

THE USE OF MODERN TECHNOLOGIES IN STATISTICAL DATA COLLECTION

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ABSTRACT

This article describes statistical data, their types, methods of obtaining information, methods of statistical analysis of them, as well as questionnaires from the types of conducting statistical research. The issue of data collection and statistical analysis through online questionnaire was described in detail on the basis of vital issue.

KEYWORDS: *Statistical Information, Quantitative Information, Qualitative Information, Experience, Observation, Questionnaire, Online Questionnaire.*

1. INTRODUCTION

Today it is difficult to imagine our life without statistics. It would not be an exaggeration to say that statistics have penetrated every aspect of our lives. You know, when we look at my fields of medicine, economics, education, and more, through statistical data, our eyes are drawn to the statistics of changes in one word - shortcomings, growth and decrease rates in this area. For example, the comparison of higher education institutions in the scientific sphere and in the field of education at the Republican level today shows high indicators of which higher education institution, and some of which lag behind. Such data are being determined not only in the Republic, but also on a global scale, that is, the rating indicators of universities all over the world are being determined. Another example is the information to the patient of Covid-19, one of today's pressing problems that anyone can get through the internet. When we get these data, we come across statistics about the number of people directly affected, recovered and died as a result of the disease. By collecting statistical data, analyzing this data, classifying it and disseminating it to the public, the areas in which there are shortcomings are prominent, and as a result, measures were taken to eliminate the shortcomings in those areas. That is why issues such as the collection and analysis of statistical data are one of the pressing issues today.

2. MAIN PART

Collecting statistical data means measuring the values of one or more variables by units in this sample. All data can be divided into two types of general Data, these are: quantitative data and

qualitative data. Quantitative data is a naturally recorded quantitative data. Qualitative (or categorical) information is information that can be expressed through a natural number and divided into only categories that cannot be measured.

To describe a statistical data, it is very important to know what type of data it is, that is, it is quantitative or categorical data. Data presentation and analysis depend on the type of data. There are many ways to analyze quantitative and categorical data, so far we are limited to the issue of data collection below. We learned that data can be divided into two types, quantitative or qualitative. The next issue is the issue of data collection. In general, it is known that computers can be collected in different ways, but there are basically three types of Information Retrieval, these are:

1. From the published source;
2. From the experience done;
3. From observation research (for example, questionnaire).

Sometimes information on a topic that interests you can already be published in sources such as a book, a newspaper or a magazine. For example, you want to study and summarize the degree of divorce in 12 regions of Uzbekistan (that is, the number of divorces in 1000). You can find this data collection on the official website of the State Statistics Office of the Republic of Uzbekistan, which is published by the Government of Uzbekistan. Similarly, the number of inhabitants by Regions, the number of deaths, the number of births, etc. Statistical information about each region of Uzbekistan and the Republic of Karakalpakstan can be found on the official websites of the authorities. Any information about any higher education institution of Uzbekistan can be found on the official websites created by that higher education institution. At the moment, there are many different websites: education, news, forums, social networks, e-commerce sites (online stores), blogs, lends, etc. Any question you are interested in at a time when modern technology has developed (all over the world), relevant information can be easily found in books, magazines and articles from sources published on the Internet (world wide web), using phones or computers.

The second way to collect data is by experience. The researcher has strict control over units (people, things or objects) in the process of experimentation. For example, medical research has studied the potential of aspirin in the prevention of heart attacks, which often occur. Volunteer doctors are divided into two groups: the treatment group and the control group. Each doctor in the treatment group received one aspirin daily for a year. And doctors in the control group do not take drugs. The researchers, however, are not doctors, they collected data on whether doctors and medication should be taken, whether or not to take the medication, and the health benefits in these cases should be under strict supervision, and a conclusion was drawn. In an uncontrolled experiment, much more data can be obtained than necessary, that is, information that is not necessary can also be obtained. Correctly developed experience allows you to collect the necessary data.

Finally, observation research can be used to collect data. In observation, during the course of the study, the researcher will observe the variables that interest him in the natural location and records of the experimental units. For example, a child psychologist can monitor and record the level of aggressive behavior of fifth - graders playing on the school grounds. A similar zoologist can monitor and measure the weight of newborn calves. In contrast to the experiment conducted, in observation, the researcher does not attempt to control any aspect of the experimental units.

The most common method of observational research is this survey method.

3. RESULTS AND DISCUSSION

Statistical research cannot be imagined without questionnaires and the necessary conclusions. Many of the types of questionnaires include for example: online questionnaires, anonymous questionnaires, offline questionnaires and others. We are now talking about online questionnaires. There are also several types of online surveys. An example of this is that we can bring together questionnaires coming from different social networks and Google forms questionnaires. The convenience of Google forms questionnaires is a priority. Because it is very easy to draw a statistical conclusion in the questionnaires prepared on Google forms. Below we will prepare a questionnaire on Google forms and get statistical information on it, consider the distribution of questionnaires and other issues.

There are 2 different ways to prepare a questionnaire in Google forms:

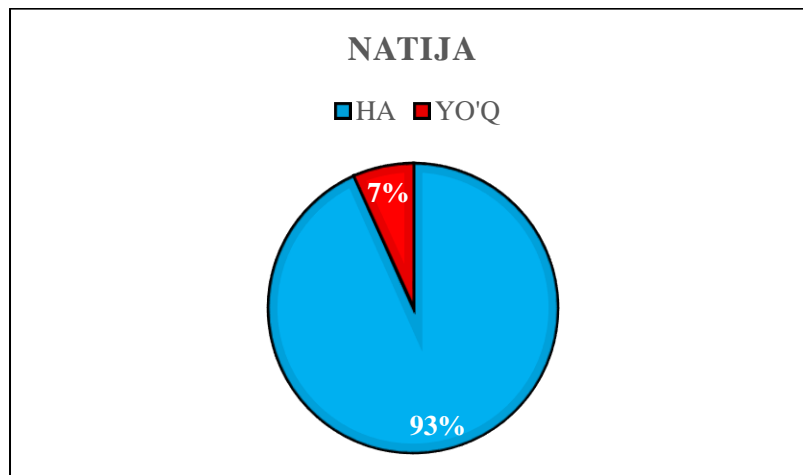
Method 1. On the computer, through Google forms, that is, this is entered into Google account, and from the Applications menu, a questionnaire is formed through the Forms item. This is attached to the questionnaire with the necessary questions and answers for selection. With the questionnaire ready, you will be given a link to the link to disperse it. Through this link, it is possible to distribute the questionnaire through social networks and get the desired results.

2-the method is to take a survey by mobile phone. That will install the Forms app application on the phone through the Play market and through this application will enter Google account and prepare a questionnaire. The mobile application also has its own convenience, but the questionnaire made on the computer turns out to be more qualitative.

We also formed a voluntary questionnaire on the problem of unemployment among cocaine University students in Google Forms. This questionnaire was asked of university students whether they would like to work in their free time from their studies or not. In the questionnaire, the student was asked about the name and surname, how much they want to work and how much they want to receive a salary, the regions of residence, the course, the direction. We bring the results below.

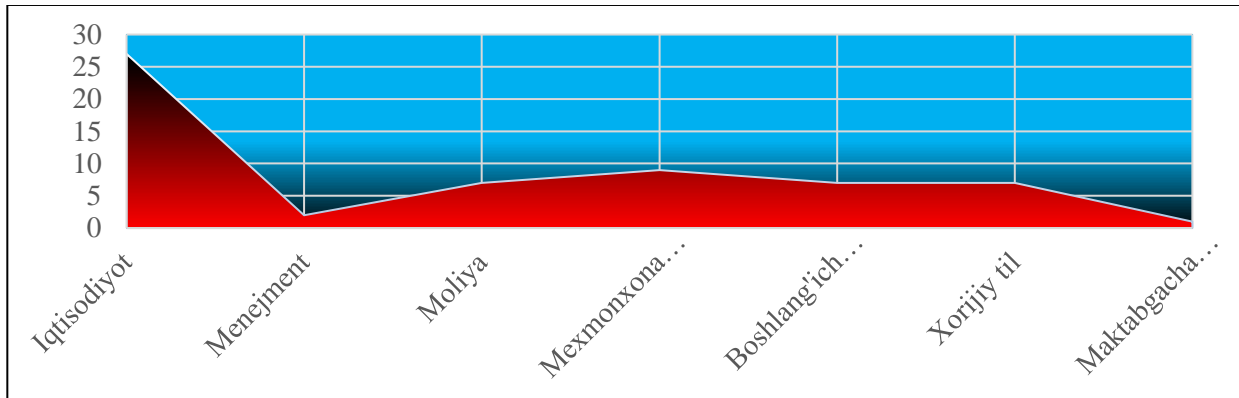
A total of 60 students participated in this survey. Of these, 37 were boys and the remaining 23 were girls. First of all, when asked about their desire to work in free time from their studies, a total of 60 out of 56 students confirmed their desire to work. This is 93% in statistical terms. In the second place, they were asked how many of them are studying in the first course. You can see the statistical diagram below:

1-TABLE



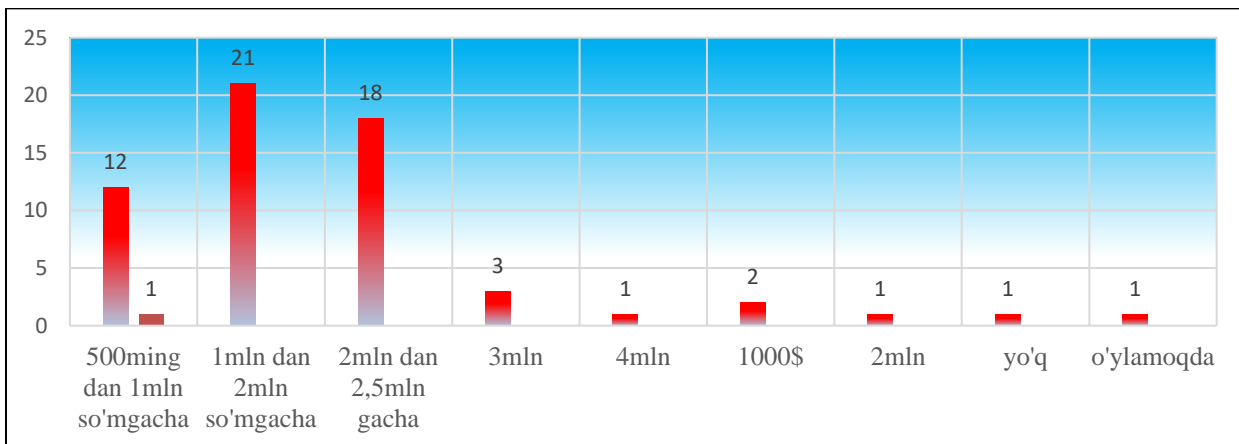
In this case, 36 out of 60 second-year students, 17 first-year students and 7 third-year students completed the questionnaire.

2-Table



Through the diagram above, you can see the results of their directions in the questionnaire 27 students of the economic direction, 9 students of the direction of tourism and hotel management, 7 students of the direction of foreign education, primary education and finance, 2 students of the direction of management and 1 student of the direction of preschool education took part.

3-Table



According to the chart above, the results of how many salaries they want showed that 35% of the students recorded the amount from 1mln sum to 2mln sum, 30% students recorded the monthly salary from 2mln sum to 2.5 million sum, 20% students recorded the monthly salary from 500 thousand sum to 1mln sum, and the remaining 15% students.

4. CONCLUSION.

In conclusion, we received such statistical data from this voluntary questionnaire that many students are dissatisfied with their material condition. But in fact, there should not be any other work of students other than reading. Because the knowledge that students get when they work while they study may not go far either. Or if they work in a job that is suitable for their own direction.

Above is the statistical results of the questionnaire we prepared by ourselves and the conclusion we worried you. Further inquiries can also be made in the form of personal conversations and interviews. Although personal requests are more expensive, they may be needed when it is necessary to collect more complex information than mail or phone requests. The positive side of conducting an online survey is that at the same time a large amount of information can be obtained. Today's information flow is the most effective way to collect information through online questionnaires at a time when modern technology has developed. Thus, we gave information about the types of statistical data, the methods of obtaining information, and the types of questionnaire and how to formulate it, what kind of statistical conclusion can be drawn from it.

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