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TRANSPORTATION MODE CHOICE TO CAMPUS STUDY IN THE NEW NORMAL ERA (CASE STUDY: AL-AZHAR UNIVERSITY)

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Abstract

This research aims (1) to find out the types of transportation modes used by students in the new normal era (2) to find out the factors that influence students in choosing transportation modes in the new normal era (3) to identify the characteristics of students in choosing transportation modes in the new normal era. new normal. The method used in this research is a quantitative method with a deductive approach because the researcher tests general problems based on testing a theory consisting of variables in choosing transportation modes. Conclusions from this research were obtained The coefficient of determination (R square) is 0.612, which means the influence of the independent variables (health/environment, cost/cheap, speed, address of origin, monthly transportation costs, monthly transportation money, security, comfort, travel time, convenience, availability, pocket money per month, gender, vehicle ownership, semester, driver's license ownership) of the dependent variable (mode type) is 61.2%, it is known that the calculated F value = 3.449 with a significance level of 0.001<0.05, so it can be concluded that these variables affect the choice of transportation mode for Al-Azhar University Medan students.

Kata Kunci: *mode transportasi, era normal baru, mahasiswa, faktor yang mempengaruhi, metode kuantitatif, pendekatan*

Abstract

Penelitian ini bertujuan (1) untuk mengetahui jenis moda transportasi yang digunakan mahasiswa pada era new normal (2) untuk mengetahui faktor-faktor yang mempengaruhi mahasiswa dalam pemilihan moda transportasi pada era new normal (3) untuk mengidentifikasi karakteristik mahasiswa dalam pemilihan moda transportasi pada era new normal. Metode yang digunakan dalam penelitian ini adalah metode kuantitatif dengan pendekatan deduktif karena peneliti menguji permasalahan yang umum berdasarkan pengujian suatu teori yang terdiri dari variabel-variabel dalam pemilihan moda transportasi. Kesimpulan dari penelitian ini diperoleh koefisien determinasi (R square) sebesar 0,612, yang berarti pengaruh variabel bebas (kesehatan/lingkungan, biaya/murah, kecepatan, alamat asal , biaya transportasi perbulan, uang transportasi perbulan, keamanan, kenyamanan, waktu perjalanan dilakukan, kemudahan, ketersediaan, uang saku perbulan, jenis kelamin, kepemilikan kendaraan, semester, kepemilikan sim) terhadap variabel terikat (jenis moda) adalah sebesar 61.2 %, diketahui bahwa nilai F hitung = 3,449 dengan tingkat signifikansi

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deduktif, pemilihan moda transportasi

sebesar 0,001<0,05, maka dapat disimpulkan variabel-variabel tersebut berpengaruh terhadap pemilihan moda transportasi mahasiswa Universitas Al-Azhar Medan .

INTRODUCTION

Socio-economic activities are starting to be reopened by the Government with mandatory health protocols called the new normal [1]. The change in behaviour in this new normal era has a big impact on various community activities, including transportation. Higher education is an area that can arouse the attraction of a trip [2]. The daily campus activities at Al-Azhar University are not just one type of activity, on the same day, there can be 2 (two) or more different activities that students must carry out. The occurrence of travel mobility is followed by activities that must be carried out, so students need to choose the mode of transportation that will be used [3]. The choice of transportation mode acts as a means of supporting travel mobility for students to get to the Al-Azhar University campus.

There is travel mobility carried out by students of course it will affect the traffic system. In student travel mobility, there are modes, traffic, and facilities needed [4]. To support travel mobility, it is necessary to provide public transport stops, traffic signs around campus roads, and other supporting facilities. Therefore, there needs to be proper planning to solve transportation problems [5].

This research aims to determine the characteristics of choosing a good mode of transportation used by students to get to campus and these characteristics are used as a basis for determining the model of choosing a mode of transportation to Al-Azhar University Medan Transportation is the movement of people or goods using tools driven by humans or machines [6]. Transportation is used to make it easier for people to carry out daily activities. Many experts have formulated and expressed the meaning of transportation. Experts have their views which have differences and similarities between one another [7]. The word transportation comes from the Latin word transport, where trans means to lift or carry. So, transportation is carrying something from one place to another. The definition of transportation according to several experts:

1. According to [8], transportation is the activity of moving goods (cargo) and passengers from one place to another. In transportation, there are two most important elements, namely transfer/movement and physically changing the location of goods (commodities) and passengers to another place.
2. According to [9], transportation can be defined as the business of moving, moving, transporting, or diverting an object from one place to another, where in this other place the object is more useful or can be useful for certain purposes. The supporting tools used to carry out the process of moving, moving, transporting, and transferring can vary depending on:

- The shape of the object to be moved.
- The distance between one place and another.
- The purpose of the object is to be moved.

So, the definition of transportation means a process, namely the process of moving, the process of moving, the process of transporting, and diverting where this process cannot be separated from the need for supporting equipment to ensure a smooth transfer process according to the desired time [10]

Supporting Factors in Mode Choice

According to Ortuza and Willumsen, factors that influence mode choice include [11]:

1. Road User Characteristics.

The following factors are believed to greatly influence mode choice, namely: availability or choice of a private vehicle, ownership of documents, driving license (SIM), household structure (partner, family

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with children, retired, single, etc.), income, factors others, for example having to use a car to go to work and take children.

2. Movement characteristics:

The choice of mode will also be greatly influenced by:

a. Movement goal. For example, it is easier to travel to work or campus in developed countries using public transportation, because the timeliness and level of service are very good and the costs are relatively cheaper compared to private transportation. However, on the other hand, in developing countries, people prefer private vehicles such as cars or motorbikes to get to work, and travel and education, although more expensive, because punctuality, comfort, etc. cannot be met by public transportation.

b. Time of movement. If we want to move in the middle of the night, we need a private vehicle because at that time public transportation does not or rarely operates.

c. Travel distance. The longer the journey, the more we tend to choose public transportation compared to private transportation.

3. Characteristics of transportation mode facilities:

This can be categorized into two categories, namely:

a. Quantitative factors such as travel time, transportation costs (fares, fees, fuel, etc.), space availability, and parking rates.

b. Qualitative factors that are quite difficult to calculate include comfort and safety, reliability and regularity, and others.

4. Characteristics of a city or zone

Characteristics that can influence mode choice are the distance from the city centre and population density. In his book Sulistyorini the choice of transportation mode depends on

1). Economic/income level

2). Transportation costs [12]

People who choose one mode are said to be captive to that mode. If there is more than one mode, the mode chosen is usually the one with the shortest, fastest, or cheapest route or even a combination of all three. Another factor that influences is the level of comfort and safety.

c. Mode Choice Models (mode choice models)

[13] regarding the mode choice model states the following:

1. The mode choice model aims to determine the proportion of people who will use each mode. This process is carried out to calibrate the mode selection model. After calibration, the model can be used to predict mode choice using values (attributes) for the future. Of all mode choice models, the choice of attributes depends on the person choosing the mode, the purpose of the trip, and the type of model used.
2. Binomial Logit model. The binomial logit model consists of the difference binomial logit model and the ratio binomial logit model. Binomial Logit Difference Model. In this model, the proportion P1 for mode 1 is expressed by the following equation:

$$P_1 = \frac{1}{1 + e - (\alpha + \beta(C_2 - C_1))}$$

Where :

P_1 = Proportion of choosing mode 1 (%)

C_1 = Total combined costs on mode 1 (Dollars)

C_2 = Total combined costs in mode 2 (Dollars)

α = Intercept at Y1 = A + B X1 or equal to - A

β = Independent factor coefficient or equal to – B

d. Determining the Total Sample Size

1. The sample size is expected to represent the population or be equal to the population by 100%
2. The generalization error will be smaller if the sample size is close to the population size.
3. Some sample sizes depend on the desired level of accuracy or error as well as on funds, energy, and time.

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To determine the sample size that can describe and represent the population, in determining the sample size the Slovin formula is used:

$$n = \frac{N}{1+Ne^2} \quad \text{.....}$$

Information:
n=sample size,
N=number of population e = significance level (0.075) or 7.5%

RESEARCH METHODS

Research methodology is a method used by researchers to obtain the necessary data which will then be used for analysis to obtain the conclusions they want to reach in the research. This research is a type of quantitative research.

Data analysis method

Data analysis is the process of organizing and sorting data into patterns, categories, and basic units of description so that themes can be found and a working hypothesis can be formulated as suggested by the data [14]. The data obtained from the survey results is in the form of primary data and secondary data, then data analysis will be carried out in the form of:

Analysis of Mode Choice Characteristics

The data results obtained from distributing the questionnaire will then be depicted in the form of a histogram or pie chart. This histogram will help reflect the overall characteristics of respondents, one of which consists of movement characteristics and characteristics of student transportation facilities.

From the histogram or pie chart, we will find out the percentage proportion of these characteristics on students' choice of mode. In theory, there are no provisions for taking the range in each histogram group. This range was taken subjectively by the researcher himself before the survey was carried out.

Binary Logistic Regression Analysis

Logistic binary regression analysis is research using the help of a statistical program, namely SPSS (Statistical Package for the Social Sciences). This binary logistic regression analysis was carried out to test whether or not there was an influence of factors that could influence students' decisions in choosing a mode of transportation to get to campus. This binary logistic regression analysis technique uses 2 variables:

1. The dependent or dependent variable is the type of transportation mode chosen (private vehicle and public transportation)
2. The independent variables are:
   - Gender (X_1),
   - Pocket money or income (X_2),
   - Total expenditure or total transportation costs (X_3),
   - Origin Address (X_4),
   - Type of residence (X_5),
   - Private vehicle ownership (X_6),
   - Ownership of a driving license (X_7),
   - Travel time is made (X_8),
   - Cost Considerations (X_9),
   - Convenience considerations (X_{10}),
   - Convenience considerations (X_{11}),
   - Speed considerations (X_{12}),
   - Security Considerations (X_{13}),
   - Availability considerations (X_{14}),
   - Health/environmental considerations (X_{15}).

After obtaining the results of the binary logistic regression analysis from the SPSS program, the feasibility, goodness of the model, and hypothesis of the resulting model were then tested.

RESULTS AND DISCUSSION

Descriptive Analysis of Student Characteristics

From the results of filling out the questionnaire randomly with a total of 150 students as respondents. In the research data collection stage, researchers used online data collection techniques using Google Forms and field surveys by distributing questionnaire forms

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directly to students. The following is the profile of student characteristics at Al-Azhar University Medan:

Educational level

From the results of a survey filling out questionnaires by 150 respondents, data was obtained that 100% of respondents were students with Strata (S-1) education at Al-Azhar University Medan.

Faculty

Al-Azhar University consists of 4 (four) Strata level (S-1) faculties, namely, the Faculty of Economics, the Faculty of Law, the Faculty of Agriculture, and the Faculty of Engineering. With 8 (eight) study programs, including a management Study Program, Accounting Study Program, Legal Studies Study Program, Agrotechnology Study Program, Civil Engineering Study Program, Electrical Engineering Study Program, Industrial Engineering Study Program, and Mechanical Engineering Study Program. Based on the results of a questionnaire conducted on 150 respondents, it can be seen that the distribution of respondents by faculty is not close to the distribution of the number of students at Al-Azhar University. The following is a table of respondent distribution based on each study program at Al-Azhar University.

Table 1. Distribution of respondents based on a study program.

No	Faculty	Amount	Percentage Respondents (%)
1	Management	25	**17**
2	Accountancy	33	**22**
3	Legal studies	4	**3**
4	Agrotechnology	32	**21**
5	Civil Engineering	18	**12**
6	Industrial Engineering	14	**9**
7	Electrical Engineering	17	**11**
8	Mechanical Engineering	8	**5**
	Amount	**150**	**100**

From the data on the distribution of respondents based on study programs, it can be seen that accounting study programs (22%), agrotechnology (21%), management (17%), civil engineering (12%), electrical engineering (11%), industrial engineering (9%), mechanical engineering (5%), and law (3%).

Gender

Based on data obtained from filling out questionnaires by 150 respondents, the percentage of respondents with male gender was 41% and female was 59%.

Semester

In this research, the semester that students take is the even semester of the 2022/2023 academic year, so data was obtained from 150 respondents with students in semesters I-IV amounting to 54% and semesters V-VIII amounting to 46%.

Ownership of a driving license

Based on data from the results of filling out questionnaires by 150 respondents, it can be seen that as many as 63% of Al-Azhar University students do not have a driver's license,27% have SIM C, 9% have SIM C and SIM A, and 1% have SIM A.

Origin Address

Based on the results of a survey filling out questionnaires by 150 respondents, it shows data from Al-Azhar University student respondents69% of students come from within the city and 31% of students come from outside the city.

Type of Residence

Based on data from the results of filling out the questionnaire by 150 respondents, it can be seen that: 66% of students live in their parents'/relatives' homes, 33% live in rented/boarding houses, 1% live in dormitories, 0% live in Islamic boarding schools.

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Amount of Pocket Money/Month (Rp)

The amount of pocket money given to respondents certainly shows the economic value which can describe the economic characteristics of students which may influence the characteristics of student travel. From the data obtained from distributing the questionnaire, 150 respondents have been categorized into 4 groups, The first group is students with pocket money > IDR 500,000, the second group with pocket money IDR 500,000 - IDR 1,000,000, the third group with pocket money IDR 1,000,000 - IDR. 1,500,000, and the fourth group with pocket money of more than Rp. 1,500,000. From the data that has been collected, it shows that most respondents have pocket money of Rp. 500,000- Rp. 1,000,000 with a total of 62%.
1,000,000-Rp. 1,500,000, 13% of students have pocket money of more than IDR 1,500,000, and 10% of students have pocket money of less than IDR 500,000.

Monthly Transportation Needs Expenditures

From the data on transportation expenditure/month, it is known that 33% of students spend Rp. 200,000-Rp. 300,000 on transportation, 27% of students spend less than Rp. 100,000 on transportation, 21% of transportation costs range from Rp. 100,000-Rp. 200,000, and a 19% fee for transportation more than Rp. 300,000.

Private Vehicle Ownership

Based on data from the results of filling out the questionnaire by 150 respondents, you can It is known that 57% of students own motorbikes (trains), 40% of students do not own vehicles, 2% own cars, and 1% own bicycles.

Analysis of Student Travel Characteristics to Campus

Main Mode to Campus

Based on data from the results of filling out the questionnaire by 150 respondents, you can It is known that as many as 63% of Al-Azhar University students choose to use motorbikes.

Travel Frequency

Based on data from the results of filling out questionnaires by 150 respondents, it can be seen that the frequency of travel in one day most often done by Al-Azhar University students is 1.1 – 2.0 times round trip, with a percentage of 55%. The following is a table and diagram of the distribution of respondents based on the frequency of trips in a day.

Travel Time

Based on data from the results of filling out questionnaires by 150 respondents, it can be seen that Al-Azhar University students travel to campus more often regularly, with a percentage of 54% and 46% of students travelling irregularly.

Reasons/Considerations for Choice of Mode

In the questionnaire, questions regarding the reasons for using the main mode are presented in the form of options from which more than one answer can be chosen. These options include cheapness, safety, comfort, availability, health/environment, convenience, and speed. From the data from the results of filling out the questionnaire by 150 respondents, it can be seen that the cost reason was most often chosen by Al-Azhar University students with a percentage of 28%choose to use the mode because of the cost/cheap factor, 19% the convenience factor, 16% the speed factor, 13% the comfort factor, 12% the availability factor, 8% the safety factor, and 4 % health/environmental factors.

Distance from residence to faculty/campus

In this study, the distance between the student's residence and the faculty or campuses is expressed in kilometres (km). From the data filled in by 150 respondents, data on the distance from the residence to the faculty/campus was dominated by relatively close distances. In group division, the distance has been divided into 4 groups with a range of 5 km. A distance of 1-5 km is a distance that is relatively close and not too far from campus, a distance of 6-10 km is a distance that is quite

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far, a distance of 11-15 km is a distance that is considered far, and above 15 km is a distance that has been categorized as very far. The respondents based on distance from residence It is known that 34% of students have a distance between 1-5km, 29% more than 15km, 21% of students 6-10km, and 16% of students 11-15km.

Analysis of the Characteristics of the Use of Other Modes of Transportation by Students

1. Walk

Every human being will instinctively travel every day on foot. Walking is also one of the simplest sports that everyone can do. In one day, without realizing it, we burn calories and do light exercise by just walking. In this research, there is a question about how much distance has been walked both on campus and outside campus (when exercising or just walking in and around the house). From the results of filling out the questionnaire by 150 respondents, it was discovered that the highest percentage was in the distance range of 1-2 km for on-campus activities with a percentage of 56% and the distance range of 1-2 km for non-campus activities with a percentage of 52%.

From respondents based on non-campus walking, it is known that 52% of students walk non-campus for a distance of 1-2km, 27% for a distance of more than 3km, 12% for a distance of 0-1km, and 9% for a distance of 2-3km.

2. Bicycles

Bicycles are a mode of land transportation apart from motorbikes, cars, trains, and walking. Bicycles are considered to have disadvantages when compared to other modes of land transportation because if someone wants to travel a long distance it will take a long time and require more energy compared to a motorbike. However, bicycles have their advantages. Bicycles are a mode of transportation that does not emit carbon pollution, in other words, bicycles are a green mode of transportation.

Recently, bicycles have become the main mode of transportation very rare. Bicycles are more often used as a means of exercise only. In this research, the characteristics of bicycle use by students can be known from the results of filling out the questionnaire. From data from the results of filling out questionnaires by 150 respondents, it was found that the frequency of bicycle use by students was very small, with the percentage of students who never used bicycles being 85%, students who rarely used bicycles being 9%, students who frequently cycled 4%, and students who always use a bicycle by 2%. The following is a table and diagram of the distribution of bicycle use by respondents.

3. Other Public Transport

Apart from knowing the frequency of use of the above modes of transportation, this research can also find out the frequency of use of other public transportation modes such as city transportation (*angkot*), pedicab, and so on. Based on data from the results of filling out questionnaires from 150 respondents, it can be seen that students still use public transportation less. As many as 64% of students never use public transportation, 21% of students rarely use public transportation, 10% of students often use public transportation, and 5% always use public transportation.

4. Online Transportation

Online transportation is a form of organizing traffic and vehicles that follow and utilize developments in science or technology. Online transportation in Indonesia currently belongs to transportation companies that use applications as a link between users and drivers. In recent years, people have begun to change to using online transportation services instead of conventional transportation services.

Practical and easy reasons are often the background for choosing online transportation, including by students. In this research, the frequency of students who use this online transportation service can be determined. From the data from completing the questionnaire by 150 respondents, it can be seen that 26% of students never use online transportation, 68% of students rarely use online transportation, 5% of students often use online transportation, and

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1% of students always use online transportation.

5. Binary Logistic Regression Analysis

From the results of the data that may influence students' choice of transportation mode, the data will be processed in IBM SPSS software using binary logistic regression analysis because there is a dependent variable in the form of qualitative data with 2 variables. However, beforehand it is necessary to carry out a cross-tabulation recap to find out the variables that may and may not influence mode choice. Because this initial step cannot confirm whether a variable influences mode choice. A variable can be said to be influential after the significance number is known (sig. < a, with a = 0.05) using the chi-square test in binary logistic regression analysis.

Testing stages

This test is used to test the influence of the independent variable on the dependent variable. The following are the output results of the significance test using the IBM SPSS version 21.0 application:

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	health/environment, cost/cheap, speed, address of origin, monthly transportation costs, monthly transportation money, security, comfort, travel time, ease, availability, monthly pocket money, gender, vehicle ownership, semester, driving license ownership		Enter

Dependent Variable: mode type
All requested variables entered

From the table above it can be seen that the variable health/environment, cost/cheap, speed, home address, monthly transportation costs, monthly transportation money, security, comfort, travel time, convenience, availability, monthly pocket money, gender, vehicle ownership, semester, ownership driver's license is the independent variable (free) and the mode type variable is the dependent variable (not free) and the method used is the enter method.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,782 a	,612	,434	,202

Predictors: (Constant), health/environment, cost/cheap, speed, home address, monthly transportation costs, monthly transportation money, security, comfort, travel time, convenience, availability, monthly pocket money, gender, vehicle ownership, semester, sim ownership From the results of the summary model output, the coefficient of determination (R square) is 0.612, which means the influence of the independent variable (health/environment, cost/cheap, speed, address of origin, monthly transportation costs, monthly transportation money, security, comfort, travel time, convenience, availability, monthly pocket money, gender, vehicle ownership, semester, driver's license ownership) on variables bound (mode type) is 61.2%.

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ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,259	16	,141	3,449	,001b
	Residual	1,433	35	,041		
	Total	3,692	51			

From the ANOVA output, it is known that the calculated F value = 3.449 with a significance level of 0.001<0.05, so the regression model can be used to predict the dependent variable (mode type) which means there is an influence of the independent variable (health/environment, cost/cheap, speed, home address, monthly transportation costs, monthly transportation money, security, comfort, travel time, convenience, availability, monthly pocket money, gender, vehicle ownership, semester, possession of a driver's license) towards dependent variable (mode type).

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,757	,100		7,559	,000
	gender	,150	,096	,222	1,567	,126
	semester	,035	,080	,064	,438	,664
	monthly pocket money	-,065	,075	-,119	-,871	,390
	monthly transportation money	-,102	,069	-,190	-1,485	,146
	monthly transportation costs	-,032	,076	-,052	-,418	,678
	origin address	-,100	,238	-,052	-,420	,677
	vehicle ownership	,119	,091	,202	1,305	,201
	SIM ownership	,100	,103	,179	,978	,335
	travel time	,078	,066	,146	1,178	,247
	cost/cheap	,177	,071	,316	2,490	,018
	comfort	-,047	,083	-.075	-,568	,574
	convenience	,038	,083	,068	,452	,654
	speed	,035	,085	,063	,415	,681
	security	-,599	,144	-,524	-4,161	,000
	availability	-,044	,077	-,073	-,572	,571
	environmental Health	,257	,137	,225	1,882	,068

a. **Dependent Variable: mode type**

From the results of the output coefficients, it is known that the consistent value of the dependent variable (mode type) is 0.757, and the value of the regression coefficient -0.032, origin address=0.100, vehicle ownership=0.119, driving license ownership=0.100, travel time=0.078, cost/cheap= 0.177, comfort -0.047, convenience=0.038, speed=0.035, safety=-0.599, availability= -0.044, health/environment = 0.257, which means that for every 1% increase in the value of the independent variable, the value of the dependent variable increases according to the value of the independent variable.

Based on the significance value from the coefficients table, the significance value is obtained:

1. Gender = 0.126 > 0.05, not significant.
2. Semester = 0.664 > 0.05, not significant.
3. Pocket money = 0.390 > 0.05, not significant.
4. Monthly transportation expenditure = 0.146 > 0.05, not significant.
5. Origin address = 0.678 > 0.05, not significant.
6. Type of residence = 0.677> 0.05, not significant.
7. Vehicle ownership = 0.201 > 0.05, not significant.
8. Driver's license ownership = 0.335 > 0.05, not significant.
9. Travel time = 0.247, not significant.
10. Cost/cheap = 0.018 < 0.05, significant.
11. Comfort = 0.574 > 0.05, not significant.

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12. Ease = 0.654> 0.05, not significant.
13. Speed = 0.681> 0.05, not significant.
14. Security = 0.000 < 0.05, significant.
15. security influences the mode type variable.
16. Availability = 0, 571 > 0.05, not significant.
17. Health/environment = 0.068 > 0.05, not significant.

From the results of the regression model data processing, significant variables were obtained in selecting the transportation mode

Classification Tables

Observed		Predicted		
		mode type		Percentage Correct
		when using other transportation	when using a private vehicle	
mode type	when using other transportation	0	21	,0
	when using a private vehicle	0	129	100.0
Overall Percentage				86.0

From the test results, it is known that the main mode of transportation used by Al-Azhar University students is private vehicles with a percentage of 86%.

model, namely the variables cost/cheap and safety. So the regression equation is

So it can be seen that the mode selection model based on cost/cheapness is more important with a value of 10.5%. Next, an analysis is carried out to find out whether students choose the mode of transportationAl-Azhar University prefers private vehicle modes or public transportation modes.

CONCLUSION

1. 63% of Al-Azhar University students use motorbikes for campus trips, with 55% making 1.1-2.0 round trips. The most frequent trips are 1.1-2.0 times, with 54% visiting more frequently. Cost is the most popular mode of transportation (28%).
2. The study reveals that 56% of students use on-campus transportation for 1-2 km, while 42% use non-campus transportation for 0-1 km. Bicycle use is rare, with 85% never using one. 64% never use public transportation, while 21% rarely use it, 10% often, and 5% always. 65% never use online transportation.
3. The test results show that the independent variables (health/environment, cost/cheap, speed, address of origin, monthly transportation costs, security, comfort, travel time, convenience, availability, pocket money, gender, vehicle ownership, semester, driver's license ownership) influence the dependent variable (mode type) by 61.2%, with cost/cheap and safety being significant factors.

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