; Tax, Brown, and Chandrashekaran, 1998; Blodgett et al., 1997; Thibaut and Walker, 1975). These dimensions highlight the importance of how the recovery process is managed, ensuring that customers feel the process is

fair, timely, and responsive to their needs. Both distributive and procedural justice play crucial roles in shaping customers' overall satisfaction with service recovery efforts, as customers not only expect fair outcomes but also fair processes in addressing service failures.

Sparks and McColl-Kennedy (2001) define interactional justice within the context of service recovery as the extent to which customers feel they have been treated fairly by employees during interactions throughout the recovery process. This concept emphasizes how customers perceive interpersonal treatment from service employees while resolving service failures. Past research has identified six sub-dimensions of interactional justice: courtesy, honesty, offering explanations, empathy, effort, and offering apologies (del Rio-Lanza, 2009; McColl-Kennedy and Sparks, 2003; Clemmer, 1988; Tax et al., 1998). These elements highlight the significance of human interactions, including how employees communicate, show concern, and provide explanations during service recovery. Corporate image is the perception consumers hold of an organization in their memory, which acts as a filter influencing how they view the company's operations (Gronroos, 1998; Keller, 1993). Dobni and Zinkhan (1990) describe corporate image as a mental representation of a brand, linked to its offerings. Keller (1993) further suggests that corporate image consists of perceptions about a brand formed by consumers based on their associations with it. Nguyen and Leblanc (2001) add that corporate image is shaped by various physical and behavioral attributes, such as a company's name, architecture, product or service variety, traditions, and the quality of employee-client interactions. A strong corporate brand, though intangible, is invaluable to an organization. Robert and Dowling (2002) argue that a strong corporate brand is a valuable, hard-to-replicate asset that can help companies achieve superior financial performance. Kim and Kim (2005) also point out that a strong brand image not only indicates a positive reputation but also reflects a higher level of brand strength compared to competitors.

The main goal of service recovery efforts is to transition customers from dissatisfaction to satisfaction (Zemke, 1993). Wirtz and Mattila (2004) highlight that recovery outcomes, procedures, and interactional treatment all contribute to post-recovery satisfaction. A customer's future satisfaction and loyalty largely depend on whether they feel they have been treated fairly during the recovery process. Customers generally expect service recovery to be fair in order to restore their satisfaction and loyalty. Numerous studies have shown that the three dimensions of justice—distributive, procedural, and interactional—positively influence overall service recovery satisfaction (Kim et al., 2009; dos Santos and Fernandes, 2008; Karande et al., 2007; Karatepe, 2006; Kau and Loh, 2006; Patterson et al., 2006; Ok et al., 2005; Smith, Bolton, and Wagner, 1999; Tax et al., 1998; Clemmer and Schneider, 1996). These studies, conducted in various industries such as hotels, mobile phones, education, and airlines, demonstrate the wide applicability of justice theory in understanding service recovery.

Past literature suggests that corporate image plays a significant role in influencing customer satisfaction (Andreassen and Lindestad, 1998). Nguyen and Leblanc (2001) argue that a high level of corporate image is associated with better perceptions of an organization's quality, business name, and ideology. Kim and Kim (2005) add that a strong brand image indicates a positive reputation and reflects greater brand strength compared to competitors. This suggests that a strong corporate image can enhance customer perceptions of service recovery efforts, ultimately impacting their satisfaction and loyalty. A positive corporate image, therefore, is vital for companies, as it can serve as a buffer during service failures and improve how customers perceive recovery efforts. This interconnected relationship between perceived justice, recovery satisfaction, and corporate image underscores the importance of fair treatment and strong brand perception in ensuring effective service recovery and maintaining customer loyalty. Consumers who develop a positive mental image of a brand are more likely to experience higher customer satisfaction due to a halo effect, where everything associated with the brand is perceived positively (Lai et al., 2009). In such cases, even if service failures occur, customers with a favorable mental image of the brand are more inclined to believe that the company will compensate them or deliver better outcomes in the future. This positive perception acts as a buffer, reassuring customers that the company has their best interests in mind, which helps maintain their trust even in the face of occasional service issues. Consequently, the impact of perceived justice due to a company's recovery efforts is likely to be stronger when the corporate image is positive, leading to higher recovery satisfaction among customers. However, upon reviewing past literature related to the present study, the author found limited research exploring the moderating role of corporate image in the relationship between perceived justice and service recovery satisfaction. This gap highlights the need for further investigation into how a company's brand image influences the effectiveness of recovery efforts in restoring customer satisfaction after service failures.

3. CONCEPTUAL DISCUSSION

The conceptual framework of this study was developed based on the study's objectives and the literature reviewed for this research. The framework aims to explore the relationships between perceived justice, service recovery satisfaction, and the potential moderating role of corporate image, as outlined in both theoretical and empirical studies relevant to the field. This approach provides a structured basis for analyzing how different dimensions of justice—distributive, procedural, and interactional—affect customer satisfaction, and how a strong corporate image may influence these relationships.
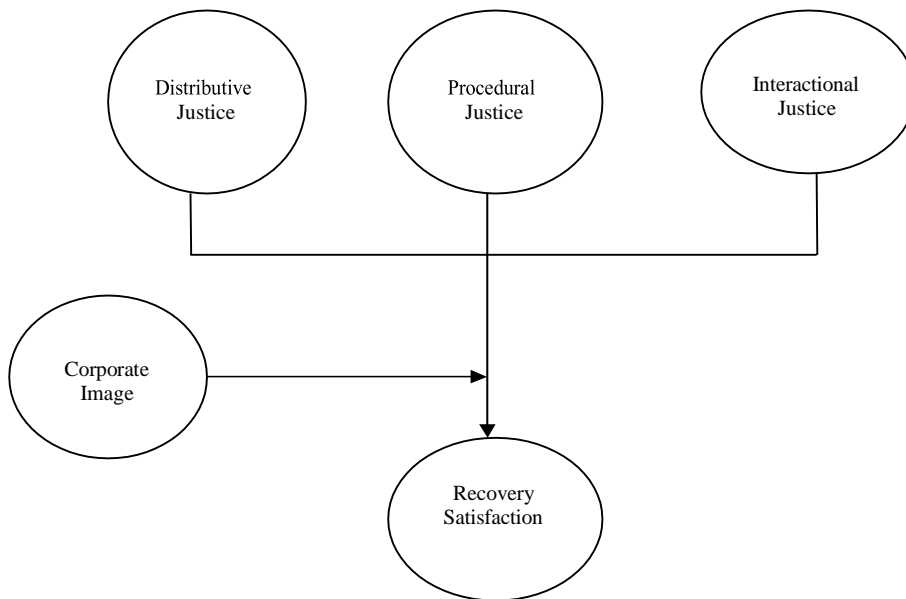
Figure 1: Framework of study

Distributive, procedural, and interactional justice are expected to have a significant effect on recovery satisfaction (H1a, H1b, H1c). Specifically, each dimension of perceived justice is hypothesized to positively influence how satisfied customers feel after a service recovery effort. Furthermore, corporate image is proposed to play a moderating role in the relationships between these justice dimensions—distributive, procedural, and interactional—and recovery satisfaction (H2a, H2b, H2c). This means that a positive corporate image may strengthen the impact of perceived justice on customer satisfaction, enhancing the overall effectiveness of service recovery efforts.

3.1. MEASUREMENT SCALES

Multiple item scales were employed to measure each construct in this study, with most of the scales being previously validated and slightly modified to align with the study's objectives. All scales were measured using a seven-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (7). For the corporate image construct, three items were measured on a seven-point scale ranging from "Very Low" to "Very High," and the fourth item used a scale ranging from "Much Worse" to "Much Better." To address the study's objectives, distributive justice was measured using a four-item scale adopted from Blodgett et al. (1997) and Smith et al. (1999). Procedural justice was assessed through a four-item scale adapted from Blodgett et al. (1997) and Karatepe (2006). Interactional justice was measured using a five-item scale adapted from Karatepe (2006), Smith et al. (1999), and Tax et al. (1998). Recovery satisfaction was evaluated through a four-item scale adapted from Maxham and Netemeyer (2002). Lastly, the corporate image construct was measured using a four-item scale adapted from Zeithaml (1988) and Selnes (1993). These scales were carefully chosen to ensure the constructs were accurately captured and relevant to the research objectives.

3.2. DATA COLLECTION

Primary data for this study were collected from individuals who travel via airlines operating in the Indian aviation industry. The researcher approached respondents at airports while they were waiting to board their flights. This method of approaching air travelers at that moment proved effective, as it eliminated the need to obtain customer records in advance by requesting them from the Indian aviation department. To ensure the relevance of the sample, a screening question was asked to determine whether respondents had encountered any service failure with airline operators in the past six months. A structured questionnaire was administered to the target population by the researcher in person. Since the questionnaire was adapted from previous studies, it was essential to test its suitability for the Indian context and the service industry. To do so, a pilot study was conducted with a sample of 52 respondents to assess the appropriateness of the constructs within the Indian aviation industry setting. A reliability check was performed to determine whether the constructs were suitable for this industry and context. Following the pilot study and confirmation of the constructs' suitability, the questionnaire was distributed to a sample size of 217 respondents. As the pilot study results were favorable, the responses from the pilot study were included in the final sample. Of the 217 questionnaires collected, 19 were either incomplete or deemed unreliable, resulting in 198 valid questionnaires being retained for further data analysis.

3.3. DEMOGRAPHIC PROFILE

The structured questionnaire used in this study included a section focused on the demographic and socio-economic profile of the respondents, as various factors such as age, gender, and income could influence the customer services provided by the airline companies. Collecting this information was also important for understanding how different demographic

groups might experience and evaluate service recovery efforts, which could help tailor services more effectively. The demographic profile of the respondents included key variables such as age, gender, marital status, educational qualifications, employment status, and monthly income. Among the respondents, 61.4 percent were aged between 28 and 40 years, while 23 percent were 27 years old or younger. There was a good balance between male and female participants, with 52.3 percent being male and 47.7 percent being female. A majority of the respondents were married (62.5 percent), while 37.5 percent were unmarried. Regarding educational qualifications, most respondents were highly educated, with 59.6 percent holding postgraduate degrees, compared to graduates and those with other qualifications. In terms of employment status, a significant portion of the respondents were professionals (72.4 percent), while 19.5 percent were self-employed, and 5.7 percent fell into other occupational categories. The survey also revealed that the respondents came from various income brackets. A substantial majority (64.7 percent) earned more than Rs. 40,000 per month, while 35.3 percent earned less than Rs. 40,000. This diverse demographic and socio-economic representation provided valuable insights into the customer profiles that helped shape the analysis of service recovery experiences and satisfaction levels.

4. FINDINGS

The data collected for this study were analyzed using SPSS software package version 17.0. Additionally, Microsoft Excel was utilized for some basic computations, such as calculating average values, standard deviations, and other descriptive statistics. To assess the reliability of the items forming each construct, Cronbach's alpha was computed as a measure of construct reliability. Cronbach's alpha is commonly used to determine how well a set of variables or items measure a single, one-dimensional latent construct. According to Sekaran (2003), an alpha value of 0.70 or greater represents satisfactory reliability, while values below 0.60 indicate poor reliability. In this study, the Cronbach's alpha values for all constructs ranged from 0.752 to 0.903 (see Table 1), confirming that the constructs used in the study demonstrate strong reliability. This suggests that the items effectively measure their respective constructs and are suitable for further analysis. The table 1 presents the results of a reliability analysis, which evaluates how consistently a set of items measures different constructs. Each construct is made up of several items, and the analysis checks whether the items within each construct are aligned in assessing the same concept. The analysis shows that all the constructs exhibit good reliability, meaning the items for each construct consistently reflect the concept they are intended to measure. The construct of corporate image, for example, demonstrates good internal consistency, indicating that respondents' answers across the items used to assess corporate image were reliable. Similarly, recovery satisfaction, another construct measured in the analysis, also shows adequate consistency, suggesting the items effectively capture the concept. Distributive justice, which pertains to the fairness of outcome distributions, displays particularly strong reliability, indicating that respondents consistently understood and responded similarly to the items measuring this concept. Procedural justice, related to the fairness of processes, also demonstrates a reliable pattern, with respondents providing consistent answers across the relevant items. Lastly, interactional justice, which deals with fairness in interpersonal treatment, shows a good level of internal consistency as well, meaning the items used to measure this construct were well understood and reliably answered by the respondents. Overall, the analysis suggests that the measurement tool used in the study provides a dependable way to assess these various constructs.

Table 1: Reliability Analysis Results

Name of Construct	No. of items	Cronbach's Alpha Value	No. of Respondents
Corporate Image	4	0.786	198
Recovery Satisfaction	4	0.752	198
Distributive Justice	3	0.903	198
Procedural Justice	3	0.812	198
Interactional Justice	5	0.796	198

Exploratory factor analysis was conducted to ensure that the data collected were consistent with the expected structure. The results showed that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.883, and Bartlett's Test of Sphericity (Chi-square = 1673.314, significance = 0.000) confirmed that the factor analysis was appropriate for the eleven variables under study. This indicates that exploratory factor analysis was effective in validating the structure of the data. Three factors were extracted using principal component analysis, which together explained 77.74% of the variance. Principal Component Analysis with varimax rotation and Kaiser Normalization was employed to determine the dimensionality of the dataset. The factor loadings for each dimension were stable, with each variable loading strongly onto a single factor. The selected factors were based on Eigenvalues equal to or greater than 1.00, and a cut-off point of 0.40 was used in this study. The factor loadings matrix is presented in Table 2. Hierarchical regression analyses were

performed on the collected data to test the study's hypotheses. The analyses also examined the relationships between the dimensions of perceived justice (distributive, procedural, and interactional) and recovery satisfaction, as well as the moderating role of corporate image in the relationship between perceived justice and recovery satisfaction. The first model of hierarchical regression analysis revealed that all three justice dimensions—distributive, procedural, and interactional—were positively related to recovery satisfaction (see Table 3). This positive relationship supports Hypotheses H1a, H1b, and H1c. Moreover, the model showed that the effect of distributive justice on recovery satisfaction was stronger than that of interactional justice, and interactional justice had a stronger effect on recovery satisfaction than procedural justice. These findings suggest that customers place the highest importance on fair distribution of outcomes when evaluating service recovery, followed by how they are treated interpersonally, and lastly by the fairness of the recovery processes.

Table 2: Factor Loadings Matrix

Variable	Factor Loadings		
	1	2	3
Interactional Justice1	0.483	.892	
Interactional Justice2		.926	0.451
Interactional Justice3	0.513	.808	0.491
Interactional Justice4	0.441	.656	
Interactional Justice5	0.411	.585	
Procedural Justice1		0.511	.770
Procedural Justice2		0.421	.611
Procedural Justice3	0.433		.823
Distributive Justice1	.813	0.542	
Distributive Justice2	.883		0.551
Distributive Justice3	.716	0.472	

This table 2 provides the factor loadings matrix, which is used in factor analysis to show how well different variables (in this case, justice-related variables) correlate with three underlying factors. Factor analysis identifies these factors as underlying dimensions that group the variables based on their shared variance. Each variable has a loading score for one or more factors, with higher loadings indicating a stronger relationship with the factor. The variables related to interactional justice generally load heavily on the second factor, suggesting that this factor predominantly captures aspects of interpersonal fairness, such as respect and communication during interactions. However, some of the interactional justice items also show moderate loadings on the first factor, indicating some overlap in how these variables relate to both factors. For procedural justice, the items mainly load on the third factor. This suggests that the third factor likely represents the fairness of the processes used to make decisions. There is less overlap between procedural justice and the other factors, indicating that these variables are well represented by a distinct underlying dimension. Lastly, distributive justice variables, which relate to the perceived fairness of outcomes, strongly load on the first factor. This indicates that the first factor captures aspects of fairness in terms of outcome distribution, and these variables are less influenced by the other factors. Overall, the matrix highlights how different aspects of justice are grouped under distinct underlying factors. Interactional and procedural justice variables tend to load on their respective factors, while distributive justice strongly correlates with a separate factor, reflecting the conceptual differences between these forms of justice.

Table 3: Multiple Regression Results

Model	Variable	Beta value (Stnd.)	R	R Square	AdjustedR Square	F Value	Change Statistics R Square Change	F change
	Procedural Justice	0.317	0.851	0.725	0.708	63.637	0.725	63.637
1	DistributiveJustice	0.483						
	InteractionalJustice	0.393						

This table 3 presents the results of a multiple regression analysis, which explores the relationship between three independent variables—procedural justice, distributive justice, and interactional justice—and a dependent variable. The analysis aims to determine how well these forms of justice predict the dependent variable and the relative contribution of

each. The results indicate that all three justice variables (procedural, distributive, and interactional) have a positive relationship with the outcome, as shown by their standardized beta values. Distributive justice has the largest beta value, suggesting that it has the strongest impact on the dependent variable, followed by interactional justice and then procedural justice. The overall model shows a high degree of explanatory power, as reflected by the R value, which indicates a strong correlation between the combined independent variables and the dependent variable. The R square value demonstrates that a significant portion of the variation in the dependent variable is explained by these justice factors. The adjusted R square, which accounts for the number of variables in the model, also shows that the model remains robust after adjusting for potential overfitting. The F value indicates that the model is statistically significant, meaning that the combination of procedural, distributive, and interactional justice reliably predicts the dependent variable. Additionally, the change statistics show that the model explains a substantial portion of variance, with the R square change confirming that the justice variables significantly contribute to the model's predictive power. In summary, the regression analysis demonstrates that all three forms of justice play a meaningful role in explaining the dependent variable, with distributive justice having the most substantial impact, followed by interactional and procedural justice. The model as a whole is highly effective in predicting the outcome. The second model of the analysis focused on examining the direct effect of corporate image on recovery satisfaction. The results provided clear evidence that corporate image has a direct and positive impact on recovery satisfaction. This suggests that customers who perceive a company's image favorably are more likely to be satisfied with the company's service recovery efforts, regardless of the specific dimensions of perceived justice. A strong corporate image may enhance customers' overall trust and confidence in the company, making them more forgiving of service failures and more appreciative of recovery efforts. This finding underscores the importance of maintaining a positive corporate image in fostering customer satisfaction, especially during instances of service recovery.

Table 4: Multiple Regression Results

Model	Variable	Beta value (Stnd.)	R	R Square	AdjustedR Square	F Value	R Square Change	F change
							Change Statistics	
	Procedural Justice	0.213	0.885	0.783	0.771	32.206	.0798	32.206
2	DistributiveJustice	0.253						
	InteractionalJustice	0.264						
	Corporate Image	0.521						

This table 4 provides the results of a multiple regression analysis where procedural justice, distributive justice, interactional justice, and corporate image are used as predictors for a dependent variable. The goal of this analysis is to examine how these four variables contribute to explaining the variation in the outcome. The inclusion of corporate image in this model appears to play a significant role, as reflected by its high standardized beta value, indicating that corporate image has the strongest influence on the dependent variable among the predictors. In comparison, the other three variables—procedural justice, distributive justice, and interactional justice—also contribute to the model but have smaller effects relative to corporate image. This suggests that while perceptions of justice are important, corporate image stands out as a major driver of the outcome being examined. The overall model shows a strong relationship between the independent variables and the dependent variable, as indicated by the R value, which points to a high degree of correlation. The R square value indicates that a large portion of the variability in the dependent variable is explained by the combined effect of the four predictors. The adjusted R square, which adjusts for the number of predictors in the model, suggests that the model remains reliable and minimizes the risk of overfitting. The F value indicates that the model is statistically significant, meaning that the combination of corporate image and the various forms of justice reliably predicts the dependent variable. The change in R square demonstrates that this model explains a significant proportion of the variance, and the F change statistic confirms the importance of the variables in improving the model's predictive accuracy. In summary, corporate image emerges as the most significant predictor in this model, while procedural, distributive, and interactional justice also contribute meaningfully. The overall model is effective in explaining the dependent variable, with a high level of explained variance and statistical significance.

The third model of the study examined the moderating effect of corporate image on the relationship between perceived justice dimensions and recovery satisfaction. The results, as shown in Table 5, indicated significant interaction terms between all three justice dimensions (distributive, procedural, and interactional) and corporate image. This supports the stated hypotheses H2a, H2b, and H2c. In other words, the findings confirm that corporate image plays a moderating role in the relationship between perceived justice dimensions and recovery satisfaction. This suggests that when customers hold a positive image of a company, the impact of perceived justice—whether distributive, procedural, or interactional—

on recovery satisfaction is amplified. Consequently, a strong corporate image enhances the effectiveness of service recovery efforts, further reinforcing the importance of corporate reputation in the context of customer satisfaction and service recovery. None of the hypotheses were rejected, confirming the moderating influence of corporate image across all justice dimensions.

Table 5: Moderation Analysis Results

Model	Moderating Variable	Beta value (Stnd.)	R	R Square	Adjusted R Square	F Value	Change Statistics R Square Change	F change
3	Corporate Image X Procedural Justice	0.207	0.926	0.858	0.842	9.897	0.073	9.897
	Corporate Image X Distributive Justice	0.712						
	Corporate Image X Interactional Justice	0.404						

This table 5 provides the results of a moderation analysis, which investigates whether the interaction between corporate image and various forms of justice (procedural, distributive, and interactional) affects the dependent variable. The goal of this analysis is to determine how the relationship between justice perceptions and the outcome might change when corporate image is taken into account. The interaction between corporate image and distributive justice shows the strongest effect, as indicated by its relatively high standardized beta value. This suggests that corporate image significantly amplifies or modifies the impact of distributive justice on the dependent variable. In other words, the effect of distributive justice on the outcome becomes stronger when corporate image is factored in as a moderating variable. The interaction between corporate image and interactional justice also shows a meaningful relationship, though its impact is somewhat smaller compared to distributive justice. This implies that corporate image influences how interactional justice affects the outcome, but not as strongly as it does with distributive justice. The interaction between corporate image and procedural justice shows the least impact among the three, though it still plays a role in moderating the effect of procedural justice on the dependent variable. While the moderation is present, the influence of procedural justice on the outcome seems less dependent on corporate image compared to the other forms of justice. The overall model shows a very strong relationship between the variables, as indicated by the high R value. A significant portion of the variability in the dependent variable is explained by the interaction between corporate image and the different forms of justice, as demonstrated by the R square value. The adjusted R square suggests that the model remains stable even after adjusting for the number of predictors, ensuring that the findings are not a result of overfitting. The F value confirms that the model is statistically significant, meaning that the moderation effect of corporate image on the relationship between justice and the dependent variable is important. The change in R square reflects the additional explanatory power gained by incorporating the interaction terms into the model. Overall, corporate image plays a key moderating role, particularly in amplifying the effects of distributive justice and interactional justice on the outcome. The overall model suggests that corporate image not only has a direct impact but also influences how perceptions of justice affect the dependent variable, enhancing the relationship between these factors.

5. DISCUSSION

The study revealed several important implications for Indian aviation management, particularly in terms of employee training and customer service. One of the key focuses should be on equipping employees with a deep understanding of perceived justice, which includes fair treatment and effective communication. Ensuring that staff can recognize and address customer concerns with a balanced approach to distributive, procedural, and interactional justice is essential for improving recovery satisfaction. Distributive justice, which has shown a strong connection to customer satisfaction, particularly in service recovery situations, suggests the need for well-defined guidelines regarding compensation. Employees should be trained to handle service failures swiftly and appropriately, offering compensation that meets customer expectations. Giving frontline staff the flexibility to present customers with a range of compensatory options that are of equivalent value allows customers to choose the option that best meets their needs and fosters a sense of fairness.

At the same time, training programs should emphasize the importance of interactional justice, which is equally crucial in influencing recovery satisfaction. Staff members should be prepared to handle customer dissatisfaction with empathy and attentiveness, showing courtesy and offering sincere apologies when necessary. These qualities help restore trust and

enhance the overall service recovery experience. However, the study does have limitations. Since the research was conducted within the Indian airline industry, the findings may not be applicable to other industries or regions. Future research could explore these concepts in different service sectors and across various geographical locations to validate and broaden the understanding of how perceived justice influences recovery satisfaction. Additionally, further studies could investigate other moderating variables, beyond corporate image, that might impact the relationship between justice perceptions and service recovery outcomes. Such efforts would help deepen insights into the complexities of customer satisfaction in various service environments.

6. CONCLUSIONS

Earlier research in the area of service recovery has provided valuable insights into the significant role that perceived justice plays in shaping recovery satisfaction. Studies have consistently highlighted that customers' perceptions of fairness—whether through distributive, procedural, or interactional justice—strongly influence how satisfied they feel after a service failure is addressed. This body of research has established a clear link between how justice is perceived during the recovery process and the likelihood of restoring customer trust and loyalty. By understanding these justice dimensions, researchers and practitioners can better design effective service recovery strategies that not only resolve issues but also enhance overall customer satisfaction. The current research goes a step further by investigating the role of corporate image in service recovery situations. While earlier studies have focused primarily on the impact of perceived justice on recovery satisfaction, this study aims to bridge the gaps in the literature by exploring the moderating role of brand image in these relationships. Specifically, the study examines whether a company's corporate image can influence how different dimensions of perceived justice—distributive, procedural, and interactional—affect recovery satisfaction. By addressing this gap, the research provides a more comprehensive understanding of how brand perception interacts with customer expectations and satisfaction during service recovery. The first model of the hierarchical regression analysis revealed that all three dimensions of perceived justice—distributive, procedural, and interactional—are positively related to recovery satisfaction. Among these, the effect of distributive justice on recovery satisfaction was found to be stronger than that of interactional justice, and interactional justice had a stronger effect than procedural justice. These findings highlight the varying influence of each justice dimension on how customers evaluate recovery efforts. Additionally, the results confirmed that all three interaction terms were significant, indicating that corporate image plays a moderating role in the relationship between perceived justice dimensions and recovery satisfaction. This suggests that a positive corporate image can amplify the positive effects of perceived justice on recovery satisfaction, further enhancing customers' overall experience during service recovery.

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