Evaluation of students' views on teaching the subject of migration through distance education in Kazakhstan geography course

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Abstract
The aim of this study is to determine the important and methodological aspect of examining the population migration patterns of distance education and university students’ geography course. 420 university students who continue their education in Kazakhstan participated in the research in the spring term of 2020-2021. Scanning method was used in the research. In the research, a measurement tool called the general opinion measurement tool for the geography lesson, which was developed by the researchers and collected by taking expert opinion in the field of geography, was used. In the research, a 4-week online seminar was organized to increase the views of university students about the geography lesson, and training was given over Microsoft Teams, the interview form was collected with electronic forms after the seminar. The collected data were analyzed using spss program. According to the results of the study, it was concluded that university students' inclination to geography course is higher than male students, university students are familiar with the system for 1-3 years, their inclination to distance education systems is high and population migration patterns are learned well with this system.

Keywords: University Student, Distance Education, Geography, Lesson, Kazakhstan;

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1. Introduction

Today, it is seen that distance education and technology have become a part of our lives with the rapid development of information technologies, so it is seen that technology and distance education have started to be used in the education system (Ezza et al., 2019). Technological uses in education also affect the structure of the education system. As a result of this interaction, learning and teaching methods are changing rapidly (Naro et al., 2020). While learning and teaching activities become easier thanks to technology, they offer new opportunities for learning. In addition, technology is also effective in creating permanent behaviors. Therefore, technology is widely used in human education and is becoming more and more widespread (Aidarbekova et al., 2021 & Canpolat, 2019).

Although there is always a group that is distant to distance education, online education activities have become a compulsory education system rather than an alternative or supportive, since it has become inevitable to conduct education and training activities remotely during the Covid 19 Epidemic period. In this process, even those who are reluctant to change the traditional education system later switched to online education (Okay, 2020). During the pandemic process, geography educators in many places in the world had to adopt digitalization by having to deal with digital education channels and applications together with students (Bakioğlu et al., 2020). In this situation, it is seen that many educational institutions are trying to integrate into the system by creating a distance education infrastructure in order not to fall behind in the process, and university students continue their courses with distance education (Karakaya et al., 2020).

Distance education and education technology systematically analyzes problems involving all aspects of human learning and integrates all elements (manpower, knowledge, methods, techniques, tools, regulations, etc.) It is a complex process that develops, implements, evaluates and manages appropriate designs by running (Capuyan et al., 2021). People can benefit from it to the extent that they know the environment in which they live. Geography, which helps us to know the earth better, has begun to be used effectively in solving the issues related to the environment we live in today (Lembani, et al., 2020). It is seen that the practical use of this branch of science, which organizes the relations between man and the earth in the best way, depends on the increase in the number of students who have received good geography education in the society. It is seen that the population process of the world begins with the geographical order in which people settled down (Hashim et al., 2020). It is seen that many courses have been introduced with distance education and added to the system using the educational technology method, thus it is thought that a meaningful learning method has developed for students within an education (Bello et al., 2020).

In the following periods, thanks to the technological developments created by man, both the average geographical time of the human being extended and the population growth accelerated. It is seen that there are very rapid developments and specialization tendencies in geography, such that; In terms of methodological approach, it is seen that the era of "Geography with Travel Books" is long behind (Park, 2021). The period of classical school, regional view and determinist/determinist view has been overcome, and today the era of applied geography has been reached. Although it is not possible to distinguish these periods from each other precisely, geographers in Western countries have already taken their place in physical and economic planning as well as in the teaching profession. Today, it can be said that visualization and technology have an important place in research on geography (Wikle et al., 2020). Thanks to the possibilities created by modern technology, it is possible to make quality
visualizations depending on user requests. With this method, it is thought that students will both improve in their professional lives and achieve success in their lessons (Bartek, 2018).

In this context, it is thought that this study is important both for geography course and distance education. In the research, it was aimed to determine the important and methodological aspect of examining the population migration patterns related to the geography course of university students with distance education and it was designed according to this problem situation.

**Related Studies**

❖ Using the Kazakh population of Mongolia as a case study, this article aims to examine how non-immigrants view the economic and cultural costs of migration, emphasizing that their study in Werner & Barcus (2009) encompasses multiple disciplines, scales, and methodological approaches to the causes and consequences of migration. and, as a result, they concluded that the decision not to immigrate can be very strategic for non-immigrants in highly transnational contexts, researches in this context seem to be methodological for geography.

❖ Sadovskaya (2007) aimed to analyze her research on contemporary Chinese and Kazakh migration in her study, which she carried out in 2007. socio-demographic, geographic and both political and legal dimensions. In this respect, the methodological aspect of the research is important in field studies as well as revealing the scientific aspect of the research in all respects.

❖ Considering the related research part, not many studies were found in this context. In this context, it can be said that there is a research gap regarding this issue. Studies close to the research were scanned through the system and added, and it is thought that the studies will contribute to the research in this context.

The general purpose of this study is to determine the important and methodological aspect of examining the population migration patterns of university students regarding geography course with online education. In order to reach the problem situation in the research, answers to some questions were sought;

**Purpose of Research**

1. How is the online education status of university students?

2. Is there a significant difference on the geography course of university students according to gender variables?

3. How do university students examine the population migration patterns related to the geography course?
4. What is the status of university students according to their distance education education status?

2. Method and Materials

Research Model

In this research, the descriptive study method was chosen from the research methods and continued by using the survey model. The scanning method is a research method that aims to describe an event from past life to the present, as it is. (Baglama et al., 2017). In this research, on the determination of the important and methodological aspect of examining the population migration patterns related to distance education and geography course of university students by means of scanning method; were described according to the variables of gender, educational status, and duration of education.

Working Group/Participants

The research was carried out on a voluntary basis, and it was carried out on 380 primary school teachers working in the schools located in the center of Kazakhstan in the 2020-2021 fall academic year and willing to participate in the research voluntarily. The measurement tool used in the research was applied to 380 primary school teachers and accepted.

Gender

In this section, the distinctions of university students according to their gender are given in Table 1.

<table>
<thead>
<tr>
<th>Gender</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>238</td>
<td>56.66</td>
</tr>
<tr>
<td>Female</td>
<td>182</td>
<td>43.44</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100</td>
</tr>
</tbody>
</table>

As seen in Table 1, it is seen that 56.66% (238 people) of the university students in the study group are male and 43.44% (182 people) are female university students. In the gender section, the findings reflect the actual gender distribution.

Online education

In this section, the online education usage status of university students is examined and detailed information is given in Table 2.
As seen in Table 2, the online education usage status of the university students in the study group was examined and the highest among them was between 69.52% (292 people) 1-3 years, 30.23% (127 people) 4-6 years, and finally, 0.23% (1 person) is between 7 years and above, the findings in the online education use cases section reflect the actual distribution.

**Age Status**

In this section, the age status of university students is examined and detailed information is given in Table 3.

As can be seen in Table 3, among the university students in the study group, the highest 85.71% (360 people) are in the 18-24 age group, 13.09% (55 people) are in the 25-29 age group, and Finally, 1.20% (5 people) are in the age group of 30 and above. In the age status section, the findings reflect the actual distribution.

**Data Collection Tools**

1. **Personal Information Form (Demographic Data):** In the personal information form; Information such as age, gender, online education use cases are included.

2. **General Opinion Measurement Tool for the Geography Lesson Taken by Distance Education:** The measurement tool used in the research was developed by the researchers, the content validity of the developed measurement tool was checked and examined by experts with the title of 6 professors working in the field of geography and online education, and unnecessary items were removed from
the measurement tool or rearranged. The measurement tool consisting of 28 items in total, 20 items were used, and the 8-item measurement tool was developed thanks to expert opinion. University students' opinions were sought from two factorial dimensions, namely "predisposition to online education" and "geography, population power and methodological parts" of university students. If these factorial groups are to be discussed, it consists of the information about the definitions of population migration related to the geography lesson, and then the information about the definitions of population migration related to the geography lesson. In addition to these, the Cronbach Alpha reliability coefficient of the measurement tool as a whole was calculated as 0.93. Measuring tool; "strongly disagree" (1), "disagree" (2), "undecided" (3), "agree" (4) and "strongly agree" (5). The measurement tool was also collected from university students in the form of an online environment.

**Analysis of Data**

Data obtained from university students were analyzed in the Statistics program using frequency (f), percentage (%), mean (M), standard deviation (SD), t-test and one-way analysis of variance (one-way ANOVA). The data obtained from the program are given in the findings section accompanied by tables and comments.

**Application**

An online education environment was prepared for 420 volunteer university students continuing their education in Kazakhstan and the educational environment was designed by showing it to experts in the field. During the 4-week education period, information such as "online education", "population migration related to geography course", "important and methodological aspects of examining population migration patterns" were given in the form of online education, and performance assignments were requested from university students on this subject, these assignments were more relevant to the subject. It is thought to provide good consolidation. After the 4-week education, the measurement tool and information form of the university students were applied and the data were given in the findings section in tables. The training is set to 5 sections through the Microsoft Teams application program, which is preferred by most universities, and each section is distributed over the weeks to be limited to a maximum of 90 university students, each seminar is covered in 50 minutes in total, 40 minutes of which are training and 10 minutes of which are questions and answers. On the other hand, university students were expected to participate in the training by using devices such as tablets, phones and computers with video and microphone. The measurement tool applied to university students was collected by means of an online questionnaire.

**3. Results**

In this section, the findings obtained as a result of the analysis of the data obtained in the research are added in tables, and various comments are given in line with the findings.

**Online Education Situations of University Students**

In this section, the online education status of university students was investigated under two headings and the findings were added to Table 4.
Table 4 Online Education Status of University Students

<table>
<thead>
<tr>
<th>Online Education</th>
<th>N</th>
<th>M</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becoming an Online Education Aptitude</td>
<td>420</td>
<td>4.25</td>
<td>.432</td>
</tr>
<tr>
<td>Unable to Use Online Education Environment</td>
<td>420</td>
<td>2.20</td>
<td>.595</td>
</tr>
</tbody>
</table>

When Table 4 is examined, it is seen that the situations related to the online education status of university students are examined and it is seen that there are findings. According to these values, the table shows that university students are prone to online education and can use the environment.

3.2 Distribution of University Students on Geography Course by Gender Variables

The t-test was applied to find out whether there was a difference in the gender variable on the geography course of university students.

Table 5 Distribution of University Students on Geography Course by Gender Variables

<table>
<thead>
<tr>
<th>Geography lesson</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SS</th>
<th>sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriateness to Geography Lesson</td>
<td>Male</td>
<td>238</td>
<td>4.10</td>
<td>.443</td>
<td>420</td>
<td>-2.293</td>
<td>.022*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>182</td>
<td>3.90</td>
<td>.413</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't Stay Away From Geography Class</td>
<td>Male</td>
<td>238</td>
<td>2.30</td>
<td>.568</td>
<td>420</td>
<td>2.253</td>
<td>.023*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>182</td>
<td>2.20</td>
<td>.596</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results of the t-test applied according to Table 5, it was concluded that the difference in the dimension of "predisposition to geography lesson" in terms of the gender variable of the university students' scores for the geography lesson was significant \[t(420)=-2.293, p<.05\]. When the arithmetic averages in the dimension of inclination to geography lesson are examined, it is seen that the average of male university students is \(M=4.10\), the average of female university students is \(M=3.90\) and the scores of male university students are high. Accordingly, it can be said that male university students are more inclined to geography lessons than female university students.

According to the gender variable, the t-test, which made the difference in the dimension of "staying away from the geography lesson" among the scores calculated from the measurement tool of university students, was the last one \[t(420)=2.253, p<05\]. When the arithmetic averages in the stop dimension from the geography course are examined, it is seen that the average of female university students \(M=2.30\) is higher than the average of male university students \(M=2.20\). According to this result, it is seen that female university students stay away from geography lesson more than male.
university students. This value supports the success of male university students on geography course aptitude.

**University students' examination of population migration patterns related to geography course**

Anova test was applied to find out that there is no difference in the case of university students examining the population migration patterns related to the geography course.

*Table 6 University students' examination status of population migration patterns related to geography course*

<table>
<thead>
<tr>
<th>Measuring tool</th>
<th>Source</th>
<th>Squares Total</th>
<th>sd</th>
<th>Squares Average</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Migration</td>
<td>Intergroup</td>
<td>57.897</td>
<td>10</td>
<td>.224</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ingroups</td>
<td>58.503</td>
<td>410</td>
<td>.163</td>
<td>1.301</td>
<td>.249</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60.303</td>
<td>420</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Patterns</td>
<td>Intergroup</td>
<td>.307</td>
<td>10</td>
<td>.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ingroups</td>
<td>105.630</td>
<td>410</td>
<td>.335</td>
<td>.408</td>
<td>.790</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>107.104</td>
<td>420</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results of one-way analysis of variance (ANOVA) conducted for population migration patterns and their scores for population patterns over university students according to the variable of population migration patterns, no statistically significant difference was found for the size of population migration patterns [F(10-410)=1.310, p> .05]. Again, as a result of the analysis, it was concluded that there was no statistically significant difference for the size of the population patterns [F(10-410) .408, p>.05]. The fact that there is no difference in the cases of examining the population migration patterns means that the subject covered in the lesson is well learned, and it is seen that a behavior is formed in the students about this subject.

**Distance Education Education Status of University Students**

Finally, in this section, university students' distance education learning situations were investigated under two headings and the findings were added to Table 7.

*Table 7 Distance Education Status of University Students*

<table>
<thead>
<tr>
<th>Distance Learning</th>
<th>N</th>
<th>M</th>
<th>SS</th>
</tr>
</thead>
</table>

301
When evaluating the distance education situations used in the geography lesson, which is the last problem of the research, the highest value (M=4.30) in the dimension of "distance education aptitude" of university students on Table 7, and "not being able to use a distance education environment" (M = 2.30) When Table 7 is examined from this situation, it can be said that the distance education aptitudes used for the geography lesson are very low.

4. Discussion

It is seen that the rapid technological developments in today's world have caused great changes in geography teaching as in all areas of life. Computers, tablets, smart devices and the Internet are the most widely used technologies in geography lessons today, due to their contributions to the creation of an active learning environment. In the study of Demirci et al. (2013), they aimed to find out what the technologies in the classrooms where geography lessons are taught and how often they are used in Turkey. It has been concluded that university students use both technology and distance education systems very well for the geography course. In this context, it can be said that there is a difference between the studies carried out since 2013 and the education system for students is better prepared with technology. In the study of Osborne et al. (2020), K–12 geography education generally limits students' exposure to geospatial technology and geographic inquiry. They investigated the use cases of the application of geospatial technology in North Carolina K–12 schools, and as a result, they found that the lack of use of geospatial technology in the classroom shows its lack in geography class. It was found that the students were successful with distance education in the geography course, in this context, it can be said that when distance education systems are well prepared, it can be a good learning method not only for university students but also for all education students.

In the study of Turan et al. (2018), they aimed to determine the effect of augmented reality on achievement, cognitive load levels and opinions of 95 students enrolled in the geography course, and as a result, it showed that the students' views on the augmented distance education technology were positive. At the same time, it was found that university students' views on the geography lesson were positive and even higher than female students, the number given in this context is very important. In this context, it can be said in the discussion part of the research that this study provided positive benefits to education with the study conducted in 2018. Knapp (2020) aimed at a timely review of the results on the spatial distribution of the population in their study, and as a result, they found that it will have an increasingly important role in regional population dynamics and that age-group-specific locations have gained differentiation. It has been concluded that there is no difference between examining the patterns and it also means that the subject covered in the lesson is well learned, and that a behavior is formed in the students about this subject.

The studies mentioned in the discussion environment are relevant and new studies are important for the research, this research prepared for the geography course is not only on the population migration patterns in the geography, but also in direct proportion to the studies that distance education
environments are appreciated and take their place in the education environment. If as much work is done, such studies will be beneficial for students and contribute to their education. In addition, it is among the expectations of the research that this study sheds light on other studies on population migration patterns.

5. Conclusions

Distance education has shown its place and importance today and has become an answer to the needs of students with the education they have prepared, it is seen that it has become an indispensable education resource for students when this situation is combined with education in this age where we learn by watching videos even while cooking. In this context, among the results of the research, the use of online education was examined and the highest result was found to be 1-3 years, it is thought that students who use distance education for 1-3 years will have success in their education life. In this context, distance education is of great importance, as they have been using this system for so many years, their predisposition to the system is also important, it is thought that it is better to use an event effectively and properly than to use it for a certain period of time. It was found that university students had high scores for online education, but low scores for not being able to use an online education environment. According to these values, it has been concluded that university students are inclined to online education and can use the environment.

It is also important for students to plan courses to be given by distance education, because each course can be given with distance education, but it seems that it is not correct to use a single method. Geography course was chosen for the study and the results of the aptitude for the geography course were investigated in the research. It was found that the average of male university students was higher than the average of female university students. Accordingly, it can be said that male university students are more inclined to geography lessons than female university students. In addition, it was found that the difference in the dimension of "staying away from geography lessons" among the scores calculated from the measurement tool of university students according to the gender variable was significant. When the arithmetic averages in the stop dimension from the geography course are examined, it is concluded that the average of female university students is higher than the average of male university students. According to this result, it is seen that female university students stay away from geography lesson more than male university students. This value supports the success of male university students on geography course aptitude. Another value of the research is the examination of the population migration patterns related to the chosen course. According to the variable of the population migration patterns, the values made for the population migration patterns and the scores for the population patterns over the university students were examined and no statistically significant difference was found. Again, as a result of the analysis, it was concluded that there was no statistically significant difference for the size of population patterns. The fact that there is no difference in the examination of population migration patterns means that the subject covered in the lesson is well learned, and it is seen that a behavior has emerged in the students about this subject.

Finally, as it was said at the beginning of the research, distance education systems are important, it is thought that students' having an opinion about distance education will also shed light on future generations, each system used leaves its place to new ones in the coming years. In this context, when the final result of the research is considered, the evaluation of the distance education situations used in the geography lesson was investigated, and as a result, it was found that the dimension of "distance
education aptitude" was high, and the dimension of "not being able to use a distance education environment" was low. In this context, while it is said that this study, in which the distance education system is used, is important for the students, it can be said that the predisposition to the geography course is high, the university students are familiar with the system for 1-3 years, the predisposition to the distance education systems is high, and the population migration patterns are learned well with this system.

References


