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PREDICTING COMPLAINT HANDLING SATISFACTION AMONG AIRLINE PASSENGERS: THE MODERATING ROLE OF COMPLAINT SEVERITY

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Abstract: This study investigates the influence of procedural justice, distributive justice, and interactional justice on airline passenger satisfaction with complaint handling, examining the moderating role of the severity of complaint (SOC). A total of 500 questionnaires were distributed, yielding 405 usable responses for analysis, indicating an effective response rate of 81.0%. Using moderated multiple regression analysis, the initial model found that all three justice dimensions significantly predicted satisfaction. The model confirmed that SOC substantially moderates the effect of procedural justice and interactional justice. Specifically, the positive impact of procedural justice on satisfaction strengthens as the severity of the complaint increases $\beta = 1.082$, p < .05). In contrast, the positive effects of interactional justice on satisfaction weaken when complaints are more severe $\beta = -1.491$, p < .01). The final model successfully accounted for 85.8% of the variance in satisfaction ($R^2 = .858$). These findings reveal the critical, contingent role of complaint severity in the service recovery process.

Keywords: Customer Complaint Satisfaction, Complaint Severity, Procedural Justice, Distributive Justice, Interactional Justice

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Introduction

The airline industry operates in a highly competitive, service-intensive environment, where service failures are often unavoidable due to factors such as flight delays, cancellations, overbooking, and service lapses (Tran, 2024). As airline services are largely intangible, heterogeneous, and produced and consumed simultaneously, even minor disruptions may significantly affect passengers' experiences (Lu et al., 2025). Consequently, customer complaints have become an important feedback mechanism through which passengers express dissatisfaction and evaluate an airline's service recovery efforts (Tran, 2024).

Effective complaint handling plays a critical role in restoring customer confidence and sustaining long-term relationships following service failures. Complaint-handling satisfaction refers to passengers' evaluations of how well an airline responds to and resolves their complaints, encompassing fairness, responsiveness, empathy, and transparency (Helmy et al., 2023). Prior research has consistently demonstrated that satisfactory complaint handling can mitigate negative emotions, enhance perceived justice, and foster positive behavioral outcomes, including customer loyalty and repurchase intention (Helmy et al., 2023). Conversely, ineffective complaint handling may intensify dissatisfaction and lead to negative word-of-mouth and customer defection (Knox & Van, 2014).

However, passengers' satisfaction with complaint handling is not determined solely by the airline's recovery actions. The nature and severity of the service failure itself play a crucial role in shaping passengers' expectations and evaluations of recovery efforts (Awa et al., 2021; Tran, 2024). Complaint severity reflects passengers' perceptions of the seriousness, impact, and consequences of a service failure. Severe service failures, such as prolonged delays or mishandled baggage, may elicit stronger emotional responses and higher expectations for compensation and corrective actions than less severe incidents (Valentini et al., 2020). As a result, the same complaint handling strategy may be evaluated differently depending on the perceived severity of the complaint (Nikbin et al., 2015).

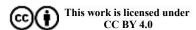
Despite the growing body of literature on service recovery and complaint handling in the airline industry, empirical studies that explicitly examine complaint severity as a moderating factor remain limited (Tran, 2024). Many existing studies focus primarily on direct relationships between complaint handling attributes and customer satisfaction, overlooking the conditional effects of failure characteristics (Lim et al., 2025; Tran, 2024). Addressing this gap is important for developing a more nuanced understanding of how passengers evaluate complaint handling outcomes under varying service failure conditions

Therefore, this study aims to predict satisfaction with complaint handling among airline passengers by examining key determinants of effective complaint handling and investigating the moderating role of complaint severity. By incorporating complaint severity into the analysis, this research offers deeper theoretical insights into service recovery evaluation processes and practical guidance for airline managers on tailoring complaint-handling strategies to the seriousness of service failures.

Literature Review

Customer Complaint Satisfaction

Customer complaint satisfaction represents airline passengers' overall evaluation of how satisfactorily their complaints are addressed following a service failure (Hien et al., 2024). In





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the context of airline services, where operational disruptions and service inconsistencies are often unavoidable, passengers' post-complaint evaluations become a critical indicator of service recovery effectiveness (Su et al., 2021; Tran, 2024). Rather than reflecting the initial service experience, customer complaint satisfaction captures passengers' judgments formed after interacting with the airline's complaint handling system, making it a central outcome variable in understanding post-failure service evaluations (Nikbin et al., 2015; Wang et al., 2022; Wu et al., 2023).

From a service recovery perspective, customer satisfaction with complaints is primarily shaped by passengers' perceptions of fairness during the complaint-handling process. When passengers believe that their concerns are handled appropriately and justly, they are more likely to view the recovery effort positively, even if the initial failure was significant. Conversely, perceptions of unfair treatment can intensify dissatisfaction and prolong negative emotions (Matikiti et al., 2018; Yu et al., 2025). As such, customer satisfaction with complaints provides a meaningful lens for assessing the adequacy and quality of an airline's response to service failures (Tran, 2024).

However, passengers' evaluations of complaint handling are not uniform and may vary depending on the context of the service failure (Dwesar & Sahoo, 2022; Mirzahossein & Rezashoar, 2025; Pereira et al., 2023; Yu et al., 2025). The perceived severity of a complaint can influence passengers' expectations and emotional responses, thereby shaping their assessment of the complaint-handling experience (Desai et al., 2015; Elbaz et al., 2023; Sengupta et al., 2024; Vassilikopoulou et al., 2018). In situations involving more severe service failures, passengers may apply stricter standards when evaluating recovery efforts, making complaint satisfaction more sensitive to perceived fairness and responsiveness (Migacz et a., 2018; Nikbin et al., 2015). Accordingly, customer complaint satisfaction in this study is examined not only as a direct outcome of perceptions of complaint handling but also as a context-dependent construct influenced by the seriousness of the complaint experience.

Procedural Justice and Customer Complaint Satisfaction

Procedural justice refers to customers' perceptions of the fairness of the processes and procedures used by airlines to handle complaints, including accessibility, timeliness, consistency, and transparency (Cintamür et al., 2023; Matikiti et al., 2018). In the context of airline service failures, passengers often experience stress, uncertainty, and inconvenience, making the complaint handling process itself a critical component of their overall evaluation (Awa et al., 2021; Herjanto et al., 2022; Hien et al., 2024; Xu et al., 2019). When airlines provide clear complaint channels, respond promptly, and apply procedures consistently, passengers are more likely to perceive the process as fair and respectful (Lai, 2023; Matikiti et al., 2018; Matimati, 2020; Olatunde et al., 2020). Such perceptions foster a sense of control and trust, which contributes positively to customer complaint satisfaction (Ayyildiz et al., 2024; Honora et al., 2023; Lal & Kashyap, 2024).

Empirical evidence from the service recovery literature suggests that fair procedures can significantly enhance customer satisfaction with complaints, even when the outcome may not fully compensate for the inconvenience experienced (Orsingher, 2022; Susanti, 2021). Passengers tend to value being heard and treated fairly throughout the complaint-handling process, particularly in high-contact service industries such as airlines. Conversely, complicated procedures, long waiting times, or lack of transparency may exacerbate frustration and lead to dissatisfaction, regardless of the resolution offered (Castro et al., 2021; Elemoah et al., 2025;



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Liu et al., 2024; Shin et al., 2024). Therefore, procedural justice plays a crucial role in shaping customer satisfaction with complaints by influencing how passengers evaluate the airline's commitment to fairness and responsiveness during service recovery (Cintamür et al., 2023; Matikiti et al., 2018).

Distributive Justice and Customer Complaint Satisfaction

Distributive justice refers to customers' perceptions of the fairness of the outcomes they receive following a service failure, such as compensation, refunds, replacements, or other corrective actions provided by the airline (Ahmad et al., 2024; Arneson, 2022; Cintamür, 2023; McColl-Kennedy & Sparks, 2003). In the airline industry, where service failures can result in tangible losses of time, money, and convenience, passengers often evaluate complaints based on whether the resolution adequately offsets the inconvenience experienced. When passengers perceive that compensation or corrective action is fair and proportionate to the severity of the failure, they are more likely to evaluate the complaint handling experience positively, leading to higher levels of customer complaint satisfaction (Matikiti et al., 2018).

Research on service recovery consistently shows that distributive justice is a strong predictor of customer satisfaction with complaints, particularly in situations involving substantial service disruptions (Al-Dmour et al., 2021; Ali et al., 2023; Russo et al., 2022). Fair outcomes signal that the airline accepts responsibility and values the customer, which helps restore trust and reduce negative emotions arising from the service failure (Kumar & Shankar, 2024; Nazifi et al., 2021). Conversely, when passengers perceive the recovery outcome as insufficient or inequitable, dissatisfaction may persist even when the complaint-handling process is efficient (Yu et al., 2025). Thus, distributive justice plays a vital role in shaping customer complaint satisfaction by influencing passengers' judgments of whether the airline's response adequately compensates for the service failure (Mahrous, 2023; Sarılgan & Yücel, 2025)

Interactional Justice and Customer Complaint Satisfaction

Interactional justice refers to passengers' perceptions of the quality of interpersonal treatment they receive during the complaint handling process, particularly in terms of politeness, empathy, respect, and sincerity shown by airline employees (Matikiti et al., 2018; Migacz et al., 2018). In service failure situations, passengers often experience frustration, stress, and emotional discomfort, making interpersonal interactions a crucial element of complaint handling. When airline staff communicate courteously, listen attentively, and demonstrate genuine concern for passengers' issues, customers are more likely to feel acknowledged and respected, which positively influences their satisfaction with the complaint handling experience (Mahrous, 2023). According to Mir et al. (2023), interactional justice depends on the manner (kindness, respectfulness, politeness) in which the service provider interacts with customers throughout the recovery process.

Prior research suggests that interactional justice can significantly enhance customer satisfaction with complaints by alleviating negative emotions and fostering positive relational outcomes (Awa et al., 2021; Honora et al., 2024; Nuansi & Ngamcharoenmongkol, 2024). Even in cases where service failures cannot be fully remedied, respectful and empathetic communication can soften passengers' negative perceptions and improve their overall evaluation of the airline's response. Conversely, rude, dismissive, or indifferent behavior may intensify dissatisfaction and damage trust, regardless of the compensation or procedures applied (Ahmad et al., 2024; Muralindharan et al., 2021). Therefore, interactional justice plays a vital role in shaping



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customer satisfaction with complaints by influencing how passengers emotionally interpret the airline's response to service failures.

Severity of Complaints and Customer Complaint Satisfaction

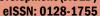
Complaint severity refers to passengers' perceptions of the seriousness and impact of a service failure, including the extent of inconvenience, loss, or emotional distress experienced (Elbaz et al., 2023; Hien et al., 2024; Omar et al., 2025; Yu et al., 2025). In the airline industry, service failures vary widely in severity, ranging from minor inconveniences to major disruptions such as prolonged delays, cancellations, or mishandled baggage. These differences in perceived severity shape passengers' expectations and emotional responses, which, in turn, influence how they evaluate the airline's complaint-handling efforts. Generally, as the perceived severity of a service failure increases, passengers become more sensitive and critical in their assessments of the recovery experience, making it more difficult to achieve customer satisfaction with complaints (Aksoy & Yilmaz, 2022; Gao et al., 2022; Herianto et al., 2022).

In this study, complaint severity is expected to influence customer satisfaction with complaints by conditioning how passengers interpret the airline's response to their complaints. For severe service failures, passengers may require higher levels of fairness, responsiveness, and consideration to feel satisfied, whereas less severe incidents may be resolved with more modest recovery efforts. As a result, complaint severity plays a crucial role in shaping the strength of the relationship between perceptions of complaint handling and customer complaint satisfaction (López-López et al., 2021; Muralidharan et al., 2021; Sofia et al., 2023). Understanding this relationship allows airlines to tailor their recovery strategies according to the seriousness of service failures, thereby improving complaint satisfaction outcomes across different complaint contexts.

Research Methodology

This study employed a quantitative, cross-sectional approach to examine how procedural justice, distributive justice, and interactional justice relate to customer satisfaction with complaints, while also considering how complaint severity might influence these relationships. To gather data, a structured questionnaire was administered to airline passengers who had experienced a service failure and subsequently filed a complaint. Only those with firsthand experience of the complaint-handling process were included in the analysis. A non-probability sampling method was chosen because of the specific criteria needed for selecting participants. All measurement items were drawn from well-established literature on service recovery and justice, and responses were measured using a Likert-type scale.

For data analysis, this study utilized the Statistical Package for the Social Sciences (SPSS), specifically a reliability analysis to check the internal consistency of the measurement scales. Next, a correlation analysis is performed to investigate the relationships among the study variables. To assess the moderating effect of complaint severity, this study conducted a moderated multiple regression analysis. This involved creating interaction terms by multiplying the mean-centered justice variables with the severity of the complaint, which were then entered hierarchically into the regression models. This method enabled this study to examine both the direct effects of the different justice dimensions on customer satisfaction with complaints and how the severity of the complaint interacted with these relationships. The findings shed light on how varying levels of complaint severity can affect passengers' perceptions of how well their complaints were handled.



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Findings and Discussion

Table 1 shows the response rate of this study. Initially, 500 questionnaires were distributed to participants for the study. Of these, 456 questionnaires were returned, yielding a strong response rate of 91.2%. This indicates that the majority of those approached participated by responding. Of the 456 questionnaires collected, not all were suitable for analysis. Thirty-eight were discarded because the respondents did not meet the complaint criteria, representing 8.3% of the returned forms. Additionally, 13 questionnaires were removed because they contained outlier data, accounting for 2.9% of the total collected. After excluding the non-complainants and outliers, 405 questionnaires remained usable for the study. This final number corresponds to 81.0% of the distributed questionnaires, demonstrating an effective data collection and cleaning process that ensured reliable inputs for analysis.

Table 1: Response Rate

Items	Total	Response Rate
Questionnaire Distributed	500	
Data Collected	456	91.2%
Questionnaire Discarded (non-complainants)	38 (out of 456)	8.3%
Questionnaire Discarded (outliers)	13 (out of 456)	2.9%
Usable Questionnaire	405	81.0%

Respondent Profile

Table 2: Respondent Profile

Variables	Description	Frequencies	Percentage
Types of Airlines	Air Asia	205	50.6
	Malaysian Airlines Berhad	200	49.4
Gender	Female	191	47.2
	Male	214	52.8
Age	25-35 years old	80	19.8
	36-45 years old	123	30.4
	46-55 years old	99	24.4
	56-65 years old	43	10.6
	Above 65 years old	10	2.5
	Below 25 years old	50	12.3
Marital Status	Divorced	45	11.1
	Married	233	57.5
	Single	126	31.1
	Widowed	1	.2
Occupation	Government Officer	84	20.7
	Private Business Owner	61	15.1
	Private Sector Employee	188	46.4
	Retired	11	2.6
	Student	45	11.1
Monthly Income	Above RM10,001	32	7.9
	Below RM3000	59	14.6
	RM3001-RM4000	10	2.5
	RM4001-RM5000	29	7.2
	RM5001-RM6000	35	8.6



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	RM6001-RM7000	72	17.8
	RM7001-RM8000	70	17.3
	RM8001-RM9000	61	15.1
	RM9001-RM10,000	37	9.1
Frequency of Flying	≥ 11 times	32	7.9
	0 - 1 time	42	10.4
	2- 4 times	169	41.7
	5 -7 times	124	30.6
	8 - 10 times	38	9.4
Category of Travel	Business traveler	32	7.9
	Business traveler/Leisure/ personal traveler	168	41.0
	Business traveler/ Leisure/ personal traveler/ Student	2	.5
	Business traveler/Student	1	.2
	Leisure/ personal traveler	179	44.2
	Leisure/ personal traveler/Student	23	5.7
	Student	2	.5
Flight Length	Long-haul (more than 7 hours)	5	1.2
	Mid-haul (more than 3 hours but less than 7 hours)	9	2.2
	Mid-haul (more than 3 hours but less than 7 hours), Long-haul (more than 7 hours)	4	1.0
	Short-haul (less than 3 hours)	130	32.1
	Short-haul (less than 3 hours), Longhaul (more than 7 hours)	1	.2
	Short-haul (less than 3 hours), Midhaul (more than 3 hours but less than 7 hours)	138	34.1
	Short-haul (less than 3 hours), Midhaul (more than 3 hours but less than 7 hours), Long-haul (more than 7 hours)	118	29.1

The data in Table 2 presents the demographic and travel-related characteristics of respondents, highlighting their distribution across various categories. Regarding airline preference, respondents were nearly evenly split, with 50.6% flying Air Asia and 49.4% Malaysian Airlines Berhad. Gender distribution was slightly more male (52.8%) than female (47.2%).

Age groups show that most respondents were between 36 and 45 years old (30.4%), followed by those between 46 and 55 years old (24.4%), with smaller proportions in the youngest (below 25 years old at 12.3%) and oldest categories (above 65 years old at 2.5%). The majority were married (57.5%), with singles (31.1%) and those who were divorced (11.1%) making up the remainder. Nearly half (46.4%) of the respondents were private sector employees, followed by government officers (20.7%) and private business owners (15.1%). The income distribution was fairly spread out, with the most significant segments earning between RM6,001 and RM8,000 monthly (17.8% and 17.3%, respectively), while 14.6% earned below RM3,000.



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The data also indicated that the frequency of respondents' flying varied, with the most common ranges being 2-4 times (41.7%) and 5-7 times (30.6%) per given period. Most travelers were leisure or personal travelers (44.2%), with a significant number combining business and leisure travel (41.0%). Flight length data show diverse travel patterns: about one-third combined shorthaul and mid-haul flights (34.1%), nearly one-third experienced short-, mid-, and long-haul flights (29.1%), and a smaller portion primarily took short-haul flights (32.1%). Long-haul-exclusive travelers were very few (1.2%). Overall, this profile reflects a balanced sample across airline choice, gender, occupation, and travel behavior, with a tendency toward middle-aged, married, private-sector employees who mostly fly short- to mid-haul for leisure purposes.

Correlation and Reliability Analyses

Table 3 presents the means, standard deviations, correlations, and reliability measures (Cronbach's alpha) for four variables related to justice perceptions and complaint-handling satisfaction. The mean scores for Procedural Justice (2.94), Distributive Justice (2.94), Interactional Justice (3.05), and Complaint Handling Satisfaction (2.84) indicate moderate levels of agreement or satisfaction across these constructs. The standard deviations, ranging from 0.94 to 1.10, indicate a reasonable spread in responses, with Complaint Handling Satisfaction showing slightly greater variability than the justice variables.

Strong positive correlations exist between all pairs of variables, with coefficients ranging from 0.867 to 0.967, all of which are significant at the 0.01 level. This suggests that perceptions of procedural, distributive, and interactional justice are closely linked to one another and to satisfaction with complaint handling, indicating that higher justice perceptions tend to coincide with greater satisfaction.

Reliability scores (Cronbach's alphas) are very high for all variables, ranging from 0.888 to 0.985, indicating excellent internal consistency of the measures. Overall, the results indicate a strong and reliable relationship between different types of justice and satisfaction with complaint handling in this sample.

Table 3: Correlation and Reliability Analyses

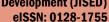
No	Variables	Mean	SD	1	2	3	4	5
1	Procedural Justice	2.94	.97	(.985)				
2	Distributive Justice	2.94	1.04	.945**	(.903)			
3	Interactional Justice	3.05	.94	.967**	.924**	(.955)		
4	Complaint Handling Satisfaction	2.84	1.10	.915**	.879**	.867**	(.888)	

Notes: **. Correlation is significant at the 0.01 level (1-tailed). N=405; Cronbach's alphas along the diagonal in the parentheses

Moderated Multiple Regression Analysis

The moderated multiple regression analysis presented in Table 4 examined how Procedural Justice, Distributive Justice, and Interactional Justice predict the dependent variable, with the Severity of Complaint (SOC) acting as a moderator.

In Model 1, Procedural Justice ($\beta = 1.044$, p < .01), Distributive Justice ($\beta = 0.167$, p < .01), and Interactional Justice ($\beta = -0.296$, p < .01) all significantly predicted the outcome, explaining 84.5% of the variance ($R^2 = .845$). Model 2 introduced the moderator, Severity of Complaint (SOC), which had a small but significant adverse effect ($\beta = -0.082$, p < .01) and later a positive





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effect ($\beta = 0.143$, p < .05) once interaction terms were included. This step slightly improved model fit $(R^2 = .851)$.

Meanwhile, Model 3 included interaction terms between the independent variables and SOC, revealing that SOC significantly moderated the relationships between Procedural Justice and Interactional Justice and the outcome. Specifically, the Procedural Justice-SOC interaction was positive and significant ($\beta = 1.082$, p < .05), indicating that the effect of Procedural Justice on the dependent variable strengthens as the severity of the complaint increases. Conversely, the Interactional Justice-SOC interaction was negative and significant ($\beta = -1.491$, p < .01), indicating that the impact of Interactional Justice on the outcome becomes weaker for more severe complaints. The interaction between Distributive Justice and SOC was not significant (β = 0.122).

The final model accounted for 85.8% of the variance ($R^2 = .858$), showing a modest but significant increase over previous models. The high F-change values and significance levels indicate that all steps significantly improved the model. The Durbin-Watson statistic of 1.997 suggests no issue with autocorrelation in the residuals. Overall, the findings reveal that the severity of the complaint moderates the influence of procedural and interactional justice on the dependent variable, highlighting the nuanced role that complaint severity plays in shaping these relationships.

Table 4: Moderated Multiple Regression Analysis

Independent Variables	Model 1	Model 2	Model 3
Procedural Justice	1.044**	1.012**	242
Distributive Justice	.167**	.159**	.043
Interactional Justice	296**	294**	1.361**
Moderator			
Severity of Complaint (SOC)		082**	.143*
Interaction Terms			
Procedural Justice*SOC			1.082*
Distributive Justice*SOC			.122
Interactional Justice*SOC			-1.491**
R	.919	.922	.926
\mathbb{R}^2	.845	.851	.858
Adjusted R ²	.844	.849	.855
R ² Change	.845	.005	.007
F-Change	729.514	14.411	6.946
Sig. F-Change	.000	.000	.000
Durbin Watson			1.997

The Interaction of the Severity of Complaints on the Relationship between **Procedural Justice and Complaint Handling Satisfaction**

Figure 1 illustrates the interaction effect between procedural justice and severity of complaint on complaint-handling satisfaction. The x-axis represents procedural justice, ranging from low to high, while the y-axis shows complaint-handling satisfaction scores. Two lines are plotted, representing low and high levels of complaint severity. For both levels, complaint-handling



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satisfaction increases with procedural justice, indicating that higher perceptions of fair procedures are generally associated with greater satisfaction in handling complaints.

However, the line for low severity of complaint lies above that for high severity of complaint at both low and high levels of procedural justice. This suggests that when complaints are less severe, overall satisfaction tends to be higher compared to more severe complaints, across all levels of procedural justice. Interestingly, the slopes of both lines are positive and similar, indicating that procedural justice has a strong positive influence on satisfaction regardless of complaint severity. However, satisfaction remains consistently lower among respondents with high-severity complaints.

In summary, the graph reveals that while enhancing procedural justice improves satisfaction with complaint handling for both low- and high-severity complaints, individuals with more severe complaints report lower overall satisfaction, highlighting the moderate role of complaint severity in this relationship.

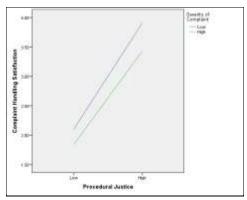


Figure 1: Interaction of Severity of Complaints on the Relationship between Procedural **Justice and Complaint Handling Satisfaction**

Interaction of Severity of Complaints on the Relationship between Interactional **Justice and Complaint Handling Satisfaction**

Figure 2 shows the interaction effect between interactional justice and complaint severity on complaint-handling satisfaction. The x-axis represents interactional justice, ranging from low to high, while the y-axis shows levels of complaint-handling satisfaction. Two lines are depicted, representing low and high levels of Severity of Complaint. Both lines slope upward, indicating that as Interactional Justice increases, Complaint Handling Satisfaction also increases for both low- and high-severity complaint groups.

However, the line for low Severity of Complaint consistently lies above the line for high Severity of Complaint across all levels of interactional justice. This suggests that individuals with less severe complaints report higher satisfaction with complaint handling compared to those with more severe complaints. Interestingly, the gap between the low- and high-severity groups becomes more pronounced as Interactional Justice increases, reflecting a greater divergence in satisfaction between the groups at higher levels of Interactional Justice. This aligns with the moderated regression finding that the interaction between interactional justice and complaint severity was significant and negative, implying that the positive effect of interactional justice on satisfaction is weaker when complaint severity is higher.

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In summary, this graph demonstrates that while better Interactional Justice improves overall satisfaction with complaint handling, the severity of complaints modifies this effect, reducing its positive impact for those with more severe complaints.

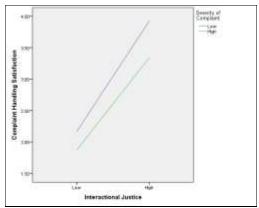


Figure 2: Interaction of Severity of Complaints on the Relationship between **Interactional Justice and Complaint Handling Satisfaction**

Research Implications

Theoretical Implications

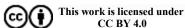
This research primarily contributes to Justice Theory by establishing the Severity of Complaint (SOC) as a crucial moderator. The study empirically demonstrates that SOC interacts with specific dimensions of justice, offering a more nuanced model of complaint satisfaction than is typically found in existing literature. Specifically, the results show that the positive effect of Procedural Justice on satisfaction is strengthened as the severity of the complaint increases (positive and significant interaction term: $\beta = 1.082$, p < .05) Conversely, the impact of Interactional Justice on satisfaction is weakened or becomes less effective for more severe complaints (negative and significant interaction term: $\beta = -1.491$, p < .01). These findings enhance the theoretical framework by highlighting that the effectiveness of different justice elements is not constant but is contingent upon the magnitude of the service failure.

Practical Implications

For airlines, the study provides a roadmap for tailoring complaint-handling strategies to the severity of passengers' issues, such as prioritizing procedural fairness for severe complaints. Airlines must ensure that complaint procedures for severe issues are highly transparent, consistent, and well-documented. Since the positive effect of Procedural Justice increases with the severity of the problem, a failure in process fairness for a serious complaint will be especially detrimental to satisfaction.

The management of airlines also needs to re-evaluate interactional justice in severe cases: While politeness and empathy are necessary for good service (Interactional Justice), staff should recognize that these efforts alone have a diminished positive impact on satisfaction when the complaint is severe. In such cases, airlines must focus on providing a substantive resolution through Distributive Justice (compensation, quick fix, etc.) and a fair process (Procedural Justice).

Finally, airlines need to acknowledge and address the overall lower satisfaction. Since satisfaction is consistently lower for high-severity complaints across all levels of procedural or





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interactional justice, management must be prepared for reduced satisfaction. It may need to implement measures beyond the recovery efforts (e.g., proactive follow-up) to mitigate lasting adverse effects. Training programs should be developed to equip staff with the skills to differentiate complaints by severity and adjust their recovery efforts accordingly, ensuring that the appropriate justice dimension is prioritized for maximum impact.

Conclusion

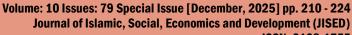
This research confirmed that procedural, distributive, and interactional justice are strong predictors of satisfaction with airline passenger complaint handling. The most critical finding is the significant moderating role of complaint severity, which creates a nuanced picture of the service recovery process. Specifically, the influence of procedural justice (the fairness of the process) on satisfaction is more substantial when the complaint is more severe. This means that clear and consistent complaint procedures are essential for addressing high-impact failures. Conversely, the effect of interactional justice (staff empathy and politeness) on satisfaction weakens as the severity of the complaint increases. Ultimately, while good employee interaction helps, it cannot overcome the dissatisfaction caused by a severe service failure. The study's model enhances Justice Theory and provides airlines with practical guidance on tailoring recovery strategies to prioritize fair processes for serious complaints.

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References

- Ahmad, B., Yuan, J., Akhtar, N., & Ashfaq, M. (2024). Identifying the determinants and consequences of post-recovery satisfaction in B2B customers: A multidimensional justice theory perspective. *Journal of Business & Industrial Marketing*, 39(2), 423–437.
- Aksoy, M., & Yilmaz, Ö. (2022). Consumer complaints and complaint management in the tourism sector. In *Managing risk and decision making in times of economic distress, part a* (Vol. 108, pp. 95-111). Emerald Publishing Limited.
- Al-Dmour, R., AlShaar, F., Al-Dmour, H., Masa'Deh, R., & Alshurideh, M. T. (2021). The effect of service recovery justice strategies on online customer engagement via the role of "customer satisfaction" during the Covid-19 pandemic: An empirical study. In *The effect of coronavirus disease (COVID-19) on business intelligence* (pp. 325–346). Cham: Springer International Publishing.
- Ali, M. A., Ting, D. H., Isha, A. S. N., Ahmad-Ur-Rehman, M., & Ali, S. (2023). Does service recovery matter? Relationships among perceived recovery justice, recovery satisfaction, customer affection, and repurchase intentions: the moderating role of gender. *Journal of Asia Business Studies*, 17(2), 308–326.
- Arneson, R. (2022). Distributive justice. The Oxford Handbook of Moral Responsibility, 412.
- Awa, H. O., Ikwor, N. K., & Ademe, D. G. (2021). Customer satisfaction with complaint responses under the moderation of involvement. *Cogent Business & Management*, 8(1), 1905217.
- Awa, H. O., Nwobu, C. A., & Igwe, S. R. (2021). Service failure handling and resilience amongst airlines in Nigeria. *Cogent Business & Management*, 8(1), 1892924.
- Ayyildiz, T., Ayyildiz, A. Y., & Koc, E. (2024). Illusion of control in service failure situations: customer satisfaction/dissatisfaction, complaints, and behavioural intentions. *Current Psychology*, 43(1), 515-530.

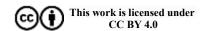


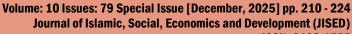


Journal website: www.academicinspired.com/jised DOI: 10.55573/JISED.107917

Castro, E. B. G., Mamani, A. V., Mayta, R. A., & Chura, T. T. (2021). Influence of waiting time on the satisfaction of users who attended the facilities of the Ministry of Health and Social Health Insurance. *Turkish Journal of Computer and Mathematics Education Vol*, *12*(13), 6555–6570.

- Cintamür, İ. G. (2023). Linking customer justice perception, customer support perception, and customer citizenship behavior to corporate reputation: evidence from the airline industry. *Corporate Reputation Review*, 26(2), 111-132.
- Desai, P. H., & DE SOUZA, M. F. (2015). Severity and controllability of service failures as perceived by passengers in the airline industry. *Turkish Economic Review*, 2(3), 186–195.
- Dwesar, R., & Sahoo, D. (2022). Does service failure criticality affect global travellers' service evaluations? An empirical analysis of online reviews. *Management Decision*, 60(2), 426–448.
- Elbaz, A. M., Soliman, M., Al-Alawi, A., Al-Romeedy, B. S., & Mekawy, M. (2023). Customer responses to airline companies' service failure and recovery strategies: the moderating role of service failure habit. *Tourism Review*, 78(1), 1–17.
- Elemoah, D., Abeasi, D. A., Agyei, F. B., Sasemame, E. S., & Akumiah, P. O. (2025). The waiting game: determinants and effects of OPD service delays in a Tertiary Health Facility. *BMC Health Services Research*, 25, 1545.
- Gao, J., Yao, L., Xiao, X., & Li, P. (2022). Recover from failure: Examining the impact of service recovery stages on relationship marketing strategies. *Frontiers in Psychology*, 13, 852306.
- Helmy, Y., Ashraf, M., & Abdelhamid, L. (2023). The role of effective complaint handling for business sustainability: A review paper. *International Journal of Global Business and Competitiveness*, 18(Suppl 1), 54–65.
- Herjanto, H., Amin, M., Okumus, F., & Cobanoglu, C. (2022). Airline service: Low-cost-carriers (LCCs) failure and passenger emotional experience. *Tourism Review*, 77(3), 945–963.
- Hien, N. N., Long, N. T., Liem, V. T., & Luu, D. X. (2024). Customer responses to airline service failure: Perspectives from expectation disconfirmation theory. *Sage Open*, 14(2), 21582440241248334.
- Honora, A., Chih, W. H., & Ortiz, J. (2023). What drives customer engagement after a service failure? The moderating role of customer trust. *International Journal of Consumer Studies*, 47(5), 1714-1732.
- Honora, A., Wang, K. Y., & Chih, W. H. (2024). The role of customer forgiveness and perceived justice in restoring relationships with customers. *Service Business*, 18(3), 363–393.
- Knox, G., & Van Oest, R. (2014). Customer complaints and recovery effectiveness: A customer base approach. *Journal of Marketing*, 78(5), 42-57.
- Kumar, A., & Shankar, A. (2024). Why do consumers forgive online travel agencies? A multistudy approach. *Australasian Marketing Journal*, *32*(4), 323–338.
- Lai, K. W. (2023). The impacts of service quality, customer satisfaction, and perceived price fairness on the behavioural loyalty of Hong Kong business and non-business air travellers towards airline companies. University of Wales Trinity Saint David (United Kingdom).
- Lal, M., & Kashyap, H. (2024). Consumer complaint satisfaction and customer retention: A study of complaint satisfaction in the electronic industry. *Jindal Journal of Business Research*, 13(1), 82–99.
- Lim, W., Saha, V., & Das, M. (2025). From service failure to brand loyalty: Evidence of the service recovery paradox. https://doi.org/10.1057/s41262-025-00380-5.pdf

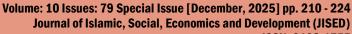


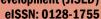


Journal website: www.academicinspired.com/jised DOI: 10.55573/JISED.107917



- Liu, P. L., Zhang, L., Ma, X., & Zhao, X. (2024). Communication matters: The role of patient-centered communication in improving old adults' health competence and health outcomes. *Health Communication*, 39(2), 363–375.
- López-López, I., Palazón, M., & Sánchez-Martínez, J. A. (2021). Why should you respond to customer complaints on a personal level? The silent observer's perspective. *Journal of Research in Interactive Marketing*, 15(4), 661–684.
- Lu, L., Xu, Y., Fan, W., Pan, H., Ip, W., & Yung, K. L. (2025). Research on the recovery method of disrupted flights considering passenger transfer and cancellation costs: L. Lu et al. *Operations Management Research*, 18(2), 691-717.
- Mahrous, A. A. (2023). Perceived Justice and the Sharing of Brand Experience in Virtual Travel Communities: A Study of Airline Passengers. *South Asian Journal of Management*, 30(2), 7–23.
- Matikiti, R., Roberts-Lombard, M., & Mpinganjira, M. (2018). The Influence of Perceived Justice on Recovery Satisfaction in the Airline Industry. *Journal of African Business*, 19(4), 512–530. https://doi.org/10.1080/15228916.2018.1475784
- Matimati, U. T. (2020). The impact of service quality on customer satisfaction in the airline industry: A case study of Kilimanjaro International Airport (KIA) (Doctoral dissertation, The Open University of Tanzania).
- McColl-Kennedy, J. R., & Sparks, B. A. (2003). Application of fairness theory to service failures and service recovery. *Journal of Service Research*, 5(3), 251–266.
- Migacz, S. J., Zou, S., & Petrick, J. F. (2018). The "terminal" effects of service failure on airlines: Examining service recovery with justice theory. *Journal of Travel Research*, 57(1), 83–98.
- Mir, M., Ashraf, R., Syed, T. A., Ali, S., & Nawaz, R. (2023). Mapping the service recovery research landscape: A bibliometric-based systematic review. *Psychology & Marketing*, 40(10), 2060-2087.
- Mirzahossein, H., & Rezashoar, S. (2025). Feature importance analysis of optimized machine learning modeling for predicting customer satisfaction at the United States Airlines. *Machine Learning with Applications*, 100734.
- Muralidharan, E., Guo, W., Fazel, H., & Wei, W. (2021). Organizational response to goods failure complaints: the role of culture on perceptions of interactional justice and customer satisfaction. *Global Business Review*, 22(6), 1327–1344.
- Nazifi, A., Gelbrich, K., Grégoire, Y., Koch, S., El-Manstrly, D., & Wirtz, J. (2021). Proactive handling of flight overbooking: How to reduce negative eWOM and the costs of bumping customers. *Journal of Service Research*, 24(2), 206–225.
- Nikbin, D., Marimuthu, M., Hyun, S. S., & Ismail, I. (2015). Relationships of perceived justice to service recovery, service failure attributions, recovery satisfaction, and loyalty in the context of airline travelers. *Asia Pacific Journal of Tourism Research*, 20(3), 239–262.
- Nuansi, P., & Ngamcharoenmongkol, P. (2021). Proactive complaint management: Effects of customer voice initiation on perceived justice, satisfaction, and negative word-of-mouth. *SAGE Open*, *11*(3), 21582440211040788.
- Olatunde, O. P., Sunday, O. T., & Niyi, A. S. (2020). Complaint management and customer loyalty among aviation customers in Ekiti State, Nigeria. *British Journal of Management and Marketing Studies*, 3(1), 76–94.
- Omar, N. A., Mohd Anim, N. A. H., Jannat, T., Nazri, M. A., Shah Alam, S., & Zaki, H. O. (2025). Does ethnocentrism work? Evaluating the effect of airlines' service recovery strategies on airline brand equity. *Cogent Business & Management*, 12(1), 2433709.





Journal website: www.academicinspired.com/jised DOI: 10.55573/JISED.107917



- Orsingher, C., De Keyser, A., Varga, D., & Van Vaerenbergh, Y. (2022). Service failure and complaints management: an overview. The Palgrave Handbook of Service Management, 823-846.
- Pereira, F., Costa, J. M., Ramos, R., & Raimundo, A. (2023). The impact of the COVID-19 pandemic on airlines' passenger satisfaction. Journal of Air Transport Management, 112, 102441.
- Russo, I., Masorgo, N., & Gligor, D. M. (2022). Examining the impact of service recovery resilience in the context of product replacement: The roles of perceived procedural and interactional justice. International Journal of Physical Distribution & Logistics Management, 52(8), 638-672.
- Sarılgan, A. E., & Yücel, M. F. (2025). The mediation role of passenger overall satisfaction in the effect of complaint satisfaction on repurchase intention: An empirical study on airline passengers. Gümüşhane Üniversitesi Sosyal Bilimler Dergisi, 16(1), 314-326.
- Sengupta, A. S., Stafford, M. R., & Fox, A. K. (2024). Misery loves company: Evaluation of negative e-WOM effects at the post-service recovery stage. Journal of Service Theory and Practice, 34(4), 493–518.
- Shin, J., Lee, D. A., Kim, J., Lim, C., & Choi, B. K. (2024). Dissatisfaction-considered waiting time prediction for outpatients with interpretable machine learning. Health Care Management Science, 27(3), 370–390.
- Sofia, R. D., Afiff, A. Z., & Aruan, D. T. H. (2023). The effect of attributions and failure severity on consumer complaint behaviors in the sharing economy. Cogent Business & Management, 10(3), 2275848.
- Su, Y., Xie, K., Wang, H., Liang, Z., Chaovalitwongse, W. A., & Pardalos, P. M. (2021). Airline disruption management: A review of models and solution methods. Engineering, 7(4), 435–447.
- Tran, V. D. (2024). Service failure recovery on customer recovery satisfaction and attitude loyalty for the airline industry: The moderating effect of brand authenticity. Cogent Business & Management, 11(1), 2296145.
- Valentini, S., Orsingher, C., & Polyakova, A. (2020). Customers' emotions in service failure and recovery: A meta-analysis. Marketing Letters, 31(2-3), 199-216.
- Vassilikopoulou, A., Lepetsos, A., & Siomkos, G. (2018). Crises through the consumer lens: the role of trust, blame and risk. *Journal of Consumer Marketing*, 35(5), 502–511.
- Wang, W., Zhang, Y., Wu, H., & Zhao, J. (2022). Expectation and complaint: online consumer complaint behavior in COVID-19 isolation. Psychology Research and Behavior Management, 2879–2896.
- Wu, Y., Groth, M., Zhang, K., & Minbashian, A. (2023). A meta-analysis of the impact of customer mistreatment on service employees' affective, attitudinal, and behavioral outcomes. Journal of Service Management, 34(5), 896–940.
- Xu, X., Liu, W., & Gursoy, D. (2019). The impacts of service failure and recovery efforts on airline customers' emotions and satisfaction. Journal of Travel Research, 58(6), 1034-1051.
- Yu, Z., Zhou, J., Jiang, P., & Liu, S. (2025). Rethinking service failure and recovery process: insights from a leading airline in China. International Journal of Contemporary Hospitality Management, 37(8), 2676–2693.