ANALYSIS OF THE DEMAND ON MOVEMENT OF THE POPULATION BY PUBLIC TRANSPORT AND TAXI VEHICLES IN THE MINGACHEVIR CITY

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ARTICLE INFO	ABSTRACT
	The article is dedicated to the demand on public transport and taxis in the Mingachevir city, which belongs to the class of medium cities of our country. A survey was conducted to analyze the current situation in the field of transportation and transport in Mingachevir city and to identify problems. The survey covered different age groups (under 18, 18-25, 26-35, 36-45, 46-55, 56-65, over 65), different professions and different zones in the Mingachevir city. As a result of the conducted survey, the opinions of the population on these issues were studied, the existing problems in this field were revealed and solutions were proposed. Also, visual monitoring of buses and taxis was carried out and deficiencies were revealed. As a result of the conducted scientific-research works, it was determined that buses in general use are more accessible than taxis.

INTRODUCTION

The Urban Mobility Plan concept (UMP) was first used in the European Union (EU) between 2009 and 2013. It emerged as a result of the inability of traditional transport planning practices to offer solutions to the mobility problems that arised in modern cities.

This approach was taken as a basis during the preparation of the action plan of the cities of Azerbaijan, including the Mingachevir city. The SMP is a strategic plan designed to meet mobility-related demand to improve the quality of life of people living in and around cities and to provide better service levels to commercial establishments located there. This plan is implemented on the basis of existing planning practices, taking into account the principles of monitoring and evaluation.

The Mingachevir city is the fourth largest city of Azerbaijan in terms of population. It received city status on November 11, 1948. On February 4, 1954, the republic became a subordinate city. It is located on the banks of the Kura River. Mingachevir city is bordered by Yevlakh district on the east, south and west, and Mingachevir Reservoir on the north [1].

The territory of Mingachevir city is 130 km², the local population is 105,671 people, the internally displaced are 20,740 people. According to the 2018 census, 50.5% of the population are men and 49.5% are women [1].

The implementation of the mobility project in the Mingachevir city, the improvement of the transport provision of the population in residential areas serves to increase the labor productivity of the population and the quality of life.

Within the framework of the mobility project in the Mingachevir city, during the monitoring of bus routes, there were cases that caused a decrease in the quality of service to the population.

The low quality of public transport services causes a rapid increase in the number of private cars in our country. As a result, traffic jams increase and dangerous situations on the roads are accompanied by more traffic accidents.

At the same time, there are more cases of environmental pollution with emission gases, other car waste and noise [2].

METHODOLOGY

In order to determine the level of transport services provided to the population, surveys and monitoring were conducted in 16 cities of our country under the organization of "Logistics and Transport Institute" operating under the Azerbaijan Technical University. One of those cities is Mingachevir. Tablets and mobile phones were used to conduct the survey, and live observation was used to conduct the monitoring. Surveys and monitoring were carried out by undergraduate and graduate students of Azerbaijan Technical University. The survey was conducted among 424 respondents and 50 questions were included in the questionnaires. A certain part of the survey questions is devoted to the study of population displacements in the Mingachevir city. By using the survey method, the opinions of the population regarding the transport service in Mingachevir city were obtained and the emerging problems were identified. Corresponding improvements have been proposed to solve the problems.

ANALYSIS OF POPULATION MOVEMENTS

The share of use of common means of transport (buses) used by the respondents who took part in the survey for the Mingachevir city during the month is shown in the following pictures (Figures 1-3).
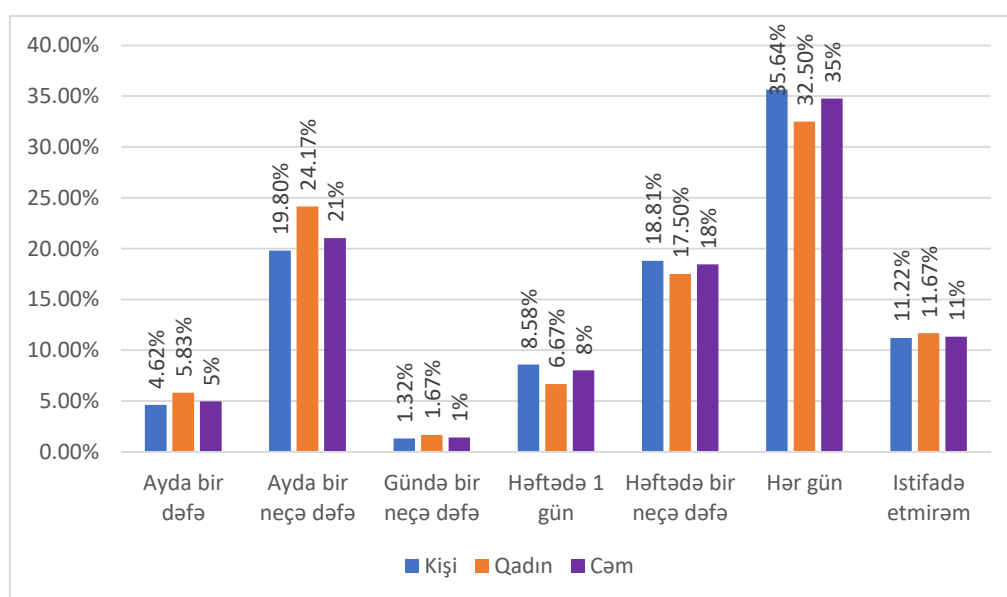
Figure 1. Frequency of using the bus during the month of the respondents participating in the survey

As it can be seen from Figure 1, 18.81% and 17.50% of male and female respondents participated in the survey, respectively, several times a week, 19.80% and 24.17% several times a month, 35.64% and 32.5% every day, 4.62% and 5.83% once a month, 8.58% and 6.67% 1 day a week, 1.32% and 1.67% use the bus several times a day. 11.22% and 11.67% of male and female respondents, respectively, said that they did not use the bus during the month.
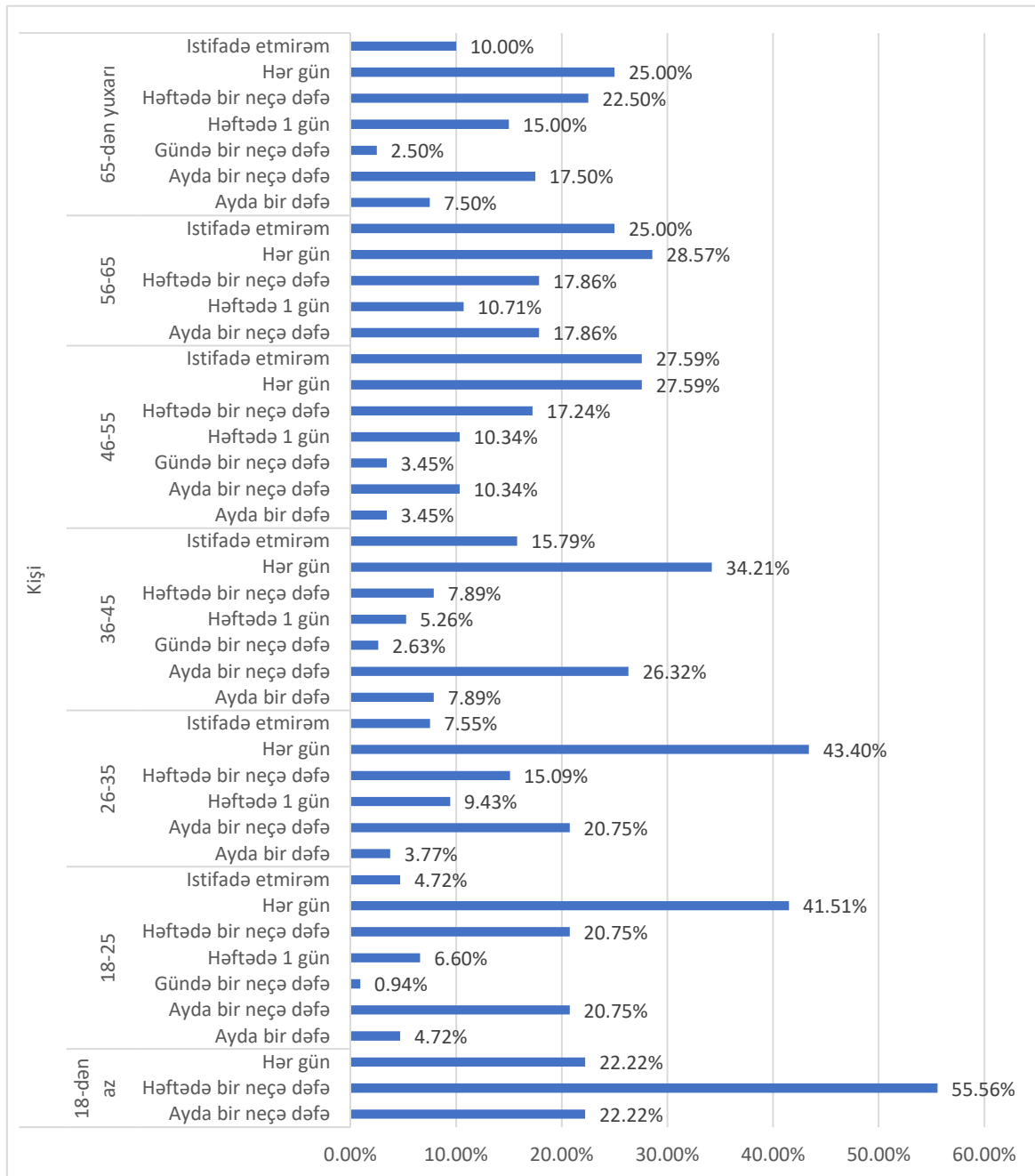

Figure 2. Frequency of bus use by male respondents

As it can be seen from Figure 2, 55.56% of male respondents in the age group less than 18 several times a week, 20.75% in the age group 18-25 several times a week, 43.40% in the age group 26-35- every day, 7.89% of the 36-45 age group once a month, 10.34% of the 46-55 age group several times a month, and 17.86% of the 56-65 age group several times a month, 65 over 25.00% reported that they used the bus every day.
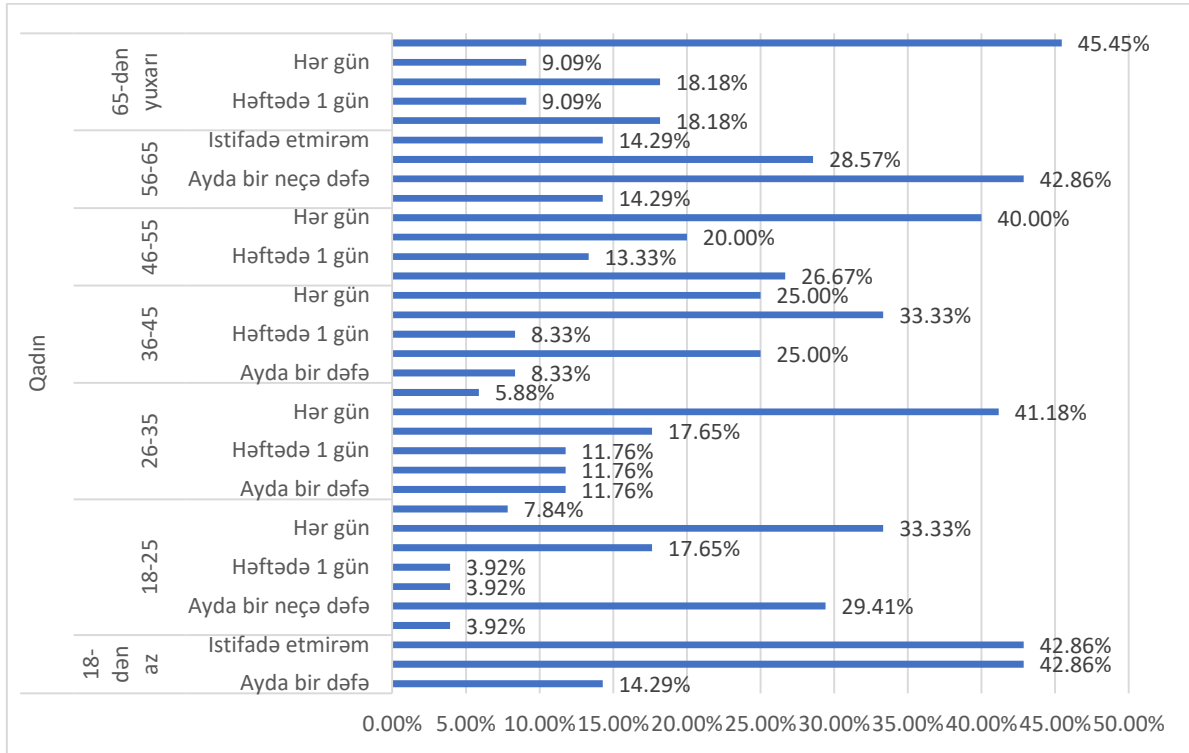
Figure 3. Frequency of using the bus by female respondents

As it can be seen from Figure 3, 42.86% of female respondents under the age group of 18 do it every day, 17.65% of the 18-25 age group do it several times a week, and 11.76% of the 26-35 age group do it once a week. day, 33.33% of the 36-45 age group used the bus several times a week, 20.0% of the 46-55 age group several times a week, 42.86% of the 56-65 age group used the bus several times a month, 45.45% of the age group over 65 said that they did not use the bus.

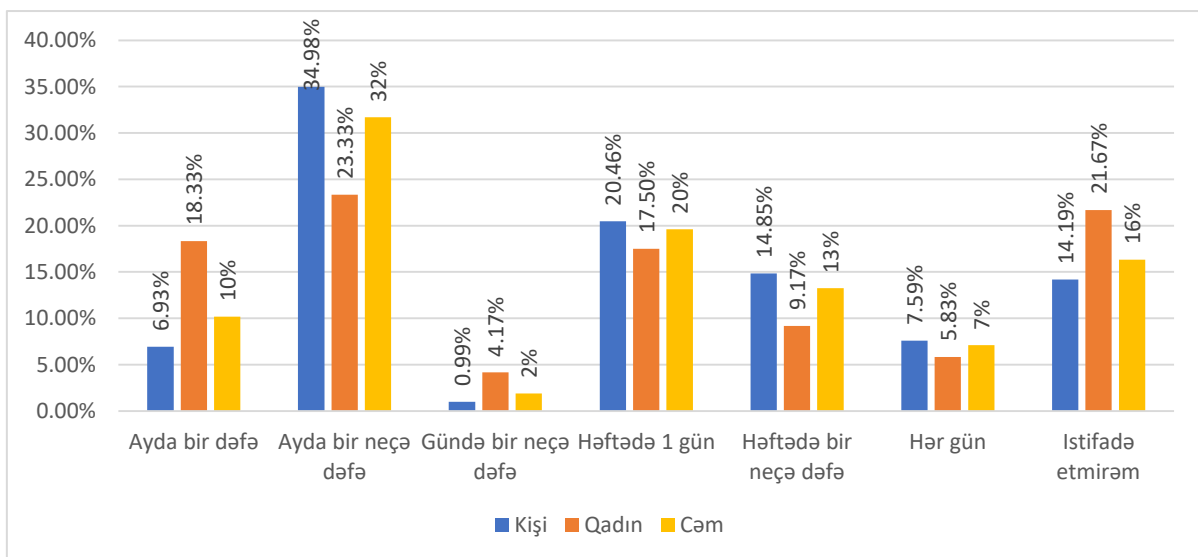The frequency of the respondents' use of taxis during the month is given in the following pictures (Figures 4-6).

Figure 4. The frequency of using a taxi during the month of the respondents who took part in the survey

As it can be seen from Figure 4, 34.89% and 28.33% of male and female respondents participated in the survey several times a month, 6.93% and 18.33% once a month, and 14.85% and 9.17% several times a week. , 7.85% and 5.83% reported that they used a taxi every day, 20.46% and 17.5% once a week, and 0.99% and 4.17% reported that they used a taxi several times a day. 14.19% of male respondents and 21.67% of female respondents said that they do not use taxis.
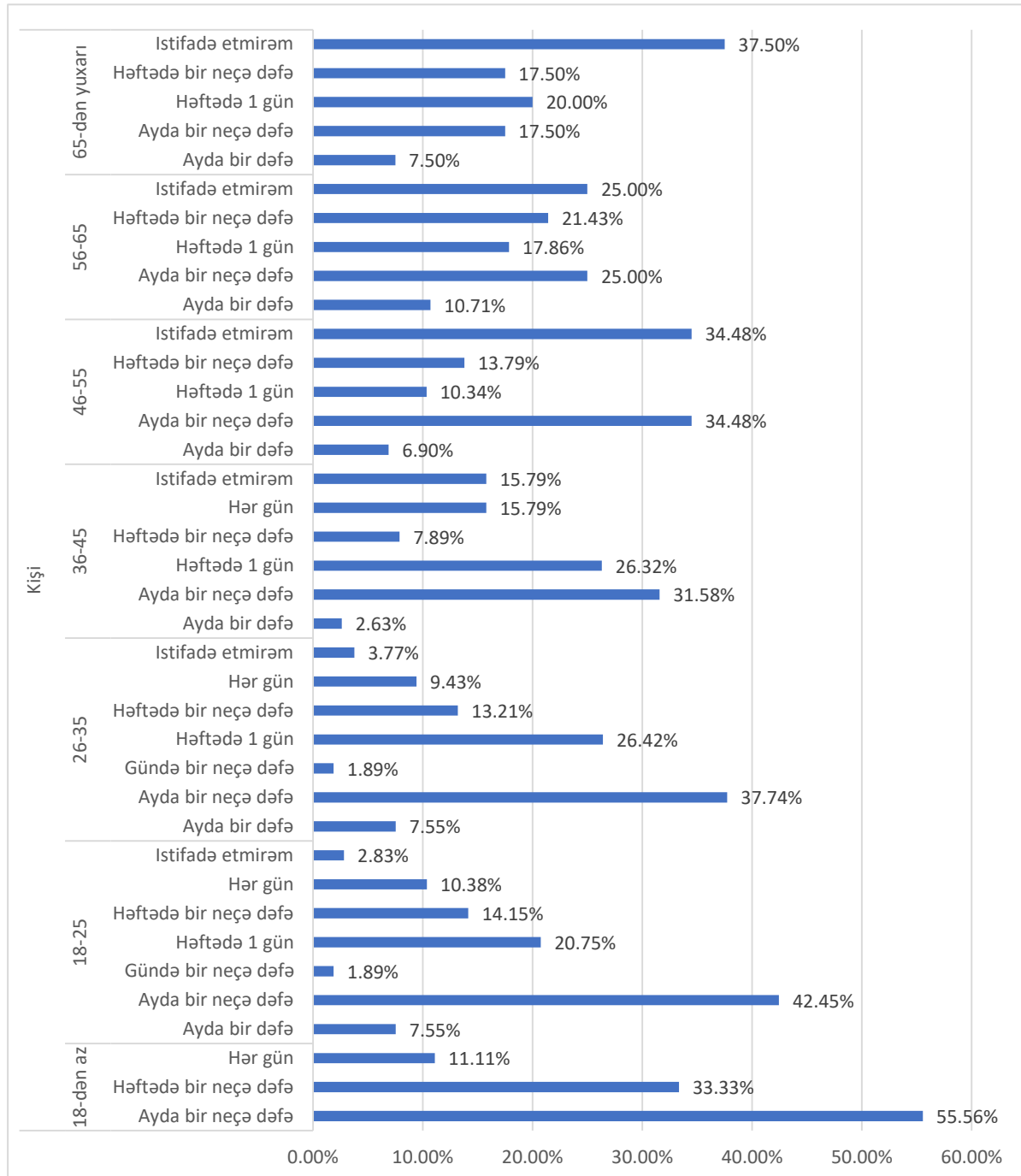

Figure 4. Frequency of taxi use by male respondents

As it can be seen from the picture, 55.56% of the under 18 age group several times a month, 42.45% of the 18-25 age group several times a month, and 37.74% of the 26-35 age group several times a month. , 2.63% for the 36-45 age group once a month, 34.48% and 25.00% for the 46-55

and 56-65 age groups several times a month, respectively, and 7.5% for the over 65 age group They reported that they used a taxi once a month.
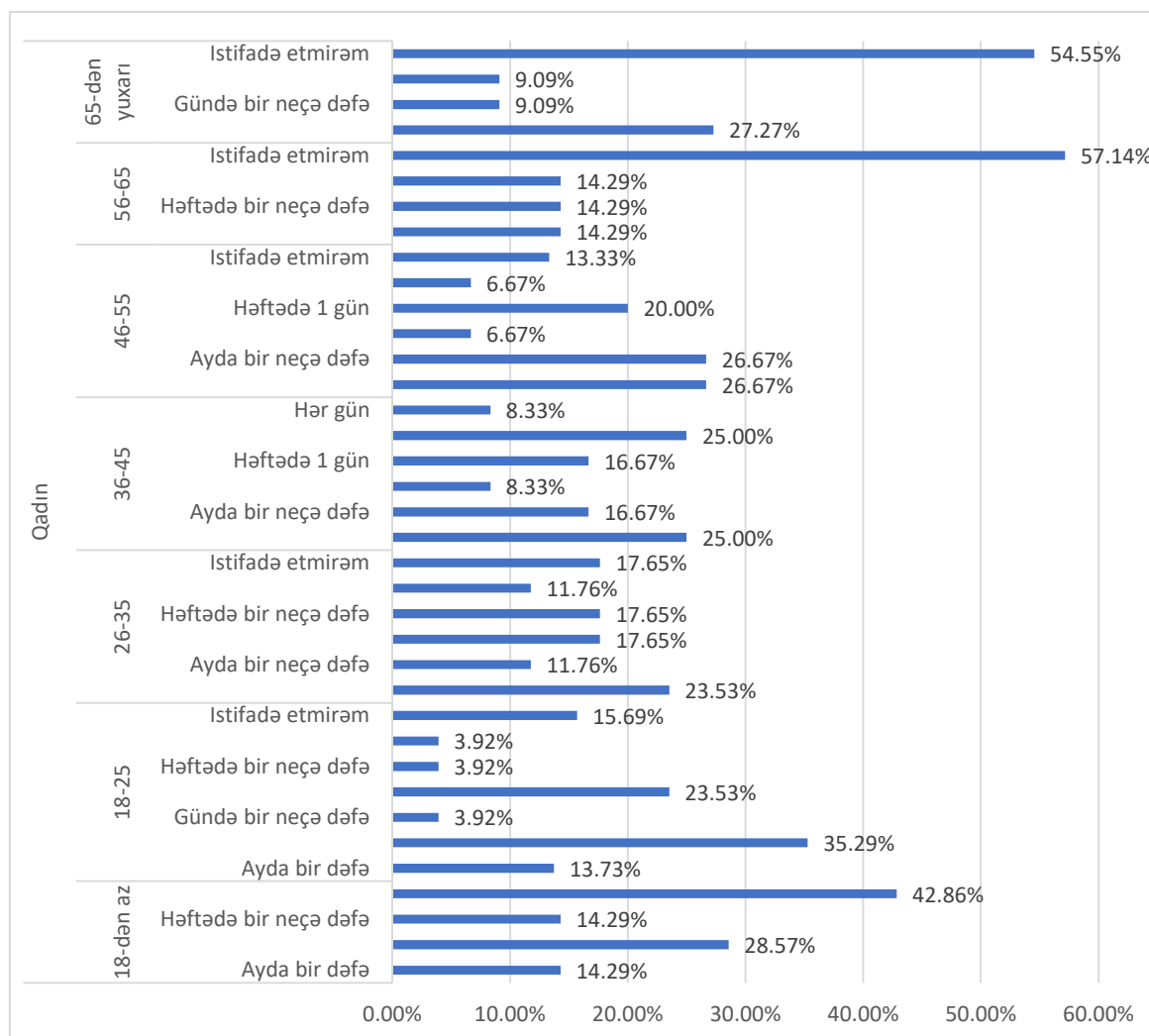

Figure 6. Frequency of taxi use by female respondents

As it can be seen from the figure, 42.86%, 15.69%, 17.65%, 0%, 13.33%, 14.29% and 54.55% of the female respondents in all age groups stated that they did not use a taxi.

Thus, it is clear from the results of the conducted research that buses in general use are more accessible than taxis. However, the fact that both the bus fleet and the taxi fleet are too old does not fully satisfy the residents of Mingachevir city. Therefore, the tendency of the majority of city residents to use private passenger cars can lead to an unnecessary increase in the city car park. An excessive increase in the car park usually causes traffic problems.

REFERENCE LIST

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