



M. IDRIS, M. ABIDIN, E. WILLYA

Justice in handling complaints and its impact on satisfaction and loyalty in higher education

Problem and aim. In providing services to students, universities often get complaints from students as customers. Universities must respond to and resolve complaints wisely and fairly to satisfy students with the services provided. The article aims to measure student complaint-handling strategies and their effect on satisfaction and loyalty as customers. The study will examine whether justice in addressing students' complaints, interactional justice, procedural justice, and distributive justice affect student satisfaction and does student satisfaction mediate the relationship between complaint-handling strategies and student loyalty.

Research methods. The study involved 328 students from several universities in Indonesia. Samples selected using the purposes sampling method. Data were analysed quantitatively using SmarPLS version 3.3.3.

Results. The study resulted that interactional justice significantly affected student satisfaction with a value of $0.019 < 0.05$. Procedural justice significantly affects student satisfaction with a value of $0.000 < 0.05$, and distributive justice significantly affects student satisfaction with a value of $0.014 < 0.05$. This study also found that student satisfaction mediated the relationship between interactional justice, procedural justice, distributive justice and student loyalty with a significance level of value < 0.05 .

Conclusion. This study confirms that the fair and wise handling of student complaints affects student satisfaction with higher education services and can potentially increase student loyalty. This study strengthens several previous studies, emphasizing that fair complaint handling at companies and other institutions affects customer satisfaction and loyalty. Therefore, universities should care for student satisfaction and loyalty by continuously improving service handling student complaints, both interactional, procedural, and distributive.

Keywords: student complaint, satisfaction, loyalty, interactional justice, procedural justice, distributive justice, university customer

For Reference:

Idris, M., Abidin, M., & Willya, E. (2023). Justice in handling complaints and its impact on satisfaction and loyalty in higher education. *Perspektivy nauki i obrazovania – Perspectives of Science and Education*, 61 (1), 24-39. doi: 10.32744/pse.2023.1.2

Introduction

The COVID-19 pandemic hit the world, presenting many problems in all aspects of human lives, including education. This pandemic has changed almost all educational activities. Of the elements of educational activities that have changed because of the COVID-19 pandemic is the lecturing system, from the luring to the daring model [1]. Almost all education institutions over the world run their education system online, starting from elementary education to higher education.

Indonesian government released the decisions regarding guidelines for the implementation of learning in the Academic Year 2020-2021 during the coronavirus disease (COVID-19) pandemic. The policies, compiled due to collaboration and synergy between ministries, aim to prepare academic units for the time they are going through a new period of habit. The government decided the implementation of the education system into zones. Educational institutions in the green zone can conduct offline learning, while those in the yellow, orange, and red zones have to perform online learning. All education institutions in these zones continue to study from home [2].

Initially, the implementation of the online education system was not easy. Some facilities and resources must be provided despite personal discipline to study independently. Many complaints come from students, lecturers, and staff about implementing education during this pandemic. Universities are required to provide adequate facilities for the performance of the online education program for lecturers and students. Many parents and educators have difficulty providing learning tools such as cell phones and laptops and credit for internet connections. In other words, this online learning system can potentially widen the socio-economic gap that has been happening so far during the pandemic [3]. Online learning has received many complaints from students regarding the management of learning implementation, infrastructure provision, and financing. The problem is how higher education institutions respond to complaints submitted by students during the COVID-19 pandemic. Can they be fair in responding to those complaints during the COVID-19 pandemic?

Students as customers greatly determine the survival of universities. They must maintain students' existence by creating good customer relationships in the long term [4]. Optimal customer relationship maintenance improves sustainable higher education performance. One of the effective ways that drive universities as companies to maintain relationships with customers is to handle customer complaints [5]. The impact of a well-established customer relationship is the satisfaction and loyal behavior of customers to the university. Furthermore, it will increase public interest to generate profits and ultimately affect the stability of universities. Handling customer complaints in universities is a strategy that improves universities' quality, aiming to prove universities' reliability in customers' eyes [6].

According to Smith [7], customer satisfaction in handling complaints consists of three dimensions are interactional justice (IJ), procedural justice (PJ), and distributive justice (DJ). Interactional justice (IJ) related to the interpersonal treatment received by customers during the complaint procedure [8]. IJ describes politeness, empathy, and honesty during the complaint process, providing meaningful explanation and effort in dissolving conflicts.

Procedural justice (PJ) related to the decision-making process in solving existing problems. PJ describes aspects of process control, decision control, accessibility, timing speed, and flexibility that aim to resolve conflicts to encourage the continuation of productive relationships between disputing parties [9]. Distributive justice (DJ) is related to settlement decisions on the handling of customer complaints. This justice describes charges, refunds, repairs, credits, replacements, and apologies [10].

Effective complaint handling provides opportunities to turn dissatisfied customers into satisfied customers or even regular customers. An effective complaint handling process starts from identifying and determining the source of the problem that causes unhappy customers and complaints [11]. The involvement of top management in handling customer complaints also has a positive impact because customers prefer to deal with people who have the power or authority to make decisions and take action to solve their problems [12]. Responsiveness to handling customer complaints is a solution to customer problems and also provide opportunities for product development, maintain market share, and encourage customer loyalty levels [13].

Satisfaction with the handling complaints can be a mediator that connects perceptions of justice dimensions with the behavior and attitudes of customer complaints. The consequences of customer satisfaction attitudes and behaviors play an essential role in the continuity of long-term relationships between universities and customers [14]. Customer satisfaction affects the performance of the college because every student as customer who satisfied with the handling of complaints given will one day be loyal and bring other prospective students to the college where he is studying [15].

Research on the relationship between service quality and university customer satisfaction has often been carried out [14; 16; 18]. However, research on university complaints handling strategies and their effect on customer satisfaction and loyalty has rarely been done. One of the earliest studies on this subject was a study conducted by Dolinsky [19] on customer complaints and their implications for forming a handling strategy. However, this study is limited in the dimensions used to measure fairness in handling student complaints. Waqas et al. [20] adopt management theories that are often applied to companies by measuring the principles of justice recovery in handling student complaints and their effect on student satisfaction. However, this research is still too general in looking at the impact of justice in handling student complaints. It still needs to be reaffirmed with the need to adopt other strategies for handling student complaints and their effects on student satisfaction. One of them is the theory of justice in handling complaints, consisting of three elements: interactional justice, procedural justice, and distributive justice [21]. Although this theory was initially applied to the business world, considering that universities are currently no different from the business world in many ways [22], this theory is also applicable to universities to see its effect on universities student satisfaction and loyalty.

The study seeks to overcome the limitations in previous studies, especially in measuring customer complaint handling strategies and their effect on student satisfaction and loyalty as customers. This study used a sample of students from several universities in Indonesia, which the researchers considered representative to serve as a place to collect data.

This study aims to know how interactional, procedural, and distributive justice affects student satisfaction with universities in handling their complaints during the COVID-19 pandemic. Furthermore, this research wants to understand how student satisfaction with

universities handling the complaints during the COVID-19 pandemic affects student loyalty. For this reason, the formulation of the problem in this study are as follows:

1. Does interactional justice, procedural justice, and distributive justice in handling student complain at universities affect their satisfaction?
2. Does students' satisfaction with problem-solving somewhat moderate them to increase their loyalty to higher education?

Literature review

Interactional justice

Interactional justice (IJ) is the first dimension of handling customers' complaints. It is the interpersonal treatment received by the customer during the complaint procedure and describes aspects of politeness, caring, and honesty during the complaint process, such as providing explanations and meaningful efforts to resolve conflicts [8]. Interactional factors explain why people feel mistreated, although they will describe fair decision-making procedures and outcomes. Several studies indicate that the communication aspect between customers, employees and leaders to resolve conflicts or disputes affects customer satisfaction [23; 24]. Research on service quality [16] and complaint handling [21] supports the critical role of interactional justice in decision-making. The factor determining the customer's behavior is whether the customer is treated with courtesy and respect or not. Customers who are treated fairly, politely, and respectfully will behave to prevent the spread of negative issues and continue their relationship with the company to become loyal customers. On the other hand, customers who feel they are not being treated fairly will spread negative points and end relationships with the company [12].

Research on organizational behavior and social psychology provide five essential interactional justice elements: explanation, honesty, politeness, effort, and empathy. Interpersonal justice describes aspects of politeness, caring, and honesty during the complaint process, such as providing explanations and meaningful actions in resolving complaints that occur [15]. Interactional justice has a positive effect on satisfaction with handling customer complaints [7].

Procedural justice

Procedural justice (PJ) is handling the customer's problem by following established procedures [9]. When the customers telling the issues, the company provides an acceptable explanation [25]. Procedural justice (PJ) is fundamental because it aims to resolve conflicts and encourage productive relations between the disputing parties. There are five essential elements of procedural justice used in some research are process control, decision control, accessibility, timing/speed, and flexibility [15; 26].

Several previous studies shown that the relationship between procedural justice and customer satisfaction has been investigated using variables such as accessibility, timing or speed, and process control [25]. Although a limited number of marketing studies have tested that procedural justice directly affects customer behavior [23], other studies indirectly support the effect of procedural justice on customer satisfaction [27]. Procedural fairness is a significant predictor that significantly affects satisfaction, company performance, and company commitment [28].

Distributive justice

The third dimension of justice is distributive justice that emphasizes the allocation of compensation and costs [15]. Some important principles that are usually used to measure distributive justice are equity, equality, and need. Most marketing research focuses on equity, and some studies say that equity affects customer satisfaction [29]. Equity, equality, and need are also relevant for evaluating complaints on distributive justice [15].

The result of handling complaints with distributive justice can be seen from corrections of charges, refunds, repairs, credits, replacements, and apologies [10]. Distributive justice has a strong influence on satisfaction in handling customer complaints by a company [28]. Companies that promise to provide satisfaction will create customer expectations and manage various complaints within a framework that refers to need rules [30].

Customers will evaluate the appropriateness of compensation differently based on:

1. Previous experience with both the company in question and with other companies.
2. Knowledge of the roots of the settlement obtained by other customers.
3. Perception of the losses experienced.

Distributive justice is the most appropriate strategy for handling complaints applied in a general framework for meeting the needs and fairness of customers [31]. Distributive justice is a significant predictor and affects company satisfaction, performance, and commitment [28]. Distributive justice includes allocating compensation such as discounts, reimbursement of costs, coupons, and replacement of goods—response by the company to repair the failure of the services provided. Distributive justice provided by the company positively influences encounter service satisfaction. Based on the research results, the calculation of distributive justice has the most significant percentage value of the overall effect of justice on customer satisfaction [32].

Satisfaction with handling customer complaints

Satisfaction is a feeling of pleasure or disappointment from a customer when he compares his perception of the performance of a product or service with his desired expectations. Satisfaction can also be interpreted as the experience experienced by a person on the version of the product received and compared with the performance of a standard product, a person's impression during or after using a product, or direct evaluation part by part of the company's products and services. The evaluation can provide input to the company to create an added value to the management of a product. Satisfaction is giving what customers want and responding or responding to customer complaints [33]. Overall customer satisfaction will reduce the level of complaints, and increasing overall satisfaction will increase customer loyalty [31; 34].

From the perspective of university profitability, the steps of universities to respond to customer complaints will affect their behavior in carrying out promotions in the future [17]. Satisfaction is usually considered the primary mediator of loyal behavior, related to trust in choosing a product or service, customer communication, and behavior to remain dedicated to the university. Satisfaction with the handling of complaints can also be the primary mediator related to perceptions of the dimensions of justice in the attitudes and behavior of complaints [35].

Complaint handling is a strategy used by companies to improve and learn from service errors to prove the company's reliability in customers' eyes [36; 37]. Customer complaint

data is a guide in improving management quality to correct service design and delivery problems that will enhance the company's performance [15]. The complaint handling strategy is an essential part of managing customer relationships in the service business. The challenges in quality management combined with the critical rules played by customers in the service process and the fact that customer loyalty can be profitable, then handling customer complaints is an important time of truth in maintaining and developing these relationships [18].

Although many requests for increased investment are related to handling customer complaints, not much is known about how customers rate their response to their complaints or how its efforts influence customer relationships [23]. In principle, customers prefer companies that deal with their problems by replacing the defective product or service or refunding their money. This aspect of customer service is beneficial to the long-term profitability of the company. Companies with a consistent reputation in improving customer complaints will build customer loyalty and increase their market share. On the other hand, companies with a bad reputation in handling complaints will slowly lose customers [21].

In this case, a customer-oriented company should provide an opportunity for its customers to submit suggestions, opinions, and complaints. They can use the media in the form of suggestion boxes placed in strategic places and provide comment cards, telephone lines, and others. Businesses that emphasize handling customer complaints can significantly improve the company's financial development and market performance [12]. A comprehensive understanding of various complaints handling evaluations can help company managers create more effective complaint handling programs [10].

Student loyalty

Customer loyalty is a repetitive buying behavior that has become a habit, which has a high degree of relevance and involvement in the customer's choice of a particular object and is characterized by the absence of external information seeking and alternative evaluation [38]. Customer loyalty is a manifestation and continuation of customer satisfaction in using the company's facilities and services and the company's remaining customers [32]. Loyalty is evidence of customers who are always customers, have power, and have a positive attitude towards the company. The main factor of excellence for an institution in competition is its ability to increase customer loyalty. It will be the key to short-term success and sustainable competitive advantage. Customer loyalty has strategic value for all organizations [39]. When the customers are satisfied with universities' services, especially in handling complaints against universities, it can increase their love and loyalty to the institution. In turn, they will maintain, defend and promote their institution to other parties so that they become new customers at the college [17].

Research model and hypothesis

Several studies emphasized that the concept of justice is essential in explaining a person's reaction in dealing with conflict situations. Fairness or justice provides a broad framework for understanding the complaints process and its initiation to settlement [9]. From a process perspective, complaint handling can be described as a series of events in which a procedure that begins with communicating a complaint results in an interactive process where ultimately decisions are made and errors are corrected. Satisfaction with

handling customer complaints is influenced by three variables, namely: interactional justice (related to interpersonal treatment during the procedure), procedural justice (related to the decision-making process), and distributive justice (related to decision outcomes). When these three variables are adequately implemented, it will affect student satisfaction with handling complaints submitted to the institution. If they are satisfied with handling the complaints they submit, their loyalty will increase [31]. To overcome the limitations in research concerning interactional justice, procedural justice, and distributive justice in university context, this study adopts the dimensions that have been developed by Blodgett [21] and Kelley [10].

Based on this theoretical framework, the research model is developed, as shown in the following figure.

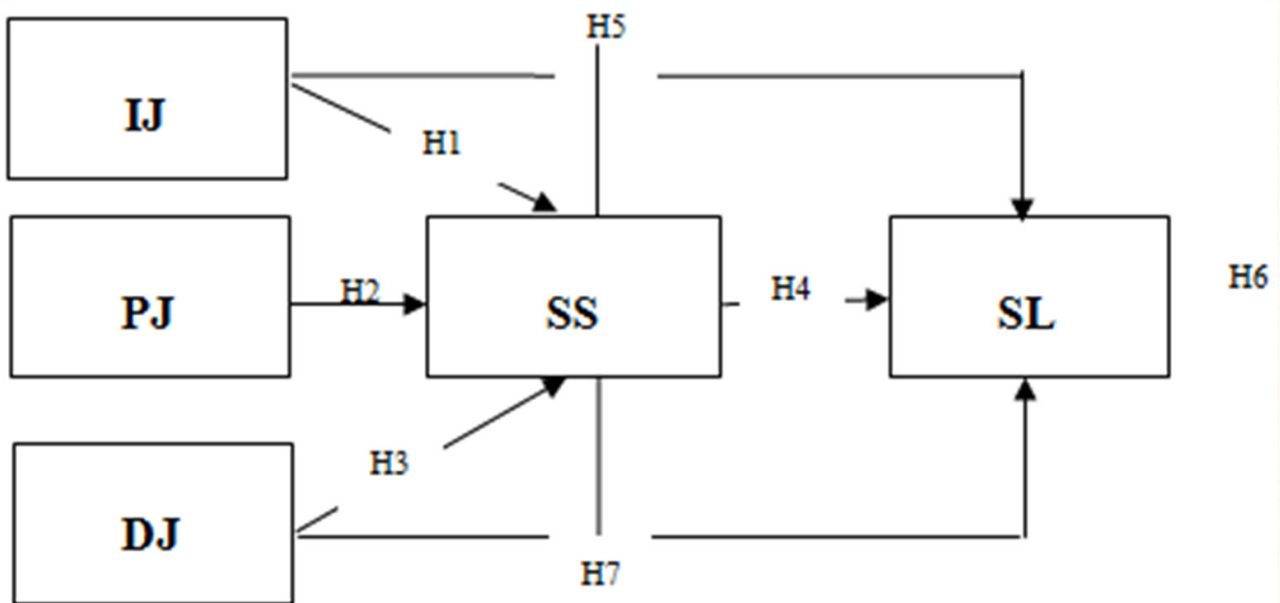


Figure 1 Model of research

Previous research says that interactional justice attempts to resolve conflicts or disputes that affect customer satisfaction [24]. Procedural justice is fundamental because it aims to resolve disputes to encourage productive relations between the disputing parties [25]. Distributive justice has a strong influence on handling customer complaints by a company [28]. Based on the literature review and theoretical framework that has been stated in Figure 1 above, this study proposed some hypotheses as follows:

H1. Interactional justice will be positively related to student satisfaction.

H2. Procedural justice will be positively related to student satisfaction.

H3. Distributive justice will be positively related to student satisfaction.

H4. Student satisfaction will positively relate to student loyalty.

H5. Student satisfaction will partially mediate the relationship between interactional justice and student loyalty.

H6. Student satisfaction will partially mediate the relationship between procedural justice and student loyalty.

H7. Customer satisfaction will partially mediate the relationship between distributive justice and customer loyalty.

Material and methods

The research was conducted at some universities in Indonesia, especially in the cities of Malang and Manado. This study employs the purposive random sampling technique, which determines the number of samples from a population with specific characteristics until the desired quota is met [40; 41]. Data is collected in various ways, through mass media such as WhatsApp, Facebook, Telegram, and others. Respondents who completed filling out the questionnaire were 368 students; after checking in detail, only 328 met the requirements for analysis.

Table 1 shows in terms of gender, the number of male respondents was 57%, and females were 43%. While in the term of the semester of the participant, the researcher limit from the third semester to the seventh semester only because we suppose that student in the first and second semesters are considered newbie students, and student in the eighth semester usually has no lectures and focus only in writing a research.

From the semester aspect, the table shows that participants from the fourth semester had more complaints by 26%, and students in the third semester had lower complaints by 10%. At the same time, the rest semesters have a middle complaint between 20% to 24%.

Table 1

Participant demographic data

No	Category	Amount	Percentage (%)
1	Gender		
	Male	185	57%
	Female	143	43%
2	Semester		
	III	34	10%
	IV	85	26%
	V	64	20%
	VI	66	20%
	III	79	24%

The questionnaires in this research developed from three main theories that contain 14 questions. The questionnaires of interactional justice (IJ) were developed based on Brown's theory with five indicators; explanation, honesty, politeness, effort, and empathy [15]. The questionnaire about procedural justice (PJ) was compiled based on J. Greenberg's theory which contains five indicators; process control, decision control, accessibility, timing/speed, and flexibility [25]. While the questionnaires about distributive justice (DJ) were derived from the Brown theory with indicators are equity, equality, and need [15].

The Questionnaires were designed using the Likert rating scale [42]. The measurement scale used in the questionnaire has an assessment score between 1-7, where a score of 1 to state the respondent's answer strongly disagrees (SD) to a score of 7 to note that the respondent's answer strongly agrees (SA). The rating scale is described as follows: 1: Strongly disagree, 2: Disagree, 3: The tendency to disagree is big, 4: Tendency to agree, 5: The tendency to agree is big, 6: Agree, and 7: Strongly agree [43].

This study was conducted to analyze the effect of interactional justice (IJ), procedural justice (PJ), and distributive justice (DJ) with customer satisfaction (CS) as an intervening

variable on customer loyalty (CL). Data were collected via a survey via a google form and distributed through social media such as WhatsApp, Telegram, and Facebook. In addition, the researcher also asked for help from lecturers and higher education administrations to distribute the questionnaire through student groups, both at the department, faculty, and university levels. After the desired data is achieved, the google form will be closed, and the data will be analyzed based on the procedures established in quantitative data analysis. The data was analyzed using the Partial Least Square Path Modeling (PLS-PM) approach with the help of the SmartPLS 3.3.3 software program.

Results

Before testing the research hypothesis, the researchers will ensure whether each question item posed in this study has met the requirements for further analysis or not. Researchers tested the Validity and reliability of the indicators through several stages, including Convergent Validity, Discriminant Validity, Average Variance Extracted (AVE), Composite Reliability, and Cronbach Alpha.

Convergent Validity is a correlation between reflexive indicator scores and latent variable scores, while Discriminant Validity is a reflexive indicator measurement with latent inconsistent scores [44]. The expected value for Convergent Validity is more significant than 0.7. Discriminant Validity is the value of the cross-loading factor that is useful for knowing whether the construct has an adequate discriminant by comparing the loading value with other constructs. The value of Average Variance Extracted (AVE) meets the expected requirements if it is more significant than > 0.5 . As for Composite Reliability, the data have a high composite reliability value if > 0.7 . The Cronbach Alpha value is expected to exceed the number > 0.6 for all constructs [45].

Table 2

Factor loadings and VIF value of all dimensions

Dimension	Item	Factor Loading (Outer Loading)	VIF	Cronbach's α	Rho_A	CR Value	AVE
Customer Satisfaction	CS1	0,875	2,677	0,946	0,950	0,957	0,790
	CS2	0,868	2,104				
	CS3	0,926	2,235				
	CS4	0,929	1,859				
	CS5	0,792	1,933				
	CS6	0,933	2,648				
Distributive Justice	DJ1	0,919	1,571	0,810	0,936	0,858	0,609
	DJ2	0,649	1,573				
	DJ3	0,888	3,307				
	DJ4	0,616	2,105				
Interactional Justice	IJ1	0,930	2,325	0,904	0,923	0,930	0,728
	IJ2	0,850	1,915				
	IJ3	0,693	3,474				
	IJ4	0,927	3,063				
	IJ5	0,842	1,672				

Loyalty	LY1	0,815	3,630	0,902	0,905	0,928	0,720
	LY2	0,845	3,941				
	LY3	0,781	3,038				
	LY4	0,922	2,116				
	LY5	0,872	2,677				
Procedural Justice	PJ1	0,688	2,104	0,850	0,880	0,893	0,627
	PJ2	0,919	2,235				
	PJ3	0,776	1,859				
	PJ4	0,778	1,933				
	PJ5	0,780	2,648				

Table 2 shows the full prerequisite test results using SmartPLS. The data shows that the value of outer loading on all dimensions indicators is more than 0.7, so theoretically, it has met the criteria for item validity. The data also shows that the Cronbach's Alpha value for all constructs is above 0.6. The lowest value is 0.616, and the highest value is 0.930. This data indicates that all the latent variable constructs in this study are reliable.

For the AVE value, Table 2 shows that the AVE value of all the latent variables greater than 0,5 indicates a good measure of the validity of the indicators. The AVE value of the interactional justice variable is 0,728. The AVE value of the procedural justice variable is 0,627. The AVE value of the distributive variable is 0,609. The AVE value of customer satisfaction is 0,790, and the AVE value of loyalty variable value is 0,720. The data in Table 2 also shows that the composite validity value is more than 0.7.

Table 3

Reliability analysis of all dimensions

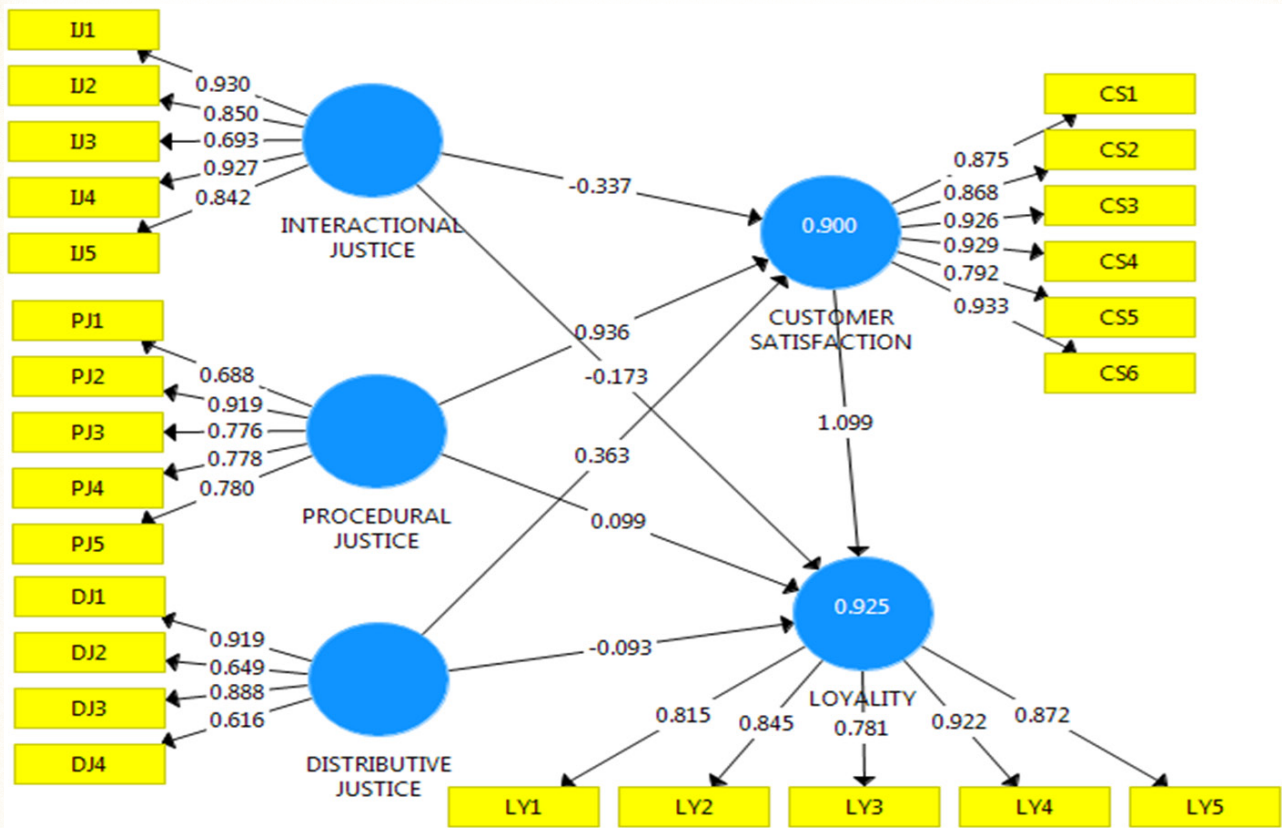
Dimension		Formell–Larcker				
		1	2	3	4	5
1	Customer Satisfaction	0,889				
2	Distributive Justice	0,880	0,780			
3	Interactional Justice	0,887	0,935	0,853		
4	Loyalty	0,957	0,801	0,809	0,848	
5	Procedural Justice	0,940	0,889	0,946	0,886	0,792

To sum up, the data from the collinearity analysis, reliability, and construct validity show that all the data above have reliability, convergent validity, and discriminant validity. Therefore, the structural model analysis is eligible for a causal path test between dimensions.

Hypothesis 1 predicts that interactional justice has a positive effect on customer satisfaction. Table 3 shows that the value of the parameter coefficient for the IJ variable to CS is 0.337 which means a positive effect of IJ on CS, so the higher the value of IJ, the CS will also increase. An increase of one unit of IJ will increase CS by 33.7%. The IJ estimation coefficient test on the bootstrap result CS is 0.170 with a t-count value of 3.562 and a standard deviation of 0.216. Then the p-value is $0.019 < 0.05$, so H1 accepts, which means IJ directly affects CS statistically.

Figure 2

The results of bootstrapping path analysis using smart PLS



Hypothesis 2 predicts that procedural justice (PJ) has a positive effect on customer satisfaction (CS). The data in Table 5 shows that procedural justice has a positive impact on customer satisfaction with a p-value $0.000 < 0.05$, which means that procedural justice positively affects customer satisfaction. The hypothesis test shows the path coefficient value of 0.936, which means that procedural justice positively affects customer satisfaction and has a positive relationship. It means that there is a significant positive effect of procedural justice variables on customer satisfaction. When procedural justice increases, customer satisfaction will also increase. Thus, hypothesis 2 of this study is accepted.

Table 5

Path Coefficients

VARIABLES CORRELATION	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Interactional Justice > Customer satisfaction	0,337	0,170	0,216	3,562	0,019
Procedural Justice -> Customer satisfaction	0,936	0,793	0,231	4,044	0,000
Distributive Justice > Customer satisfaction	0,363	0,344	0,147	2,462	0,014
Customer satisfaction > Loyalty	0,999	0,053	0,181	6,082	0,000

Hypothesis 3 examines whether distributive justice has a positive effect on customer satisfaction. The data in Table 5 shows that distributive justice positively impacts customer satisfaction with p-value of $0.014 < 0.05$. It means that distributive justice positively affects customer satisfaction. Hypothesis testing with a path coefficient value of 0.363 indicates that procedural justice positively affects customer satisfaction. It implies that distributive justice has a significant positive effect on customer satisfaction. When distributive justice increases, customer satisfaction will also increase. Thus, hypothesis 3 in this study is accepted.

Hypothesis 4 tests whether customer satisfaction has a positive and significant direct effect on customer loyalty. The data results in Table 5 from the path model coefficient analysis show the p-value of $0.000 < 0.05$. Customer satisfaction has a positive and significant effect on customer loyalty.

The fifth hypothesis examines whether interactional justice affects loyalty through customer satisfaction. Table 6 shows the results of the analysis of the indirect relationship between the tested variables. The analysis of the coefficients of the structural path model shows that interactional justice affect loyalty through customer satisfaction with p-value $0.025 < 0.05$. It means that interactional justice has positive effect on loyalty through customer satisfaction.

Table 6

Total Indirect effect

Variables Correlation	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Distributive Justice -> Loyalty	0,399	0,354	0,151	2,645	0,008
Interactional Justice -> Loyalty	0,370	0,186	0,241	2,535	0,025
Procedural Justice -> Loyalty	1,029	0,849	0,318	3,230	0,001

The following hypothesis is to test whether distributive justice affects loyalty through customer satisfaction. The analysis of the coefficients of the structural path model used to determine the factors that have a significant effect indicates that distributive justice positively affects loyalty through customer satisfaction with a p-value $0.008 < 0.05$. It means distributive justice positively affects loyalty through customer satisfaction.

While the last hypothesis tested in this study is to predict whether procedural justice affects loyalty through customer satisfaction. The data results in Table 6 from the analysis of the coefficients of the structural path model show that procedural justice positively affects loyalty through customer satisfaction with a p-value $0.001 < 0.05$, which means that distributive justice positively affects loyalty through customer satisfaction.

Discussion

Many literatures explain the theory of satisfaction with handling student complaints. Some findings of the study strengthened theoretical concepts and empirical support regarding the relationship between interactional justice, procedural justice, and distributive justice to

satisfaction with handling student complaints. The study's results support that satisfaction with handling customer complaints is influenced by interactional justice, procedural justice, and distributive justice [11; 21; 46]. This finding also support several previous studies [15; 21], which stated that interactional justice has a positive and significant effect on customer satisfaction. Mohr and Bitner [24] also found that interactional justice is an attempt to resolve conflicts that can positively affect customer satisfaction. In this case, an aspect that needs to be considered is the attitude of company employees who treat customers politely and provide proper explanations to show that the company cares and tries hard to handle customer complaints [26].

Satisfaction with handling customer complaints is positively influenced by procedural justice, so procedural justice will also affect the level of satisfaction with handling customer complaints. The research finding strengthened and supported empirically the theory of research results that have been carried out by Ambrose and M. Schminke [47; 49], which also stated that procedural justice has a positive and significant influence on service satisfaction in organizations. The higher the level of procedural justice carried out by the institution, the higher the level of satisfaction [15]. To carry out procedural justice properly, the higher education institution must pay attention to the convenience of customers in submitting complaints in detail. In addition, the institution's speed in dealing with these problems must also be considered. For this reason, it is necessary to facilitate the adjustment of problem-solving procedures. All of this customer satisfaction on complaints given to the higher education institution.

Satisfaction with handling customer complaints, positively influenced by distributive justice. Therefore, the higher the level of distributive justice, the higher the satisfaction with handling customer complaints. This finding strengthens and empirically supports the theory of previous research, which suggests that distributive justice has a positive and significant effect on satisfaction with handling complaints [32; 49]. To provide distributive justice can be focused on delivering compensation (reimbursement of costs) for losses received by customers. In addition, the company's attitude is also required to continuously make improvements and corrections to its services in handling complaints. In addition, the company's efforts to apologize to customers are also essential. Apologizing can show an effort to repair service errors for economic losses and repair emotional customer losses [50].

This study also proves that customer satisfaction increase customer loyalty in universities. The results of this study support several previous studies which confirm that customer satisfaction with solving problems they face in a company or organization can increase customer loyalty to a particular company or organization [32; 51]. Universities have to improve their ability to resolve student complaints as customers. If they are satisfied with their services, they will be loyal to the college, support higher education programs, and promote them to other parties to enter the university.

Conclusion

This study examines whether the strategies for handling student complaints increase student satisfaction, which implies increasing student loyalty in private universities. Based on the data analysis in the previous chapter, this research shows that the universities' strategies in handling student complaints through interactional justice, distributive justice,

and procedural justice have a positive and significant effect on student satisfaction. Student satisfaction mediates the relationship between the strategies for handling complaints and student loyalty to universities.

The results of this study suggest managerial policies in universities to evaluate how they respond to students' complaints as customers, either through interactional justice, procedural justice, or distributive justice to students, to increase their satisfaction with higher education services and increase their loyalty. Applying interactional justice, college employees have to tell the truth and provide an explanation that is acceptable to customers why the problem occurs. Employees also need to pay attention, be polite in dealing with issues faced by students, and try hard to solve these problems. University employees can carry out procedural justice by giving students the freedom to accept or reject the results of handling problems presented, providing convenience in raising issues, providing opportunities to explain problems, responding quickly to dealing with issues, and being willing to adjust procedures problem handling. University employees can carry out distributive justice by being ready to provide compensation costs to students as customers who were harmed, improve services, correct any mistakes made, and are eager to apologize for these mistakes. Higher education institutions should have a particular unit that accommodates and handles student complaints to increase satisfaction with handling their complaints. These employees can help bridge customers' desires with the company's interests.

Based on the study's limitations, future research suggests improving this research by adding more respondents from higher education service users to be more accurate and accounted for. Further research needs to be done on different research objects, not only from private universities but also from state universities, to obtain a broader picture of the role of justice variables in handling customer complaints in universities.

Further research also can be done qualitatively with data collected through interviews, observation, and documentation. It is necessary to see the different variations in universities in resolving customer or student complaints. To get better results, adding other independent variables, such as disconfirmation, the level of satisfaction with handling customer complaints, and linking the satisfaction variable on handling customer complaints with the customer loyalty variable as the final result.

REFERENCES

1. Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, 25(6), 5261–5280. <https://doi.org/10.1007/s10639-020-10219-y>
2. Developer, M. I. (2020a, May 8). *Pendidikan Indonesia di Tengah Pandemi Covid-19*. Available at: <https://mediaindonesia.com/opini/311137/pendidikan-indonesia-di-tengah-pandemi-covid-19>
3. Developer, M. I. (2020b, June 26). *Pemerintah Atur Pendidikan di Masa Pandemi*. Available at: <https://mediaindonesia.com/humaniora/323438/pemerintah-atur-pendidikan-di-masa-pandemi>
4. Vecchi, V., & Leone, V. M. (2021). *Public Private Partnerships: Principles for Sustainable Contracts*. Springer Nature.
5. Ekiz, E. H., Araslı, H., Farivarsadri, G., & Bavik, A. (2008). *Measuring organizational responses to the student complaints in the perceived justice framework: Some evidence from northern cyprus universities*.
6. Aldridge, S. & Rowley, J., (1998). Measuring customer satisfaction in higher education. *Quality Assurance in Education*, 6(4), 197-204.
7. Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36(3), 356–372.
8. Gilliland, S. W. (1993). The perceived fairness of selection systems: An organizational justice perspective. *Academy of Management Review*, 18(4), 694–734.

9. Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. Springer Science & Business Media.
10. Kelley, S. W., & Davis, M. A. (1994). Antecedents to customer expectations for service recovery. *Journal of the Academy of Marketing Science*, 22(1), 52–61.
11. Nel, D., Athron, T., Pitt, L. F., & Ewing, M. T. (2000). Customer evaluations of service complaint experiences in the public sector. *Journal of Nonprofit & Public Sector Marketing*, 7(3), 3–30.
12. Salim, A., Setiawan, M., Rofiaty, R., & Rohman, F. (2018). Focusing on Complaints Handling for Customer Satisfaction and Loyalty: The Case of Indonesian Public Banking. *European Research Studies Journal*, 21(3), 404–416.
13. Karatepe, O. M. (2006). Customer complaints and organizational responses: The effects of complainants' perceptions of justice on satisfaction and loyalty. *International Journal of Hospitality Management*, 25(1), 69–90.
14. Abidin, M. (2021). Stakeholders Evaluation on Educational Quality of Higher Education. *International Journal of Instruction. International Journal of Instruction*, 14(3).
15. Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing*, 62(2), 60–76.
16. Abidin, M. (2015). Students' perception of service quality dimensions in Islamic higher education. *International Journal of Innovative Research & Development*, 4(1), 237–242.
17. Masserini, L., Bini, M., & Pratesi, M. (2019). Do quality of services and institutional image impact students' satisfaction and loyalty in higher education? *Social Indicators Research*, 146(1), 91–115.
18. Parasuraman, A. (2002). Service quality and productivity: A synergistic perspective.
19. Dolinsky, A. L. (1994). A Consumer Complaint Framework with Resulting Strategies: An Application to Higher Education. *Journal of Services Marketing*, 8 (3), 27-39. <https://doi.org/10.1108/08876049410065598>
20. Waqas, M., Ali, H., & Khan, M. A. (2014). An investigation of effects of justice recovery dimensions on students' satisfaction with service recovery in higher education environment. *International Review on Public and Nonprofit Marketing*, 11(3), 263–284.
21. Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on postcomplaint behavior. *Journal of Retailing*, 73(2), 185–210.
22. Gordon, R. A., & Howel, J. E. (1959). *Higher education for business*. Columbia University Press.
23. Goodwin, C., & Ross, I. (1992). Consumer responses to service failures: Influence of procedural and interactional fairness perceptions. *Journal of Business Research*, 25(2), 149–163.
24. Mohr, L. A., & Bitner, M. J. (1995). The role of employee effort in satisfaction with service transactions. *Journal of Business Research*, 32(3), 239–252.
25. Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of Management*, 16(2), 399–432.
26. Beugre, C. D., & Baron, R. A. (2001). Perceptions of systemic justice: The effects of distributive, procedural, and interactional justice. *Journal of Applied Social Psychology*, 31(2), 324–339.
27. Taylor, S. (1994). Waiting for service: The relationship between delays and evaluations of service. *Journal of Marketing*, 58(2), 56–69.
28. McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35(3), 626–637.
29. Oliver, R. L., & Swan, J. E. (1989). Consumer perceptions of interpersonal equity and satisfaction in transactions: A field survey approach. *Journal of Marketing*, 53(2), 21–35.
30. Sham, G., Rehman, M. A., Samad, S., & Rather, R. A. (2020). The impact of the magnitude of service failure and complaint handling on satisfaction and brand credibility in the banking industry. *Journal of Financial Services Marketing*, 25(1), 25–34.
31. Ahmed, R. R., Vveinhardt, J., Warraich, U. A., & Baloch, A. (2020). Customer satisfaction & loyalty and organizational complaint handling: Economic aspects of business operation of airline industry. *Inžinerinė Ekonomika= Engineering Economics*. Kaunas, KTU, 31(1).
32. Wu, X., Du, S., & Sun, Y. (2020). E-tailing service recovery and customer satisfaction and loyalty: Does perceived distributive justice matter? *Social Behavior and Personality: An International Journal*, 48(5), 1–15.
33. Gale, B., T. (1998). Introduction to Customer Satisfaction, Loyalty and Value: Satisfaction is not Enough. *Marketing News*, 1–6.
34. Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose, and findings. *Journal of Marketing*, 60(4), 7–18.
35. Brown, R. M., & Mazzarol, T. W. (2009). The importance of institutional image to student satisfaction and loyalty within higher education. *Higher Education*, 58(1), 81–95.
36. Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International Journal of Service Industry Management*, 7 (4), 27-42. <https://doi.org/10.1108/09564239610129931>
37. Hart, C. W., Heskett, J. L., & Sasser, Jr. W. E. (1990). The profitable art of service recovery. *Harvard Business Review*, 68(4), 148–156.
38. Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer behavior* (Vol. 8th). Forth Worth.
39. Martinelli, E., Belli, A., & Marchi, G. (2015). The role of customer loyalty as a brand extension purchase predictor. *The International Review of Retail, Distribution and Consumer Research*, 25(2), 105–119.

40. Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330–333.
41. Moser, C. A. (1952). Quota sampling. *Journal of the Royal Statistical Society. Series A (General)*, 115(3), 411–423.
42. Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. *JALT 2013 Conference Proceedings*, 1–8.
43. Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396.
44. Solimun, D. (2002). Multivariate analysis. Structural Equation Modeling (SEM), Lisrel Dan AMOS.
45. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
46. Schoefer, K., & Ennew, C. (2004). Customer evaluations of tour operators' responses to their complaints. *Journal of Travel & Tourism Marketing*, 17(1), 83–92.
47. Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology*, 88(2), 295.
48. Luo, Y. (2007). The independent and interactive roles of procedural, distributive, and interactional justice in strategic alliances. *Academy of Management Journal*, 50(3), 644–664.
49. Martinez-Alier, J. (2003). *The Environmentalism of the poor: A study of ecological conflicts and valuation*. Edward Elgar Publishing.
50. Siu, N. Y.-M., Zhang, T. J.-F., & Yau, C.-Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, 114(4), 675–686.
51. Gumussoy, C. A., & Koseoglu, B. (2016). The effects of service quality, perceived value and price fairness on hotel customers' satisfaction and loyalty. *Journal of Economics, Business and Management*, 4(9), 523–527.

Information about the authors

Muh Idris

(Indonesia, Manado)

Associate Professor, PhD in Islamic Education

Institut Agama Islam Negeri Manado

E-mail: idristunru02@iain-manado.ac.id

ORCID ID: 0000-0002-4200-5323

Scopus Author ID: 57216748991

Munirul Abidin

(Indonesia, Malang)

Professor, PhD in Islamic Education Management

Universitas Islam Negeri Maulana Malik Ibrahim Malang

E-mail: munirul@bio.uin-malang.ac.id

ORCID ID: 0000-0001-9804-8528

Scopus Author ID: 57218824792

Evra Willya

(Indonesia, Manado)

Associate Professor, PhD in Islamic Education

Department of Education

Institut Agama Islam Negeri Manado

E-mail: Evrawillya@iain-manado.ac.id

ORCID ID: 0000-0002-8083-0105

Scopus Author ID: 57216746281