Determinants of Customer Satisfaction in Public Transportation Services: Studies on Solo-Yogyakarta Commuter Line

^a Sarjiyanto; ^b Lilik Wahyudi; ^c Sarwoto; ^d Miftachul Ma'Arif; ^e Ana Shohibul Manshur Al Ahmad abade Faculty of Economic Business, Universitas Sebelas Maret, Kota Surakarta, Jawa Tengah, Indonesia

ABSTRAK

Kereta Rel Listrik (KRL) Solo-Yogyakarta telah menjadi moda transportasi yang populer karena kecepatan, keterjangkauan, konektivitas, bebas dari kemacetan, dan manfaat lingkungan, menawarkan solusi yang menjanjikan untuk mengurangi kemacetan di Solo dan Yoqyakarta. Namun, KRL belum menarik sebagian besar komuter. Tujuan penelitian ini adalah untuk mengevaluasi persepsi pelanggan terhadap kualitas layanan pada Solo-Yogyakarta Commuter Line, dengan fokus pada dampak fasilitas, pengalaman berkesan, dan hiburan terhadap kepuasan dan loyalitas pelanggan. Menggunakan metode SEM PLS, penelitian ini menemukan bahwa Pengalaman Hiburan memiliki pengaruh yang kuat terhadap Loyalitas tetapi tidak terhadap Kepuasan, karena pengguna KRL lebih mengutamakan keselamatan dan keandalan dibandingkan dengan hiburan. Fasilitas meningkatkan Kepuasan tetapi memiliki dampak terbatas pada Loyalitas, menunjukkan bahwa meskipun penting, fasilitas tidak cukup untuk membangun komitmen jangka panjang. Pengalaman Berkesan secara positif memengaruhi baik Kepuasan maupun Loyalitas, menyoroti pentingnya menciptakan momen yang emosional dan berkesan. Kepuasan saja tidak mendorong Loyalitas, menekankan perlunya pengalaman yang lebih bermakna dan menarik. Oleh karena itu, PT KAI harus fokus pada keseimbangan antara efisiensi fungsional dan fitur yang menarik secara emosional untuk lebih memenuhi harapan pelanggan dan mendorong loyalitas jangka panjang.

ABSTRACT

The Solo-Yogyakarta commuter line (KRL) has become a popular mode of transport due to its speed, affordability, connectivity, freedom from traffic congestion, and environmental benefits, offering a promising solution to reduce congestion in Solo and Yogyakarta. However, it has not yet attracted the majority of commuters. This research aims to evaluate customer perceptions of service quality on the Solo-Yogyakarta Commuter Line, with a focus on the impact of facilities, memorable experiences, and entertainment on customer satisfaction and loyalty. Using the SEM PLS method, the study found that Entertainment Experience strongly influences Loyalty but not Satisfaction, as KRL users prioritize safety and reliability over leisure. Facilities improve Satisfaction but have a limited impact on Loyalty, indicating that while they are essential, they are not sufficient to build long-term commitment. Memorable Experiences positively affect both Satisfaction and Loyalty, highlighting the importance of creating emotionally engaging moments. Satisfaction alone does not drive Loyalty, emphasizing the need for more meaningful and engaging experiences. Therefore, PT KAI should focus on balancing functional efficiency with emotionally engaging features to better meet customer expectations and foster long-term loyalty.

ARTICLE HISTORY

Submited: 10 02 2024 Revised: 24 11 2024 Accepted: 25 11 2024 Published: 03 12 2024

KATA KUNCI

Transportasi Publik; Kepuasan Pelanggan; Perilaku Konsumen

KEYWORDS

Customer Behavior; Public Transportation; Customer Satisfaction

INTRODUCTION

The launch of the Solo-Yogyakarta commuter line (KRL) marked a significant step forward in improving transportation efficiency and urban mobility in the region. Since its introduction, this modern mode of public transport has become a popular choice, particularly for the people of Solo and Yogyakarta. The new Solo-Jogja KRL, which replaced the Prambanan Ekspres (Prameks) service, began operating on 10 February 2021. It serves a route with stops at 11 stations: Yogyakarta, Lempuyangan, Maguwo, Brambanan, Srowot, Klaten, Ceper, Delanggu, Gawok, Purwosari, and finally Solo Balapan. The average travel time on the KRL is approximately 68 minutes, making it faster than the Prameks, which averaged around 75 minutes (Chindyana et al., 2022).

The Solo-Yogyakarta KRL has now been in operation for over two years and has shown promising growth as an alternative mode of transport (Yuniati., 2022). It has become increasingly popular due to its faster travel times, affordability, ability to connect multiple cities, freedom from traffic congestion, and contribution to reducing air pollution. The KRL is seen as a viable solution for alleviating road congestion in the Solo and Yogyakarta areas. However, despite its many advantages, the KRL has yet to attract the majority of commuters, meaning its impact on easing traffic in the region remains limited. While the general appeal of the KRL is evident, understanding user behaviour is still underexplored. Unlike the extensive research on consumer preferences for other transport modes, such as air travel, studies on train passengers' behaviour are still in their early stages, highlighting a need for further investigation into this area (Hou et al., 2021)

Sener et al., (2020) examined the behavior of light rail users in Houston, USA, showing that perceived benefit is the strongest factor in predicting people's intention to use train services. Similarly, Zhang et al., (2021) integrated the theory of planned behavior and consumer satisfaction theory in a study of train passengers during COVID-19 in China, finding that service quality strongly predicts consumer satisfaction Hou et al., (2021), further highlight that quality of service significantly influences customer attitudes toward high-speed trains in China. These studies collectively underscore the critical role of service quality and perceived benefits in shaping public transportation preferences. Applying these insights to the Solo-Yogyakarta KRL, understanding passengers' perceptions of service quality, convenience, and benefits could provide actionable strategies to enhance ridership and satisfaction, especially given the KRL's potential as a sustainable and efficient transportation alternative.

Existing studies on the Solo-Yogyakarta KRL have explored various aspects, including its role in regional architectural development and supporting facilities (Prasetyo et al., 2018), the quality of train services from the perspective of commuter mobility patterns (Chindyana et al., 2022) operational services from a technical standpoint (Devera Asrar & Adhari, n.d.). While these studies provide valuable insights, they largely focus on infrastructure and technical dimensions, leaving a gap in understanding how service quality affects customer satisfaction. As highlighted by Permatasari, (2017), PT KAI need to consider public perceptions of service quality to improve KRL services and enhance customer satisfaction. Supporting public transportation with scientific findings is crucial for informed policymaking; for example, research-driven strategies in other contexts have successfully improved service delivery and user satisfaction. This study addresses the research gap by examining the factors influencing user satisfaction with the Solo-Yogyakarta KRL, contributing to the broader goal of enhancing public transportation services in Indonesia.

This research emphasizes the importance of understanding emotions as a driving force for the behavioral intentions of Solo-Yogyakarta KRL service users as individuals and their environment. In line with the thoughts of (Kormos et al., 2021), One of the sciences that tries to comprehend the use of public transportation is the behavioral science approach. This research focused on how emotional factors can be related to the satisfaction of Solo-Yogyakarta KRL users. Research by (Redman et al., 2013) explained that the many factors that cause users of private transportation modes to switch to public transportation are affective or emotional.

A theory that can also explain transportation satisfaction is the Travel Mode Choice Cycle (TMCC) theory, which integrates the planned behavior theory, goal-directed behavior, and cognitive dissonance theory (De Vos, Waygood, et al., 2022). According to (Sirgy, 2010), transportation satisfaction can also be explained using a goal theory approach oriented toward the user's goals. (De Vos & Witlox, 2017), (De Vos, Singleton, et al., 2022) have classified public transportation satisfaction into three types based on period, namely short-term satisfaction (travel satisfaction), medium-term (daily travel satisfaction), and long-term (life satisfaction). These three types of satisfaction are interconnected with each other.

Regarding emotional and psychological factors, several previous studies have tried to explain satisfaction with using public transportation based on risk factors (An et al., 2010), motivation for using it for holidays (Lin et al., 2012), and social norms (De Angelis et al., 2021). This research focuses on three factors that play a role in public transportation satisfaction: facilities (service quality), entertainment, and experience. Furthermore, this research hopes to determine whether facilities, experience, and satisfaction influence the intention to continuously use Solo-Yogyakarta KRL public transportation services.

Literature Review

Customer Experience

Satisfaction is defined as a positive response resulting from a favorable evaluation of a consumption experience (Oliver, 1980, p. 47). It reflects various psychological responses that arise during and after the consumption of public services (Oliver, 1997; Rasoolimanesh et al., 2022). This concept is particularly relevant in public services, where customer satisfaction plays a critical role in assessing service effectiveness and guiding improvements. Studies have shown a significant positive relationship between the quality of service experiences and satisfaction levels (Oh et al., 2007; Abdullah et al., 2021). Satisfaction is shaped by the psychological process of confirming or disconfirming customer expectations (Oliver, 1997) and influences how customers evaluate services after consumption (Uzir et al., 2021). Chang et al. (2004) highlight that enjoyable and engaging service experiences can elevate satisfaction levels, while Wang et al., (2016) describe satisfaction as the degree of pleasure and arousal experienced by customers. In public services, satisfaction is not only a measure of individual experience but also a key factor in fostering trust, loyalty, and continued usage. It serves as a benchmark for public service providers to understand user expectations and design improvements, emphasizing the need for a customer-centric approach to policy and service delivery.

Moreover, (Azis et al., 2020) demonstrated that experience has a significant impact on tourist satisfaction. Similarly Isa et al., (2018) revealed a strong correlation between experience and satisfaction in the context of public service consumption in Malaysia. Additionally, a study by Serra-Cantallops et al., (2018) involving 475 customers in Germany also identified a robust relationship between experience and satisfaction. This satisfaction, in turn, plays a critical role in shaping the reputation of organisations, as highlighted by Saribanon et al., (2024). Numerous empirical studies, including those by (Han et al., 2018; M. Kim & Thapa, 2018; Azis et al., 2020) have consistently confirmed the

strong influence of experience on satisfaction. Research conducted in related sectors, particularly public services, further reinforces the idea that experience is a key determinant of satisfaction. Based on these findings, the following hypothesis is proposed:

H1 Memorable experiences positively influence customer satisfaction.

(Lee & Kim, 2016) conducted a study to explore the impact of entertainment experiences on satisfaction among 450 domestic and international tourists in South Korea, focusing on interactive and immersive activities provided during their journeys. The findings revealed a strong connection between entertainment experiences and satisfaction. Similarly Khan & Rahman, (2016) examined this relationship among 429 students in India, considering entertainment elements such as onboard digital media and recreational services, concluding that entertainment experiences significantly influence satisfaction. Akoglu & Özbek, (2022) examined this relationship among 429 students in India, considering entertainment elements such as onboard digital media and recreational services, concluding that entertainment experiences significantly influence satisfaction. Furthermore, Shekhar Kumar et al., (2013) researched this phenomenon among 902 patients in India, examining entertainment offerings like visual displays and music, confirming a notable influence on satisfaction levels. Applying these findings to train services, entertainment experiences—such as onboard digital media, Wi-Fi availability, and recreational activities—can significantly impact passenger satisfaction. Based on this overview, the following hypothesis can be proposed:

H2 Entertainment experience positively influence consumer loyalty

Service Quality

Numerous studies have explored the relationship between service quality and customer satisfaction. For instance, (Carranza et al., 2018) investigated 456 fast-food customers in Spain and found a strong link between service quality and consumer satisfaction. Similarly, (Abdullah et al., 2021) conducted a study with 489 students in Pakistan, yielding comparable results indicating a significant influence. (Uzir et al., 2021) examined 259 online shoppers in Dhaka, Bangladesh, and also found a strong correlation. Additionally, (S. Kim et al., 2013) researched 581 visitors in Orlando, USA, confirming a significant relationship. (Helgesen, 2008) explored the perceptions of 443 bachelor's students in Norway and reported a strong influence of service quality on consumer satisfaction. Based on these findings, the following hypothesis is proposed.

H3 Service quality positively influence consumer satisfaction.

So et al., (2013) carried out a study to explore the relationship between service quality and customer loyalty among 252 hotel guests in Australia. The study's findings reveal a strong impact of service quality on customer loyalty. Similarly, (Abdullah et al., 2021) examined 489 Students in Karachi, Pakistan and their results also demonstrated a significant influence. In another study by (S. Kim et al., 2013) which involved 581 visitors to Orlando, United States, the findings indicated a strong relationship as well. (Casidy, 2014) researched 258 students in Australia and found a notable connection between quality and customer loyalty. Since facility comfort is a component of service quality, the following hypothesis can be proposed:

H4 Facility comfort positively influence consumer loyalty

Consumer Satisfaction and Consumer Loyalty

Scaglione & Mendola, (2017) Investigated the impact of satisfaction on loyalty among 350 visitors to holiday farms in Sicily, Italy, and found a strong correlation between satisfaction and loyalty. Similarly, (Campón-Cerro et al., 2017) studied 64 tourists in Spain, revealing a significant influence of satisfaction on loyalty. In another study, (Serra-Cantallops et al., 2018) examined 475 customers in Germany, also demonstrating a strong relationship between satisfaction and loyalty. (Helgesen, 2008) focused on 443 undergraduate students in Norway and reported a strong influence of satisfaction on loyalty as well. (S. Kim et al., 2013) conducted research among 581 visitors in Orlando, USA, and found a similar significant relationship. (Jeong & Kim, 2019) explored the effect of satisfaction on loyalty among 311 sports tourists in South Korea and confirmed a strong influence. (Matsuoka et al., 2017) Tested this relationship with 437 domestic visitors in Japan, also showing a strong connection. (Wang et al., 2016) studied 300 visitors at heritage sites in China, and their findings indicated a significant influence of satisfaction on loyalty. Lastly, (Zulganef et al., 2024) noted that satisfaction affects loyalty, with trust in police services acting as a moderating variable in Indonesia. Based on these findings, the following hypothesis can be formulated:

H5 Consumer Satisfaction positively influence consumer loyalty

RESEARCH METHODS

This study will analyse primary data collected through a survey method, which involves the distribution of quetionnaires to respondents. The data gathered will then be analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SMART PLS software. PLS-SEM is a robust statistical technique that allows for the analysis of complex relationships between multiple variables, making it particularly suitable for the exploration of factors influencing customer satisfaction in this study. The use of SMART PLS will enable the model to test both the measurement and structural relationships, providing a comprehensive understanding of the key determinants affecting satisfaction.

Sampling and data collection

The participants in this research were individuals who met the criteria of having used the Solo-Yogyakarta KRL public transport service. Data was collected using the LimeSurvey platform, which was distributed to targeted respondents through social media channels. The sampling method employed was a non-probability purposive sampling technique, where participants were selected based on specific criteria, namely their experience with the Solo-Yogyakarta KRL service. This approach ensured that the sample accurately represented individuals who were familiar with the service, allowing for a more targeted and relevant analysis of user satisfaction. Further information on sample size determination and representative would be explain in result section.

Measurement

The questionnaire is structured into two sections. The first section gathers personal information about respondents, including socio-demographic details such as age, gender, education, and income. The second section focuses on the key variables of this research, which include entertainer experience, memorable experience, satisfaction, loyalty, and facility comfort. Entertainer experience was assessed using four questions adapted from Hwang & Lee, (2019) while memorable experience was evaluated with three questions adapted from Stokburger-Sauer et al., (2012). Satisfaction was measured through three questions adapted from J. J. Kim

et al., (2020). Loyalty through three questions adapted from Chiu et al., (2016), and facility comfort through five questions adapted from Miranda et al., (2018). Responses to each question were collected using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data Analysis

The research was carried out through an online survey distributed to targeted respondents. Data screening was performed to identify any problematic respondents. As noted by Hair (2019), it is essential to detect issues with respondent data to prevent response bias, such as those who answer randomly or follow a specific pattern. From the survey distribution, a total of 246 respondents completed the questionnaire fully and met the criteria.

> Table 1. **Respondent Profile**

Description	Description	Total	Percentage
Gender	Male	164	66.67%
	Female	82	33.33%
Education	High school (and equivalent level)	101	41.06%
	D3/S1	133	54.07%
	S2/S3	12	4.88%
Work	Students	50	20.33%
	Government employees	57	23.17%
	TNI/POLRI	50	20.33%
	Private employees	89	36.18%

Source: SmartPLS Result 2023

As mentioned in Table 1, Respondent Profile, there were 164 male respondents, accounting for 66.67%, and 82 female respondents, making up 33.33%. This gender distribution indicates a higher participation from male respondents, which could reflect the general usage patterns of the Solo-Yogyakarta KRL service or the sample's specific demographic. However, the proportion of female respondents still provides valuable insights into their experiences and satisfaction with the service.

Regarding education level, 101 respondents, or 41.06%, had a high school education or equivalent, while 133 respondents, or 54.07%, held a D3/S1 degree. Additionally, 12 respondents, representing 4.88%, had a master's or doctoral degree. Most respondents with a D3/S1 degree suggest that the KRL service attracts an educated demographic, which may indicate higher expectations regarding service quality and infrastructure. The small percentage with advanced degrees might point to a more niche group with specific needs or usage patterns.

When examining occupation, 50 respondents were students (20.33%), 57 were civil servants (23.17%), another 50 were in the military or police (20.33%), and 89 were private employees (36.18%). The variety of occupations reflects a broad user base, with private employees making up the largest group, suggesting that the KRL service is widely used for commuting to work. The presence of students and civil servants indicates that the service also plays an important role in educational and government sectors, while the participation of military and police personnel suggests that the KRL service is perceived as a practical and accessible transportation option for individuals across different professions.



RESULTS AND DISCUSSIONS

Measurement Model Testing

Data analysis was conducted using PLS SEM with SMART PLS software Version 3.3.2. The testing process involved three key stages: internal consistency reliability, convergent validity, and discriminant validity. Internal consistency reliability was assessed using Cronbach's Alpha, which measures the extent to which items within a construct are consistently related. This is important because it ensures that the indicators used to measure each latent variable are reliable and accurately represent the underlying construct. A high Cronbach's Alpha value indicates that the items within a construct are cohesive, contributing to the overall reliability and robustness of the model and also enhances the confidence in the measurements used for further analysis and model testing.

Table 2.
Internal Consistency Reliability Testing

Variable	Cronbach Alpha	Description	
Entertainment	0.760	very good	
Facility	0.860	very good	
Loyalty	0.728	very good	
Memorable Experience	0.823	very good	
Satisfaction	0.914	very good	

Source: SmartPLS Result 2023

As mentioned in table 2. Internal consistency reliability testing, indicate a reliability value exceeding 0.7. According to Hair (2017), a Cronbach's alpha score above 0.7 is classified as very good. Therefore, it can be concluded that all variables successfully passed the internal consistency reliability test. Convergent validity is assessed by examining the values of the Reliability Indicator (Outer Loading) and the Average Variance Extracted (AVE). According to Hair (2017), an outer loading score above 0.7 is considered very good, while an AVE value above 0.5 meets the criteria for being very good. Convergent validity is important because it ensures that the indicators used to measure a construct truly reflect the intended concept. High outer loading values and adequate AVE indicate that the construct's indicators collectively capture a significant portion of the variance in the latent variable, thus demonstrating that the measurement model is valid and reliable. Establishing convergent validity is essential for confirming that the items used in the research are accurately measuring the constructs they are intended to measure, which strengthens the credibility of the study's findings.

Table 3.
Convergent Validity Testing

Variable	Indicator	Loading Factor	Composite Reliability	AVE
	EntEx1	0.819		
Entartainment	EntEx2	0.750	0.848	0.582
Entertainment	EntEx3	0.753	0.040	
	EntEx4	0.727		
	FacCo1	0.762		0.643
Facility	FacCo2	0.849	0.900	
	FacCo3	0.847		

Variable	Indicator	Loading Factor	Composite Reliability	AVE
	FacCo4	0.704		
	FacCo5	0.838		
	Loy1	0.750		
Loyalty	Loy2	0.851	0.847	0.649
	Loy3	0.812		
	MemEx1	0.860		
Memorable Experience	MemEx2	0.862	0.894	0.739
	MemEx3	0.857		
	Sat1	0.934		
Satisfaction	Sat2	0.925	0.946	0.853
	Sat3	0.912		

Source: SmartPLS Result 2023

In Table 3. convergent validity testing shows that the outer loading values exceed 0.7 and the AVE values are above 0.5. This suggests that each variable and indicator demonstrates very good convergent validity. Table 4 discriminant validity testing presents the results of the Discriminant Validity Testing using the Fornell-Larcker criteria, as outlined by Hair (2017). The square root of the AVE for each construct (diagonal values) is greater than the correlations between constructs (off-diagonal values), confirming that each construct is more closely related to its own indicators than to other constructs. This meets the criteria for discriminant validity, indicating that the constructs are distinct and not highly correlated, ensuring the integrity of the model's structure

> Table 4. Discriminant Validity Testing

Discriminant validity resting					
Variable	1	2	3	4	5
Entertainment	0.763	0.000	0.000	0.000	0.000
Facility	0.543	0.802	0.000	0.000	0.000
Loyalty	0.647	0.579	0.805	0.000	0.000
Memorable Experience	0.651	0.651	0.688	0.859	0.000
Satisfaction	0.560	0.857	0.550	0.655	0.924

Source: SmartPLS Result 2023

Structural Model Evaluation

The next step, after evaluating the measurement model, is to assess the structural model to test the hypotheses proposed earlier. The structural model aims to examine the relationships between the latent variables, specifically focusing on both the direct and indirect effects. This analysis helps to determine whether the proposed paths between variables are supported by the data, providing insights into the causal relationships and the strength of the connections among the constructs in the research model.

JMPP

FacCo1 23.179 47,720 **←** 58.629 20.107 48.189 Facility FacCo5 19.321 **←** 123.305 **←**88.111 88.691 36.112 Satisfaction 2.040 Loyalty 42.982 MemEx2 ← 43.851 1.638 4.073 Memorable EntEx1 31.887 **17.699** 21.220 18.613 EntEx4 Entertainment

Figure 1. Structural Model Testing

Source: SmartPLS Result 2023

The complete results of hypothesis testing can be seen in the following table:

Table 5. Hypothesis testing results

Hypothesis testing results						
Hipotesis	Sample	Standard	T-Test	р	Status	
Theoresis	Mean	Mean Deviation	1-1630	Value	Jiaius	
Entertainment → Loyalty	0.316	0.078	4.073	0.000	Significant	
Entertainment \rightarrow Satisfaction	0.081	0.050	1.638	0.102	Not	
					significant	
Facility → Loyalty	0.198	0.104	1.902	0.058	Not	
					significant	
Facility → Satisfaction	0.732	0.038	19.321	0.000	Significant	
Memorable Experience ->	0.386	0.090	4.310	0.000	Significant	
Loyalty						
Memorable Experience ->	0.125	0.062	2.040	0.042	Significant	
Satisfaction						
Satisfaction → Loyalty	-0.049	0.103	0.476	0.634	Not	
					significant	

Source: SmartPLS Result 2023

In Figure 1 structural model testing and Table 5. Hypothesis testing results reveal key insights into the relationships among Entertainment Experience, Facilities, Memorable Experience, Satisfaction, and Loyalty. Entertainment Experience significantly influences Loyalty (t = 4.073, p

= 0.000), indicating that engaging and enjoyable experiences strongly drive customer loyalty, However, it does not significantly affect Satisfaction (t = 1.638, p = 0.102), suggesting other factors may weigh more in shaping satisfaction. These results are diverge from the findings of Shekhar Kumar et al., (2013), Khan & Rahman, (2016), and Akoglu & Özbek, (2022) who observe that entertainment experiences have a positively strong influence on satisfaction. In the context of this research, satisfaction is described as the level of pleasure and fulfillment consumers feel (Zailani et al., 2016) specifically concerning the Jogja-Solo KRL. This difference may be attributed to the unique needs and priorities of the target demographic, primarily workers and students who rely on the KRL as their primary mode of transportation. This is feasible given that the majority of KRL users are workers and students who rely on KRL as their primary mode of transportation. For these users, practical needs such as safety, reliability, and punctuality are paramount. The KRL fulfills their need for security, as it is perceived as a safer mode of transportation compared to alternatives. Additionally, its ability to facilitate timely arrivals supports their broader daily objectives, such as attending work or school. In this context, the functional aspects of the KRL experience such as its reliability and safety may overshadow entertainment in shaping satisfaction. Users are likely to prioritize the fulfillment of these practical needs over entertainment, which might be perceived as a secondary or less critical element of their commuting experience. This explains why, in this study, entertainment experiences do not have a significant influence on customer satisfaction.

Facilities significantly impact Satisfaction (t = 19.321, p = 0.000), emphasizing their critical role in meeting customer expectations and ensuring a positive experience. High-quality facilities such as cleanliness, comfort, accessibility, and modern amenities—directly address basic customer needs, creating an environment that enhances satisfaction by aligning with users' goals and preferences. This aligns with findings from Carranza et al., (2018), Abdullah et al., (2021), Uzir et al., (2021), S. Kim et al., (2013) and Helgesen, (2008) all of whom affirm the strong relationship between service quality and satisfaction. However, it shows non-significant influence of facilities on Loyalty (t = 1.902, p = 0.058) which suggests that while facilities contribute to satisfaction, they may not inspire long-term loyalty. Facilities might function as hygiene factors essential for avoiding dissatisfaction but insufficient to create emotional bonds or sustained customer allegiance. To explain this weak connection, mediating variables such as satisfaction or customer experience could clarify whether emotional or relational dimensions are needed to strengthen the pathway from satisfaction to loyalty. Moderating variables like perceived value, frequency of use, or customer expectations might also play a role, as high quality facilities could have varying effects based on customer perceptions or usage patterns. Addressing these factors can help clarify how facilities can be leveraged not only to satisfy customers but also to foster loyalty.

Memorable Experiences significantly enhance both Satisfaction (t = 2.040, p = 0.042) and Loyalty (t = 4.310, p = 0.000), underscoring the importance of creating emotionally impactful and unique experiences that leave lasting impressions. This finding aligns with previous study by Azis et al., (2020), Isa et al., (2018), Serra-Cantallops et al., (2018), Wang et al., (2016); M. Kim & Thapa, (2018) which emphasize that memorable experiences play a significant role in driving satisfaction. In the context of the Solo-Jogja KRL, such experiences are reflected in the comfort, convenience, and efficiency that passengers associate with this mode of transportation. According to Anne Purba, Vice President and Corporate Secretary of KAI Commuter, daily ridership ranges from 14,000 to 18,000 on weekdays and increases to 23,000 to 27,000 on holidays, showcasing the growing preference for KRL among commuters. This consistent ridership growth demonstrates that passengers value the KRL not only for its functional benefits

such as speed and reliability but also for the positive experiences it delivers, which contribute to customer satisfaction and encourage long-term loyalty.

Interestingly, Satisfaction does not significantly influence Loyalty (t = 0.476, p = 0.634), indicating that while satisfaction is important, it does not automatically translate into customer loyalty without additional factors such as entertainment or memorable experiences. These findings suggest that businesses should prioritise creating engaging and memorable experiences alongside maintaining high-quality facilities to effectively foster both satisfaction and loyalty. This reinforces the understanding that customers of the Jogja-Solo KRL primarily utilise this mode of transport to meet their essential travel needs. The majority of KRL users are workers and students who regard it as a safer option compared to other forms of transportation. Consequently, customers choose the KRL to ensure a safe and reliable journey to their destinations, enabling them to undertake activities that address their broader needs, as outlined in Maslow's hierarchy of needs.

CONCLUSIONS

The study reveals that Entertainment Experience strongly influences Loyalty but not Satisfaction, reflecting the practical priorities of KRL users, primarily workers and students who prioritise safety, reliability, and punctuality over leisure. Facilities significantly impact Satisfaction by addressing essential needs such as cleanliness and comfort but have limited influence on Loyalty, indicating that while necessary, they are not sufficient to foster long-term commitment. Memorable Experiences, however, are crucial, enhancing both Satisfaction and Loyalty by creating unique and emotionally impactful travel moments. Notably, Satisfaction does not directly drive Loyalty, highlighting the importance of deeper, more engaging experiences to cultivate customer allegiance. Therefore, it is recommended that PT KAI prioritises enhancements that balance functional efficiency with emotionally engaging features to meet customer expectations and foster long-term loyalty.

This research has several limitations that should be addressed in future studies. First, it does not account for the varying purposes of KRL usage, such as commuting for work, studying, or leisure travel. Future research could explore whether passengers' objectives influence their perceptions and behaviours, potentially yielding different analytical results. Second, the study focuses solely on individuals who have already used KRL services. It would be valuable to investigate differences in behaviour between frequent and infrequent users to better understand diverse customer segments. Third, this research primarily examines service quality and user experience with loyalty. Expanding the model to include additional variables such as Trust, Customer Engagement, and Electronic Word-of-Mouth (E-WoM) could provide a more comprehensive understanding of the factors driving loyalty among KRL users.

ACKNOWLEDGEMENT

The research was supported by the Local Wisdom Research Group and Research Institute and Community Service (LPPM) Universitas Sebelas Maret Research Group Grant 2024. with contract number 202/UN27.22/PT.01.03/2024

REFERENCES

Abdullah, M., Ali, N., Dias, C., Campisi, T., & Javid, M. A. (2021). Exploring the Traveler's Intentions to Use Public Transport during the COVID-19 Pandemic While Complying with Precautionary Measures. *Applied Sciences*, 11(8), 3630. https://doi.org/10.3390/app11083630

- Akoglu, H. E., & Özbek, O. (2022). The effect of brand experiences on brand loyalty through perceived quality and brand trust: a study on sports consumers. Asia Pacific Journal of Marketing and Logistics, 34(10), 2130-2148. https://doi.org/10.1108/APJML-05-2021-
- An, M., Lee, C., & Noh, Y. (2010). Risk factors at the travel destination: their impact on air travel satisfaction and repurchase intention. Service Business, 4(2), https://doi.org/10.1007/s11628-010-0094-2
- Azis, N., Amin, M., Chan, S., & Aprilia, C. (2020). How smart tourism technologies affect tourist destination loyalty. Journal of Hospitality and Tourism Technology, 11(4), 603-625. https://doi.org/10.1108/JHTT-01-2020-0005
- Campón-Cerro, A. M., Hernández-Mogollón, J. M., & Alves, H. (2017). Sustainable improvement of competitiveness in rural tourism destinations: The quest for tourist loyalty in Spain. Journal of Destination Marketing & Management, 6(3), 252-266. https://doi.org/10.1016/j.jdmm.2016.04.005
- Carranza, R., Díaz, E., & Martín-Consuegra, D. (2018). The influence of quality on satisfaction and customer loyalty with an importance-performance map analysis. Journal of Hospitality and Tourism Technology, 9(3), 380-396. https://doi.org/10.1108/JHTT-09-2017-0104
- Cassidy, R. (2014). Linking Brand Orientation with Service Quality, Satisfaction, and Positive Word-of-Mouth: Evidence from the Higher Education Sector. Journal of Nonprofit & Public Sector Marketing, 26(2), 142–161. https://doi.org/10.1080/10495142.2014.901004
- Chindyana, A., Romadlon, F., & Ananda, R. (2022). POTENSI PENINGKATAN KUALITAS LAYANAN KERETA REL LISTRIK SOLO-JOGJA BERBASIS POLA MOBILITAS KOMUTER. Jurnal Transportasi, 22(2), 131-142. https://doi.org/10.26593/jtrans.v22i2.6063.131-142
- Chiu, W., Zeng, S., & Cheng, P. S.-T. (2016). The influence of destination image and tourist satisfaction on tourist loyalty: a case study of Chinese tourists in Korea. International Journal of Culture, Tourism and Hospitality Research, 10(2), 223–234. https://doi.org/10.1108/IJCTHR-07-2015-0080
- Cooper, D., & Schindler, P. (2013). Business Research Methods 12th Edition. New York, McGraw-Hill/Irwin.
- De Angelis, M., Mantecchini, L., & Pietrantoni, L. (2021). A Cluster Analysis of University Commuters: Attitudes, Personal Norms and Constraints, and Travel Satisfaction. International Journal of Environmental Research and Public Health, 18(9), 4592. https://doi.org/10.3390/ijerph18094592
- De Vos, J., Singleton, P. A., & Gärling, T. (2022). From attitude to satisfaction: introducing the travel mode choice cycle. Transport Reviews, 42(2), 204-221. https://doi.org/10.1080/01441647.2021.1958952
- De Vos, J., Waygood, E. O. D., Letarte, L., & Cao, M. (2022). Do frequent satisfying trips by public transport impact its intended use in later life? Transportation, 49(4), 1245-1263. https://doi.org/10.1007/s11116-021-10209-0
- De Vos, J., & Witlox, F. (2017). Travel satisfaction revisited. On the pivotal role of travel satisfaction in conceptualizing a travel behavior process. Transportation Research Part A: Policy and Practice, 106, 364-373. https://doi.org/10.1016/j.tra.2017.10.009
- Devera Asrar, L., & Adhari, F. (n.d.). KAPASITAS GARDU TRAKSI MENGURANGI HEADWAY OPERASIONAL KRL JALUR YOGYAKARTA LINTAS SOLO-KLATEN.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis 8th Edition, Cengage Learning.
- Han, H., Kiatkawsin, K., Jung, H., & Kim, W. (2018). The role of wellness spa tourism performance in building destination loyalty: the case of Thailand. Journal of Travel & Tourism Marketing, 35(5), 595-610. https://doi.org/10.1080/10548408.2017.1376031

- Helgesen, Ø. (2008). Marketing for Higher Education: A Relationship Marketing Approach. *Journal of Marketing for Higher Education*, 18(1), 50–78. https://doi.org/10.1080/08841240802100188
- Hou, Z., Liang, L. J., Meng, B., & Choi, H. C. (2021). The Role of Perceived Quality on High-Speed Railway Tourists' Behavioral Intention: An Application of the Extended Theory of Planned Behavior. *Sustainability*, *13*(22), 12386. https://doi.org/10.3390/su132212386
- Hwang, J., & Lee, J. (Jay). (2019). A strategy for enhancing senior tourists' well-being perception: focusing on the experience economy. *Journal of Travel & Tourism Marketing*, 36(3), 314–329. https://doi.org/10.1080/10548408.2018.1541776
- Isa, S. M., Chin, P. N., & Mohammad, N. U. (2018). Muslim tourist perceived value: a study on Malaysia Halal tourism. *Journal of Islamic Marketing*, *9*(2), 402–420. https://doi.org/10.1108/JIMA-11-2016-0083
- Jeong, Y., & Kim, S. (2019). A study of event quality, destination image, perceived value, tourist satisfaction, and destination loyalty among sports tourists. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 940–960. https://doi.org/10.1108/APJML-02-2019-0101
- Khan, I., & Rahman, Z. (2016). E-tail brand experience's influence on e-brand trust and e-brand loyalty. *International Journal of Retail & Distribution Management*, 44(6), 588–606. https://doi.org/10.1108/IJRDM-09-2015-0143
- Kim, J. J., Hwang, J., & Kim, I. (2020). Congruent charitable cause sponsorship effect: Air travelers' perceived benefits, satisfaction, and behavioral intention. *Journal of Hospitality and Tourism Management*, 42, 190–198. https://doi.org/10.1016/j.jhtm.2020.01.004
- Kim, M., & Thapa, B. (2018). Perceived value and flow experience: Application in a nature-based tourism context. *Journal of Destination Marketing & Management*, 8, 373–384. https://doi.org/10.1016/j.jdmm.2017.08.002
- Kim, S., Holland, S., & Han, H. (2013). A Structural Model for Examining how Destination Image, Perceived Value, and Service Quality Affect Destination Loyalty: a Case Study of Orlando. *International Journal of Tourism Research*, 15(4), 313–328. https://doi.org/10.1002/jtr.1877
- Kormos, C., Sussman, R., & Rosenberg, B. (2021). How Cities Can Apply Behavioral Science to Promote Public Transportation Use. *Behavioral Science & Policy*, 7(1), 95–115. https://doi.org/10.1177/237946152100700108
- Lee, K., & Kim, J. (2016). World culture festivals: Their perceived effect on and value to domestic and international tourism. *Journal of Psychology in Africa*, 26(5), 443–448. https://doi.org/10.1080/14330237.2016.1219551
- Lin, Y.-H., Lee, Y.-C., & Wang, S.-C. (2012). Analysis of motivation, travel risk, and travel satisfaction of Taiwan undergraduates on work and travel overseas programs: Developing measurement scales. *Tourism Management Perspectives*, 2–3, 35–46. https://doi.org/10.1016/j.tmp.2012.01.002
- Matsuoka, K., Hallak, R., Murayama, T., & Akiike, A. (2017). Examining the Effects of Perceived Quality, Value, Satisfaction, and Destination Loyalty in Shiogama, Japan. *Tourism Review International*, 21(1), 3–16. https://doi.org/10.3727/154427217X14858894687432
- Miranda, S., Tavares, P., & Queiró, R. (2018). Perceived service quality and customer satisfaction:

 A fuzzy set QCA approach in the railway sector. *Journal of Business Research*, 89, 371–377. https://doi.org/10.1016/j.jbusres.2017.12.040
- Permatasari, D. (2017). Customer satisfaction towards the service quality of Tawang Alun Malang-Banyuwangi Train. *IOP Conference Series: Earth and Environmental Science, 70,* 012009. https://doi.org/10.1088/1755-1315/70/1/012009
- Prasetyo, A. D., Pitana, T. S., & Gunawan, G. (2018). THE CONCEPT OF HARMONY BY CONTRAST IN ARCHITECTURE ON THE DEVELOPMENT OF PURWOSARI STATION AREA. ARSITEKTURA, 16(1), 77. https://doi.org/10.20961/arst.v16i1.20020

- Rasoolimanesh, S. M., Seyfi, S., Rather, R. A., & Hall, C. M. (2022). Investigating the mediating role of visitor satisfaction in the relationship between memorable tourism experiences and behavioral intentions in heritage tourism context. Tourism Review, 77(2), 687-709. https://doi.org/10.1108/TR-02-2021-0086
- Redman, L., Friman, M., Gärling, T., & Hartig, T. (2013). Quality attributes of public transport that attract car users: A research review. Transport Policy, https://doi.org/10.1016/j.tranpol.2012.11.005
- Saribanon, E., Simarmata, J., Yuliantini, Y., Wardana, A., & Ramdhany, M. A. (2024). Customer Satisfaction and Logistics Company Reputation through Supply Chain Disruption Management. Jurnal Manajemen Pelayanan Publik, 8(2), 291-306. https://doi.org/10.24198/jmpp.v8i2.51109
- Scaglione, A., & Mendola, D. (2017). Measuring the perceived value of rural tourism: a field survey in the western Sicilian agritourism sector. Quality & Quantity, 51(2), 745-763. https://doi.org/10.1007/s11135-016-0437-8
- Sekaran, U. & Bougie, R. (2016). Research Methods for Business: A Skill-Building Approach. 7th Edition, Wiley & Sons, West Sussex.
- Sener, I. N., Lee, K., Durand, C. P., O. Oluyomi, A., & Kohl, H. W. (2020). Intention to use light-rail transit in Houston, Texas, United States: Findings from the travel-related activity in neighborhoods study. International Journal of Sustainable Transportation, 14(12), 944-955. https://doi.org/10.1080/15568318.2019.1663962
- Serra-Cantallops, A., Ramon-Cardona, J., & Salvi, F. (2018). The impact of positive emotional experiences on eWOM generation and loyalty. Spanish Journal of Marketing - ESIC, 22(2), 142-162. https://doi.org/10.1108/SJME-03-2018-0009
- Shekhar Kumar, R., Dash, S., & Chandra Purwar, P. (2013). The nature and antecedents of brand equity and its dimensions. Marketing Intelligence & Planning, 31(2), 141-159. https://doi.org/10.1108/02634501311312044
- Sirgy, M. J. (2010). Toward a Quality-of-Life Theory of Leisure Travel Satisfaction. Journal of Travel Research, 49(2), 246–260. https://doi.org/10.1177/0047287509337416
- So, K. K. F., King, C., Sparks, B. A., & Wang, Y. (2013). The influence of customer brand identification on hotel brand evaluation and loyalty development. International Journal of Hospitality Management, 34, 31–41. https://doi.org/10.1016/j.ijhm.2013.02.002
- Stokburger-Sauer, N., Ratneshwar, S., & Sen, S. (2012). Drivers of consumer-brand identification. International Journal of Research in Marketing, 29(4), 406-418. https://doi.org/10.1016/j.ijresmar.2012.06.001
- Uzir, M. U. H., Al Halbusi, H., Thurasamy, R., Thiam Hock, R. L., Aljaberi, M. A., Hasan, N., & Hamid, M. (2021). The effects of service quality, perceived value and trust in-home delivery service personnel on customer satisfaction: Evidence from a developing country. Journal of Retailing and Consumer Services, 63, 102721. https://doi.org/10.1016/j.jretconser.2021.102721
- Wang, B., Yang, Z., Han, F., & Shi, H. (2016). Car Tourism in Xinjiang: The Mediation Effect of Perceived Value and Tourist Satisfaction on the Relationship between Destination Image and Loyalty. Sustainability, 9(1), 22. https://doi.org/10.3390/su9010022
- Yuniati, I. (2022). Pengguna KRL Solo-Jogja Melonjak pada Desember, Capai 9000/Hari. 4 Januari.
- Zailani, S., Iranmanesh, M., Masron, T. A., & Chan, T.-H. (2016). Is the intention to use public transport for different travel purposes determined by different factors? Transportation Research Part D: Transport and Environment, 49, 18-24. https://doi.org/10.1016/j.trd.2016.08.038
- Zhang, X., Liu, D., Wang, Y., & Du, H. (2021). Behavioral Intentions of Urban Rail Transit Passengers during the COVID-19 Pandemic in Tianjin, China: A Model Integrating the Theory of Planned Behavior and Customer Satisfaction Theory. Journal of Advanced

Transportation, 2021, 1–12. https://doi.org/10.1155/2021/8793101

Zulganef, Z.-, Pratminingsih, S. A., & Purwaningdyah, S. W. S. (2024). Increasing Public Loyalty through Trust in The Police: The Case Of The Police In Indonesia. Jurnal Manajemen Pelayanan Publik, 8(2), 417–432. https://doi.org/10.24198/jmpp.v8i2.53272