

STUDY ANALYSIS OF PUBLIC TRANSPORT SELECTION BY STUDENTS IN TONDANO

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Abstract

Public transportation is one of the needs of the community, including students, to help with daily activities. This study aims to examine the selection of public transportation by students using descriptive analysis. Variables such as gender, age, price and quality of service are studied. Research shows that the majority of students still use public transportation and are not affected by the rise of online transportation. Female students prefer public transportation because it is more convenient. Those in the lower semesters use public transportation more because it is efficient. The price paid by students is in accordance with local regulations and what students want. The quality of service received is considered good so that students do not switch to other transportation.

INTRODUCTION

In the current era, where humans are required to carry out mobility in every activity, transportation is a means that is needed and cannot be separated from life because it is a medium for moving goods or people from one place to the intended place. (Lukow et al., 2023). The need for transportation makes it a human destination to move locations because their duties and responsibilities are increasingly facilitated. One type of transportation that plays a vital role in supporting people's mobility is public transportation (Istia et al., 2018; Sekar et al., 2021). When viewed from the context of the transportation system, public transportation is one part that cannot be separated because of its role that concerns the lives of many people (Oktariansyah et al., 2017). Even in large countries such as South Korea, Japan, Colombia, Brazil, and Hong Kong, the role of public transport is taken into account (Prayudyanto, 2021). It is said to be very

important because the condition of public transportation that could be better can result in a decrease in the overall transportation system. Moreover, if in one area, public transportation is the primary mode of transportation for people when travelling from one place to another. Public transportation that is considered poor can disrupt the overall community system both in terms of meeting the need for mobility and in terms of community life.

Minahasa Regency is one of the regencies in North Sulawesi Province. According to BPS data in 2022, the population of Minahasa Regency is 350,317 people with a population density in 2022 reaching 307 people/km² (Kabupaten Minahasa Dalam Angka, 2023). The population density is quite diverse in 25 districts spread across Minahasa Regency. Minahasa Regency has the capital city, namely Tondano City in which there are four districts, namely West Tondano, South Tondano, East Tondano and North Tondano. Overall, Tondano City has a population of 66,417 people (Badan Pusat Statistik, 2023).

The city of Tondano has a mode of transportation, namely city transportation with various lines provided according to the area passed by the city transportation. As the centre of government of Minahasa Regency, Tondano City is the centre of activities both trade, education and government. Hence, this makes the needs of the people of Tondano City for transportation continue to increase. Apart from being the centre of government, Tondano City is an area that stands for one of the largest universities in North Sulawesi, namely Manado State University. Based on the Accountability Report on Accounting Performance, Manado State University has 16,592 students, 762 lecturers and 344 education staff (Universitas Negeri Manado, 2022). This is a profitable market segment for public transportation because of the dense university activities, especially on weekdays. However, from various circles of people who need public transportation in the Tondano area, students are one of them. Students, in their daily activities, depend on transportation (Islam et al., 2022). The condition of students who are still dependent on their parents and have not been able to buy a private vehicle (Islam et al., 2022; Lukow et al., 2023) makes them users with a significant contribution to the use of public transportation.

The quality of service from public transportation is essential in fulfilling customer satisfaction and passenger loyalty using it (Koc & Kaya, 2021). However, students' needs for public transportation do not necessarily match the existing reality; the phenomenon of drivers often underestimates whether the passengers are students (Islam et al., 2022). Public transportation fares need to follow the ability of students (Pradhitya Hardiani et al., 2022). Also,

the poor quality of public transport services makes passengers barely to other transportation (Maia et al., 2020). These things if left unchecked will affect the decline of the public transportation business which will be increasingly extinct. (Sekar et al., 2021)

Seeing the phenomenon that occurs where public transportation is one of the primary needs for Manado State University students, this study aims to analyse the characteristics of public transportation based on student preferences in using public transportation for daily activities.

RESEARCH METHODS

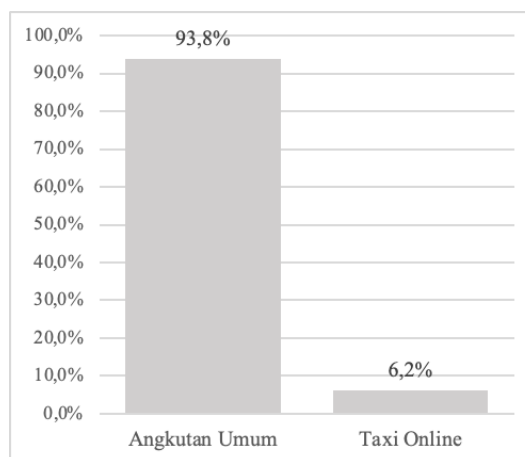
Research on the characteristics of public transportation users that are the preferences of students in Tondano is a type of quantitative research. Quantitative research is an approach that pays attention to phenomena or symptoms in human life (Jumain et al., 2021). The choice of location in Tondano, precisely at Manado State University, occurred because the focus of the research was students who in their activities needed public transportation as a mode of daily transportation. The scope of research discussed in this study is students who use conventional public transportation to see their preferences in the use of public transportation. The variables used use variables for the choice of transportation modes and several theories related to factors that influence prospective passengers using public transportation such as Socioeconomic characteristics which include gender and age; Movement characteristics such as the distance travelled using public transportation; Price characteristics, which include the ability to pay and the willingness To Pay (Pradhitya Hardiani et al., 2022) and the quality of public transportation services (Rifai et al., 2021).

The type of data in this study is using primary data and secondary data. The primary data in this study was obtained from the results of the distribution of questionnaires distributed in the form of Google form links to be answered honestly by students as respondents. Secondary data in this study were obtained using literature studies through available literature such as books, journals, references and regulations related to transportation, especially public transportation and preferences among the community. The theory obtained from secondary data becomes the basis for carrying out research both before and during data analysis and research conclusions. This research uses descriptive analysis and quantitative analysis. Descriptive analysis is performed to analyse causal factors by converting raw data sets into easy-to-

understand ones in the form of shorter information (Jumain et al., 2021).

RESULTS AND DISCUSSION

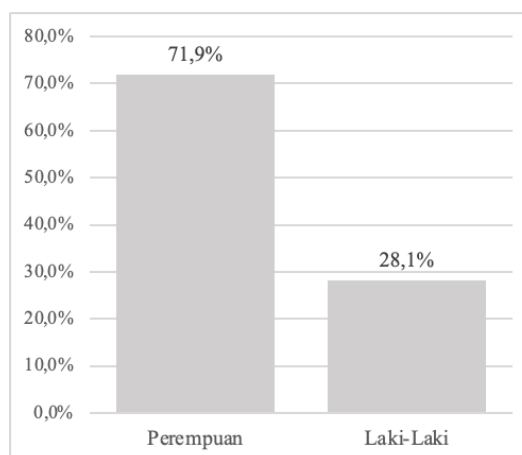
The study began by surveying students to find out how many use public transportation among students. The results can be seen in Figure 1 below. Based on the results of the study, of all respondents surveyed, the majority of students or as many as 93.8% use public transportation as their primary transportation in carrying out activities.



Gambar 1. Presentation of public transport users among Tondano students

1. Socioeconomic characteristics of students using city transportation in Tondano

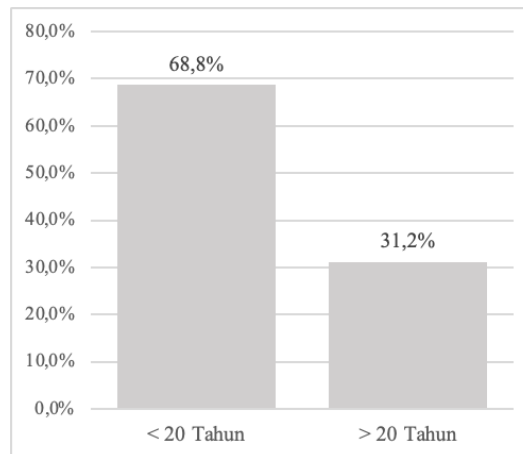
The socioeconomic characteristics of students using public transportation in Tondano based on the type of gelatin can be seen in Figure 2. Figure 2 shows that the gender of students who use public transportation in Tondano for women is 71.9% while men are only 28.1%.



Gambar 2. Student Characteristics of Public Transport Users in Tondano Based on Gender

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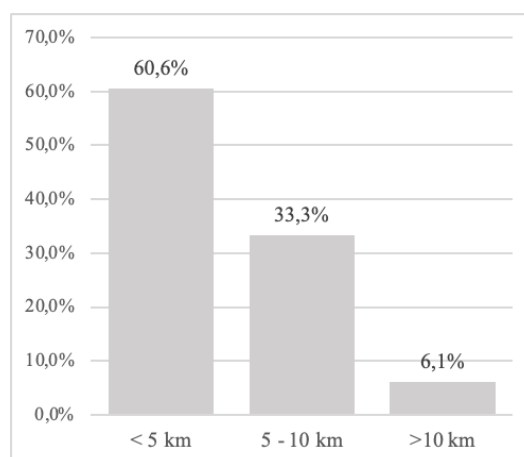
The socioeconomic characteristics of students using public transportation in Tondano based on age can be seen in Figure 3. Figure 3 shows that the age of students who use public transportation in Tondano aged <20 years is 68.8% while students aged >20 years are 31.3%.



Gambar 3. Characteristics of Students Using Public Transport in Tondano Based on Age

2. Characteristics of the movement of students using public transportation in Tondano

The characteristics of the movement of students using City Transport based on the distance to travel to campus can be seen in Figure 4. Based on Figure 4, it can be seen that the distance student travel from their location to arrive at campus 60.6% is <5 km, 33.3% is 5-10 km, and the rest is above 10km.



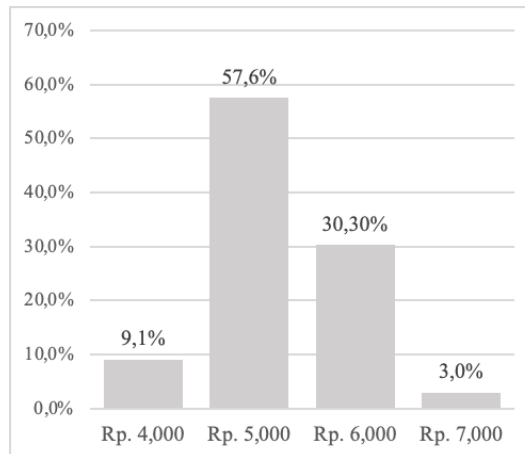
Gambar 4. Student Characteristics of Public Transport Users in Tondano Based on Age
Based on Gender

3. Characteristics of public transportation prices in Tondano used by students

The characteristics of public transportation facilities in Tondano used by students based

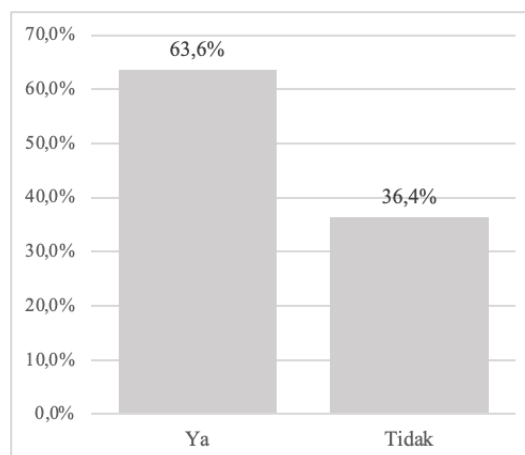
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on the prices issued by students can be seen in Figure 5. Based on Figure 5, it can be seen that the fare for one trip issued by students in Tondano when using public transportation is Rp. 4,000; Rp. 5,000; Rp. 6,000 and Rp. 7,000. The tariff of Rp. 5,000 was issued by the majority of students at 67.6%, followed by a rate of Rp. 6,000 at 30.3%, a tariff of Rp. 4,000 by 9.1% of respondents and the rest received a rate above Rp. 6,000.



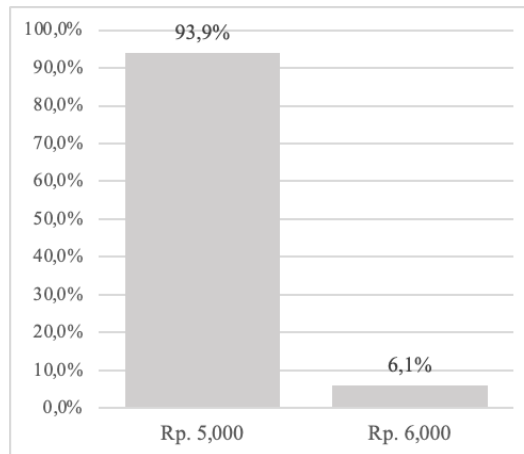
Gambar 5. Characteristics of public transportation prices used by students in Tondano

The price characteristics of public transportation facilities in Tondano used by students based on the appropriateness of the current price paid can be seen in Figure 5. Based on Figure 5, it can be seen that the current public transportation fare issued by students one way, as many as 63.6% of respondents answered that it was following the wishes of students. In contrast, 36.4% of respondents answered that it was not what should be spent in this case, too expensive.



Gambar 6. The characteristics of public transportation prices used by students are based on the appropriateness of the current prices issued

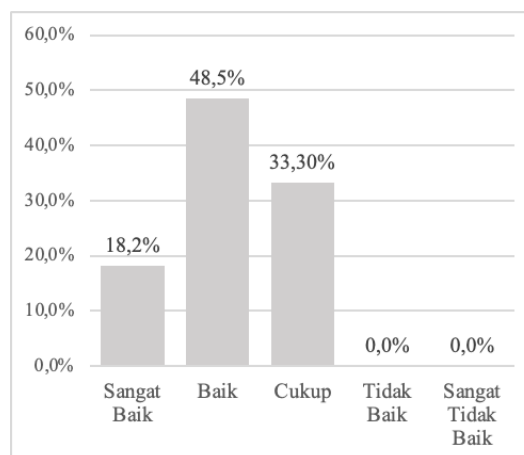
The characteristics of public transportation facilities in Tondano used by students based on the price desired by students can be seen in Figure 7. Based on Figure 7, it can be seen that the price that students want to pay in one way when using public transportation, 93.9% of respondents want a fare of Rp. 5,000, and the remaining 6.1% want a fare of Rp. 6,000.



Gambar .7 Characteristics of public transportation facilities used by students based on the desired price

4. Quality of Tondano Public Transport Services to Students

The quality of Tondano's public transportation services felt by students can be seen in Figure 8. Based on Figure 8, it can be seen that public transportation services felt by students vary. As many as 48.5% answered the service felt in a suitable category, 33.3% was sufficient, and 18.2% said the service received was very good.



Gambar 7. Quality of public transportation services to students in Tondano

Based on the results of the study, it was found that the majority of students still use

public transportation as their primary transportation in travelling. Although online transportation has been widely used in various circles of society (Kurniati et al., 2023; Sahputra et al., 2022) however, this is not the case for students in Tondano who still use public transportation when travelling.

Viewed based on the gender category of students who use city transportation in Tondano, it shows that the majority of city transportation users are women. This research is in line with research conducted by (Lestari & Aldino, 2020; Tandirerung et al., 2019), that the majority of public transport users are women. The results of this study are because the majority of male students already have private vehicles or prefer to walk. Conversely, female students prefer to use public transportation because it can transport more people so that they can use it together with friends. It is more comfortable than having to ride a vehicle such as a motorised vehicle.

In terms of age, those less than 20 years are the most likely to use public transportation because, at this age, students are relatively new to campus, so they still need to be given their vehicles or drive motorbikes, for example. This semester, student lecture hours are still crowded on campus, so private vehicles are not needed. Unlike the case with students who have entered the fifth semester or are over 20 years old, they tend to have been trusted by parents to have their motorised vehicle and prefer to use other private vehicles because activities that do not require them must always be on campus, in this semester students have been faced with many activities outside the campus.

In the results of the study for student travel distance, researchers found that the majority of students who are less than 5 km away prefer Angkot. This is due to the condition of student boarding places, which are primarily in the campus environment. In addition, the path set by the government for public transportation that can enter the campus area is made to pass through the boarding house complex where students live. Through the results of this study, it can be seen that the need for public transportation is vast among students, especially when going to campus. Students turned out to be accustomed to using public transportation even though the location was less than 5km away. So, previous studies on the importance of public transportation among students (Islam et al., 2022; Koc & Kaya, 2021; Sattin-Bajaj, 2023) supported this research.

The price of city transportation that students often pay ranges from Rp. 5,000 – Rp. 6,000. The price is a one-way price from their boarding house to the campus. According to the

Minahasa Transportation Agency regulation issued on September 13, 2022, concerning the Adjustment of Economy Class Passenger Transportation Rates with Public Bus Cars and Public Passenger Cars in Minahasa Regency (Pemerintah Kabupaten Minahasa, 2022). The price of Rp. 5,000, and the price of Rp. 6,000 is the price of the Tondano line to the UNIMA Campus route through Tataaran and Tonsaru, where the path is passed by students every day. The price of public transportation used by passengers is set according to the distance travelled to provide service, comfort and convenience for the community (Lukow et al., 2023).

According to the results of this study, the price set by the government at the price that students can afford to pay is following what students want. This result makes city transportation in Tondano still the prima donna of students in travelling, especially when they go to the University area. In line with previous research, public transportation fares affect the preference for greetings, choosing public transportation as a means of transportation (Jayanthi & Parsa, 2021).

In terms of ability to pay, students give their opinion on the price they can afford every time they take public transportation in Tondano. The result is following the current city transportation price of Rp. 5,000,-. This is in line with previous research that one of the quality of service that determines passengers prefer public transportation is because of its low price (Maia et al., 2020). Especially as students whose needs are still the result of gifts from parents, affordable prices will be their priority in choosing the type of transportation.

The quality of city transportation services is also a positive thing because it is considered good according to what is received by students. Manado State University students consider that the service they receive from public transportation drivers is good. Exemplary service quality has a significant influence on passenger satisfaction (Oktariansyah et al., 2017). This is one of the reasons public transportation in Tondano cannot be replaced by other transportation in other areas (Handayani & Handalia, 2021).

CONCLUSIONS AND SUGGESTIONS

The results showed that public transportation in Tondano City is still used as the most common means of transportation used by students in Tondano. Female students are the most likely to use public transportation because of their need for more convenient and shared transportation. Students under the fifth semester with the age of less than twenty years prefer to use public transportation. With the transportation needs needed by students, even short

distances can be an income for public transportation, as this study shows that even short travel distances, public transportation remains an option for most students. The price set by the government for the campus area is the price most often paid by students, and it is by the wishes of students as well as the price desired by students to be spent. The quality of service to passengers is considered reasonable by students. The driver's perceived concern for passengers increases service satisfaction with passengers (Primasworo et al., 2022).

To increase public interest in using public transportation and help the sustainability of public transportation amid the rise of emerging online transportation, the government can pay attention to several aspects, such as Supervision of driver behaviour, control of traffic order by public vehicles, and also provide convenient stop facilities for passengers (Hidayat et al., 2023; Istia et al., 2018; Jayanthi & Parsa, 2021), socialising to the community the importance of using public transportation (Pramudika, 2014). Public transportation passengers, the majority of whom are women, need to be considered for women-only transportation (Lestari & Aldino, 2020). Who pays attention to the comfort and safety of public transportation so that female students can accept it as a solution to reduce problems often experienced by women. Even though the quality of service is considered good, it is necessary to measure service quality to continually improve service to users (Rifai et al., 2021). For entrepreneurs and owners of public transportation, vehicle rejuvenation also needs to be done for old public transportation (Leliana & Oktaviastuti, 2020; Sattin-Bajaj, 2023) to ensure the comfort and safety of passengers. This effort should be a shared responsibility so that the function of public transportation to become a fast, safe, comfortable, cheap, and efficient transportation service can be felt by the community (Lukow et al., 2023).

After this study, the author hopes that future research can develop it to be more comprehensive. Future research can add other variables, such as passenger waiting time, payment system, and driver behaviour, to provide more detailed results.

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