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# REDESIGNING TRA CONCEPT TO ASSESS MILLENNIALS' INTENTION TO USE PUBLIC TRANSPORTATION SERVICES IN INDONESIA

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**Abstract:** This study attempts to re-design the original concept of the theory of reasoned action (TRA) in order to explain millennials' intention to use public transportation services in Indonesia. Using quantitative-survey method, a total of 137 respondents participated in this study. Respondents are millennials living in Indonesia who had used public transportation services (trains, buses, or MRT) regularly over the past 6 months. Using PLS, authors concluded that all three antecedents, namely attitude, perceived service affordability and subjective norms significantly influence millennials' intention to use public transportation services in Indonesia.

**Keywords:** Attitude, Perceived Service Affordability, Subjective Norms, Intention to Use Public Transportation Services, Theory of Reasoned Action (TRA)

**Abstrak:** Penelitian ini mencoba untuk mengembangkan konsep dasar dari *theory of reasoned action* (TRA) guna menjelaskan keinginan dari para generasi milenial di dalam menggunakan jasa transportasi umum yang tersedia di Indonesia. Menggunakan metode survei-kuantitatif, sebanyak 137 responden berpartisipasi pada penelitian ini. Adapun para responden merupakan individu yang telah menggunakan jasa transportasi umum di Indonesia (baik bus, kereta ataupun MRT) secara berkala dalam kurun waktu 6 bulan terakhir. Dengan menggunakan metode PLS, peneliti menyimpulkan bahwa ketiga faktor, yaitu *attitude*, *perceived service affordability*, dan *subjective norms*, secara signifikan memengaruhi intensi para kaum milenial di dalam menggunakan jasa transportasi umum di Indonesia.

**Kata Kunci:** *Attitude, Perceived Service Affordability, Subjective Norms, Intention to Use Public Transportation Services, Theory of Reasoned Action (TRA)*

## INTRODUCTION

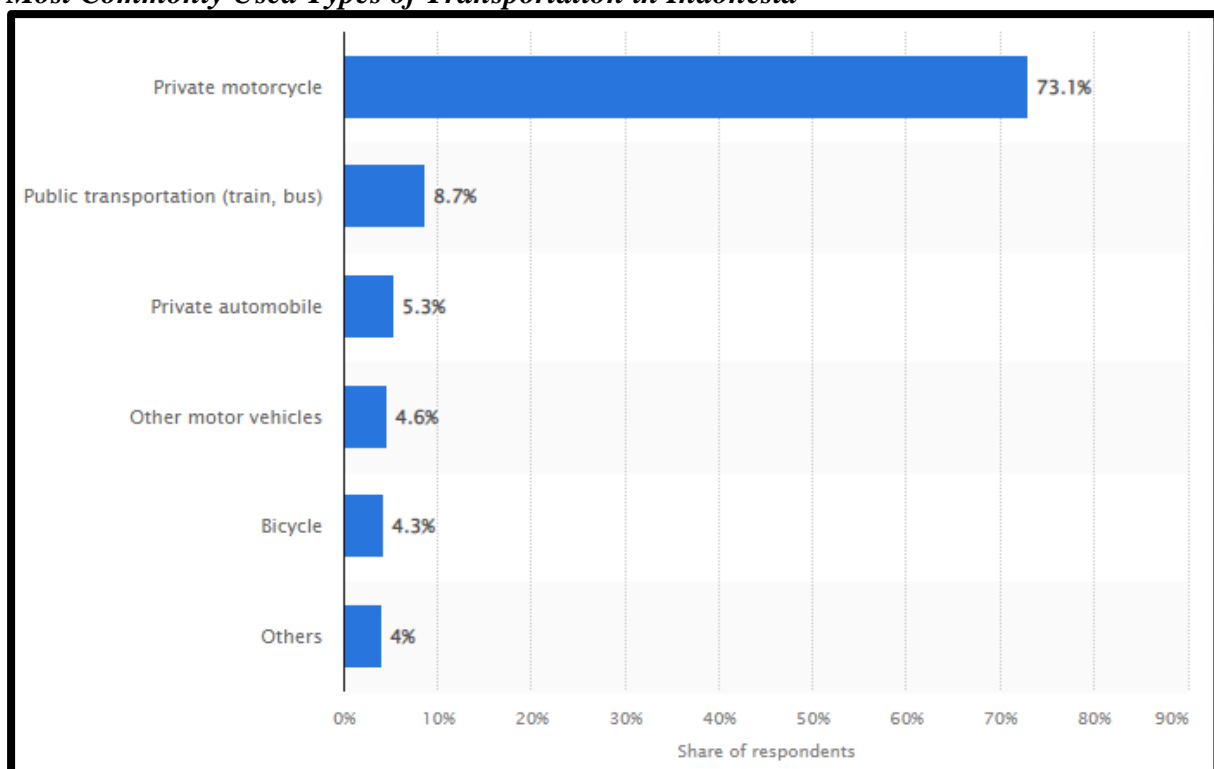
### Research Background

Public transportation services in Asia vary widely, ranging from modern and efficient systems in countries like Japan and South Korea to overcrowded and unreliable systems in others. However, in recent years there has been a growing focus on improving public transportation in many Asian countries, including Indonesia. Indonesia's public transportation system is largely based on buses, with both traditional and modern air-conditioned buses operating in cities and towns across the country. However, the quality and reliability of these buses vary widely, with many lacking proper maintenance and infrastructure. This has led to issues such as overcrowding, long waiting times, and frequent breakdowns. To address these issues, the Indonesian government has launched a number of initiatives aimed at improving the country's public transportation system. One of the most notable of these is the TransJakarta bus rapid transit system, which began operating in Jakarta in 2004. The TransJakarta system consists of dedicated bus lanes and modern, air-conditioned buses, providing a more reliable

and efficient option for commuters in the city (Sukmana, 2023). In addition to the TransJakarta system, the Indonesian government has also invested in other public transportation infrastructure such as the Jakarta MRT (mass rapid transit) system, which began operating in 2019 (JakartaMRT.co.id, 2023). The MRT provides a faster and more convenient option for commuters in the city, and has helped to reduce traffic congestion in some areas.

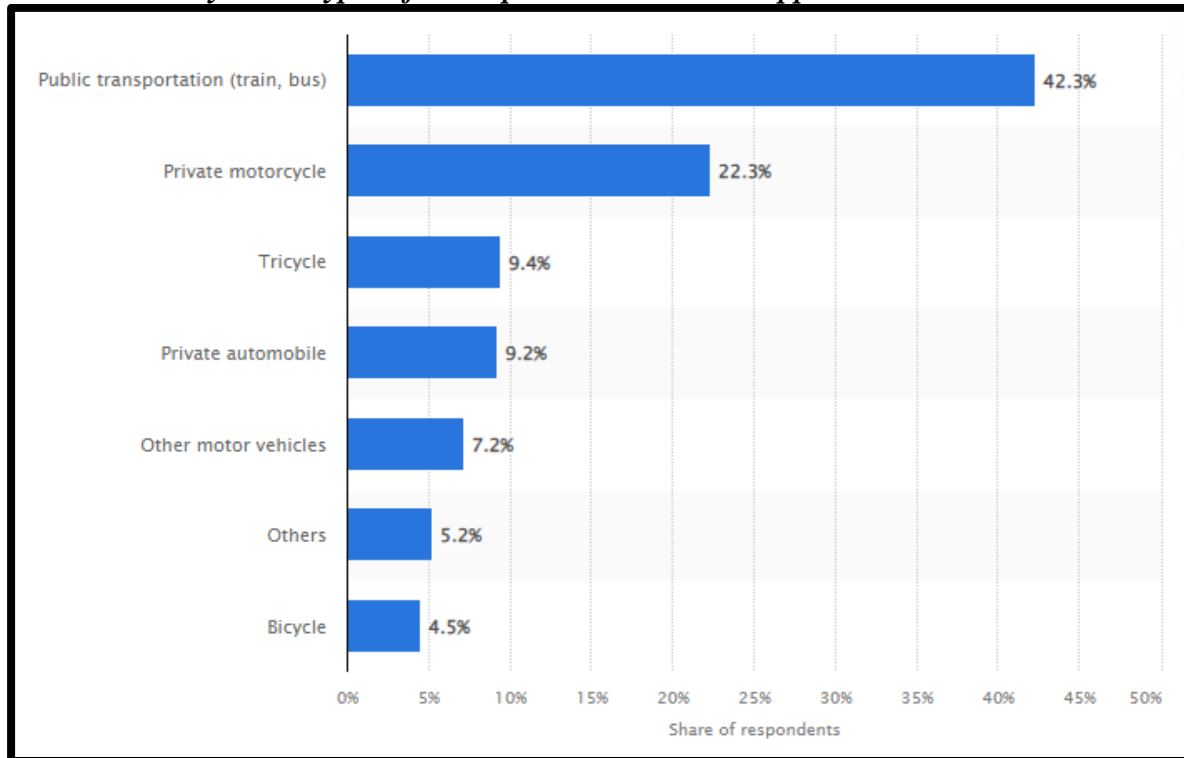
Although there have been some improvements, the utilization of public transportation in Indonesia lags behind that of other countries in the region. One reason which could explain the low usage of public transportation in Indonesia is the prevalence of private vehicles, particularly motorcycles, as the primary means of transport. Motorcycles are deemed to be more convenient and adaptable, enabling riders to navigate through congested roads and narrow streets. This view is further substantiated by the statistical data published by Statista.com (2022), which revealed that over half of Indonesians (73.1%) preferred private motorcycles as their primary mode of transportation compared to public transportation such as trains or buses, which was only the primary mode of transportation for 8.7% of Indonesians. These data indicate that Indonesians' willingness or intention to utilize public transportation is significantly lower than that of other Southeast Asian countries such as the Philippines. In contrast to Indonesia, the majority of people in the Philippines (42.3%) rely on public transportation modes such as trains or buses, while only 22.3% of the population uses private motorcycles.

**Figure 1**  
**Most Commonly Used Types of Transportation in Indonesia**



Source: Statista.com (2022)

**Figure 2**  
**Most Commonly Used Types of Transportation in the Philippines**



Source: Statista.com (2022)

Despite the prevailing preference for private vehicles in Indonesia, a preliminary study conducted by the authors highlighted a noteworthy difference between millennials and centennials regarding their willingness to use public transportation services. Out of the 185 millennials selected at random, more than half (123 respondents) reported relying on public transportation as their primary mode of transportation for daily activities, indicating a higher propensity among millennials to use public transportation services. Therefore, the authors aimed to investigate the factors that drive millennials to opt for public transportation over other modes of transportation in Indonesia.

One popular theory which had been extensively used by numerous authors to explain people's intention or willingness to do a specific behavior. The theory of reasoned action (TRA) is a social psychological model that explains how individuals make decisions and take action based on their attitudes and beliefs. The theory was first proposed by Fishbein and Ajzen (1975) and has since been widely used in various fields, including health psychology, marketing, and communication. The TRA suggests that an individual's behavior is determined by their intentions to engage in that behavior, and their intentions are influenced by their attitudes and subjective norms. Attitudes refer to an individual's positive or negative evaluation of a particular behavior (Annamdevula *et al.*, 2023). When an individual holds a positive attitude toward a behavior, they are more likely to intend to engage in that behavior. Conversely, when an individual holds a negative attitude toward a behavior, they are less likely to intend to engage in that behavior (Ding *et al.*, 2023).

Meanwhile, subjective norms refer to the perceived social pressure to perform or not perform that behavior. Formed through an individual's perceptions of what significant others (such as family members, friends, or coworkers) believe they should or should not do, subjective norms play a critical role in shaping an individual's intentions to engage in a particular behavior. When an individual perceives that important others believe they should engage in a behavior, they are more likely to intend to engage in that behavior. Conversely,

when an individual perceives that important others believe they should not engage in a behavior, they are less likely to intend to engage in that behavior.

While TRA had been extensively and repeatedly used by various researchers to predict people's willingness to perform a behavior, however, most of these studies seem to utilize TRA in order to explain people's willingness to buy or consume eco-friendly products, while studies which attempt to adopt TRA to explain people's intention to use public transportation services seem to be rare. For example, previous studies by Troudi and Bouyoucef (2020), Liu *et al.* (2017), Sukhu and Scharff (2018), Abu-Elsamen *et al.* (2019), and Sharma and Foropon (2019) tried to adopt TRA in order to explain consumers' behavior in purchasing or buying eco-friendly (green) products, while another studies not discussing about green products had tried to use TRA framework in order to assess consumers' intention to buy luxury fashion products (Lau *et al.*, 2023), tax compliance behaviour of small businesses in developing country (Kiconco *et al.*, 2019), consumers' intention to use Islamic rural banks' services (Effendi *et al.*, 2021), and to determine architects' willingness to share knowledge (Zhikun and Fungfai, 2009). However, none of these studies had attempted to adopt the concept of TRA in order to explain why people are willing to use public transportation services as opposed to the other similar mode of transportation available within a country.

Furthermore, this study also attempted to expand the original framework of TRA by integrating perceived service affordability as another additional factors which could determine millennials' willingness to use public transportation services in Indonesia. Service affordability refers to the extent to which a service is priced within the financial means of potential customers. It is an important factor that influences consumers' intention to use or purchase a service (Biswas, 2023). Affordability is a critical component of service quality because it determines the perceived value of the service and the ability of the customers to afford it. When a service is affordable, it is more likely to be perceived as a good value for money, which can positively affect consumers' intention to use it. Customers are more likely to engage with services that they perceive as offering good value and that are within their budget (Maouloud *et al.*, 2021). On the other hand, if a service is too expensive, it may be perceived as a luxury item that only a few can afford, which can limit the potential market and affect the service's success. Therefore, based on these explanations, authors attempt to expand the original concept of TRA by adding perceived service affordability as another factor which can determine one's intention to use public transportation service in Indonesia.

### **Purpose of the Study**

This research attempt to utilize the modified TRA framework in order to empirically explain intention to use public transportation services among millennials in Indonesia. In this case, other than the original factors within the TRA framework (attitudes and subjective norms), perceived service affordability was also integrated into this framework as another variable which was hypothesized can affect people's willingness to use public transportation services.

## **LITERATURE REVIEW**

### **The Theory of Reasoned Action (TRA)**

The theory of reasoned action (TRA) is a framework designed to explain and predict human behavior based on attitudes and beliefs. The TRA posits that an individual's intention to perform a particular behavior is the primary factor influencing their actual behavior. This intention is shaped by two factors: attitude toward the behavior and subjective norms (Sukhu and Scharff, 2018). Attitude refers to an individual's evaluation of whether a behavior is positive or negative, based on their beliefs about the outcomes of that behavior. For instance, an individual may hold a favorable attitude towards using public transportation because they believe it is a convenient and eco-friendly option. In contrast, a negative attitude may stem from concerns about the cost, time, or comfort associated with public transportation. Moreover,

subjective norms refer to an individual's perception of the social pressure to perform or avoid a behavior (Effendi *et al.*, 2021). These norms arise from the beliefs about what important others think about the behavior and the motivation to comply with them. For example, an individual might feel compelled to use public transportation due to the positive opinions of their friends and family members (Ding *et al.*, 2023). Alternatively, they may be influenced by broader social norms regarding transportation, such as the promotion of sustainable travel modes. Overall, the TRA posits that attitudes and subjective norms are crucial determinants of an individual's intention to perform a behavior. The theory has been applied in a variety of contexts, including health, marketing, and environmental studies, to predict and explain different behaviors (Wallace and Buil, 2023; Ong *et al.*, 2023).

### **Perceived Service Affordability**

Service affordability refers to the ability of consumers to access and utilize services at a cost that is manageable and reasonable in relation to their income and budget (Salim *et al.*, 2022; Omer and Chen, 2023). This concept is essential in ensuring that services are accessible to a broad range of customers, including those with limited financial resources. Affordability plays a crucial role in determining the willingness of customers to use a service or product, and in turn, affects the demand for these offerings (Wu and Corpus, 2023). In this case, when customers feel that they are getting a good deal for their money, their intention to use the service is likely to increase. This is especially true when the price is affordable and competitive compared to other alternatives offering similar services. In fact, customers are more likely to use the service when they believe that they are getting a high level of value for their money. Therefore, it is essential for service providers to understand that pricing plays a critical role in the perception of the value of their services. Bismas (2023) further argue that when such providers are able to offer reasonable, competitive and appropriate pricing, it signals to customers that they are committed to providing a high level of service which can lead to increased intention to use the same services repeatedly in the future. In general, customers' perceptions of service affordability are influenced by factors such as their income level, the price of competing services, and their expectations of the value provided by the service (Maouloud *et al.*, 2021). Additionally, customers may have different perceptions of affordability based on their specific needs and preferences, making it essential for service providers to tailor their pricing and promotional strategies to meet diverse customer needs (Sahli and Legohereh, 2016).

### **Intention**

Intention is a fundamental concept in marketing, referring to a customer's plan or desire to engage in a particular behavior or action (Kim and Park, 2023; Sun *et al.*, 2023). Intention is a key predictor of behavior, as it reflects the level of motivation and commitment a customer has towards a specific product or service. Intention can be influenced by a range of factors, including personal beliefs, attitudes, social norms, and perceived benefits and costs (Upadhyay and Kamble, 2023). In the context of business, understanding a customer's intention is critical for developing effective business strategies. By identifying the underlying motivations and goals that drive customer behavior, companies can tailor their messaging and offerings to align with those intentions. This can help to increase the likelihood that customers will engage with a brand or make a purchase (Bommer *et al.*, 2023). Furthermore, Li and Zhu (2022) stated that the importance of intention could also be highlighted from the fact that intention is closely linked to the concept of decision-making. In many cases, a customer's intention to purchase a product or service is a precursor to their actual decision to make a purchase. Understanding the factors that influence intention can help marketers to identify key decision-making points in the customer journey and develop strategies to optimize those moments. This can involve providing customers with more information, addressing their concerns or objections, or highlighting the benefits of a particular product or service. Ultimately, by leveraging the

concept of intention, marketers can improve their ability to connect with customers and drive positive business outcomes (Abbasi *et al.*, 2023; Mukherjee *et al.*, 2023)

### **The Impact of Attitude on Intention to Use Public Transportation Services**

Several studies have examined the relationship between attitude and purchase intention, and the results have consistently shown that attitude plays a significant role in determining purchase intention. A study by Jang and Cho (2022) found that attitude was a strong predictor of behavioral intention. It was found that consumers who had a positive attitude towards a product were more likely to have a higher purchase intention for that product. Moreover, another study by Gundala *et al.*, (2022) examined the relationship between attitude and purchase intention in the context of organic food. In this research, it was found that a positive attitude towards organic food was a significant predictor of purchase intention.

Next, further study by Adu-Gyamfi *et al.* (2023) examined the relationship between attitude and waste sorting intention among employees in Ghana. In this case, it was found that attitude was a significant predictor of employees' waste sorting intention. Overall, these studies provide strong evidence for the significance of attitude in determining behavioral intention, across a range of different products and contexts. Therefore, based on these previous findings, authors want to propose the following hypothesis:

H<sub>1</sub>: Attitude positively determine millennials' intention to use public transportation services in Indonesia

### **The Impact of Subjective Norm on Intention to Use Public Transportation Services**

Similar with attitude, several previous authors had also found the significance of subjective norm in determining one's intention to perform certain behavior. For example, previous study by Yasami *et al.*, (2022) found that subjective norm had a significant positive effect on international tourists' intentions to choose restaurants with contactless dining services as a protective behavior against COVID-19 in Thailand. In regard to this result, it can be understood that tourists were more likely to perform this behavior if they perceived social pressure to do so. Furthermore, another study by Johan *et al.*, (2020) also found that subjective norm is a significant predictor of people's intention to hold Shariah-compliant credit card (SCCC) in Malaysia. This result indicated that people were more likely to buy environmentally friendly products if they think that their colleagues or family will perceive that holding Shariah-compliant credit card (SCCC) was a positive thing to do. Based on these previous findings, authors want to propose the following hypothesis:

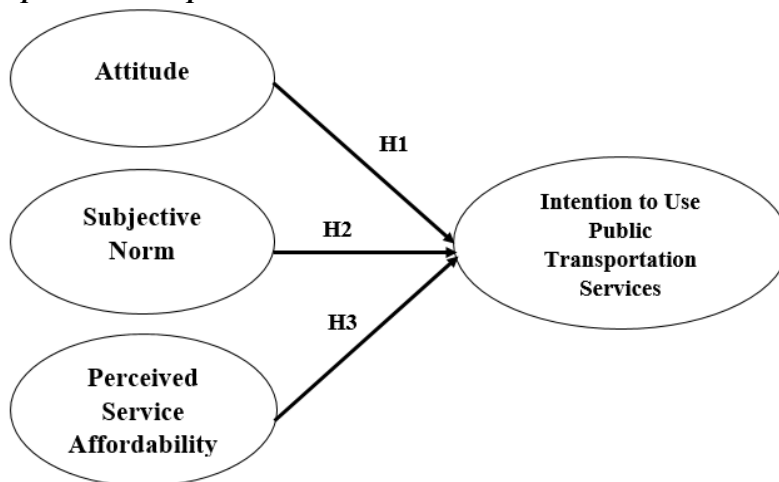
H<sub>2</sub>: Subjective norm positively determine millennials' intention to use public transportation services in Indonesia

### **The Impact of Perceived Service Affordability on Intention to Use Public Transportation Services**

Previous studies conducted by Nisar *et al.*, (2020), Adel *et al.* (2022), An and Ozturk (2022) uncovered the significance of consumers' perception regarding the price of the product in determining consumers' willingness to buy or use certain service. In regard to this finding, before paying for the product that they want to purchase, customers tend to assess whether or not the price that they have to pay was affordable or financially viable related to their economic or financial situation. In this case, when customers felt that the price set by the company for the product was too expensive (not affordable), then this judgement could ultimately weaken their willingness or intention to buy or use the product. In the contrary, when customers felt that the price set by the company for the product was within their financial reach (affordable), then such assessment could significantly strengthen their intention to buy or use the product. Based on these previous findings, authors want to propose the following hypothesis:

H<sub>3</sub>: Perceived service affordability positively determine millennials' intention to use public transportation services in Indonesia

**Figure 3**  
**Proposed Conceptual Framework**



Source: Troudi & Bouyoucef (2020), Wilson & Edelyn (2022), Biswas (2023)

## RESEARCH METHODOLOGY

All data for this study were collected from a total of 137 participants using an online survey distributed via Google Forms. Using purposive sampling method, the respondents in this study were restricted to millennials living in Indonesia who had used public transportation services regularly over the past 6 months. The public transportation services included public trains, buses, or MRT. Millennials (or Gen Y) are a generation of people born between the years 1981-1996. This group is typically characterized by their use and familiarity with technology, their willingness to challenge traditional social norms, and their desire for work-life balance. Respondents were asked to rate a series of statements and questions using a 7-point Likert scale, which ranged from strongly disagree to strongly agree. Once all the data were collected, then these data will be assessed using the PLS-SEM method to determine the relationships between the variables discussed in this research. Next, all of the variables were explained and represented by a total of 16 indicators representing all 4 variables which were adapted from various sources. A total of 12 indicators representing attitude, intention to use public transportation services and subjective norm were adapted from Wilson and Edelyn (2022) and Abu-Elsamen *et al.* (2019), while a total of 4 indicators representing perceived service affordability were adopted from Bismas (2023).

Moreover, before assessing all of the data using PLS, a respondents' profile analysis was performed in order to understand the general profile of all respondents who participated in this study. Based on the results of this analysis, it was found that the majority of the respondents were male (52,55%), and that most of them have been regularly using public transportation services as their main mode of transportation at least 3 times a week over the past 6 months (66,42%. Furthermore, most of them were students (64,23%). After performing and discussing the respondents' profile assessment, PLS assessment could performed next in order to assess the effect of attitude, perceived service affordability and subjective norms toward millennials' intention to use public transportation services in Indonesia.

## RESULTS AND ANALYSIS

### Outer Model

A total of 137 usable data were assessed using PLS in order to determine the impact given by all three variables (namely subjective norm, attitude and perceived service affordability) on millennials' intention to use public transportation services. In this case, a two-step sequential analysis, which consisted of the outer model and the inner model assessment, need to be performed one after another in order to ensure that all data could be deemed as valid

and reliable before being further analyzed to understand the relationships between factors discussed in this research. The outer model assessment was first performed in order to test both the validity and the reliability of the data. Several criteria need to be satisfied in this assessment, such as the loading factor of every indicator need to be above 0,6; the value of both composite reliability and cronbach’s alpha of every variable need to be greater than 0,7; the AVE of each variable should be greater than 0,50, and the HTMT value of every variable need to be lower than 0,85. Until all of these criteria had been successfully satisfied, then the model hasn’t passed the outer model assessment, which indicated that the inner model assessment can’t be performed. The results of the outer model assessment were presented on table 1 and 2.

**Table 1**  
**Outer Model Assessment – Loading, AVE, CR and Cronbach’s Alpha**

Variable	Indicators	Factor Loading	AVE	Composite Reliability	Cronbach’s Alpha
Attitude	Using public transportation services is a good thing to do	0,830	0,667	0,889	0,832
	Using public transportation services is a positive thing to do	0,724			
	Using public transportation services is a responsible thing to do	0,836			
	Using public transportation services is beneficial	0,867			
Subjective Norm	It is expected of me by my friends that I should use public transportation services	0,719	0,530	0,818	0,708
	The opinion of my friends about using public transportation is important to me	0,717			
	My family is important to me, and they support me to use public transportation services	0,728			
	My family are expecting me to use public transportation services	0,749			
Perceived Service Affordability	The price that I should pay to use public transportation services is reasonable	0,806	0,711	0,908	0,864
	The price that I should pay to use public transportation services is affordable	0,785			
	Using public transportation services is inexpensive	0,894			
	The price that I should pay to use public transportation services satisfy my expectation	0,882			
Intention to Use Public Transportation Services	Over the next month, I will consider using public transportation services	0,908	0,848	0,957	0,940
	I will encourage my colleagues to use public transportation services	0,955			
	Over the next one month, I plan to use public transportation services more frequently	0,924			
	I’m willing to use public transportation services	0,897			

Source: Researcher (2022)



**Table 2**  
**HTMT (Discriminant Validity)**

	Attitude	Intention	Subjective Norm	Perceived Service Affordability
Attitude				
Intention	0,801			
Subjective Norm	0,808	0,824		
Perceived Service Affordability	0,791	0,829	0,795	

Source: Researcher (2022)

In accordance with the results of the outer model assessment presented on both table 1 and 2, it can be concluded that all data had successfully satisfied all validity and reliability criteria set in this study. Therefore, the next stage, which is the inner model assessment, can be performed in order to determine the relationships between variables, together with testing all hypotheses proposed in this research.

### Inner Model

Contrary to the outer model assessment, the inner model assessment was performed with the purpose of determining the effect given by one variable toward the other, together with testing every hypothesis proposed in this study. Using 95% confidence interval, the effect given by one variable toward the other was deemed significant if the p-value (significance value) is lower than 0,05, and vice versa. The result of the inner model assessment was presented on table 3.

**Table 3**  
**Path Coefficient Assessment**

Relationships	Sample Mean	t-Statistics	p-Value
Attitude → Intention to Use Public Transportation Services	0,381	2,487	0,013
Subjective Norm → Intention to Use Public Transportation Service	0,443	2,798	0,006
Perceived Service Affordability → Intention to Use Public Transportation Service	0,507	3,564	0,000

Source: Researcher (2022)

Based on the result of the inner model assessment presented on table 3, it can be concluded that all hypotheses were supported, since all relationships between variables discussed in this research were significant. The first hypothesis (H<sub>1</sub>) propose that attitude positively determine millennials' intention to use public transportation services in Indonesia. Based on the results of the inner model assessment, the first hypothesis was supported since the p-value highlighting the effect given by attitude toward intention to use public transportation services has been lower than 0,05 with a coefficient value of 0,381. Next, the second hypothesis (H<sub>2</sub>) propose that subjective norm positively determine millennials' intention to use public transportation services in Indonesia. Based on the results of the inner model assessment, the second hypothesis was supported since the p-value highlighting the effect given by attitude toward intention to use public transportation services has also been lower than 0,05 with a coefficient value of 0,443. Furthermore, the third hypothesis (H<sub>3</sub>) propose that perceived service affordability positively determine millennials' intention to use public transportation services in Indonesia. Based on the results of the inner model assessment, the third hypothesis was also supported since the p-value highlighting the effect given by attitude toward intention to use public transportation services has been lower than 0,05 with a coefficient value of 0,507.

## **Discussion**

This study attempts to test the effect given by attitude, subjective norms and perceived service affordability toward intention to use public transportation services among millennials in Indonesia. Based on the statistical results obtained in this study, it was found that all hypotheses were supported, with perceived service affordability serves as the stronger predictor compared to the other two variables. First, attitude has been found as the first factor which significantly influence one's intention to use public transportation services. In regard to this finding, it can be understood that attitude is a crucial predictor of behavior, and these findings confirm its importance in understanding millennials' usage intentions for public transportation services in Indonesia. If millennials have a positive attitude towards public transportation services, they are more likely to intend to use them. Thus, it is important for transportation providers to understand the factors that shape attitudes towards public transportation and work towards improving them. Furthermore, the significance of attitude in determining millennials' intention to use public transportation services in Indonesia can be attributed to several factors. Firstly, millennials are known to have a strong sense of individuality and personal choice. As such, their attitudes towards public transportation can significantly impact their transportation decisions. If they view public transportation services positively, they are more likely to use them. Conversely, if they have negative attitudes towards these services, they may be less likely to consider them as a viable option. Secondly, the quality of public transportation services in Indonesia can also influence millennials' attitudes towards these services. For instance, if the services are reliable, safe, and convenient, millennials are more likely to view them positively. However, if the services are perceived as slow, unsafe, or inconvenient, their attitudes may become negative, and they may be less likely to use these services.

Next, other than attitude, subjective norm also revealed to play a significant role in affecting millennials intention toward using public transportation services in Indonesia. Refers to the influence of other people's attitudes and opinions on an individual's behavior, within the context of public transportation usage, subjective norm is a critical factor in determining millennials' intention to use these services in Indonesia. The significance of subjective norm lies in the fact that millennials often rely on the opinions of their peers, family members, and social networks when making decisions about transportation.

In Indonesia, where public transportation services are often seen as less convenient and less reliable than private transportation, the opinions of others can play a significant role in shaping attitudes towards these services. For instance, if a millennial's social network has a positive attitude towards public transportation, they are more likely to view these services as a viable option for their transportation needs. On the other hand, if their social network has negative attitudes towards public transportation, they may be less likely to consider these services as a viable option.

Moreover, perceived service affordability has also been found as the third essential factor in determining millennials' intention to use public transportation services in Indonesia. The affordability of public transportation services can significantly impact the decision-making process of millennials when it comes to transportation options. In this case, the significance of perceived service affordability in determining millennials' intention to use public transportation services in Indonesia can be attributed to the fact that millennials are known to be price-sensitive consumers, especially in developing countries like Indonesia where the cost of living is relatively high. If the cost of public transportation services is perceived as affordable and match their expectations, then it may drive millennials to use these services as opposed to the other alternative transportation options available to these millennials, and vice versa.

## **CONCLUSIONS AND SUGGESTIONS**

### **Conclusion and Managerial Implications**

Based on the results obtained in this study, authors concluded that all variables, namely attitude, perceived service affordability and subjective norm play integral and significant roles

in affecting millennials' intention to use public transportation services in Indonesia. These findings have several important implications for transportation providers and policymakers in Indonesia. Firstly, improving the quality of public transportation services, such as by increasing reliability, safety, and convenience, can help to improve millennials' attitudes towards these services, which in turn may increase their intention to use them. Secondly, efforts should be made to promote positive attitudes towards public transportation services among millennials by highlighting the benefits of using these services, such as cost savings and environmental sustainability. Furthermore, promoting public transportation services through social media campaigns and other marketing efforts could also help to improve millennials' attitudes towards these services.

In terms of subjective norms, transportation providers and policymakers could work to influence the opinions of millennials' social networks towards public transportation services. For instance, through targeted social media campaigns or public awareness programs, transportation providers could aim to educate millennials' social networks on the benefits of using public transportation services, which may help to shift their attitudes towards these services. Additionally, incentives could be offered to encourage social networks to promote the use of public transportation services among their peers, such as discounts or loyalty programs.

Lastly, with regard to perceived service affordability, transportation providers could consider implementing pricing strategies that target millennials' price-sensitive behavior, such as offering discounted rates during off-peak hours or to frequent users. Furthermore, transportation providers could work with policymakers to provide subsidies for public transportation services, which may help to reduce the cost of these services for millennials and make them more accessible.

### **Limitations and Suggestions for Future Studies**

Despite the valuable insights provided by this study, there are some limitations that need to be addressed in future research. Firstly, the study focuses solely on millennials in Indonesia, and the results may not be generalizable to other age groups or populations in different countries. Future studies should include a more diverse sample to ensure the findings are representative of the broader population.

Secondly, this study only considers three factors (attitude, subjective norms, and perceived service affordability) in predicting millennials' intention to use public transportation services. Future research should include additional factors, such as the quality of public transportation services, the availability of alternative transportation options, and the impact of technology on transportation usage.

Finally, this study only examines the intention to use public transportation services, and it does not explore actual usage behavior. Future research should include a follow-up study to assess whether millennials' intentions to use public transportation services translate into actual usage behavior. This would provide a more comprehensive understanding of the factors that influence millennials' transportation decisions and offer practical insights for transportation providers to improve their services.

### **REFERENCES**

- Abbasi, A.Z., Ayaz, N., Kanwal, S., Albashrawi, M. and Khair, N. (2023), "TikTok app usage behavior: the role of hedonic consumption experiences", *Data Technologies and Applications*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DTA-03-2022-0107>
- Abu-Elsamen, A.A., Akroush, M.N., Asfour, N.A. and Al Jabali, H. (2019), "Understanding contextual factors affecting the adoption of energy-efficient household products in Jordan", *Sustainability Accounting, Management and Policy Journal*, Vol. 10 No. 2, pp. 314-332. <https://doi.org/10.1108/SAMPJ-05-2018-0144>

- Adel, A.M., Dai, X. and Roshdy, R.S. (2022), "The psychological mechanism of consumers' behavioral intentions of suboptimal food products from the perspective of economic value", *British Food Journal*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BFJ-01-2022-0027>
- Adu-Gyamfi, G., Asamoah, A. N., Nketiah, E., Obuobi, B., Adjei, M., Cudjoe, D., & Zhu, B. (2023). Reducing waste management challenges: Empirical assessment of waste sorting intention among corporate employees in Ghana. *Journal of Retailing and Consumer Services*, 72, 103261. <https://doi.org/10.1016/j.jretconser.2023.103261>
- An, Q. and Ozturk, A.B. (2022), "Assessing the effects of user-generated photos on hotel guests' price, service quality, overall image perceptions and booking intention", *Journal of Hospitality and Tourism Technology*, Vol. 13 No. 4, pp. 608-625. <https://doi.org/10.1108/JHTT-05-2021-0146>
- Annamdevula, S., Nudurupati, S.S., Pappu, R.P. and Sinha, R. (2023), "Moral obligation for recycling among youth: extended models of the theory of planned behaviour", *Young Consumers*, Vol. 24 No. 2, pp. 165-183. <https://doi.org/10.1108/YC-05-2022-1520>
- Biswas, A. (2023), "Reconnoitering enablers of travelers' online hotel booking intention: moderation of service affordability and perceived pandemic risk", *International Journal of Quality & Reliability Management*, Vol. 40 No. 2, pp. 542-565. <https://doi.org/10.1108/IJQRM-10-2021-0363>
- Bommer, W.H., Milevoj, E. and Rana, S. (2023), "A meta-analytic examination of the antecedents explaining the intention to use fintech", *Industrial Management & Data Systems*, Vol. 123 No. 3, pp. 886-909. <https://doi.org/10.1108/IMDS-03-2022-0170>
- Ding, Y., Jiang, H., Liu, J., Chen, D., & Yang, F. (2023). Effects of the theory of planned behavior and nudge strategy-based intervention on the adherence to anticoagulation treatment in patients with non-valvular atrial fibrillation. *Geriatric Nursing*, 51, 17–24. <https://doi.org/10.1016/j.gerinurse.2023.01.023>
- Dukung Transformasi Digital, PT MRT Jakarta (Perseroda) Gandeng Microsoft Indonesia. Dukung Transformasi Digital, PT MRT Jakarta (Perseroda) Gandeng Microsoft Indonesia | MRT Jakarta. (n.d.). Retrieved March 11, 2023, from <https://jakartamrt.co.id/id/info-terkini/dukung-transformasi-digital-pt-mrt-jakarta-perseroda-gandeng-microsoft-indonesia>
- Effendi, I., Murad, M., Rafiki, A. and Lubis, M.M. (2021), "The application of the theory of reasoned action on services of Islamic rural banks in Indonesia", *Journal of Islamic Marketing*, Vol. 12 No. 5, pp. 951-976. <https://doi.org/10.1108/JIMA-02-2020-0051>
- Gundala, R. R., Nawaz, N., R M, H., Boobalan, K., & Gajenderan, V. K. (2022). Does gender moderate the purchase intention of organic foods? theory of reasoned action. *Heliyon*, 8(9). <https://doi.org/10.1016/j.heliyon.2022.e10478>
- Jang, H.-W., & Cho, M. (2022). The relationship between Ugly Food Value and consumers' behavioral intentions: Application of the theory of reasoned action. *Journal of Hospitality and Tourism Management*, 50, 259–266. <https://doi.org/10.1016/j.jhtm.2022.02.009>
- Johan, Z.J., Hussain, M.Z., Mohd, R. and Kamaruddin, B.H. (2020), "Muslims and non-Muslims intention to hold Shariah-compliant credit cards: a SmartPLS approach", *Journal of Islamic Marketing*, Vol. 12 No. 9, pp. 1751-1785. <https://doi.org/10.1108/JIMA-12-2019-0270>
- Kiconco, R.I., Gwokyalya, W., Sserwanga, A. and Balunywa, W. (2019), "Tax compliance behaviour of small business enterprises in Uganda", *Journal of Financial Crime*, Vol. 26 No. 4, pp. 1117-1132. <https://doi.org/10.1108/JFC-03-2018-0031>
- Kim, H., & Park, M. (2023). Virtual influencers' attractiveness effect on purchase intention: A moderated mediation model of the product–endorser fit with the brand. *Computers in Human Behavior*, 143, 107703. <https://doi.org/10.1016/j.chb.2023.107703>

- Lau, M.M., Ng, P.M.L., Chan, E.A.H. and Cheung, C.T.Y. (2023), "Examining purchase intention for luxury fashion: integrating theory of reasoned action, with affect-behavior-cognition (ABC) model, identity and social identity theories", *Young Consumers*, Vol. 24 No. 1, pp. 114-131. <https://doi.org/10.1108/YC-07-2022-1557>
- Li, T. and Zhu, Z. (2022), "A meta-analysis of online travel booking services adoption: the moderating effects of national or regional economic development level and culture differences", *Aslib Journal of Information Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/AJIM-04-2022-0198>
- Liu, Y., Segev, S. and Villar, M.E. (2017), "Comparing two mechanisms for green consumption: cognitive-affect behavior vs theory of reasoned action", *Journal of Consumer Marketing*, Vol. 34 No. 5, pp. 442-454. <https://doi.org/10.1108/JCM-01-2016-1688>
- Maouloud, V.M., Kassim, S. and Othman, A.H.A. (2021), "Islamic microfinance in Mauritania: an investigation into involuntary factors affecting usage", *International Journal of Ethics and Systems*, Vol. 37 No. 3, pp. 390-405. <https://doi.org/10.1108/IJOES-11-2020-0176>
- Mukherjee, S., Baral, M.M., Lavanya, B.L., Nagariya, R., Singh Patel, B. and Chittipaka, V. (2023), "Intentions to adopt the blockchain: investigation of the retail supply chain", *Management Decision*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/MD-03-2022-0369>
- Nisar, T.M., Hajli, N., Prabhakar, G. and Dwivedi, Y. (2020), "Sharing economy and the lodging websites: Antecedents and mediators of accommodation purchase intentions", *Information Technology & People*, Vol. 33 No. 3, pp. 873-896. <https://doi.org/10.1108/ITP-06-2018-0297>
- Ong, A. K., Prasetyo, Y. T., Borja, A.-K. F., Hosillos, F. A., Perez, Y. F., Robas, K. P., Persada, S. F., & Nadlifatin, R. (2023). Factors affecting revisiting behavior to Taal Volcano during the Post Recovery 2020 Eruption: An extended theory of planned behavior approach. *International Journal of Disaster Risk Reduction*, 86, 103552. <https://doi.org/10.1016/j.ijdr.2023.103552>
- Published by Statista Research Department, & 13, J. (2023, January 13). Philippines: Main Mean of Transportation 2022. Statista. Retrieved March 11, 2023, from <https://www.statista.com/statistics/1338717/philippines-most-used-modes-of-transportation/>
- Published by Statista Research Department, & 18, O. (2022, October 18). Indonesia: Most used modes of transportation 2022. Statista. Retrieved March 11, 2023, from <https://www.statista.com/statistics/1339768/indonesia-most-used-modes-of-transportation/>
- Sahli, A.B. and Legohere, P. (2016), "The tourism Web acceptance model: a study of intention to book tourism products online", *Journal of Vacation Marketing*, Vol. 22 No. 2, pp. 179-194
- Salim, T. A., El Barachi, M., Mohamed, A. A., Halstead, S., & Babreak, N. (2022). The mediator and moderator roles of perceived cost on the relationship between organizational readiness and the intention to adopt Blockchain technology. *Technology in Society*, 71, 102108. <https://doi.org/10.1016/j.techsoc.2022.102108>
- Sharma, A. and Foropon, C. (2019), "Green product attributes and green purchase behavior: A theory of planned behavior perspective with implications for circular economy", *Management Decision*, Vol. 57 No. 4, pp. 1018-1042. <https://doi.org/10.1108/MD-10-2018-1092>
- St Omer, S. M., & Chen, S. (2023). Examining the dynamics of mathematics anxiety, perceived cost, and achievement: A control-value theory approach. *Contemporary Educational Psychology*, 73, 102169. <https://doi.org/10.1016/j.cedpsych.2023.102169>

- Sukhu, A. and Scharff, R. (2018), "Will 'doing right' lead to 'doing well'? An examination of green behavior", *Journal of Consumer Marketing*, Vol. 35 No. 2, pp. 169-182. <https://doi.org/10.1108/JCM-04-2016-1778>
- Sukmana, Y. (2022, June 13). Sejarah TransJakarta, Koridor Pertama hingga Tarif Awalnya Halaman all. KOMPAS.com. Retrieved March 11, 2023, from <https://money.kompas.com/read/2022/06/13/112808426/sejarah-transjakarta-koridor-pertama-hingga-tarif-awalnya?page=all>
- Sun, H., Jing, P., Wang, B., Cai, Y., Ye, J., & Wang, B. (2023). The effect of record-high gasoline prices on the consumers' New Energy Vehicle Purchase Intention: Evidence from the Uniform Experimental Design. *Energy Policy*, 175, 113500. <https://doi.org/10.1016/j.enpol.2023.113500>
- Troudi, H. and Bouyoucef, D. (2020), "Predicting purchasing behavior of green food in Algerian context", *EuroMed Journal of Business*, Vol. 15 No. 1, pp. 1-21. <https://doi.org/10.1108/EMJB-03-2019-0046>
- Upadhyay, N., & Kamble, A. (2023). Examining Indian consumer pro-environment purchase intention of electric vehicles: Perspective of stimulus-organism-response. *Technological Forecasting and Social Change*, 189, 122344. <https://doi.org/10.1016/j.techfore.2023.122344>
- Wallace, E., & Buil, I. (2023). Antecedents and consequences of conspicuous green behavior on social media: Incorporating the virtual self-identity into the theory of planned behavior. *Journal of Business Research*, 157, 113549. <https://doi.org/10.1016/j.jbusres.2022.113549>
- Wilson, N., & Edelyn, E. (2022). Predicting Indonesian consumers' intention to buy Green Cosmetics using the modified TPB Framework. *Journal of Business & Applied Management*, 15(2), 079. <https://doi.org/10.30813/jbam.v15i2.3137>
- Wilson, N., & Edelyn, E. (2022). Extending the theory of reasoned action (TRA) model to predict consumers' intention to purchase Green Cosmetics. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 6(5), 565–570. <https://doi.org/10.24912/jmbk.v6i5.18746>
- Wu, S. H., & Corpus, J. H. (2023). The role of perceived cost in college students' motivational experiences and long-term achievement outcomes: A mixed-methods approach. *International Journal of Educational Research Open*, 4, 100229. <https://doi.org/10.1016/j.ijedro.2023.100229>
- Yasami, M., Rabiul, M.K., Promsivapallop, P. and Zhu, H. (2022), "The COVID-19 crisis and factors driving international tourists' preferences for contactless dining services", *International Journal of Contemporary Hospitality Management*, Vol. 34 No. 11, pp. 4029-4051. <https://doi.org/10.1108/IJCHM-11-2021-1435>
- Zhikun, D. and Fungfai, N. (2009), "Knowledge sharing among architects in a project design team: An empirical test of theory of reasoned action in China", *Chinese Management Studies*, Vol. 3 No. 2, pp. 130-142. <https://doi.org/10.1108/17506140910963639>