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ONLINE UKULELE TRAINING DURING COVID-19: A CASE STUDY OF TURKEY ON PRESCHOOL TEACHER CANDIDATES

(Research article)

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Abstract

In the present study, the purpose was to determine the opinions and suggestions of pre-school teacher candidates regarding distance ukulele training because of the Covid-19 pandemic. The study design was determined as a case study based on a qualitative approach. The study group consisted of 32 pre-service teachers who were studying at the department of preschool education of a state university in Turkey. The participants were provided online ukulele training for twelve weeks as part of the preschool music education course. The data were collected through semi-structured video interviews and were then analysed under different themes with the content analysis method. Content analysis was conducted by three researchers to ensure researcher triangulation. Thirteen sub-themes emerged depending on five major themes (i.e. “Opportunities”, “Infrastructure System”, and “Motivation for Studying”, “Synchronous & Asynchronous Lessons and Learning Outcomes”). As a result of the study, it was found that students think that distance ukulele training had personal and professional contributions to teacher candidates during the pandemic process, but they preferred face-to-face education to distance education.

Keywords: Preschool teacher education, preschool music education, online music training, ukulele, COVID-19

1. Introduction

The World Health Organization (WHO) announced to the world that the novel Coronavirus (COVID-19) emerged as a global pandemic on March 11, 2020. As a result of the changes in education systems because of the pandemic, schools, universities, and other educational institutions had to switch to distance education in all countries (Joseph & Lennox 2021; Scull et al., 2020). The transition to distance education was initiated as of March 2020 in Turkey. The distance education system is one of the contemporary education models that has been used for many years. Distance education was used for the first time in the world through mails in 1728 (Isman, 2011). In this education model, Dewey suggested the “teacher training report” by letter in Turkey in 1924, and the method of teaching was created as a general design in 1927 (Alkan, 1997).

According to the definition of the United States Distance Learning Association, distance education includes satellite, video, audio, computer, etc. It is the teaching of lessons remotely with the students with the help of technological tools (Al and Madran 2004). It was seen in



various studies in the literature that distance education, which is widely applied in various fields, contributes to the education-teaching processes in many ways for students and institutions (Can 2020; Telli Yamamoto & Altun 2020; Gorgulu Ari & Hayir Kanat, 2020; Ozdogan & Berkant 2020). Distance education is also used in the field of music (Piji Kucuk, 2020; Aksoy et al. 2020). Interpersonal communication has strengthened with the development of technology and effective and qualified education has begun to be provided.

Distance education can be carried out in three ways; synchronous, asynchronous, and mixed (Yungul, 2018). In distance education, which is an institutional education model in which synchronous or asynchronous learning activities are performed by using technological tools (Okan, 2017; Ulusol et al., 2014; Isik et al., 2008), teachers and students interact synchronously although they are in different places. In this way, a synchronous structure independent of space emerges. Synchronous education is carried out with the participation of more than one person in a virtual setting with the communication tools of people in different places (Yenal, 2009). Question-answer and discussion can be made instantaneously in synchronous education between the teacher and the student (Kanli, 2009). In this learning model, individuals can communicate in audio, video, and written form (Cakir et al., 2019). Students have the chance to watch the lesson later independently of space and time, and instant interaction between students and teachers is not possible in the asynchronous education model (Kocer, 2001). All activities and materials to be performed in this model must be prepared in advance and loaded into the relevant program (Cinar, 2011; Yeniad, 2006). It is an educational process in which it is not necessary for the teacher and the student to be at the same time and place for the education to be provided (Yurdakul, 2015). In other words, this learning model can be carried out at different times with online platforms (Can, 2008). However, mixed learning is a structured mix model of synchronous and asynchronous learning (Mayadas et al., 2015).

Another issue that the present study addressed along with distance education was pre-school music education and teacher training. For this reason, it would be appropriate to focus on pre-school teaching and music education. It has great importance to provide music education determined according to the musical development characteristics of children in terms of supporting all developmental areas in the pre-school period. Realizing this is possible with a comprehensive and balanced curriculum that considers the musical development characteristics of children and preschool teachers who have the musical equipment to perform such curricula (Yildiz, 2017). In addition to basic knowledge and skills in music education, it has great importance for pre-school teachers to be able to use instruments and voices, which are highly required in professional life (Yilmaz et al., 2021). Music is one of the educational tools that preschool teachers benefit from in their professional lives and requires proficiency (Eldemir et al., 2009).

One of the vital elements of music education is instrument training, in which the purpose is to provide the individual with physical, cognitive, affective, and psychomotor skills related to performance (Erim & Yondem 2009; Okan, 2017). Also, instrument training uncovers the artistic abilities of individuals and also directs the values of their environment along with cultural behaviors (Uludag, 2012). At this point, the ukulele, which is gaining great popularity in the world, has a very high video repertoire on social media (Giebelhausen, 2016), and is more and more inclined to perform at many levels in music education (Gayretli et al., 2021; Mutlu Yildiz, 2021). the instrument is important. The ukulele, which is also known as the national instrument of Hawaiian culture and called “*jumping flea*”, gained its current form after the transformation of the *Braguinha Instrument* brought by Portuguese immigrants who came to Honolulu in 1879 (Greenberg, 1992; Miller & Shahriari 2012). Among the four main types of ukulele, namely soprano, concert, tenor, and baritone, the most commonly used one is the soprano ukulele in schools and has the smallest size (Davis, 2019).

It is a portable accompaniment instrument with a small and light structure and is cost-effective compared to guitar and piano due to its ease of performance, popularity in social media, and diversity of educational materials in many levels and age groups (Giebelhausen & Kruse, 2018; Gayretli et al., 2021; Mutlu Yildiz, 2021). It also draws attention as an alternative instrument that music teachers can use in the preschool period. For this reason, more and more ukulele training requests are faced and many studies have been conducted on this subject in recent years (Kruse, 2018; Egger, 2018; Smith & Secoy, 2019; Laidlaw, 2017; Bernard & Cayari, 2020; Thibeault & Evot, 2011).

In the relevant literature, there are various studies conducted on YouTube-supported ukulele training (Smith & Secoy, 2019) and the perceptions of pre-school teacher candidates regarding distance music education during the pandemic period (Yılmaz et al. 2021; Akinci, 2021), although there are various studies on distance ukulele training in the pre-school teacher training process, it was determined that no studies were conducted regarding distance ukulele training. Also, there are various studies on distance music and instrument training, such as digital literacy of primary school music teachers (Adam & Metljak, 2021), the pandemic, and its effects on music teachers and distance education (Cheng & Lam, 2021; Rossel et al., 2021; Miksza et al., 2021), teachers' perspectives on distance education (Biasutti et al., 2021; Calderon-Garrido & Gustems-Carnicer, 2021; Inal et al., 2021; Palau et al., 2020), distance bands (Hash, 2021; Sager et al., 2014), and choro (Akbarova, 2021). It is noteworthy that there is a tendency towards the views of university students on distance music education during the pandemic (Park, 2021; Rucsanda et al., 2021). On the other hand, it was determined that various studies were conducted in the fields of violin (Sakarya & Zahal, 2021), guitar (Erim & Yondem, 2009), and piano education (Karahan, 2016; Akbulut, 2020; Yungul, 2018) in distance instrument training. The focus of the present study was the distance ukulele training provided to pre-school teacher candidates during the pandemic process.

1.1. Purpose of the Study

Distance learning has brought many difficulties, such as deficiencies in distance education infrastructure, sound and image quality, and internet connection problems. Because of the pandemic, this new situation uncovered the necessity of pre-school teacher candidates and music teachers to adapt to distance education within a short time, as in many other branches. In the present study, distance ukulele training was provided to pre-school teacher candidates for 12 weeks and the purpose was to determine the opinions of the participants about this teaching process.

2. Method

2.1. Research Design

The research was conducted based on the case study design, which is one of the qualitative research methods. The case study is a process in which the situations, facts, thoughts, and opinions of people on a subject are determined through observations, interviews, and document analysis, and focuses on how these affect the situation with a holistic approach (Yildirim & Simsek 2008; Fraenkel et al., 2011). In this context, it was examined how the distance ukulele training is reflected in the perspectives of the students.

2.2. Study Group

The Study Group consisted of the pre-school students (n=32) who were studying in their second years at the department of preschool education, faculty of education, a state university in Eastern Anatolian Region, Turkey. The students in the study group were between the ages of 19 and 35 ($\bar{x} \pm sd$, 22.28 ± 3.29). When the gender distribution was evaluated, it is found

that female students constituted the majority. It was also found that most of the students came from the Eastern Anatolian Region.

2.3. Data Collection Procedure

The study was conducted synchronously with pre-school teacher candidates during the Covid-19 pandemic in 2021. Students were provided with ukulele training over Microsoft Teams, mixed with basic music training in the teaching process. Each lesson was recorded, and students who could not attend some synchronous classes for special reasons such as health status, etc. attended the classes asynchronously through the records.

Table 1. *Ukulele Lesson Plan (12 Weeks)*

Duration	60
Semester	Fall
Grade	2 nd Grade
Materials - Tools	Technological Tools (PC, Tablets, Smartphones, etc.), Virtual Learning Environment (Microsoft Teams), Social Media Communication Groups (WhatsApp, Telegram) Lesson Equipment (notes, etc.), Ukulele, technological tools.
Sources	Basic Music Education, Ukulele Method (Created By Teacher)
Purpose	This lesson aims to make the students who are studying in the department of pre-school education and receiving music education in the 2nd Grade understand the history of the ukulele, holding the ukulele, the ukulele technique, and the methods of accompaniment in ukulele training. The student understands the history, attitude, and technique of the ukulele along with the mechanics of right and left-hand movements in sound production. The student understands basic right and left-hand techniques (right hand: tirando, apoyando, p-i-m-a, left hand: duate, 1-2-3-4, etc.) in ukulele training. The student understands the notes and basic chords on the keyboard in ukulele training. The student distinguishes major and minor tones as cognitive, affective, and harmonic elements. The student understands reading notation and tabulator. The student understands the dynamics (nuances) of music. The student sings chords, arpeggio, scale, and basic rhythms (2/4, 3/4, 4/4). The student creates a vocal repertoire that includes etudes and works from Turkish and world music (school songs). The student gains vocalization and accompaniment skills in individual and group work.
Learning Outcomes	
Evaluation	Students take the virtual learning environment every week, apply the contents prepared by the instructor of the course and complete the subject tests.

The Semi-Structured Interview Form was prepared as a data collection tool to determine the opinions of pre-school teacher candidates about learning ukulele in online music education. Before this form was prepared, the relevant literature was reviewed and questions were formed in line with the purpose of the study. After the questions were prepared, the opinions of field experts were received and the questions were finalized. Using a semi-structured interview form, the participants were asked about the devices they use in the distance education process, (e. g. "Which digital devices do you use in the distance education

process, such as phones, tablets, computers, etc.?"), their access to devices (e. g. "Did you have access to a computer, tablet, phone and internet?" and "Have you had any system-related problems such as accessing the e-lesson system or uploading files?"), their proficiency in using technological devices (e. g. "Do you consider yourself competent to use technology?") psychological states during the pandemic period (e. g. "Has anyone in your family or environment been diagnosed with covid-19 positive? Can you describe your level of motivation for studying? How would you describe your mood during the pandemic process?") opinions on distance ukulele education (e. g. "What are your opinions on synchronous and asynchronous lessons?) and instrument learning (e. g. "What are your thoughts on instrument learning in pre-school education?"). All interviews were conducted in a video format and were ended between 20-30 minutes.

2.4. Data Analysis

In the present study, the content analysis method was used to analyze the obtained data. In this analysis, concepts, themes and codes can be determined in advance or created during analyses (Yildirim & Simsek, 2006). In this respect, firstly, the data obtained from the interviews were transcribed verbatim and read from beginning to end without any coding. In the second step, the dataset was read again and the codes were created (e.g. "failure in concentrating", "indifference", and "disgust" as the low motivation sub-theme). Then, these codes were grouped under sub-themes that constituted eight comprehensive themes. In some themes, categories were created (e.g. proficiency, motivation, and opportunities) to make the relations between codes and sub-themes more descriptive. In this respect, sub-themes and themes were created during the analysis process and visualized through tables. Also, codes were not included in the tables for the themes where the number of codes was quite high (e.g. "access to digital materials", "proficiency"). Then, these findings were supported by the presentation of student statements obtained as a result of descriptive analysis.

2.5. Trustworthiness

Peer debriefing, member checking, and investigator triangulation approaches were made use of to ensure the trustworthiness of the study (Creswell, 2003; Holloway & Wheeler, 1996; Lincoln & Guba, 1985; Denzin, 1978).

2.6. Ethical Aspect

An ethics committee approval was obtained from Kafkas University (dated 28/06/2021 and numbered 76878310-903.07.01-E.21446) for the research on the conformity of the study with scientific rules.

3. Results

As a result of the content analysis, five major themes (i.e. 'Opportunities', 'Distance Education Infrastructure System', 'Motivation for Studying', 'Synchronous and Asynchronous Lessons and "Learning Outcomes"') and thirteen sub-themes were determined. The themes and sub-themes were explained in titles.

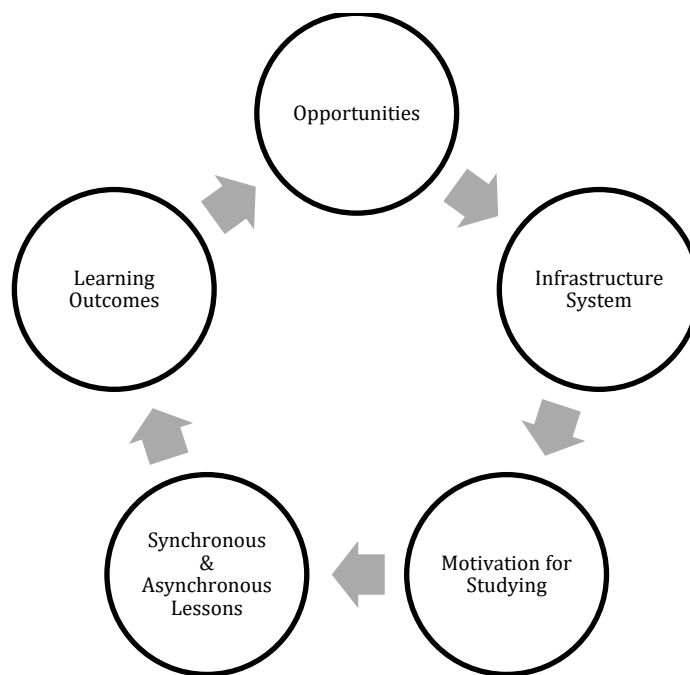


Figure 1. Major themes

3.1. Opportunities of Teacher Candidates

Table 2. *Opportunities theme and sub-themes**

Theme	Sub-theme
Opportunities	Access to digital materials (e.g. codes: <i>mobile phones, tablets, computers</i>)
	Technology literacy (e.g. codes: <i>sufficient, moderate, insufficient</i>)
	Study environment (e.g. codes: <i>own room, suitable, not suitable, study room</i>)
	Instrument availability (e.g. codes: <i>owning the ukulele, strings</i>)

*Due to the large number of codes, only examples of codes were given.

Access to digital materials: It was determined that a great majority of the students were involved in distance education through mobile phones. Although some of the students had access to computers, it was seen that students who had tablets also had mobile phones and computers. The number of students who only used mobile phones was too great to be underestimated. When it is considered that performing homework, project, etc. over the phone is more difficult than using a computer, this did not arise in line with the preferences of the students. It can be argued that it was because of the lack of access to computers and tablets. Student statements on this finding are provided below.

Aysin: I mostly use a mobile phone because my brother is preparing for the exam and we have to use the computer together. I was also partially using the computer (S21).

Gamze: Actually, I did not have the opportunity, but we were trying to provide opportunities as much as we could. I just used my mobile phone. It was very difficult while preparing homework or something (S13).

Kubra: There are all of them. Phone, tablet, computer, ... (S18)

Sehrivan: Yes, only a mobile phone (S24).

Seyda: Only mobile phone. I had a computer but it broke down and I could not have it repaired. I had to borrow my aunt's computer to be able to take the exams easily (S25).

Technology Literacy: The majority of the students considered themselves as moderate or insufficient in terms of technology literacy. Since some students did not have computers, they had difficulty in making self-evaluations regarding this sub-theme. Student statements regarding this finding are provided below.

Dilara: As a mobile phone, yes, but if I had a computer, I think I could use it (S6).

Sinem: Since I do not have a computer, I do not consider myself sufficient (S23).

Yudum: Yes for a mobile phone, but no for a computer (S28).

Study Environment: When the opinions of the students regarding whether their study environments were suitable for distance education were examined, it was understood that the majority of them said that their study environments were suitable. However, some students said that their settings were not suitable for studying for various reasons such as the crowded study environment, lack of internet access because they did not live in the city center, lack of a room of their own, and the need to spend a lot of time with housework. Except for one student, it was seen that no student had problems with the supply of the ukulele.

Fedile: No, it was not very good in the village, but I tried my best (S12).

Gamze: We are six siblings; it was very difficult to study (S13).

Kardelen: Because we lived in a village and I did not have a room of my own, I found it difficult (S17).

Dilara: There are continuous things to do at home, there is also village work. So I did not have the opportunity to study continuously (S6).

Instrument availability: Except for one student, it was seen that no student had problems with the supply of the ukulele.

3.2. Distance Education Infrastructure System

Table 3. *Sub-theme and codes of infrastructure system*

Theme	Sub-theme	Code
<i>Infrastructure system</i>	Insufficiencies	Voice interruption
		Freezing
		Disconnection
		System crash
		Being logged off
		Inability to log in
		Inability to upload a file
		Inability to upload a video

Insufficiencies: It was determined that some students had problems with voice interruptions, freezing, disconnection, system crash, being logged off, not being able to login to the system, and problems in uploading pdf, word, etc. files and videos and they said that they did not find the system sufficient in this sense. However, it was also seen that the majority of students said that they did not experience any boredom with the e-lesson platform. Based on the student opinions given below, it can be argued that the problems experienced were mostly directly proportional to the quality of the internet connection.



Hamdullah: No, it was not sufficient. Sometimes, when the teachers went online before us, we could not go online. Sometimes there was a disconnection. Our voice was sent late; the picture was freezing (S14).

Elif: The system was problematic. I was being logged out of class. There were sometimes password problems. My camera broke down, and I had to have it repaired. Sometimes the system crashed. Our exams were not uploaded to the system even though the time had come. Or the system logged us out. Because of the internet disconnection, sometimes what we wrote in the exam was deleted (S7).

3.3. Motivation for Studying

Table 4. *Sub-themes and codes of motivation for studying*

Theme	Sub-theme	Code
<i>Motivation for Studying</i>	Low motivation	fatigue, fear, anxiety, boredom, stress, anti-sociality, weariness, low mood, disgust, depression, indifference, failure in concentrating, anger, laziness
	High motivation	Self-motivation

Low Motivation: The majority of the students had low motivation to study. When their affective status was examined, it was understood that students mainly felt asocial because of boredom, stress, not being able to leave the house, as well as negative emotions such as fatigue, fear, weariness, anger, laziness, depression, indifference towards studying, and not being able to focus. It can be argued that the pandemic process and the distance education method had negative effects on the motivation levels of pre-school teacher candidates.

Fedile: I am well now, but when my family was sick (Covid-19), I was very depressed (S12). When I picked up the ukulele, I didn't feel like working. Playing the ukulele and singing made no sense to me. Because of this, I couldn't give myself enough to ukulele lessons.

High Motivation: On the other hand, it was also seen that the students who said that their motivation levels were high used expressions that they motivated themselves (self-motivation). In this respect, it seems possible to interpret that the students exhibited a metacognitive strategy in terms of motivation.

Emine: Because I want to be appointed... This is my job and I kept my motivation high to do what my job required. I considered these days were temporary (S9).

Hamdullah: Since I wanted to go towards the goal I defined, I tried to motivate myself this way (S14).

3.4. Synchronous and Asynchronous Ukulele Lessons

Table 5. *Sub-themes and codes of synchronous and asynchronous ukulele lessons*

Theme	Sub-theme	Code
<i>Synchronous</i>	Positive aspects	asking questions, receiving feedback, interaction-communication, self-control, note-taking
	Negative aspects	access to course, practice, interaction-communication, internet connection, failure in concentrating, homework, failure in being active, discipline
<i>Asynchronous</i>	Positive aspects	note-taking, easy access, watching again, seeing-correcting mistakes
	Negative aspects	asking questions, receiving feedback, interaction-communication, internet connection, power outage

The students said that synchronous lessons were positive in terms of being able to ask questions, receive feedback, interact and communicate, and listen to the lesson at any place. In the context of the negativities they faced in these lessons, they mostly highlighted the problems with internet connection. However, some students said that they could not have sufficient interaction-communication when compared to face-to-face education. It was understood that students found asynchronous lessons more productive than synchronous lessons.

The positive aspects of synchronous courses were mainly asking questions, getting feedback, and interacting and communicating, and the same was evaluated negatively for asynchronous courses. Although internet connection emerged as an important disadvantage for synchronous lessons, the number of students who expressed internet connection as a negative decreased to one, since it was possible to go online again and watch the course recording at any place and at any time in asynchronous lessons. In synchronous lessons, the access to the lesson was expressed in terms of negativities, and the statements about easy access to the lessons came to the forefront in the asynchronous lessons.

As can be understood based on these findings, it can be argued that the pre-school teacher candidates had more efficiency in distance ukulele lessons than in asynchronous lessons. Also, based on student statements, this distinction might vary in line with individual differences. It is possible to argue that the methods suitable for their learning styles were the determinants of the best learning environment for students.

Gamze: When I could not attend the classes on time, I was able to open the videos from the system and practice the ukulele. It was very useful for me to watch the chord and rhythm patterns again by pausing and playing the videos back and forth whenever I wanted. (S13).

Dilara: When I listen to the lectures during the lesson, I can have efficiency. I did not have a chance to listen to the videos because of housework. I did not understand when I listened to the videos. I understand better when I ask questions to teachers. Based on my point of view, I want to listen to the lecture during the lesson (S6).

Kardelen: I cannot succeed in video learning. No eye contact, no interaction (S17).

Also, because the ukulele course is practical, it was among the findings of the study that students preferred face-to-face education instead of distance education in the long run.

3.5. Ukulele learning outcomes

Table 6. *Sub-theme and codes of ukulele learning outcomes*

Theme	Sub-theme	Code
<i>Ukulele learning outcomes</i>	Vocational	Entertaining
		Remarkable
		Guiding
	Educational	Self-improvement
Inspiration		
Self-confidence		

Vocational: The participants emphasized that playing the ukulele had outputs that would allow the identification of entertainment, remarkable and musically talented children in terms of the children they would work with in their professional lives.

Birgul: Yes, of course. It becomes more entertaining. It has been very good for children, for my future teaching profession, and self-development. I can play an instrument now (S3).

Educational: It was understood that they said that learning the ukulele allowed them to develop themselves in terms of their education. However, all students also said that instrument training was necessary for pre-school and they were satisfied with this.

Arzu: I think it is definitely necessary. There must be music in the activities we do for children. It would be nice if we compose this music ourselves. The ukulele sounds more attractive than the block flute (S1).

4. Discussion, Conclusion, and Recommendations

As a result of the study, it was found that pre-school teacher candidates mainly performed the distance education process over mobile phones during the pandemic period. In the study conducted by Sakarya and Zahal (2020), it was concluded that violin students were mainly involved in the distance education process through a computer. It was reported that being involved in the distance education process and preparing homework etc. through mobile phones instead of computers was not in students' preferences. When it is considered that the operations are more difficult than in the computer, it is thought that this occurs because of the lacking opportunities arising from regional differences. It can be argued that there are differences in access to digital sources among students living in the western part of Turkey and those residing in the eastern part.

Although it was understood that the study settings of the students in the study group were suitable, some students were not in a suitable setting for studying because of the crowded home environment, having responsibilities for housework, not having independent rooms, poor or no internet connection in villages. Yilmaz et al. (2021) reported that issues such as the problem of accessing digital materials and unsuitable working settings were considered as disadvantages by students. Young et al. (2020), on the other hand, argued that the exposure of students to outside noise and the crowdedness of their families affect distance education negatively.

It was also found that the problems faced in the e-lesson platform were mostly caused by the internet connection. Although students generally found the Microsoft Teams application sufficient, it was also understood that they had problems with a weak internet connection, sound interruption, freezing, disconnection, system crash, being logged off, not being able to log in to the system, uploading pdf, word, etc. files and videos. They did not find the system sufficient in this sense. Genc, Engin and Yardim (2020), and Er Turkuresin (2020) reported that internet-related problems, sound interruption, freezing, etc. were common problems faced during the distance education process. They also pointed out the existence of systemic problems affected the process negatively. In the related literature, it was determined that there are many studies drawing attention to the technology and internet problems in distance education (Altun Ekiz, 2020; Karakus et al., 2020; Sercemeli and Kurnaz, 2020; Telli Yamamoto and Altun, 2020). Also, it was concluded that the students considered themselves inadequate in terms of technology literacy.

It was observed that many of the students, their families, or close circles had Covid-19, and some had even lost their relatives because of this. When this is considered in terms of the affective aspect and the pandemic process, it was understood that it had negative effects on the motivation of students to study. It was also understood that students mainly felt asocial

because of boredom, stress, not being able to leave their houses, as well as negative emotions and situations such as fatigue, fear, weariness, anger, laziness, depression, apathy to study, and inability to focus. Sakarya and Zahal (2020) reported that students mainly felt asocial during the pandemic process because of boredom, stress, not being able to leave their houses, as well as negative opinions such as fatigue, fear, weariness, anger, laziness, depression, apathy to study, and inability to focus. According to Cetin and Anuk (2020), it was understood that the loss of relatives of students because of the rapid spread of the Covid-19 pandemic caused anxiety and fear. Covid-19 affected individuals negatively in psychological terms. Kirik and Ozkocak (2020), Demir et al. (2020), Gorgulu Er and Hayir Kanat (2020) reported in their studies that the news on social media had psychological effects on people causing anxiety and asociality. The findings in many similar studies are in line with the results of the present study.

When the opinions of the students on synchronous and asynchronous ukulele lessons were examined, it was concluded that the majority of them benefited efficiently from asynchronous lessons. Yılmaz et al. (2021) stated that distance education was considered an advantage by students in that it is independent of time and space. Although synchronous lessons are considered as positive in terms of asking questions, getting feedback, interaction, and communication, it is understood that asynchronous lessons are considered as positive because of the possibility of watching the lessons that the students cannot attend because of the problems arising from the internet connection, regardless of time and place, and watching the parts they do not understand again. However, in terms of the instrument course being an applied course, it was also among the results of the study that the students preferred to take this course face-to-face. In the scope of their project, in their studies on distance electric guitar teaching, Brändström et al. (2012) reported that no significant differences were detected between distance education and face-to-face education in terms of positive and negative effects. Although Duzce and Sulak (2020) emphasized that practice courses could not be conducted efficiently with distance education, it was determined in some studies that participants who took practical courses with distance education preferred synchronous education (Aksoy et al., 2020). However, Solak et al. (2020), reported that the ability of students to watch the course recordings whenever they wanted can accelerate the learning process. Also, Smith and Secoy (2019) draw attention to the fact that YouTube and video-assisted ukulele training improved musical talent.

Students also thought that having ukulele training had positive effects on their development and professional lives. It was understood that they acquired professional gains in terms of attracting children's attention, having fun and quality time, and discovering children with musical talents. As a result, it was found that distance ukulele training had personal and professional contributions to teacher candidates during the pandemic process; however, they preferred face-to-face education to distance education.

In the light of the results obtained in the present study, the following suggestions were made.

- Equal opportunities and technological support must be provided to all students in every region of Turkey by organizing social responsibility projects.
- Technological equipment used in applied courses must be improved. It is recommended to find solutions to synchronous shifts in sounds, especially in distance music education.
- Remote ukulele training with teacher candidates was applied at the beginner level. This study can be applied by developing a more advanced ukulele program.

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