



Araştırma Makalesi • Research Article

Coronavirus and Face-to-Face Learning in Higher Education: Students' Nosophobia of Covid-19

Koronavirüs ve Yükseköğretimde Yüz Yüze Eğitim: Öğrencilerin Covid-19'a Yakalanma Kaygıları

Celalettin Korkmaz*

Abstract: This study aims to evaluate the effectiveness of face-to-face education in the pandemic with a mixed methodology according to the Covid-19 phobias and anxiety levels of higher education students. The research was designed within the framework of convergent simultaneous mixed research design. Quantitative data were obtained by using a Covid-19 phobia questionnaire with the participation of 248 higher education students in a university located in the Mediterranean region of Turkey. Qualitative data were collected by using an open-ended question about the anxiety of catching the disease with the participation of 64 students. The first part of the scale includes demographic informations. In the other parts, there are 20 question items in 5-point Likert type, and an open-ended question statement was included in order to enable different opinions to be expressed. Normally distributed quantitative data were analyzed using statistical programs, and qualitative data were analyzed using content analysis method to describe participant views. The results of the research reveal that university students have Covid-19 phobia in the face-to-face education process, and the phobias differ significantly according to the type of vaccine and the presence of people they are worried about infecting. On the other hand, it was determined that the place of residence doesn't have a significant effect on the Covid-19 phobia of the students. In addition, students explain their anxiety about getting sick in the context of environmental, individual, and educational factors. Ethics committee approval for this study was obtained with the decision of Hatay Mustafa Kemal University Social and Human Sciences Scientific Research and Publication Ethics Committee, dated 05.01.2022, meeting 01 and number 08.

Keywords: Face-to-face education, Covid-19 phobia, Higher education students, Infection

Öz: Bu çalışma, yükseköğretim öğrencilerinin covid-19 fobilerine ve kaygı düzeylerine göre pandemi sürecinde yüz yüze eğitim etkinliğini karma bir metodoloji ile değerlendirmeyi amaçlamaktadır. Araştırma yakınsak paralel karma araştırma deseni çerçevesinde tasarlanmıştır. Nicel veriler, Türkiye'de Akdeniz bölgesinde yer alan bir üniversitede, 248 yükseköğretim öğrencisinin katılımıyla covid-19 fobisi anketi kullanılarak; nitel veriler ise, 64 öğrencinin katılımıyla hastalığa yakalanma kaygılarına ilişkin açık uçlu bir soru kullanılarak toplanmıştır. Ölçeğin ilk bölümünde demografik bilgiler yer almaktadır. İkinci bölümde, 5'li Likert tipinde 20 soru maddesi

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bulunmaktadır. Nitel kısmında ise, farklı görüşlerin de ifade edilebilmesini sağlamak amacıyla, bir açık uçlu soru ifadesine yer verilmiştir. Normal dağılım gösteren nicel veriler, istatistiksel programlar kullanılarak, nitel veriler ise katılımcı görüşlerinin betimlenmesi için içerik analizi yöntemi kullanılarak analiz edilmiştir. Araştırma sonuçları, yüz yüze eğitim sürecinde üniversite öğrencilerinin covid-19 fobisi olduğunu ve fobilerinin aşı türü ile hastalığı bulaştırmaktan endişe ettikleri kişilerin bulunmasına göre anlamlı farklılık gösterdiğini ortaya koymaktadır. Buna karşın, ikamet edilen yerin öğrencilerin covid-19 fobisi üzerinde anlamlı bir etkisinin olmadığı belirlenmiştir. Ayrıca, öğrenciler hastalığa yakalanma kaygılarını çevresel, bireysel ve eğitimsel faktörler bağlamında açıklamaktadırlar. Bu çalışma için etik kurul onayı Hatay Mustafa Kemal Üniversitesi Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etik Kurulu'nun 05.01.2022 tarih, 01 ve 08 sayılı kararı ile alınmıştır.

Anahtar Kelimeler: Yüz yüze eğitim, Covid-19 fobisi, Yükseköğretim öğrencileri, Bulaş

Introduction

The coronavirus pandemic, which shook the world in the twenty-first century and affected many areas, especially health and education, has caused significant changes and transformations in people's lives. These changes and transformations have been reflected in the societies with the measures taken by countries such as social distance, isolation, quarantine, and closure to prevent the Covid-19 pandemic. As a result, educational institutions, workplaces, entertainment venues, and restaurants were closed. Public institutions and many private companies have switched to working from home. It is known that the emergence and rapid spread of the pandemic have effects on people's behavior and psychological state (Banerjee et al., 2020).

Among those, the most affected by the pandemic, education and training have been the field of importance, and the pandemic has affected negatively youth and higher education students. In particular, Covid-19 measures have affected adolescents and young adults predominantly. All these practices have caused behavioral addictions such as social isolation, future anxiety, depression, stress, and phobia (Çiçekçisoay Kaya, 2021; Dubeyve et al., 2020). Therefore, the pandemic has been one of the biggest problems that education systems have ever faced. It has been seen that the coronavirus pandemic has affected the field of education directly and indirectly in many ways, and radical reforms and strategic planning are needed to ensure continuity in education under all circumstances. As a matter of fact, people's educational lives have been greatly affected by this process, and face-to-face education applications have left their place to distance education applications in today's digitalized world (Bozkurt, 2020; Eren, 2020; Özer and Suna, 2020).

In 2019, with the Covid-19 pandemic that spread all over the world in Wuhan, China, measures have been taken for the health of students, educators and families in educational institutions where interpersonal interaction is inevitable. In this process, face-to-face education was suspended in educational institutions. As in other education levels, higher education institutions tried to eliminate the negative effects of the process with distance education applications instead of face-to-face education in order not to interrupt the teaching. On the other hand, it can be said that with the break given to face-to-face training in higher education, there are gaps that are difficult to compensate, especially in terms of applied courses and research (Baz, 2021; Karadağ and Yücel, 2020). While such measures were implemented to protect against the pandemic, the search for solutions for the disease continued.

Along with the pandemic, treatment and vaccine development studies for coronavirus continue, and various vaccine applications have been approved for immediate use by the World Health Organization (WHO). Thus, with the increase in the widespread use of vaccines and the effect of demands for face-to-face education, the Council of Higher Education (YÖK) announced that blended or face-to-face education could be introduced in line with the preferences of universities. In the process, while some of the universities made statements that they would switch to face-to-face education, some of them announced that they would be held remotely for a certain period of time, and some of them announced that the lessons would be held with hybrid applications (YÖK, 2021).

With the return to face-to-face education in higher education during the pandemic period, it is considered as an important issue to discuss the perceptions of the young people scientifically, who are mostly between the ages of 18 and 30, can pass the disease without symptoms. As a matter of fact, the Covid-19 pandemic, by its nature, cause widespread fear and anxiety. It can be stated that there is

uncertainty regarding the process because drugs and vaccines cannot completely prevent recovery or transmission, and an effective treatment method has not been found yet. Uncertainty, on the other hand, can have negative effects on human psychology, leading to feelings of anxiety and fear. It is assumed that the reason for the anxiety of the Covid-19 process lies in the fact that the exact cause of the disease is not known (Ahorsu et al., 2020; Sariçam et al., 2014; Sarı and Dağ, 2009; Thompson et al., 2004).

Symptoms associated with Covid-19 can be very mild, severe, or fatal. It is seen that Covid-19 disease increases the possibility of life-threatening in elderly individuals and especially in those with chronic diseases such as high blood pressure, heart and lung diseases (Kara, 2020). In addition, it is thought that every age group is affected both physically and mentally in the Covid-19 pandemic. For example, in a study examining the stress, anxiety, and depression levels of adults in the Covid-19 pandemic according to different age groups, young adults had higher psychological distress scores than older adults (Nwachukwu et al., 2020). According to the results of the research on perceptions and attitudes towards the Covid-19 pandemic, it has been observed that the negative psychological effects of the pandemic are felt more in young people. In terms of the psychological effects of the pandemic, a mood in which young people are distinctly separated from other classes of society has been observed, and it has been determined that they need more support in coping with the psychological effects of the coronavirus. According to this, it has been determined that the psychology of young people is more affected during the pandemic process, and they take on a worried mood. Anxiety about contracting the virus, losing family members and friends is effective on students' psychological well-being (Kesgin and Durak, 2021). Therefore, an important impact of the pandemic on people has been an anxiety syndrome characterized by fear, anxiety, perceived threat, stress and avoidance, controlling, worrying and threat monitoring (Nikčević et al., 2020). As a result, young Covid-19 patients, as well as elderly or chronically ill patients, may feel anxious (de Medeiros Carvalho et al., 2020). The fact that young people are affected by the disease both physiologically and psychologically is also reflected in the discussions on educational practices.

As in many countries of the world, experts in the field of health and education have evaluated the risks of schools being open and closed. However, when the solution proposals presented in this context are considered, it is seen that the focus is mostly on eliminating the academic deficiencies of the students and improving their academic competence, while the effects of the process on the psychological, social and emotional development of the students are ignored and there are deficiencies in practice in this context. All over the world, great emphasis is placed on ensuring that students continue to pursue academic education, and the issue of how to teach remotely or online is often discussed. Although such discussions are understandable, the issue of face-to-face education and how to support children who rely on schools for physical and mental health support is less on the agenda (Yurtaş and Kesik, 2022).

The Aim of the Study

When the pandemic first emerged at the global level, higher education institutions were faced with losing their academic education life in the spring semester in 2020. This unexpected situation has led higher education institutions to distance education applications. This process has mostly affected the life and mental health of university students negatively. Therefore, it is important to, also, focus on the effects of Covid-19 on mental health. Studies should be carried out to psychologically support university students for Covid-19 disease (de Oliveira Araújo et al., 2020; Asıcı and Günlü, 2021).

Distance education applications, which are preferred in education activities with Covid-19, have been replaced by face-to-face education with the widespread use of vaccines. In this process, which the pandemic continues, with the transition to face-to-face education in higher education institutions where there is mobility at the national level, unlike other education levels, the psychological state of university students is an issue that should be evaluated in every aspect. When evaluated holistically, the current study aims to reveal the psychological well-being of university students through the perceptions of university students in Turkey with the pandemic and face-to-face education practice.

The aim of this research is to determine the concerns of university students about catching the disease with the transition to face-to-face education in the Covid-19 pandemic. For this reason, in the study, it was aimed to determine whether the Covid-19 phobias of the students differ in the face-to-face

education process according to the vaccine preferred to prevent the disease, to the people they are worried about having Covid-19, to the place of residence, and what their concerns are about catching the disease. Thus, it is thought that the findings reached with these research questions will contribute to the functioning of institutions in similar situations. Therefore, the results will form the basis for the decisions to be taken by the education administrators.

Method

Research Model

This study was conducted within the framework of convergent parallel design, in which quantitative and qualitative data were collected simultaneously and evaluated holistically (Swanson and Holton, 2005; Baki and Gökçek, 2012; Creswell and Plano Clark, 2018; Demirkasimoğlu, 2018). The mixed model increases the validity and reliability by combining quantitative and qualitative perspectives (Subedi, 2016). Accordingly, within the study, quantitative data on Covid-19 phobias of university students and qualitative data on their anxiety about getting the disease were collected together and analyzed from a holistic perspective.

Ethics committee approval for this study was obtained with the decision of Hatay Mustafa Kemal University Social and Human Sciences Scientific Research and Publication Ethics Committee, dated 05.01.2022, meeting 01 and number 08.

Study Sample

The population of the research consists of the education faculty students of a university located in the Mediterranean region of Turkey. Random sampling method was used in the study (Meydan, 2021). Thus, the study group of the research, participating in the study voluntarily, consists of 248 students studying at different departments and grade levels in the spring term of 2022.

Before the data collection process, an e-mail was sent to all education faculty students asking whether they would like to participate in a survey about Covid-19 phobia and anxieties about contracting the disease. Afterwards, the research link was sent to the students who wanted to participate in the research. The voluntarily filled questionnaires were collected via the google form. The number of students who filled out the questionnaire digitally out of 450 volunteer students is 248. The number of students who answered the optional open-ended question at the end of the measurement tool is 110. However, insufficient and very short answers given to the open-ended question were not included in the qualitative analysis process after the joint evaluations made by the researcher and a field expert. After these evaluations, the answers of 64 participants were subjected to data analysis. This number, which represents approximately 25.8% of the participants, was considered to be sufficient for qualitative analysis (Cohen et al., 2000; Morse, 2000; Yavuz and Kepçeoğlu, 2015).

Data Collection Tools

A data collection tool designed to collect both quantitative and qualitative data through scale and open-ended questions was used in the research. The data collection tool is composed of three parts. The first part consists of personal questions about the Covid-19 vaccine preference of university students, whether there are people who they are worried about infecting, and their place of residence. The second part was created with the Covid-19 Phobia Scale (C19P-S) (Arpacı et al., 2020). The third part consists of an open-ended question about whether they will feel anxious about catching the coronavirus during the face-to-face education process.

The research data were collected with a measurement tool consisting of a scale and additional open-ended questions on google form and analyzed using statistical methods. The scale consists of two parts and the first part includes demographic information. In the second part, there are 20 items in 5-point Likert type. The scale reveals students' Covid-19 phobias within the framework of Psychological, Somatic, Social and Economic dimensions.

Qualitative data were collected with an optional open-ended question, and volunteer participants were asked to provide information and the reason about their concerns about catching Covid-19 during the face-to-face training process. Thus, the qualitative part, in which additional opinions could be explained in addition to the quantitative items, was added to the scale. Content analysis was conducted

on the written answers given to describe the phenomenon based on the participant's experiences. Holsti (1969) defines content analysis as a technique applied to draw inferences describing certain features of messages by objectively and systematically. This technique allows the researcher to easily filter large amounts of data in a methodical way. Accordingly, the main categories and sub-categories in the study were determined and presented as conceptual frameworks. Qualitative data, on the other hand, were described and interpreted in line with the categories supported by quotations from students' opinions. While the students' opinions were conveyed, the codes were given for each student between S1 and S64. The students participating in the research were included in the study voluntarily. Two experts coded the qualitative data independently of each other. In the analysis of qualitative data, the reliability formula of Miles and Huberman (1994) was used and the agreement between the two encoders was determined as 90.3%. In addition, for a more coherent and comprehensive analysis, the different coded categories were evaluated together by the experts and the categorical classifications were finalized in consensus.

Data Analysis

The quantitative data of the study show a normal distribution (Skewness .381; Kurtosis .646). Likewise, kurtosis and skewness values; .232 and -.189 for the psychological dimension of the scale; 1.043 and 1.948 for the somatic dimension; .593 and .782 for the social dimension; for the economic dimension, .315 and -.310; have been determined in the research. Confidence value of the scale for this research is .927. Cronbach Alpha is .783 for psychology sub-dimension; .855 for the somatic subscale; .811 for the social sub-dimension; and .722 for the economic sub-dimension. The effect size for the t test was calculated with Cohen's d value (Can, 2014; Taşpınar, 2017).

In the qualitative dimension, content analysis was used to describe the experiences and views of the participants. Categories and sub-categories were determined and presented as conceptual frameworks. Each participant coded as called S1, S2, etc anonymously. Open-ended questions were asked systematically in order to reduce subjectivity and make the data relatively easy to compare and analyze (Karasar, 2005; Yıldırım and Şimşek, 2006; Punch, 2013; Baltacı, 2021). The answers were evaluated in detail, coded to reflect common views in terms of content, and grouped according to common overarching categories and sub-categories. In addition, these common views and findings were supported by frequency and percentage values. Opinions considered important and original to support the results are also given in the form of quotations.

Findings

Quantitative Findings

In this section, the data obtained for the purpose of the research were subjected to Levene's test, t-test and one-way analysis of variance, and were organized and interpreted in a way that would answer the sub-objectives. The following findings were obtained as a result of the statistical analysis made on the quantitative data.

During the face-to-face training process of the participants, Covid-19 phobias differ in terms of the preferred vaccine variable. The results of the analysis made in this context are given in Table 1.

Table 1. Results on the Difference Between the Preferred Vaccine Type and Covid-19 Phobia

Scale / Sub-Dimensions		N	\bar{X}	sd	df	t	p	Cohen's d
Total	Sinovac	34	42.62	14.60	246	-2.01	.045	0.40
	Biontec	214	48.01	12.20	26.55			
Psychological								
	Sinovac	34	16.04	6.06				
	Biontec	214	17.65	4.87	246	-1.49	.135	
Somatic								
	Sinovac	34	8.37	3.63				
	Biontec	214	9.43	3.19	246	-1.52	.129	
Social								
	Sinovac	34	10.79	3.95				
	Biontec	214	12.43	3.72	246	-1.94	.062	
Economic								
	Sinovac	34	7.41	2.71	246			0.41
	Biontec	214	8.49	2.46		-2.01	.045	

$p = .351 > .05$

Considering the findings related to the vaccine preferred by the students in the coronavirus pandemic about Covid-19 phobias, the scores of those who prefer sinovac ($\bar{X} = 42.62$) and those who prefer biontec ($\bar{X} = 48.01$) have a significant difference, although the overall effect size of the scale has a moderate effect in all dimensions ($d > .02$). Accordingly, it can be said that there is a moderate difference between the groups, which can be considered significant, and that the students who prefer the biontec vaccine have higher Covid-19 phobias than the students who prefer the sinovac vaccine.

During the face-to-face training process of the participants, Covid-19 phobias differ in terms of the presence of people who are worried about infecting the virus. The results of the analysis made in this context are given in Table 2.

Table 2. Conclusions on the Difference Between the Presence of People Worried About Infecting Covid-19 and the Phobia of Covid-19

Scale / Sub-Dimensions		N	\bar{X}	sd	df	t	p	Cohen's d
Total	existing	197	48.49	12.07	246	2.50	.013	0.37
	nonexisting	51	43.62	13.56	71.85			
Psychological								
	existing	197	17.96	4.86				0.45
	nonexisting	51	15.66	5.22	246	2.96	.003	
Somatic								
	existing	197	9.57	3.24				0.37
	nonexisting	51	8.39	3.09	246	2.33	.020	
Social								
	existing	197	12.53	3.68				0.32
	nonexisting	51	11.27	3.97	246	2.14	.033	
Economic								
	existing	197	8.41	2.42	246			
	nonexisting	51	8.29	2.82		.310	.757	

$p = .369 > .05$

Considering the arithmetic averages; students who stated that there are people, are worried about contracting Covid-19 ($\bar{X} = 48.49$) appeared to have higher Covid-19 phobia significantly than students who stated that there is no one to be worried about getting infected with Covid-19 ($\bar{X} = 43.62$). In addition, it has been determined that the presence of people who are worried about infecting coronavirus is a variable with moderate impact in terms of Covid-19 phobia ($d > .02$). According to this result, it can be said that students are likely to have a Covid-19 phobia who stated that there are people to be infected Covid-19. In addition, in terms of the psychological, somatic and social dimensions of the scale, it can

be mentioned that students are likely to have Covid-19 phobia in the presence of people who are worried about to be infecting Covid-19.

During the face-to-face training process of the participants, Covid-19 phobias do not differ in terms of the place of residence variable. The results of the analysis made in this context are given in Table 3.

Table 3. Results on the Difference Between Place of Residence and Covid-19 Phobia

Scale / Sub-Dimensions	Variance Source	Sum of Squares	df	Mean Square	F	p
Total score	Between groups	49.91	2	24.95	0.158	.854
	Within-groups	38698.08	245	157.95		
	Total	38747.99	247			
Psychological	Between groups	11.38	2	5.69	0.225	.799
	Within-groups	6198.61	245	25.30		
	Total	6209.99	247			
Somatic	Between groups	8.82	2	4.41	0.417	.659
	Within-groups	2592.06	245	10.58		
	Total	2600.88	247			
Social	Between groups	26.73	2	13.36	0.939	.393
	Within-groups	3489.06	245	14.24		
	Total	3515.80	247			
Economic	Between groups	3.92	2	1.96	0.311	.733
	Within-groups	1545.13	245	6.30		
	Total	1549.06	247			

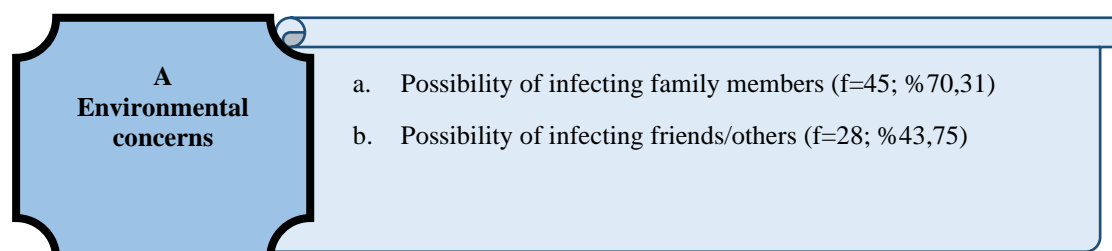
$p = .493 > .05$

When the analysis of variance is evaluated, there is no significant difference between the means. Accordingly, it was determined that the Covid-19 phobias of the students did not differ in terms of place of residence. When the averages are compared, the highest level of phobia perception was among the students ($n=51$) living in (1) Private Houses ($\bar{X} = 48.00$), while (2) the students ($n=146$) living in KYK dormitories ($\bar{X} = 47.60$) and (3) the students ($n=51$) living in family house ($\bar{X} = 46.66$).

Qualitative Findings

The data obtained in this section were organized and interpreted in line with the purpose of the research by making content analysis. The qualitative dimension was explained in line with the Covid-19 concerns of the students during the face-to-face education process. The following findings were obtained as a result of the statistical analysis made on the qualitative data.

Participating students stated that they have potential Covid-19 concerns in three sub-categories during the face-to-face education process. These are; (a) having concerns about their environment (b) having individual concerns, and (c) having concerns about school. The findings obtained within the framework of the categories and sub-categories regarding the Covid-19 concerns of the students are shown in Figure 1.



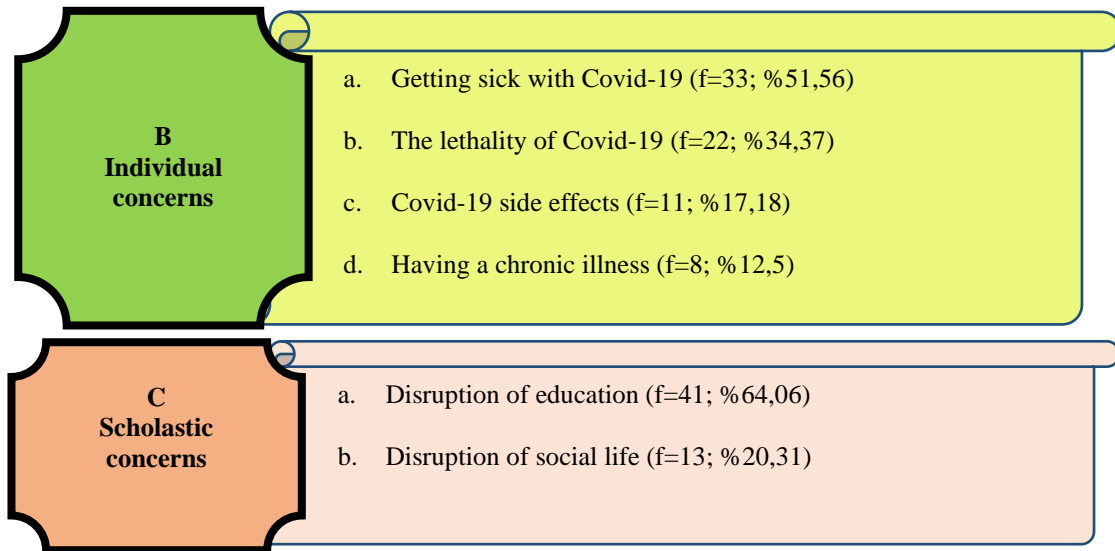
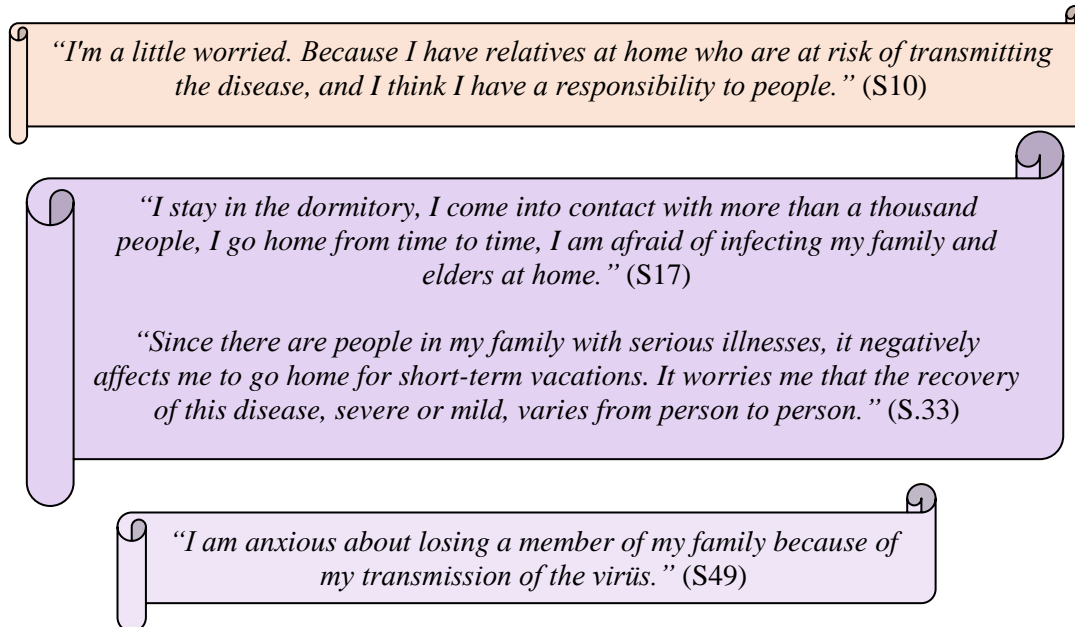


Figure 1. Qualitative Findings Regarding Covid-19 Concerns of Students in Face-to-Face Education

Qualitative findings show that Covid-19 causes some concerns on students in the face-to-face education process. These are personal and educational concerns about students' families and friends or other people.

A. Environmental concerns

a) During the face-to-face education process, 70.31% of the students stated that they have concerns about infecting Covid-19 to their family members.



The majority of the participants (f=45) stated that if they caught the Covid-19 virus during the face-to-face education process and did not show any symptoms due to their young age, they could infect their relatives at home as carriers. As a matter of fact, during the face-to-face education process, students in the classroom and dormitories share the same environment with hundreds of people both in the classroom and in the dormitory.

b) In the face-to-face education process, 43.75% of the students stated that they have concerns about transmitting Covid-19 to their friends or people around them.

"I stay at the dormitory and I can infect other people there." (S23)

"I'm worried because there are so many people who don't acknowledge the existence of this disease and are not vaccinated." (S51)

"I don't want to risk my own health and the health of my roommates. That's why I'm worried." (S38)

"I can be a carrier and infect someone with low immunity. Because we come into contact with many different students at school and at the dormitory." (S59)

"Of course I'm worried. I might get the virus and infect other people and cause them to die." (S64)

Almost half of the students (f=28) stated that if they catch the Covid-19 virus during the face-to-face education process and they do not show any symptoms, especially because they are young, they can transmit the disease to their friends in the dormitory or class as carriers. It is understood that students will experience conscientiousness if the disease is infected the people, especially those who are not vaccinated or who cannot be vaccinated due to different health problems, and those who have various diseases or those with low immunity.

B. Individual concerns

a) During the face-to-face education process, 51.56% of the students stated that they have concerns about catching Covid-19

"I am afraid of getting infected". (S11)

"I am worried. Because it is not a disease to be taken lightly, I can get sick." (S 19)

"I'm staying in a dormitory and going into quarantine scares me, I think it's a very scary thing." (S44)

"I'm getting nervous for fear that it will infect me too. Especially the fact that there are people who do not wear masks in the classroom makes me very nervous. I continue to protect myself from the disease. I wear my mask, I disinfect my hands constantly." (S 54)

Half of the participants (f=33) stated that they had concerns that they could become seriously ill due to catching the Covid-19 virus during the face-to-face training process and therefore they could go

into quarantine. It is seen that the students are psychologically affected by this situation negatively and they are also disturbed by their friends who are insensitive to the measures.

b) During the face-to-face education process, 34.37% of the students stated that they were worried about the lethality of Covid-19.

"It's a deadly disease. It's unclear how we'll get through when we're caught. We do not know what to do to whom." (S8)

"I'm worried, it's deadly. I panic when someone has flu-like symptoms." (S29)

Approximately one third of the participants (f=22) stated that they are worried that they might die due to Covid-19 during the face-to-face education process. Although the disease mostly affects the elderly, the unpredictability of how it will affect whom regardless of age causes anxiety as an unknown feature of the disease.

c) During the face-to-face education process, 17.18% of the students stated that they are worried about the side effects of Covid-19.

"I am worried because I am afraid of the side effects of the virus on me." (S14)

"I'm afraid of having a hard time with the disease and its effects." (S27)

"I'm anxious, even though I'm vaccinated, being Covid 19 scares me. So I would worry about the virus being infected, not the symptoms. Because it is a disease with uncertain future, it can have lasting effects." (S52)

Some of the participants (f=11) stated that they had concerns about the side effects of Covid-19 during the face-to-face training process and later on. Students are worried because of the uncertainty about whether the virus leaves permanent damage to patients.

d) During the face-to-face education process, 12.5% of the students stated that they are worried about the Covid-19 pandemic due to their chronic diseases.

"I am worried because I have asthma." (S15)

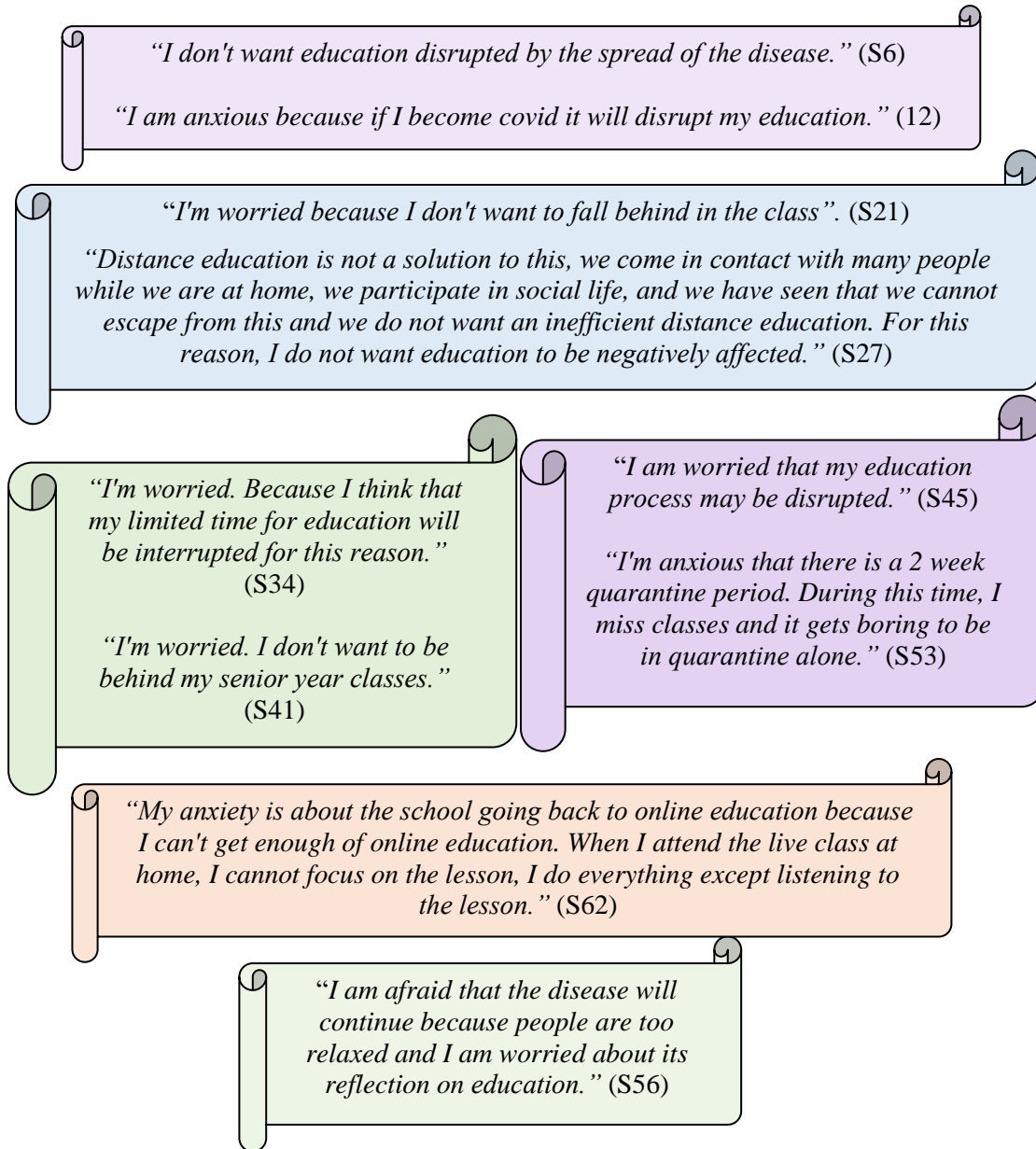
"I'm anxious about the illness because I have chronic asthma." (S 31)

"I have a chronic heart condition. Therefore, I was not vaccinated. I am afraid of the effects of both the vaccine and the virüs." (S48)

Students with chronic illness (f=8) stated that they are worried about catching Covid-19 during face-to-face education. The fact that the disease especially affects the lungs worries the participants with respiratory disease, while those who have different diseases such as heart disease and who are afraid of the side effects of drugs, and vaccines express that they are worried.

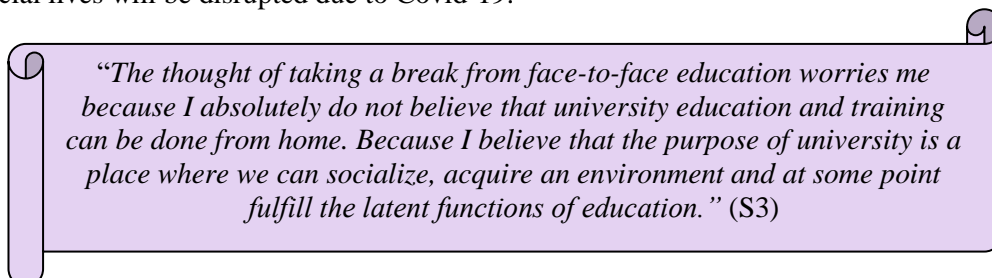
C. Scholastic concerns

a) In the face-to-face education process, 64.06% of the students stated that they are worried that education will be disrupted due to Covid-19.



More than half of the participants (f=41) stated that they are worried that their education would be adversely affected if the Covid-19 spread or they contracted the disease during the face-to-face education process. Students expressed that they are worried that if the pandemic spreads or they get sick, they may switch to distance education, which is inefficient, and that they will fall behind in their classes.

b) In the face-to-face education process, 20.31% of the students stated that they are worried that their social lives will be disrupted due to Covid-19.



"I'm worried because there is a 2 week quarantine period like prison life. You stay away from your friends, you fall behind in your studies, and it's also boring." (S20)

"I am anxious because both my education and social life may be disrupted." (S60)

One-fifth of the students (f=13) stated that they are worried about their social life to be affected adversely if the Covid-19 spreads or they catch the disease during the face-to-face education process. Participants expressed that they are worried that they will be away from their classes and friends if the pandemic spreads or they get sick.

Discussion and Conclusion

The distance education activities applied during the pandemic period were replaced by face-to-face education again with the widespread use of vaccines during the Covid-19 pandemic process. However, the course of the pandemic continues and there are people who are not or cannot be vaccinated for various reasons. In addition, the effectiveness of vaccines is debatable, and while the number of cases due to the pandemic increases from time to time, also various variants for Covid-19 occur. With the return to face-to-face education practice in higher education institutions during the pandemic period, it has been evaluated that it is important to determine the concerns of students about Covid-19. As a matter of fact, especially with the transition of higher education institutions to face-to-face education, the mobility of students throughout the country is in question, which is an important situation in terms of the course of the pandemic.

In the study, with the transition to face-to-face education, various findings were obtained as a result of the quantitative and qualitative data forms applied to determine the Covid-19 phobias of the students and their concerns about the process. According to the data obtained according to the general score of the measurement tool, students experience Covid-19 phobia according to the preferred vaccine type and in the presence of people who are worried about to be infecting Covid-19. In addition, according to the opinions of the students obtained through the semi-structured interview form, the students state that they are worried about infecting their families and other people around them with Covid-19, catching the disease individually, and affecting their education due to the pandemic negatively.

In different studies, it has been determined that the students' Covid-19 phobias are at a moderate level. Likewise, it has been determined that the fear of coronavirus and psychological resilience of healthcare students such as nursing, who are likely to encounter potential patients, are at a moderate level (Tercan, 2021; Keskin Kızıltepe & Yılmaz, 2021; Apaydın Cırık et al., 2021).

According to the results of the research, it was determined that the vaccine preferences of the students were associated with Covid-19 phobia. As a matter of fact, students who have the biontech vaccine, which is stated to be more protective, experience higher Covid-19 phobia. Therefore, it can be said that students prefer this vaccine with the thought that they will be protected from the disease more effectively. In addition, the effect size of the significant difference for this phobia in terms of both vaccine preferences is medium.

While emphasis is placed on protection as the reason for getting vaccinated, it is seen that more than half of the participants prefer the biontech vaccine for vaccine preference (Gök and Güzel Baydoğan, 2022). In this process, it can be said that the approval of the western countries, especially the USA, for the use of mRNA-based new generation vaccines was effective in this process (Gürbüz, Aydın and Çöl, 2021; Yavuz, 2020). In addition, if the people are well-educated, the rate of trust in the vaccine and the statements of the ministry of health increase (Yıldız et al., 2021).

In studies with over the age of eighteen, the most common sources of access to information during the Covid-19 period were television, public news sources, and social media, but it was reflected in the

results of the research that the participants also obtained information from many different sources. While the mass media that students frequently use to learn about the news is social media, the first mass media that the society in general learns about Covid-19 news is television (Guzel and Kurtoğlu, 2022; Alıcılar et al., 2020; Birimoğlu Okuyan et al., 2020). Therefore, it can be said that students are influenced by the media on their vaccine preferences and other issues.

According to another result, it was determined that the presence of people who are worried about infecting the disease creates Covid-19 phobia in students. In addition, the level of phobia is evident in the psychological, somatic, and social dimensions of the scale. Also, the effect size is medium. As it is known, mostly the disease affects the elderly people, those with immunity and chronic diseases, and who have different health problems. For this reason, it can be said that students are afraid of the transmission of the disease to their families.

In the studies conducted, the level of fear and depression of university students about the Covid-19 pandemic differs according to whether or not there is an individual in the risk group in their family (Yıldray and Çelik Balcı, 2021). According to the results of the research, it was concluded that there is a negative and significant relationship between general belonging and fear of Covid-19, and that general belonging significantly predicts fear of Covid-19 (Kurtulmuş and Thoughtli, 2021).

Contrary to the above findings, there was no significant difference between the place of residence of the students and the Covid-19 phobia of the students. As a matter of fact, whether students stay in a dormitory, in a family home, or a private student house, they interact with other students at school and in classrooms. Therefore, it is a natural result that there is no significant difference between the place of residence and the Covid-19 phobia of the students. On the other hand, according to the findings of a study conducted with physical education teachers, unlike the results of this study, it shows that the place of residence has an effect on the Covid-19 phobias of physical education teachers (Karaca, Selçuk, & Kalaycı, 2021).

According to the data obtained in line with the qualitative findings of the study, the students expressed opinions in support of the data obtained with the Covid-19 phobia scale. The students stated that there are people that they are worried about transmitting the disease, apart from their concerns about getting sick. They also stated to have concerns that the pandemic could affect the education process negatively. Due to factors such as the uncertain effects and course of the disease, and the lack of a definitive solution despite the availability of vaccines, it is seen that students have concerns about themselves, their environment, and their education life in the face-to-face education process.

According to similar research findings on the subject; it has been determined that the severity of anxiety and coronavirus phobia is high, especially in women and students with chronic diseases, during the pandemic process, and the level of anxiety severity of the participants significantly affects the level of coronavirus phobia (Delibaş, 2021). Fear and control perception scores were found to be higher in students with physical illness. Students are thinking that their immune systems may be weak and vulnerable may be associated with more fear (Nehir and Güngör Tavşanlı, 2021). In addition, considering that universities are not only education and research centers, but also have an important function for the social and physical development of young people, the closure of campuses due to the pandemic causes millions of students who continue their sports, artistic and other social activities within universities to remain idle in these areas (Erhan and Gümüş, 2020). The results of the research provide evidence that the sociability level of the Z generation is high. Because it has been seen that a serious pandemic such as Covid-19 has increased the socialization anxiety of the Z generation more than their individual concerns. It can also be said that the motivation of the Z generation individuals is affected negatively due to the restrictions in this process (Tekin, 2020). Apart from all these, it is emphasized that the distance education system causes disappointment in university students, their anxiety levels are high, and they see themselves as inadequate regarding their future profession (Üstün and Özberk, 2021).

As recommendation in line with these results, various measures should be taken in order to prevent students from experiencing Covid-19 phobia and to relieve their anxiety. Instead of PCR testing, rapid antigen tests can be used to determine whether the students carry the virus even if they do not

show any symptoms, to prevent transmission among students and to prevent the students from infecting their families and other people.

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