

## Original Article

# The Opinions of University Students Related to The Conditions of Cooperation with The Measures in The Covid-19 Pandemic and on Online Education

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## Abstract

**Purpose:** The study was planned as a descriptive and cross-sectional study in order to determine the cooperation of distance education students with pandemic measures and their thoughts on online education during the pandemic period.

**Method:** The research data were collected online with an information form prepared by the researchers based on the literature review, which includes socio-demographic data and the level of compliance with information and precautions regarding COVID-19, and student views on distance learning.  $p < 0.05$  was considered significant.

**Results:** The average age of the students was  $22.80 \pm 3.53$ , 79.7% of them were girls, 81.8% were studying at a state university. The perception of the level of knowledge about COVID-19 of 79.4% of the students participating in the study was evaluated as "high". Participants who stated that they had a high level of knowledge about COVID-19 had a statistically significant increase in compliance with the precautions ( $p = 0.045$ ).

**Conclusion:** Online education can be a good option in extraordinary situations to continue education and not be interrupted.

**Keywords:** Covid 19, prevention, online education, student opinions, university education

## Introduction

The Coronavirus-2019 (COVID-19), seen in Wuhan Province of China in December 2019 first and declared as a pandemic by the World Health Organization (WHO), has taken the whole world hold of its influence in a short time (WHO, 2020).

The spread of COVID-19, which is still increasing and showing its effect with different mutations, is mostly through the respiratory tract. As an effective way to prevent this "spreading", maintaining physical distance, which is a standard practice and announced by many health authorities around the world, including WHO, has been

implemented by many countries (Ozdogan & Berkant, 2020). This ordinary but protective measure has been defined as the first step in prevention work. (Ozdogan & Berkant, 2020; Guragai, M, 2020). In addition to the protection of physical distance, the use of masks and compliance with hygiene rules, especially hand hygiene, have been adopted as three basic protection methods all over the world, and all institutions have carried out public awareness activities on this issue. These measures, which have suddenly appeared in our lives, have brought with them important challenges and changes in daily life (WHO, 2020)

The most serious epidemic which has managed to spread to every country and region in the world with the influence of global transportation vehicles to date is COVID-19. The effects of this global epidemic were also felt intensely in our country and many sectors and business space have been affected negatively, especially the health sector. One of the most affected sectors has been the "education". The education sector went through a serious method change in this process and all higher education institutions had to take a break from education on March 16, 2019 (Cetin & Anuk, 2020). In order to continue education uninterrupted, all universities suddenly and effectively switched to distance education as of March 23, and this method suddenly became the basic teaching method of all educational institutions. Distance education is defined as a form of education in which one or more technologies can be used at the same time, in which the instructor and students can be carried out without being in a closed environment, and the interaction between the teacher and the student can be maintained synchronously or asynchronously (Seaman et. al., 2018; Han & Demirbilek, 2021). However, this form of education, which is practiced without a qualified preparation process and is under the initiative of academics in higher education institutions, has led students to face many serious problems (Erzen & Ceylan, 2020; Ekiz, 2020). In many studies, it is stated that students cannot benefit from the distance education courses they take, in general (Erzen & Ceylan, 2020; Ekiz, 2020). In the study conducted by Karadag and Yucel, 17,939 people, including

111 state and 52 private universities, were included. (Montenegro and Yücel, 2020).

Distance education, in addition to many positive contribution during the epidemic process, causes loss of motivation of the student (Karakus et al., 2020), it is not possible to get high benefit from the lessons requiring practice (Clark, 2020; Djalilova, 2020), it reduces the work which should be conducted as a team (Keskin & Ozer, 2020). It has received many criticisms for reasons such as interruption in education due to internet, technical problems, the certificate or diploma for the education given with distance learning not accepted by official institutions (Pirozhkova et al., 2020), and cyber security problems (Han & Demirbilek, 2021).

Considering the studies on the evaluation of distance education, it is seen that there is an increase with the COVID-19 pandemic (Ozdogan & Berkant, 2020). It has been observed that most of the studies are phenomenologically qualitative and conducted with small groups (Ekiz, M. A 2020; Kaya & Isik 2021). When the studies on the subject are examined; In comparative studies, it is seen that some advantages and disadvantages have been determined in terms of the application of distance education. Some of the advantages of distance education are these; it reduces people's anxiety levels, allows students to work at their own pace, provides flexible learning opportunities which are independent of time and space, saves time and is less costly. Some of the disadvantages of distance education are; Social isolation due to the lack of face-to-face interaction in providing motivation, difficulty in getting instant feedback, a constant need for technology, and situations related to accreditation (Ozdogan & Berkant 2020; Gewin, 2020)

Due to the COVID-19 pandemic, which has become a global epidemic, it requires great attention to know all the difficulties experienced in this process and any stages of education and the attitudes of students towards distance education. In this study, it was aimed to determine the students' comprehension and implementation of protection measures in the early stages of the Covid-19 pandemic, and to determine their views on distance learning and to develop solutions.

## Material Method

**Type of Research:** The research is of descriptive cross-sectional type in general survey model and quantitative design.

**Coverage area and Sample of the Research:** The research population consisted of all students studying at the associate degree and undergraduate level of two state universities and a foundation university, who continued their education with distance education due to the pandemic between May 2020 and June 2020. It was tried to reach all students who were not selected as a sample. The sample of the study consisted of 961 students who accepted to participate in the study and did not have any disability related to internet and computer use. In addition to being faster and easier, the compulsory quarantine and the risks of face-to-face meeting for researchers and participants; The data were collected in an internet-based digital environment (Google survey).

**Data Collection Tools:** As a data collection tool, an information collection form consisting of 66 questions prepared by the researchers based on the literature review and structured by taking the opinions of 5 experts was used. This form has been created according to 3 main objectives. The first part of the form includes questions about socio-demographic characteristics (age, gender, income status, etc.) and university-related characteristics. The second part includes the questions in which the answers given to the statements about the students' knowledge of the Covid-19 pandemic and their cooperation with the precautions to be followed during the pandemic are evaluated. In the third part, questions about evaluating online education are included.

**Evaluation of data:** The obtained data were evaluated using the SPSS package program to examine the relationship between descriptive statistics (number, percentage) and two categorical variables using Pearson chi-square analysis,  $p < 0.05$  was considered as significant

**Ethical Dimension of Research:** The study was carried out in cooperation with the Helsinki Declaration of Human Rights. For the research, approval from the Scientific

Research and Publication Ethics Committee of a university hospital (dated 30/04/2020 and numbered E.4334) and all necessary permissions from the Ministry of Health were obtained. For the voluntary basis of participation in the research, the first option of the survey was the "volunteering tab". After marking this tab, volunteers were given access to other questions.

## Results

The relationship between students' sociodemographic characteristics and their compliance with COVID-19 precautions is presented in Table 1. The mean age of the students is  $22.80 \pm 3.53$  (min:18; max:47), 79.7% are girls, 2.5% are married, 6.7% are working. 81.8% of the participants were studying at a state university, 56.7% reported that income was equal to expenses, 87.7% had a nuclear family structure, and 12.5% had a disease. Compliance with COVID-19 measures is statistically significantly higher in female students, unemployed and having a nuclear family structure ( $p < 0.05$ ) (Table 1).

79.4% of the students evaluated the perception of COVID-19 knowledge level as "high". 41.4% of students who stated that they use gloves, 5.1% who use public transport, 55.7% who ventilate their house 3 or more times a day, 41.6% who take plenty of fluids, 87.1% who use disinfectants, who have had a COVID-19 test 2.8% (Table 2). When the relationship between some behaviors of the students and their compliance with the behaviors aimed at preventing COVID-19 was examined, it was found that the participants who stated that their knowledge about COVID-19 was high was statistically significantly higher ( $p = 0.045$ ). Students who use gloves, do not use public transportation during the COVID-19 pandemic period, and use disinfectants have a statistically significant higher level of compliance with COVID-19 precautions than the other groups ( $p < 0.05$ ) (Table 2).

The distance education evaluations of the students are presented in Table 3. 27.9% of the students stated that they were satisfied with distance education, 41.7% were not satisfied, and 86.8% stated that their university/department was successful in managing the COVID-19 crisis. 59.6% of the participants stated that the impact of the COVID-19 pandemic on education was "negative", 46.9% said that education was "inefficient", 63.0% said that it was not possible

for online education to be successful, 48% .7 of them stated that they had motivation difficulties in distance education (Table 3)

**Table 1. The relationship between students' sociodemographic characteristics and their compliance with COVID-19 precautions (n=961)**

| Parameters                 |                              | n (%)      | non-compliance with COVID-19 precautions | compliance with COVID-19 precautions | p*           |
|----------------------------|------------------------------|------------|--|--------------------------------------|--------------|
| <b>&lt;0.001</b>           |                              |            |  |                                      |              |
| <b>Gender</b>              | Girl                         | 766 (79.7) | 406 (53.0)                               | 360(47.0)                            |              |
|                            | Boy                          | 195 (20.3) | 135 (69.2)                               | 60(30.8)                             |              |
| <b>Marital Status</b>      | Single                       | 937 (97.5) | 523 (55.8)                               | 414(44.2)                            | 0.06         |
|                            | Married                      | 24 (2.5)   | 18 (75.0)                                | 6(25.0)                              |              |
| <b>Type of University</b>  | State University             | 786 (81.8) | 444(56.5)                                | 342(43.5)                            | 0.79         |
|                            | Foundation University        | 175 (18.2) | 97(55.4)                                 | 78(44.6)                             |              |
| <b>Working Condition</b>   | Working                      | 64(6.7)    | 47(73.4)                                 | 17(26.6)                             | <b>0.004</b> |
|                            | Not working                  | 897(93.3)  | 494(55.1)                                | 403(44.9)                            |              |
| <b>Economic conditions</b> | Less than income-expenditure | 316(32.9)  | 172(54.4)                                | 144(45.6)                            | 0.28         |
|                            | Income equals expense        | 545(56.7)  | 318(58.3)                                | 227(41.7)                            |              |
|                            | Income more than expenses    | 100(10.4)  | 51(51.0)                                 | 49(49.0)                             |              |
| <b>Family type</b>         | Nuclear family               | 838(87.2)  | 457(54.7)                                | 381(45.5)                            | <b>0.004</b> |
|                            | Extended family              | 123(12.8)  | 84(68.3)                                 | 39(31.7)                             |              |
| <b>Any diseases?</b>       | Yes                          | 120(12.5)  | 69(57.5)                                 | 51(42.5)                             | 0.77         |
|                            | No                           | 841(87.5)  | 472(56.1)                                | 369(43.9)                            |              |

\*p<0.05, Pearson chi-square analysis

**Table 2. The relationship between some behaviors of the students during the COVID-19 pandemic and their compliance with the COVID-19 precautions (n=961)**

| Parameters                        |                 | n (%)     | Disobedient COVID-19 precautions | Obedient COVID-19 precautions | p*                |
|-----------------------------------|-----------------|-----------|----------------------------------|-------------------------------|-------------------|
| <b>0.045</b>                      |                 |           |                                  |                               |                   |
| <b>Low perception of COVID-19</b> | Düşük           | 22(2.3)   | 17(77.3)                         | 5(22.7)                       |                   |
|                                   | Orta            | 176(18.3) | 107(60.8)                        | 69(39.2)                      |                   |
|                                   | Yüksek          | 763(79.4) | 417(54.7)                        | 346(45.3)                     |                   |
| <b>Using gloves</b>               | Using           | 398(41.4) | 176(44.2)                        | 222(55.8)                     | <b>&lt;0.0001</b> |
|                                   | Not using       | 270(28.1) | 191(70.7)                        | 79(29.3)                      |                   |
|                                   | Sometimes       | 293(30.5) | 174(32.2)                        | 119(40.6)                     |                   |
| <b>Using public transport</b>     | Using           | 49(5.1)   | 30(61.2)                         | 19(38.8)                      | <b>0.009</b>      |
|                                   | Not using       | 828(86.2) | 451(54.5)                        | 377(45.5)                     |                   |
|                                   | Using sometimes | 84(8.7)   | 60(71.4)                         | 24(28.6)                      |                   |
| <b>Ventilation of the house</b>   | 1-2 times       | 426(44.3) | 239(56.1)                        | 187(43.9)                     | 0.91              |
|                                   | 3 and more      | 535(55.7) | 302(56.4)                        | 233(43.6)                     |                   |
| <b>Drinking plenty of fluids</b>  | Yes             | 400(41.6) | 210(52.5)                        | 190(47.5)                     |                   |
|                                   | No              | 131(13.6) | 75(57.3)                         | 56(42.7)                      |                   |
|                                   | Partially       | 430(44.7) | 256(59.5)                        | 174(40.5)                     |                   |
|                                   | Yes             | 837(87.1) | 458(54.7)                        | 379(45.3)                     | <b>0.01</b>       |

|                      |     |           |           |           |      |
|----------------------|-----|-----------|-----------|-----------|------|
| Use disinfectant     | No  | 124(12.9) | 83(66.9)  | 41(33.1)  |      |
| Get tested for COVID | Yes | 27(2.8)   | 525(56.2) | 409(43.8) | 0.75 |
|                      | No  | 934(97.2) | 16(59.3)  | 11(40.7)  |      |

\* $p < 0,05$ , Pearson chi-square analysis

**Table 3. Opinions of students about distance education (n=961)**

| Parameters  | Sayı | %    |
|---|------|------|
| <b>Satisfaction with the distant learning</b>                               |      |      |
| Pleased   | 268  | 27.9 |
| Kind of pleased   | 292  | 30.4 |
| Not pleased   | 401  | 41.7 |
| <b>The success of university/department in managing the COVID-19 crisis</b> |      |      |
| Successful  | 734  | 86.8 |
| Unsuccessful  | 117  | 12.2 |
| I don't know  | 10   | 1.0  |
| <b>Effect on Education</b>  |      |      |
| Positive effect   | 202  | 21.0 |
| No effect   | 189  | 19.1 |
| Negative effect   | 572  | 59.6 |
| I don't know  | 3    | 0.3  |
| <b>Evaluation of the efficiency of education</b>                            |      |      |
| Efficient   | 504  | 53.5 |
| Inefficient   | 275  | 46.9 |
| I don't know  | 6    | 0.6  |
| <b>Is it possible for distance education to be successful?</b>              |      |      |
| Possible  | 168  | 19.5 |
| I don't know  | 167  | 17.5 |
| Impossible  | 606  | 63.0 |
| <b>Having difficulty in motivation in distance education (n=940)</b>        |      |      |
| Yes   | 457  | 48.7 |
| No  | 147  | 15.6 |
| Sometimes   | 336  | 35.7 |

## Discussion

The aim of this study is to determine the opinions of the students against the compulsory distance education application, which came into the field of application as of March 23, 2020, caused by Covid-19, which was declared to have turned into a global epidemic on March 11, 2020, and to have information about Covid-19 and to take measures to protect against the pandemic. to examine compliance situations. When we consider the general course of the new type of Corona Virus epidemic, the survival conditions of the virus, the level of contagiousness, it can be said that the transformative effect of the epidemic in the education process will not be temporary and short-term (Euronews, 2020) and that face-to-face education will become controversial in the future (Yalcinkaya, 2020). For this reason, it is important to take the opinions of the students who have had

this experience with distance education and to consider these views in future planning.

It is achieved from the study that 79.7% of the students in the study group are women. In more than one study evaluating compulsory distance education conducted with university students during the Covid-19 epidemic in Turkey, it was reported that the majority of students (61.2%) were female, similar to our study (Han & Demirbilek, 2021; Kaya & Isik 2021). The fact that the density of students in the institutions where the studies were carried out consisted of women may have been effective in this result.

It has been determined that the Covid-19 personal threat perceptions of the participants are "high", and the behavior of complying with the Covid-19 measures is "moderate" (Turkmen et al., 2021). It can be interpreted that students with a high level of knowledge perceive this pandemic as a personal threat, so they comply more with the precautions.

When the participants' cooperation with Covid-19 measures is evaluated according to their socio-demographic characteristics; there is a statistically significant difference between women and students who do not work in any job compared to others ( $p < 0.05$ ). Similar to our study, in the study conducted by Turkmen et al., there was no statistically significant difference ( $p > 0.05$ ) between the mean scores of the Covid-19 personal threat perception and compliance with Covid-19 precautions scales according to the marital status, education and age groups of the participants. It has been observed that there is a higher perception of Covid-19 personal threat than men. Likewise, it was determined that female participants exhibited higher compliance behaviors to Covid-19 measures than males (Turkmen et al., 2021).

According to the results of the study, it is seen that distance education has some positive and negative features in itself compared to face-to-face education during the COVID-19 pandemic period.

When students' satisfaction with distance education was evaluated, 27.9% (268) stated that they were satisfied, while 41.7% (401) stated that they were not satisfied with this situation. When the literature is evaluated, the findings are in line with our study findings. Especially students studying in applied fields stated that distance education is not sufficient (Hark Soylemez, 2020). In another study, which is parallel to our study, some of the participants who expressed their opinions on emergency and compulsory distance education only gave negative opinions and some only positive opinions. The number of students expressing a positive opinion was 347 in total, and the number of students expressing a negative opinion was 533 in total (Han & Demirbilek, 2021). The results of many studies indicate that students find advantageous and disadvantageous aspects in distance education (Izzeddin & Bdair, 2021; Han & Demirbilek, 2021; Erzen & Ceylan, 2020; Ozdogan & Berkant, 2020).

When the students' views on the efficiency of education in distance education are evaluated; more than half of them (53.5%) stated that they found the education productive. Almaghaslah and Alsayari (2020) determined in their studies that distance education creates an important advantage in terms of meeting the education needs, and similarly, Kaden (2020) determined that the most important advantage of distance education is that it provides support for learning during the COVID-19 pandemic period.

When the students' motivation difficulties in distance education were evaluated, 48.7% of them stated that they had motivation difficulties, while only 15.6% of them stated that they had no difficulties in providing motivation. In another study evaluating the satisfaction and success of foreign language learners through online education in adults, the majority of the participants stated that they had difficulties in providing motivation (De Paepe et al., 2018). Similar to our study, in the findings of another study, it is stated that students generally have difficulty in concentrating and focusing on the process due to the comfort of the home environment during the distance education process, and that students definitely provide more motivation in face-to-face education (Kaya & Akin İşik, 2021).

**Conclusion and recommendations;** It has been concluded that students' attitudes towards complying with the measures in the Covid-19 pandemic differ between genders and that distance education has both advantageous and disadvantageous aspects, the majority of students are not satisfied with distance education, and it affects their motivation negatively. Since complying with the precautions in the Covid-19 pandemic reduces the possibility of transmission of the disease, informing the public clearly, clearly and consistently by the health authorities and explaining the severity of the disease to everyone correctly will make a significant contribution to the fight against the pandemic. Improvements can be made to reduce these disadvantages in educational environments by conducting various academic studies on the causes of disadvantages in distance education. As distance education experiences increase, more studies on the subject can be made and comparisons and improvements can be made about the methods used.

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