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PUBLIC TRANSPORTATION TRUST AND SATISFACTION DURING THE COVID-19 PANDEMIC: STUDY ON ELECTRIC TRAIN SERVICES IN KAI COMMUTER REGION 6 YOGYAKARTA

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Abstract

The present study aimed to find out the relationship between service quality attributes (i.e., facility comfort, Covid-19 protocol implementation, transport and service modes, and safety and security) and customer satisfaction, trust, and loyalty among KAI Commuter customer during the Covid-19 pandemic. Out of 1479 customers of the commuter rail service in Region 6 Yogyakarta, 478 customers gave complete answers and met the criteria of the study. In this study, structural equation modeling was applied, which was analyzed using PLS-SEM. The result of the study showed that all service quality attributes, except transport and service modes, significantly influenced customer satisfaction. Regarding customer trust, it was found that facility comfort and Covid-19 protocol implementation significantly affected customer trust. It was also found that customer satisfaction significantly affected their trust and loyalty. In addition, trust was found to significantly affect customer loyalty. The result of the study was expected to provide KAI Commuter with feedbacks regarding policies and strategies in improving its service quality to enhance customer satisfaction, which eventually leads to trust and loyalty.

Keywords: Service quality, satisfaction, trust, Covid-19 pandemic, transport

1. Introduction

Commuter public transport becomes more popular recently as it is viewed as an affordable solution to traffic congestion that provides good service quality. However, due to the pandemic, many people move to private transport due to fear of Covid-19 viral transmission in public transport. While the community needs public transport service, it is crucial to avoid unhealthy stereotypes of using public transport, such as the risk of Covid-19 transmission (Tirachini & Cats, 2020). Hence, commuter transport should perform preventive efforts to regain the community trust that it is a public transport that is safe from Covid-19 risks. PT Kereta Api Indonesia (Persero), known as KAI, as the only train operator in Indonesia, competes against other public transport modes such as bus and airplane on providing safe transport service amid the Covid-19 pandemic. Having success with commuter rail system in Region 1 Jakarta (including Jakarta, Bogor, Depok, Tangerang, and Bekasi), KAI and its subsidiary, KAI Commuter, expands the business by introducing the commuter rail system in Region 6 Yogyakarta. Since 10 February 2021, KAI Commuter officially runs 20 trips from Yogyakarta to Solo, substituting KA Prambanan Ekspres (Prameks). Data in March 2021 reported that the

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average passenger of the commuter rail reached 8382 passengers during weekends and holidays and 5.488 passengers during weekdays. The highest record of the passenger was reported during the long holiday on Friday, 2 April 2021, where 9.763 customers used the electric train service from Yogyakarta to Solo. KAI commuter adds more trip frequency by running 22 trips on weekdays and 24 trips on weekends since April 2021 to address the increasing trend. This addition aims to anticipate the increasing passenger during peak season.

During this pandemic, KAI Commuter shows its commitment to operating a commuter train service that prioritizes customer safety and health. The health protocol implemented in the train includes wearing a mask, hand washing, and practicing social distance. KAI Commuter limits the passenger capacity to 74 passengers per car to optimize the practice of social distancing. During the pandemic, any intervention that involves physical contact among the customer should prioritize hygiene and social distance practice to minimize the virus transmission risk (Yeh et al., 2021). Tirachini & Cats (2020) highlight the importance of compliance with social distancing practice and face mask, which is proven to significantly minimize the risk of Covid-19 transmission in a closed environment such as public transport. The company also provides portable hand washing stations and hand sanitizers in strategic places around the station and train. In addition, the public space in the station and the train are regularly disinfected after a trip. Meanwhile, the frequently touched parts of the train were sterilized every 30 minutes, constituting some of the company's service quality improvement during the Covid-19 pandemic.

The service quality involves the customers' perceived service quality based on the comparison of their expectations and actual service they received (Ratanavaraha et al., 2016). Customer satisfaction is viewed as the most pivotal metric in assessing the service quality, which could be evaluated by gathering the agreement rate among customers through a survey on various services and facilities (Allen et al., 2020; Mandhani et al., 2020). Chauhan et al. (2021) argue that service quality is defined as customers' overall satisfaction with various attributes such as, among others, transfer environment, accessibility, signposting, safety, security, public utility, and comfort. Most previous studies used various service quality attributes to measure the overall service quality, while only a few works analyze the impact of the service quality. Customers' fear of Covid-19 makes them reticent to use public transports. Therefore, it is crucial to discover what kind of services are expected by the public transport customer to ensure their satisfaction, trust, and loyalty during the Covid-19 pandemic. The present study offers several contributions to the literature on service quality. First, during the Covid-19 pandemic, this study enriches the literature by developing the context-specific relationship between service quality and covid-19 protocol implementation. Second, this study attempts to fill the gap by employing several attributes of service quality and their impact on customer satisfaction, trust, and loyalty.

This study was expected to define the relationship among facility comfort, covid-19 protocol implementation, transport and service modes, safety and security, satisfaction, trust, and loyalty of commuter rail customers in Region 6 Yogyakarta. The present study aimed to examine the effect of each service quality attribute (i.e., facility comfort, Covid-19 protocol implementation, transport and service modes, and safety and security) on customer satisfaction and trust. In addition, the present study also examined the effect of customer satisfaction on trust and the effect of satisfaction and trust on customer loyalty. This is the first empirical study on the quality

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of commuter railway service in Region 6 Yogyakarta. From the academic point of view, the present study could be used to define the mechanism of service quality attributes (i.e., facility comfort, Covid-19 protocol implementation, transport & service modes, and safety and security) as the factors influencing customers satisfaction and trust, which eventually affects their loyalty. From an empirical perspective, the result of the study is expected to provide KAI Commuter with comprehensive feedbacks regarding policies and strategies in improving its service quality to enhance customer satisfaction, which eventually leads to trust and loyalty during the Covid-19 pandemic.

2. Literature Review and Hypotheses Development

2.1. The Concept of Customer Satisfaction and Trust

2.1.1. Customer Satisfaction

The concept of satisfaction undergoes continuous development in the last decades. Studies on satisfaction are still relevant, where it is viewed as a psychological notion of customer emotional evaluation or pleasant experience related to a product or service (Mohammed & Rashid, 2018; Giebelhausen et al., 2016; Saleem & Sarfraz Raja, 2014; Oliver, 1999). Tse & Wilton (1988) state that satisfaction typically relates to customers' emotional response to their product or service experience and to the expectation and actual performance of the product or service they purchase. Oliver (1999) defines satisfaction as an emotional response to a product, service, and purchasing experience.

2.1.2. Trust

Studies on trust have been conducted in the last few decades, and the definition of trust has been well-established in some different manners. Trust is viewed as an intrinsic, valuable feature of social interaction that stems from personal relationships in social psychology. Rampel et al. (1985) and Larzelere & Huston (1980) state that one's trust refers to the feeling of safety whose foundation lies in individual behavior, promoted by intention and optimism toward welfare and interest of his/her partner. Moorman et al. (1992) view that trust depends on the willingness of the partners. Lien et al. (2015) and Hart & Saunders (1997) believe that trust represents one's confidence that other parties will act as expected. Trust is a widely discussed topic in marketing since marketing activities are relationship-oriented (Alhaddad, 2015; Dwyer et al., 1987). Pavlou et al. (2007) argue that trust is an effective way to minimize uncertainty and sources of uncertainty. Yusepaldo et al. (2018) state that transport service providers should maintain their customer trust by providing comfort, satisfaction, and quality service, such as paying attention to cleanliness and comfort of the facilities, providing responsive and punctual service.

2.2. Hypotheses Development

2.2.1. Antecedent of Satisfaction

Customer satisfaction refers to one's pleasant (or unpleasant) feelings after comparing his/her perception or impression to the performance of a service or product (Kotler & Keller, 2009). Customers may be satisfied when the performance is above their expectation. Otherwise, they may be disappointed.

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Every transport facility is built for a certain purpose and should serve to meet customer expectations. Customer satisfaction could be used to measure the facilities provided to customers (Allen et al., 2020; Alonso et al., 2018). The majority of previous studies viewed safety as one of the most crucial factors in analyzing the service quality (Lois et al., 2018; Hernandez et al., 2016). Some studies also found that information availability is important in analyzing the service quality (Kim et al., 2018; Lois et al., 2018; Hernandez et al., 2016). Moreover, comfort is the essential requirement to improve the quality (Kim et al., 2018; Dell'Asin et al., 2015).

Previous studies consistently found a direct relationship between service quality and customer satisfaction. For instance, Potluri et al. (2016) report a significant relationship between service quality and bank customer satisfaction. Meanwhile, Shahid Iqbal et al. (2018) also found a positive, significant relationship between service quality, loyalty, and behavioral intention, either directly and indirectly through satisfaction. It is supported Setiawan & Sayuti (2017) who report a positive, significant effect of service quality on customer satisfaction. In the Iranian banking context, Mosahab et al. (2010) showed that service quality significantly affects customer satisfaction, indicated by customers' expectation that is higher than bank's performance. Izogo & Ogba (2015) report that service quality positively affects automobile repair customer satisfaction in Southeastern Nigerian City. In the Indonesian context, Quddus & Hudrasyah (2014) found that service quality significantly affects customer satisfaction. It was further found that facility comfort, safety, and transport and service modes were positively associated with service quality. The study conducted by Sánchez-Cañizares et al. (2020) found that covid-19 protocol implementation may affect customer satisfaction. Therefore, it could be expected that:

- H1: Facility comfort positively influences customer satisfaction
- H2: Covid-19 Protocol implementation positively influences customer satisfaction
- H3: Transport and Service modes positively influences customer satisfaction
- H4: Safety positively influences customer satisfaction

2.2.2. Antecedent of Trust

Customer trust refers to customers' belief in a service provider (Garbarino & Johnson, 1999). In the present study, public transport service provider extends its service by implementing health protocol to keep its customer's trust when using public transport amid the Covid-19 pandemic. Hayuning Rat et al. (2015) state that service quality could be measured through several indicators, such as trust in service quality (consistency), trust in officers' service (contact personnel), trust in the safety, security, and comfort of the train environment (physical environment).

Trust contains three characteristics namely, competence, benevolence, and integrity (McKnight et al., 2002). Competence refers to customer's belief that a service provider can do what a service provider needs to do. Benevolence refers to the extent to which the service provider cares with the customers, in addition to its profit-gaining motives. Integrity refers to customers' belief that a service provider has good faith, acts ethically, and provides correct information. In the field of transport, trust indicates that the service provider can be trusted, is honest, has integrity, and is

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reliable to provide a service for its customers. Trust is a pivotal factor that influences customers' intention and develops and maintains long-term relationships with them (Gounaris, 2005; Sirdeshmukh et al., 2002; Garbarino & Johnson, 1999) High trust leads to the potential future relationship between the customer and service providers. Service providers should improve their system flaw by improving their quality to gain customer trust, which may drive customers to use the services provided. As today's satisfying service experience may last in the future, service quality positively may affect trust. The study conducted by Aydin & Özer (2005) found that service quality affects customer satisfaction. Meanwhile, Padma et al. (2010) found that the service quality positively and significantly affects customer trust. Boonlertvanich (2019) found that in addition to the positive relationship between service quality and customer loyalty, higher service quality was found to lead to higher customer satisfaction and trust. Accordingly, the following hypotheses were proposed:

H5: Facility comfort positively influences customer trust

H6: Covid-19 protocol implementation positively influences customer trust

H7: Transport and service modes positively influences customer trust

H8: Safety and security positively influence customer trust

2.2.3. Relationship among Satisfaction, Trust, and Loyalty

In this study, we hypothesize that commuter rail customer loyalty is affected by their trust and satisfaction with their experience in using the service. Lam & Wong (2020) state that customer satisfaction affects trust, supporting Chiu et al. (2012) findings on the significant relationship between customer satisfaction and trust. A satisfying product and feature may enhance customer satisfaction, thus influences customer trust related to the reliability and integrity of the supplier. Moreover, satisfaction is one of the aspects of trust and serves as a crucial prerequisite to establish trust (Fassnacht & Köse, 2007; Garbarino & Johnson, 1999).

Alhaddad (2015) and Han & Hyun (2013) state that trust refers to a type of bond that supports a long-term relationship between customers and the producers, where producers are viewed as reliable and capable of fulfilling customers expectation (Chiu et al., 2012; Sirdeshmukh et al., 2002). Sirdeshmukh et al. (2002) also state that customer trust plays important role in influencing customers' positive word of mouth and repurchase behavior. The previous study concludes that customer trust is associated with image, satisfaction, and loyalty. The concept of trust stemming from satisfying experiences is one of the pivotal factors in determining repurchase intention (Lankton et al., 2010). Trust may lead to loyalty because it may emerge from customer satisfaction with the company's manner in addressing complaints (Upamannyu et al., 2014; Agustin & Singh, 2005) Trust is the core component in maintaining a long-term, stable relationship with the customer (Morgan & Hunt, 1994; Larzelere & Huston, 1980). Customer satisfaction is the important factor that determines their repurchase (Lankton et al., 2010) A sustainable relationship between customers and sellers after the first transaction is defined as customer loyalty (Hallowell, 1996). According to Ashnai (2006), a satisfied customer is expected to purchase more often than other customers do. Customer loyalty is considered important since

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it positively affects long-term profitability (Dehghan & Shahin, 2011; Ribbink et al., 2004) and The success of the service-based company is often measured by its customer loyalty (Dehghan & Trafalis, 2012). To lose customers, either entirely or partially, adversely affect a company's sale volume, meaning that more marketing activity is required to maintain the customer's interest (Zins, 2001). Previous studies showed that satisfaction is the strong antecedent of loyalty (e.g., Walter et al., 2013; Belaid & Temessek Behi, 2011; Cronin et al., 2000; Rust & Zahorik, 1993). Higher satisfaction usually leads to higher loyalty (Jones & Suh, 2000) since customer satisfaction seems to extend customer loyalty (Lombart and Louis, 2012; Keller, 2009).

The relationship between trust and satisfaction is supported by studies conducted by Elbeltagi & Agag (2016) and Gwebu et al. (2014). Service quality, customer satisfaction, and customer trust together are found to improve customer loyalty (Boonlertvanich, 2019). Setiawan & Sayuti's (2017) analysis indicates that trust and satisfaction positively and significantly affect customer loyalty. Trust and loyalty serves as a positive and significant function of satisfaction; trust was found to positively and significantly affect loyalty, while satisfaction is found to have the most significant effect on loyalty (Han et al., 2019) :

H9: Satisfaction positively affects trust

H10: Trust positively affects loyalty

H11: Satisfaction positively affects loyalty

3. Research Method

3.1. Samples and Procedures

The respondent of the present study was the customer of commuter railway service in Region 6 Yogyakarta. They were recruited using the purposive sampling technique. Using Limesurvey, the questionnaire was deployed by social media to various commuter rail passenger communities. Out of 1479 responses to the questionnaire, 1001 responses were considered incomplete, leaving 478 complete and criteria-compliant responses. The respondents' profile is displayed in the following Table 1:

Description	Description	Percentage80.2 %			
Gender	Male				
	Female	19.8 %			
Age	Below 25 years old	20.2 %			
	25-35	46.4 %			
	Above 35 years old	33.4 %			
Educational Background	Senior High school	9.0 %			
	Associate's	51.9 %			
	degree/Undergraduate degree				
	Master's Degree	39.1 %			
Income	Below 2.5 million rupiah	22.9 %			
	2.5 to 7.5 million rupiah	41.6 %			
	Above 7.5 million rupiah	35.5 %			

Table 1. Respondent Characteristic

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Most of the respondents were male (80.1%), while 19.8% of respondents were female. In terms of age, respondents were dominated by individuals aged 25-35 years old (46.4%), followed by respondents aged 35 years old (33.4%) and respondents aged below 25 years old (20.2%). Regarding their educational background, most of the respondents hold an associate and undergraduate degree (51.9%), followed by respondents with a master's degree (39.1%), and respondents with senior high school background (9%).

3.2. Measurement

This study employed a self-report questionnaire to assess the facility comfort, Covid-19 protocol implementation, transport and service modes, safety and security, satisfaction, trust, and loyalty. The questionnaire used a 5-point Likert scale (from "strongly disagree" to "strongly agree"). Items measuring facility comfort, transport and service modes, and safety and security were adapted from Chauhan et al. (2021) with 5 and 4 items for each factor. Five items measuring Covid-19 protocol implementation were adapted from Sánchez-Cañizares et al. (2020) Three items developed by Möhlmann (2015) were adapted to measure customer satisfaction. Meanwhile, Tsai et al.'s (2006) five questions were adapted to measure customer trust. Three items to measure customer loyalty were adapted from Luo et al. (2019).

4. Result

Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to test the hypothesis by using SmartPLS 3.3.2. PLS-SEM was selected to test the hypotheses because it can handle several dependent and independent variables at the same time (Sarstedt et al., 2017). Two stages were done in using PLS-SEM analysis. First, evaluating the measurement model through validity and reliability test of the constructs. Second, evaluating the structural model to examine the direct and indirect effects of the developed model.

4.1. Validity and Reliability

To evaluate the measurement model, validity and reliability tests were conducted for each construct. Invalidating the construct, the convergent and discriminant validities were analyzed. A product passes convergent validity test when its factor loadings is higher than 0.5 (Hair et al., 2010). It is also recommended to have average Variance Extracted (AVE) of higher than 0.5 to pass convergent validity test (Fornell & Larcker, 1981). As displayed in table 2, the factor loadings and AVE of the constructs used in this study met the recommended criteria. Cronbach's Alpha and composite reliability are values used to examine the reliability of an instrument; it is deemed reliable if the score was higher than 0.70. However, Cronbach Alpha higher than 0.60 is acceptable (Hair et al., 2006) The instrument used in this study was considered reliable since each construct meets the criteria of reliability.

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Construct	Item	Factor Loading	Cronbach Alpha	CR	AVE
Facility Comfort	SQC1	0.742	0.776	0.848	0.528
-	SQC2	0.762			
	SQC3	0.666			
	SQC4	0.741			
	SQC5	0.718			
Covid-19 protocol	PRCVD1	0.832	0.904	0.929	0.724
implementation	PRCVD2	0.847			
	PRCVD3	0.906			
	PRCVD4	0.872			
	PRCVD5	0.792			
Transport and Service	SQTM1	0.796	0.827	0.897	0.744
modes	SQTM2	0.901			
	SQTM3	0.887			
Safety and Security	SQK1	0.827	0.857	0.903	0.700
	SQK2	0.823			
	SQK3	0.847			
	SQK4	0.848			
Satisfaction	SAT1	0.891	0.879	0.926	0.806
	SAT2	0.912			
	SAT3	0.89			
Trust	TRUST1	0.839	0.927	0.945	0.773
	TRUST2	0.893			
	TRUST3	0.885			
	TRUST4	0.890			
	TRUST5	0.889			
Loyalty	LY1	0.912	0.915	0.946	0.854
	LY2	0.935			
	LY3	0.926			

Tabel 2. Measurement model results

Source: Data 2021

To evaluate the discriminant validity, Fornell and Larcker's criterion was applied. A construct is considered havin discriminant validity if its score is higher than the others' score. As shown table 3, the construct passes discriminant validity test because each correlation value shows the highest value.

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	Facility comfort	Trust	Satisfact ion	Safety and Security	Loyalty	Transpor t and service modes	Covid- 19 protocol impleme ntation
Facility Comfort	0.726						
Trust	0.53	0.879					
Satisfaction	0.508	0.756	0.898				
Safety and Security	0.587	0.587	0.605	0.836			
Loyalty	0.397	0.664	0.625	0.46	0.924		
Transport and Service modes	0.634	0.514	0.524	0.709	0.368	0.863	
Covid-19 protocol implementation	0.58	0.617	0.648	0.725	0.436	0.632	0.851

Tabel 3. Fornell-Larcker Criterion

Source: Data 2021

4.2. Structural Model

Once the measurement model is evaluated, the structural model was analyzed to test the proposed hypotheses. It was done by testing the expected direct and indirect effect of the variables proposed in hypotheses. The following is the result of PLS-SEM analysis:

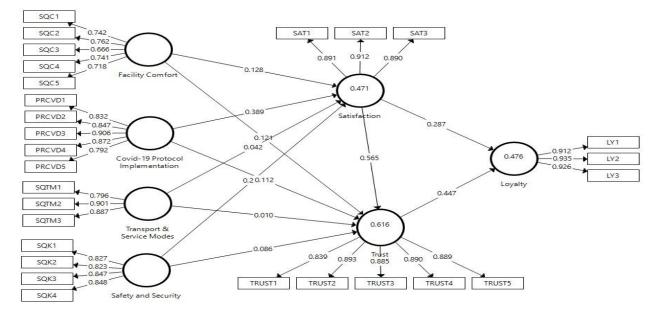


Figure 1. Path Coffecient Value and P-Value

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The data analysis process was done through bootstrapping. The following Table 4 displays the test result.

Relations Between Variables	Standard Deviation	T Statistics	P Values	Description
Facility comfort \rightarrow Satisfaction	0.054	2.364	0.018	Supported
Covid-19 protocol implementation \rightarrow Satisfaction	0.072	5.421	0.000	Supported
Transport & service modes \rightarrow Satisfaction	0.061	0.683	0.495	Not Supported
Safety and Security \rightarrow Satisfaction	0.071	3.080	0.002	Supported
Kenyamanan Fasilitas → Trust	0.042	2.900	0.004	Supported
Covid-19 protocol implementation \rightarrow Trust	0.056	2.002	0.046	Supported
Transport & Service modes \rightarrow Trust	0.048	0.217	0.829	Not Supported
Safety & security \rightarrow Trust	0.048	1.774	0.077	Not Supported
Satisfaction \rightarrow Trust	0.045	12.469	0.000	Supported
$Trust \rightarrow Loyalty$	0.070	6.420	0.000	Supported
Satisfaction \rightarrow Loyalty	0.088	3.252	0.001	Supported
Source: Data 2021				* *

Tabel 4. Hypothesis testing results

Source: Data 2021

As stated in hypothesis 1, it was expected that facility comfort positively affect satisfaction. The analysis result (as displayed in table 4) indicates that facility comforts significantly affects customer satisfaction (tstat=2,364, p-value = 0,018), meaning that H1 was supported. It was found that hypothesis 2 stating that covid-19 protocol implementation positively affects satisfaction was accepted. As displayed in the table, it significantly affects satisfaction (tstat=5,421, p-value = 0,000). Meanwhile, hypothesis 3 stating that transport and service modes positively affects satisfaction was rejected. The analysis indicates that they did not significantly affect satisfaction (tstat=0,683, p-value = 0,495). Regarding the positive effect of safety and security on satisfaction, the analysis showed that safety and security significantly affect satisfaction (tstat=3,080, p-value = 0,002). In other words, H4 was accepted. Hypothesis 5 was also accepted, where it was found that safety and security significantly affect trust (tstat=2,900, p-value = 0,004).

The analysis result also indicates that Covid-19 protocol implementation significantly affects customer satisfaction (tstat=2,002, p-value = 0,046), meaning that H6 is accepted. Meanwhile, hypothesis 7 stating that transport and service modes positively affect trust was rejected (tstat=0,217, p-value = 0,829). Regarding the effect of safety and security on trust, it was found that they do not significantly affect trust (tstat=1,774, p-value = 0,077), meaning that H8 was rejected. In Hypothesis 9, It was predicted that satisfaction positively affects trust and the analysis result supports the hypothesis (tstat=12,469, p-value = 0,000). In this study, the structural model analysis showed that trust significantly affects loyalty (tstat=6,420, p-value = 0,000). Thus, H10 was accepted. H11 was also accepted as the analysis result indicates that satisfaction significantly affects loyalty (tstat=3,252, p-value = 0,001).

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5. Discussion

The present study provides several theoretical implications to the field of customer satisfaction, trust, and loyalty and deepens the understanding of service quality attributes. This study confirms the positive, significant relationship among facility comfort, covid-19 protocol implementation, transport & service modes, safety and security, trust, and loyalty. This finding supports some previous studies on satisfaction and trust (Walter et al., 2013; Lombart & Louis, 2012; Gallarza et al., 2011; Lankton et al., 2010). It was found that transport and service modes and safety and security did not significantly affect trust, which is slightly different from Chauhan et al. (2021) findings that safety and security, transport and service modes are the most important factors in determining service quality. This difference was accounted for by fact that the commuter rail customer in Region 6 Yogyakarta had not considered the importance of trip frequency. In addition, the company had managed to put a successful image in operating commuter rail system in the Jabodetabek area. Thus, the customer thought they did not need to worry about basic factors, such as transport and service modes and safety and security. The present study also confirms the significant relationship between satisfaction, trust, and loyalty. It was found that satisfaction and trust contributed to customer loyalty among the commuter rail customer during the covid-19 pandemic.

Trust is the primary source of loyalty when the service quality and its attributes are improved. Using Covid-19 protocol implementation as one of the service quality attributes was effective in measuring customer satisfaction, trust, and loyalty during the Covid-19 pandemic. By implementing the Covid-19 protocol, the company expects to gain customer trust in public transport. This finding fills the theoretical gap between customer trust and loyalty, which is different from most previous studies (Upamannyu et al., 2014; Han & Hyun, 2013; Chiu et al., 2012; Morgan & Hunt, 1994).

6. Conclusion and Recommendation

Following the result of the study, several recommendations are made from a managerial perspective. First, this study represents a holistic view of customers' loyalty, trust, and satisfaction they perceive through service quality attributes when using the commuter rail service. In other words, KAI Commuter as the commuter rail operator in Region 6 Yogyakarta should optimize its service quality by always being adaptive to the current situation by consistently enforcing the Covid-19 protocol, among others. It is important because the relationship among the service quality, satisfaction, and trust may significantly contribute to higher customer loyalty, as previous studies consistently found (Cho & Fiore, 2015; Roberts, 2006, 2004). The company (i.e., KAI Commuter) should strengthen its service publicity through advertisements and intensify media information to deepen the customers' impression and draw more people. KAI and KAI Commuter should be prepared to face the increasingly massive transport modes competition during the economic development in the Covid-19 pandemic era. It is important to focus on caring for the environment and supporting social welfare (e.g., optimizing CSR, promoting public transport use to minimize congestion and air pollution) to improve the company's image. Having a positive image, the company may establish a stable, long-term relationship with the customers.

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Second, KAI and KAI Commuter should always focus on customer satisfaction and trust, as they are the basic requirement to gain customer loyalty. To ensure customer satisfaction and trust, KAI Commuter should accurately identify the preference and characteristics of an individual customer. The followings are recommendations to ensure customer satisfaction: 1) conducting a regular survey to listen to the customers' feedbacks to improve the quality of the product, service, and experience. 2) Creating customers' log and work log to follow up the customers' feedback and suggestion. It is useful for the company to understand the recurring customers' personal preferences to provide better service for them. 3) Regularly making innovation and improvement in the existing services to trigger customers' curiosity to try the offered services. 4) Creating special events, such as discounts or compensation when customers do not receive the standard facilities. 5). KAI Commuter needs to improve the positive cognitive association and emotion of its services based on data to capture customers' positive feedbacks. The company could utilize social media (e.g., Instagram, Facebook, Twitter) to communicate with its customer to build more stable and positive relationship.

Despite the contribution, this study has a limitation as its result could not be applied to commuter rail service outside Region 6 Yogyakarta because the data were collected only from customers in this region. Therefore, future studies are recommended to use this theory in other regions through more systematic sampling technique. Future studies are also recommended to consider other attributes of service quality (e.g., staff and ticketing management, transfer environment and supporting facilities, environment quality, price, accessibility and feasibility, etc.) and other dependent variables such as word of mouth, customer retention, and repurchase intention to obtain better understanding of commuter rail customers' behavior. Future studies are expected to focus on how customers view certain service as a satisfaction and trust that influence a long-term loyalty.

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