

Digital Literacy and Views of the COVID-19 Pandemic of Students Who Prepared for Musical Aptitude Tests during the Pandemic

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ABSTRACT

This study was carried out with the aim of determining the opinions and digital literacy status of the students who are preparing for the music talent exams of the universities during the COVID-19 process. The research is in the survey model, which is one of the quantitative research methods and is limited to 300 students who took the music department and department aptitude exams of 21 different universities. The type of high school from which the relevant students graduated, the universities they applied to for special talent exams, their previous undergraduate education, their status of researching distance education opportunities, and digital literacy levels of the universities they applied for special talent exams were included in the scope of the study. Within the scope of the problem situation of the research, the effects of the duration of the pandemic on the ear training, instrument training, voice training, and psychological state of the students were investigated. According to the data obtained from the interview form applied to the students, the pandemic process gave the students extra time for ear training, instrument training, and voice training, but this extra time could not be properly evaluated because there was no educator guidance. It was concluded that students felt inadequate about digital literacy.

Key words: Digital Literacy, Musical Aptitude Tests, Covid-19 Pandemic

INTRODUCTION

The term “pandemic” is defined as an epidemic disease that spreads to and affects large areas, such as entire continents or even the whole planet. It is derived from the Ancient Greek words “*pan*,” meaning “all,” and “*demos*,” meaning “people”, meaning literally “that which affects all people” (Aslan, 2020, p. 36). The word disease, on the other hand, is thought to be derived from the compound word “*dis-ease*” in French and Latin languages, meaning discomfort or lack of sufficient space (Boyd, 2000 as cited in Budak & Korkmaz, 2020, p. 62). According to the World Health Organization (WHO), for a disease to be defined as a pandemic it needs to be a novel disease that has not previously been encountered, the disease agent should infect humans and cause dangerous illness, and the disease should spread among people rapidly and on a continuous basis (Morens et al., 2009).

Originating in the Chinese city of Wuhan in November 2019, the COVID-19 epidemic was declared a pandemic by WHO on March 11 the following year on the same date the first case was recorded in Turkey. The pandemic has had negative effects in multiple fields, including social life, the economy, commerce and the health sector, and has brought about urgent and radical changes also in the field of education. To prevent or minimize the spread of the disease, distance education was introduced, and all schools at primary,

secondary and tertiary levels were closed to students and teachers indefinitely. Studies have reported that the education of more than 1.57 billion students has been disrupted around the globe (Karakas, 2020, p. 565).

To better understand and manage the situation, Turkey decided to suspend face-to-face education. Primary and secondary schools transitioned to distance education one week after the suspension of education on March 12, 2020, while university education was suspended on March 16, 2020. Although the timing of the transition at the university level was left to the individual institutions, all had completed the transition within three weeks (Öztürk & Çetinkaya, 2021, p. 142; Ömür & Sonsel, 2021, p. 118). Instructors and administrators employed by schools of all levels were at first concerned about the new system, and many had trouble adapting. In studies of the COVID-19 pandemic, which also disrupted music education, the difficulties encountered were attributed to the unprecedented nature of the disease, but also to the instructors’ advanced age, lack of technology-related skills, and concerns about their health and that of their loved ones (Camlin & Lisboa, 2021). Students also experienced adaptation problems, related primarily to the lack of financial means, and in many cases, the need for multiple siblings to learn using the same computer and the same room.

Studies have been conducted in all academic fields related to distance education in Turkey, shedding light on different

aspects of the phenomenon, and the field of music education is no exception. The issue of the effect of the pandemic on music education is addressed specifically in Turkey by Küçük (2020), Bolat and Akıncı (2020), Sağer, Özkişi and Yüceer (2020), Sakarya and Zahal (2020), Umuzdaş and Baş (2020), Ömür and Sonsel (2021), and Ayaz and Albuz (2021), and in other countries by Botstein (2021), Daubney and Fautley (2020), Calderón-Garrido and Gustems-Carnicer (2021), Shaw and Mayo (2021), Octaviani (2020) and Setiawan, et al. (2020). More specifically, these studies have addressed online instrument education, general music education, the views of students and teachers on the process, and music education in various countries during the pandemic.

The varied digital literacy and socio-economic levels of students have led to inequalities in almost all aspects of learning that did not exist under the more balanced conditions of face-to-face education (Yılmaz Altuntaş et al., 2020). Among the many problems encountered by students and teachers, the lack of digital literacy was one of the main causes of disruption, particularly in the early stages of distance education. Literacy – being the ability to read and write – is also related to the way individuals perceive events and objects in their lives and make sense of all their relationships in their social settings. Digital literacy, on the other hand, refers to the ability to make appropriate use of different technologies, to access, generate and share the right information, and to use technology in learning and teaching processes (Aşıcı, 2009, p. 11; Hamutoğlu et al., 2017, p. 417). According to Özerbaş and Kuralbayeva (2018), digital literacy requires learning how to make efficient use of information and communication technologies, and developing the necessary skills to make safe, legal, and moral use of these technologies to support personal development, to resolve problems one may encounter in life, and to participate in social life and production. One conclusion that can be drawn from these different definitions is that those who are digitally literate not only have knowledge of and understand technology but also possess the ability to use it.

The limitations in digital literacy not only disrupted ongoing education but also affected the work of students who were preparing to move to the next level of education. To prepare for college departments that admit students on the basis of aptitude tests, prospective students must undergo special preparations. Students who are set to graduate from field-related high schools, such as fine arts high schools or high schools run by conservatories, or from non-field high schools such as Anatolian high schools, *imam hatip* high schools or vocational high schools, must meet the same criteria in aptitude test-based admissions, and almost always need guidance in meeting these criteria, often working with an instructor. Instrument and vocal training, in particular, require a master-apprentice relationship, known as the *meshk* system in Turkey, which has been the main teaching technique since the beginning of time when there were no notation systems, right up to the present day. Demirgen and Sazak (2014, p.30) define the *meshk* system as “learning or teaching that takes place when a master plays or sings the piece individually and the student observes and learns”. Ear training, on the other hand, is not something an individual can undertake on their own, as it requires a control mechanism of some sort, as

otherwise, the student would not be able to confirm whether they are hearing right or not.

Special aptitude tests conducted by universities in the music field consist of three components:

- Hearing (ear) tests,
- Instrument tests, and
- Singing (vocal) tests.

Students preparing for special aptitude tests for college admissions in the 2019–2020 Academic Year encountered a novel situation with the interruption to their preparations a few months prior to the tests. These students had to continue their preparations with considerable concerns on their minds, not knowing how the process would unfold, how the pandemic would progress, and whether or not the tests would go ahead as scheduled. They had to prepare for all three main components of the aptitude test without the supervision of an instructor, or at best, through online sessions.

At the end of the 2019–2020 Academic Year, the music education divisions of the special arts departments of universities were free to conduct their aptitude tests either face-to-face or online. Some universities chose to conduct face-to-face tests by taking measures to minimize the risks under pandemic conditions, whereas others planned for all their tests to be conducted online. For the face-to-face tests, all stages of the test were administered by a single commission so that the prospective students would not have to spend too much time indoors, and completed the hearing, instrument and singing components of the test in a single session. For the online aptitude tests, prospective students were asked to submit videos for the instrument and singing components that were used for prescreening, and those who passed the prescreening were administered an online hearing test. Some of the universities that planned online tests based their admissions entirely on evaluations of instrument and singing videos, and this variation in the aptitude test was another source of stress and confusion for the students as regards to what exactly they had to prepare for.

With the above in mind, it is important to learn about the views of students on the special aptitude tests applied by music education institutions, as one of the fields of education that has been most affected by the pandemic. The evaluations of students of the test components and their mental states during their preparation works can serve as important inputs in efforts to improve the quality of the process or respond to future emergencies.

In light of these considerations, the present study will seek answers to the main question: “What have been the effects of the COVID-19 pandemic on students’ preparing for special aptitude tests administered by music education departments?” More specifically, answers are sought to the following questions:

1. How did the pandemic affect the ear training efforts of prospective music students who took special aptitude tests?
2. How did the pandemic affect the instrument training efforts of prospective music students who took special aptitude tests?
3. How did the pandemic affect the vocal training efforts of prospective music students who took special aptitude tests?

4. How did the pandemic affect the mental states of prospective music students who took special aptitude tests?
5. What were the digital literacy levels of the prospective music students who took the special aptitude test?

METHOD

Research Model

This study uses a survey model, as a recognized quantitative research approach, to examine the digital literacy levels and views of the COVID-19 pandemic of students who prepared for the college aptitude tests during the pandemic, and who made use of distance education in this process. A survey model is a research approach that aims to describe a past or present situation as is, and attempts to observe the person, object or event in question as is, under their own conditions (Karasar, 2009, p. 77).

Population and Sample

“Population” refers to all objects or individuals to be studied or observed in accordance with the scope of the study (Kaptan, 1998, p. 116). Sampling, on the other hand, refers to the selection of a small group from among this population, and using information about this group to draw conclusions or to make decisions regarding the larger population. The goal is to facilitate the garnering of information about the entire population by examining only a section of it (Arıkan, 2007, p. 139). The population of the present study consists of all students who took the aptitude tests administered by the music departments of 21 universities. The goal was to reach the entire population, however a sample of only 300 participants was achieved due to the pandemic conditions, and because some prospective students declined our request to take part in the study or did not take the tests. The type of high school from which the participants graduated, the universities to which they applied, any previous undergraduate education undertaken and whether they had researched the distance education opportunities offered by universities are reported in the Figure 1.

Type of high school

The questionnaire contained an item on the type of high school from which that students who took aptitude tests graduated, and the distribution of high schools is reported in Figure 1.

The figure shows that 54.60% of the students were graduates of Anatolian high schools, 31.60% were graduates

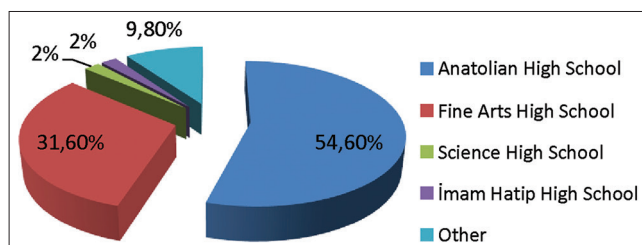


Figure 1. Type of high school graduated from among students who took aptitude tests

of fine arts high schools, while graduates of science high schools and imam hatip high schools accounted for very small percentages of the total. Those accounting for less than 2% of the total were combined under the “other” category, and included the graduates of medical, technical, private and open high schools, accounting for 9.80% of the total. The graduates of fine arts high schools were not the largest group of prospective music students, which is an unexpected finding regarding the transition from secondary to tertiary education. Fine arts high schools are meant to prepare students for faculties of education, providing them with the necessary foundation. They have a curriculum that emphasizes field-specific subjects, with more general supportive liberal arts courses. These schools provide a good grounding for the aptitude tests used in college admissions, but in recent years they have been less successful in preparing students for the mandatory university entrance exams. Students must now meet rather stringent criteria regarding minimum scores and percentiles on these exams to be eligible for the aptitude tests of faculties of education, which may explain the small number of applications from graduates of fine arts high schools.

Previous undergraduate education

The responses of students who took aptitude tests to the question of whether they had received undergraduate education are presented in Table 1, revealing that 5.6% had not received undergraduate education previously.

None of the participants who had previously received undergraduate education had degrees from related fields (e.g., musical conservatory, faculty of fine arts, audio engineering). A vast majority of the participants (94.4%), on the other hand, did not have undergraduate degrees.

Research of distance education opportunities and infrastructure offered by universities

Some universities have experimented with distance education in the past, and have adopted a hybrid education model in an attempt to keep up with technological advances, while others have offered some theory-based courses online due to a lack of sufficient classroom capacity. As with all levels, the pandemic has been a turning point also for tertiary education, with all universities having to take steps to strengthen their distance education infrastructure in a short time. Universities that had previously experimented with distance education found it easier to adapt to this new situation, whereas others had to overcome infrastructure problems for whole

Table 1. Previous undergraduate education of students who took aptitude tests

	f		%
	Field-related	Non-field	
Has an undergraduate degree	-	17	5,6
Does not have an undergraduate degree	283		94,4
Total	300		100

semesters. In this regard, the distance education capabilities of universities have become more important than the quality of face-to-face education and the campus amenities offered, and have emerged as another major criterion in the college preferences of students. Only a year ago, factors such as location, campus amenities, the physical condition of buildings, laboratories, concert halls, and even cafeterias used to feature prominently among the criteria used by students when selecting a college, in addition to academic factors, but with the pandemic, these factors have lost their previous significance, with the ability to impart knowledge through distance education emerging as an important criterion.

The responses of the students who took aptitude tests to a question on this issue are reported in Table 2, in which it can be seen that more than half of the participants (57.3%) stated that they researched the distance education capabilities and infrastructure of prospective colleges and that this had affected their choices. This shows that a well-established educational model can suddenly collapse, requiring a total transformation. The pandemic has brought about many changes that need to be addressed by college administrators and academicians, requiring continued effort.

University preferences

The responses of students who took aptitude tests to the question of which universities they had applied are reported in Figure 2.

The figure reveals that Gazi University, Ankara Music and Fine Arts University, and Uludağ University were the most popular among the respondents.

Data collection tools

Data on the digital literacy of the students who took aptitude tests and their views on the COVID-19 pandemic were collected using the “Prospective Student Questionnaire” developed by the researcher. To create this form, three faculty members with Ph.D. degrees in ear training, instrument education and vocal training were consulted, and a draft questionnaire was prepared based on their recommendations consisting of two parts and 21 items. The draft form was finalized after obtaining expert opinion, and comprised 20 items arranged into two parts. The first part contained items on demographics, and the second part contained items on participants’ views regarding their ear training, instrument training and vocal training during the pandemic, as well as their mental states and level of digital literacy. The items were scored on a 5-point Likert scale, and averaged to see where the responses were concentrated on a scale of 1–5.

Table 2. Research of distance education opportunities and infrastructure offered by universities by students who took aptitude tests

	f	%
Yes, I have researched.	172	57,3
No, I have not researched.	128	42,7
Total	300	100

The averages thus obtained were evaluated on the basis of the point ranges given in Table 3.

Data analysis

The “Prospective Student Questionnaire”, created with the support of expert opinion, was administered to students prior to the aptitude tests conducted by the universities, and the date obtained on the day of the tests. The concentrations of the responses to the items on the questionnaire were used to identify the shared views of the respondents according to the ranges presented in Table 3.

The questionnaire scores of the prospective students were averaged to identify where the responses were concentrated and where the weight of opinion was, and the results are presented below.

FINDINGS

Findings and Comments Related to the First Sub-Problem

The effects of the Pandemic on the ear training efforts of prospective music students who were to take the special aptitude test are presented in Table 4.

This section deals with the students’ views on their ear training efforts in preparation for the aptitude tests during the pandemic. The student responses to the statement that their transcription, sight-reading and solfège exercises were negatively affected by the pandemic were heavily concentrated around “Agree”. Working on their own instead of in an interactive environment, on the other hand, had a negative effect. Ear training is of primary importance among prospective music teachers. In professional music education, ear training and music theory are prioritized over other field-related knowledge (such as vocal training and instrument training), and constitute a crucial first step in the development of basic knowledge and skills (Burç and Şen, 2019, p. 1818). A musician/instructor without proper ear training cannot be expected to produce high-quality or flawless performances, as improving the quality of instrument and vocal training requires and greatly benefits from meticulous ear training. In fine arts high schools and cram schools for music education departments, prospective music teachers first undergo ear training, while instrument training goes hand-in-hand with vocal training. There have been many studies revealing that ear training is more effective in an interactive class environment, as ear training requires someone other than the learner to use an instrument (usually a piano) and to ask questions to

Table 3. Point ranges indicating shared views in responses to questionnaire items

Responses	Range Indicating Shared View
Strongly Agree	4.21-5.00
Agree	3.41-4.20
Neither Agree Nor Disagree	2.61-3.40
Disagree	1.81-2.60
Strongly Disagree	1.00-1.80

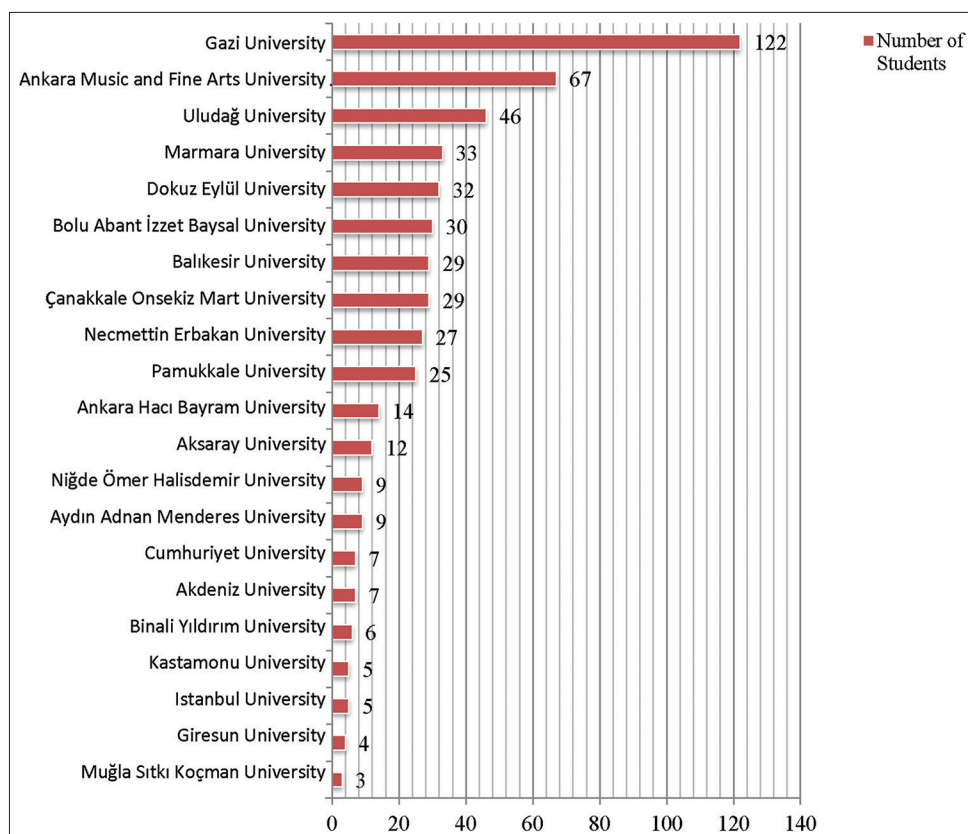


Figure 2. University preferences of students who took aptitude tests

Table 4. Effects of the pandemic on the ear training efforts of students

Items	Average Response
1 Being at home during the pandemic had a negative effect on my music transcription exercises.	3.66
2 Practicing on my own instead of being in an interactive class environment helped with my ear training.	2.86
3 Being at home during the pandemic had a negative effect on my sight-reading/solfège exercises.	3,70

the learner. Transcription and identifying notes, in particular, are difficult to learn on one's own, as while many computer programs and mobile applications have been developed in recent years specifically for ear training, they cannot replace an instructor, and are unable to duplicate the motivation arising out of the interaction of the teacher and the student. In a study of online ear training applications, Babacan (2015) argued that working with an instructor is more instructive than working with mobile applications, as there are various additional benefits with the former, such as the ability to vary the questions on the basis of the student's responses. Students preparing for aptitude tests during the pandemic lacked an appropriate environment at home in which to conduct their exercises, and were unable to support their ear training, which unfortunately hindered their preparation.

Findings and Comments Regarding the Second Sub-Problem

The effects of the Pandemic on the instrument training efforts of prospective music students who were to take the special aptitude test are reported in Table 5.

This section of the study deals with the students' views of their instrument training efforts during the pandemic, when many students missed face-to-face lessons with their instrument teachers. Most students agreed that being unable to conduct these lessons face-to-face was a significant handicap. Instrument lessons are based on master-apprentice relationships in which teachers are required to serve as models. In master-apprentice relationships, teachers display their instrument-related skills, and transfer their knowledge and experience to students in a direct manner, and the goal is for the student to imitate the behavior of the teacher on the instrument, as well as their musicality (Özmenteş, 2013, p. 321). In distance education, it is very difficult for the student to model themselves on their teacher and to learn by watching them play. Moreover, in instrument education, the teacher may need to make physical interventions to modify hand, wrist or arm movements and the bodily posture of the student so as to reinforce certain behaviors or to correct problematic ones. Correct behavior can be learned and reinforced only through seeing and tactile interactions of this sort. Unfortunately, it is not possible to learn correct behaviors and to correct mistakes through distance education, which is why the students reported missing face-to-face lessons with their instrument teachers. Another problem encountered by

Table 5. Effects of the pandemic on the instrument training efforts of students

	Items	Average Response
1	Being at home during the pandemic allowed me to devote more time to my individual instrument exercises.	4.15
2	Being at home during the pandemic made me miss face-to-face lessons with my instrument teacher.	4.60
3	Because of the pandemic, I had to choose the pieces to play in the aptitude test myself.	4.39
4	Because of the pandemic, I had to practice the pieces to play in the aptitude test myself.	4.78
5	I did not have the opportunity to practice playing an instrument because my instrument is not suitable for home practice.	3.11

the students during the pandemic related to their selection on their own of the pieces they would play or sing in the aptitude test. In the instrument component of the aptitude tests administered by the music departments of faculties of education, students are usually asked to play two pieces, with at least one piece from Turkish folk music or Turkish classical music. The evaluation criteria and the instrument component seek to identify correct and accurate performance, technical proficiency, the difficulty level of the piece and the musical interpretation. Most students who take aptitude tests are graduates of fine arts, Anatolian, science or imam hatip high schools, and of these, only fine arts high schools provide instrument education, while students attending other types of high school receive only an amateur training. Instrument education in preparation for the aptitude tests is planned and executed by an instructor on the basis of the student's current level of progress. A significant proportion of this long training process consists of technical and musical training specific to the instrument, while the final part is devoted to preparing for the aptitude test, as students are expected to excel in both the technical and musical aspects. As the pandemic overlapped with the period in which the students were scheduled to prepare for their aptitude test, they had to select the pieces they would perform in the test on their own. What was even more problematic than having to select these pieces was their need to practice them on their own. Instrument education is not something that can be successfully achieved solo, and the students had to rely on their existing technical and musical proficiency to practice the pieces they had selected in preparation for the tests. One positive aspect of the pandemic, according to students who took aptitude tests, was that they had extra time to practice their instruments. The transition to distance education and the uncertainties involved meant that students were relieved of many of their usual duties. Students are generally unable to spend as much time on their instruments as they would like during face-to-face education, but had more opportunities to practice during the pandemic. The variety of instruments available in the music education departments of faculties of education depends on the strength of the faculty in the school, as well

as on the amenities offered by the city in question (marching band, symphony, opera, conservatory), although almost all universities teach the piano, violin, tenor violin, cello, flute, guitar, bağlama, lute and qanun. Depending on the city, wind instruments such as the clarinet, saxophone and oboe may also be taught, as well as Turkish music instruments such as the tambur and cümbüş. Many of these instruments are unsuitable for home practice because they are very loud, and at a time when many people are working from home, practicing loud instruments at home for hours at a time would not be welcomed. As a result, some of the students who took aptitude tests encountered difficulties in maintaining their instrument training during the pandemic.

Findings and Comments Regarding the Third Sub-Problem

Table 6 displays the effects of the Pandemic on the vocal training efforts of prospective music students who were to take the special aptitude test.

This section of the study deals with students' views on their vocal training works and preparation for the "singing" component of the aptitude tests during the pandemic. On this topic, the respondents complained mostly about needing help with their vocal exercises and accompaniments. In vocal training, warm-up exercises with a piano are required prior to actual singing to protect one's vocal health, and so someone is needed on the piano to assist the learner with warm-up exercises, and then to accompany them when singing. In distance education, students encountered difficulties in such activities, being in a different physical location to their instructors. Moreover, given that vocal training already seems to be very abstract, students may be hesitant and may be unable to tell when they are singing the right notes, or using the right voice or vocal technique, in the absence of either positive or negative feedback. According to Baydağ (2020), vocal instructors are required to train the student's voice, equip them with relevant knowledge and resolve any problems that may arise in the process of learning. Vocal training, like instrument training, is not something that an individual can accomplish on their own, as learners need the guidance of an instructor in all steps, including learning appropriate techniques and behaviors, understanding and using breathing techniques, musicality, and creating a repertoire. Accordingly, having to work on vocal training without proper guidance hinders the learning process. Another frequent complaint by the students related to their inability to protect their voice health when preparing for the vocal tests. Unable Lacking feedback from an instructor during the pandemic, the students were often unsure whether they were using their voices right, and may have hurt their voices through the use of incorrect techniques.

Findings and Comments Regarding the Fourth Sub-Problem

Table 7 shows the psychological effects of the Pandemic on prospective music students who were to take the special aptitude test.

This section of the study deals with the psychological effects of the pandemic on students who were to take special aptitude tests. A vast majority of the students agreed that the uncertainties associated with the pandemic had had a negative effect on their mental states, increased their anxiety levels and significantly lowered their motivation levels. In general terms, anxiety can be defined as a feeling of unease that arises from the fear of some danger (Budak, 2000, p. 437). In particular, uncertainties of whether the special aptitude tests would be held as scheduled, and if so, in what manner, meant that students were unable to predict what to prepare for. The process of preparing for aptitude tests involves more than ear, instrument and vocal training, as the students are also required to be in a good mental state and highly motivated to ensure that they can progress toward their goals. The rapid transition to distance education due to the COVID-19 pandemic left students with uncertainties related to their aptitude tests, negatively affecting their mental states and lowering their motivation. In a study of college students, Duman (2020) reported that students experienced a moderate level of fear and uncertainty as a result of the COVID-19 pandemic, paralleling the findings of the present study. The suspension of face-to-face education as a result of the pandemic was expected to have a positive effect on the students' preparatory works by providing them with extra time, but a vast majority of the respondents disagreed with this assumption. In a study of college students, Piji (2020) found that in addition to students who believed there were positive aspects to the distance education associated with the 19 pandemic, there were also those who could see no benefits of distance

Table 6. Effects of the pandemic on the vocal training efforts of students

Items	Average Response
1 During the pandemic, I missed being able to receive feedback on what I did right or wrong when doing my vocal exercises.	4.42
2 When undertaking vocal training during the pandemic, I needed help with warm-up exercises and accompaniments.	4.54
3 During the pandemic, I was able to protect my vocal health when practicing the pieces I was to perform for the vocal test.	2.92

Table 7. Psychological effects of the pandemic on students

Items	Average Response
1 Living with the uncertainties of the pandemic made me anxious.	4.52
2 Uncertainties regarding college entrance exams and special aptitude tests had a negative effect on my test motivation.	4.46
3 The suspension of face-to-face education during the pandemic gave me more time to study for the college entrance exams.	2.82

education. Consistent with Piji's findings, the present study found that the effects of the COVID-19 pandemic on the students' mental health and motivation were mostly negative.

Findings and Comments Regarding the Fifth Sub-Problem

Table 8 depicts the preparedness of prospective music students who were to take the special aptitude test in terms of digital literacy for distance education during the Pandemic.

"Digital literacy" has been one of the most important aspects of education during the pandemic. Maden et al. (2018) define the concept of digital literacy as the ability to read and write for various purposes using digital devices such as computers, televisions and smartphones. Students and teachers with high digital literacy make more efficient use of such devices in education, whereas those with low levels of preparedness encounter numerous problems. With the pandemic, the concept of "emergency distance education" gained importance in educational sciences, in addition to the concept of distance education – defined as distance education adopted out of necessity and urgently in emergency situations such as natural disasters and epidemics. The success of distance education depends on the infrastructure of the country in question, and more specifically, of individual institutions, although the system does not work if the teachers and students lack the necessary knowledge or skills to make use of the relevant technologies. In addition to basic literacy, today's students have to have also technological skills (Duran & Özen, 2018). Table 8 presents the responses of the students when asked whether they considered themselves to have sufficient digital literacy, in which it can be seen that 42.3% considered themselves to be sufficiently digitally literate, whereas 57.7% thought their digital literacy skills were lacking. This shows that many prospective university students are insufficiently prepared in terms of digital literacy.

DISCUSSION

This study was conducted to examine the ear, instrument and vocal training activities of students preparing for the special aptitude tests set by universities during the COVID-19 pandemic, along with their digital literacy skills and mental states. The responses to the "Prospective Student Questionnaire" administered to the students revealed the students' preparation for the hearing component of the test was hampered by the lack of a classroom for ear training

Table 8. Preparedness of prospective music students who took special aptitude tests in terms of digital literacy for distance education

	f	%
I consider myself to have sufficient digital literacy skills.	127	42,3
I consider myself to lack sufficient digital literacy skills.	173	57,7
Total	300	100

exercises and their inability to obtain help from an instructor. Transcription and ear training exercises require the presence of an instructor with a piano, whether in the form of individual tuition or group lessons in a classroom. Using the piano, the instructor plays melodies with different tones, modes and makams, and asks students to transcribe them, paying attention to the produced sounds, rhythm and pitch. This is the only way to conduct proper transcription exercises. In sight-reading/solfège exercises, on the other hand, students try to read the notes before them, paying attention to rhythm, duration and pitch. They can check their voices with the help of an instrument (preferably a piano), although even in sight-reading and solfège exercises, students need guidance on how to progress and require feedback on their performances. In other words, sight-reading and solfège exercises, along with transcription and ear training exercises, benefit from the interaction between the student and the instructor, and if possible, between the instructor and the class, as this makes learning easier and more permanent. It was expected that during the COVID-19 pandemic, students would be unable to do transcription, ear training, sight-reading or solfège exercises on their own at home, and that their preparation would suffer as a result. In his Master's thesis titled "Perspectives of lecturers and undergraduate students on university distance education courses: The case of Balıkesir University," Erfidan (2019) reported the lack of class interaction to be one of the disadvantages of distance education identified by students, which is consistent with the findings of the present study.

When it came to the opinions of the respondents on instrument training, on the other hand, most of the students preparing for special aptitude tests were of the opinion that distance education had given them more time to focus on their training. They stated, however, that they were unable to make the best use of this extra time as they did not have access to the support of instructors in their instrument training, and they had to select and practice the pieces they were going to perform in the instrument test on their own. Instrument training is a long and comprehensive process that requires daily exercises performed under the guidance of an instructor. Without an instructor, it is very difficult to progress in the acquisition of correct technical and musical skills, in selecting a repertoire fit for the purpose and in undergoing appropriate preparation for this repertoire, leaving students groping in the dark. Students can progress on their own, without the need for the guidance of an instructor, only after reaching a certain level, having learned the basics in terms of technical and musical proficiency. Unfortunately, this is not the case for beginner students or those who have only recently begun their professional music training. In a study conducted at the University of Melbourne, the emotional support provided by the instructor and learning through effective participation were found to improve class participation in instrument training (Bruin, 2021), and these findings are consistent with those of the present study.

Regarding the participants' views on vocal training, it was found that the students who prepared for the special aptitude tests of music departments found it difficult to protect their vocal health without the guidance of an instructor,

and missed out on feedback on their strengths and weaknesses when practicing. Moreover, they needed piano support during their vocal exercises and singing practices. As with ear and instrument training, vocal training requires the guidance of an instructor, particularly in the early stages of learning when it is impossible for students to acquire the appropriate techniques, produce accurate and clear sounds, and make proper use of their breathing. All of these tasks require a voice instructor to check the breathing/diaphragm and the technical/musical behaviors of the student, and to provide feedback. Students who do not receive the necessary feedback on their performances are condemned to be stuck with the bad habits they develop; just as correct behaviors will not be made permanent. Moreover, during vocal exercises and singing practice, students should be accompanied by a piano, allowing them to hear the correct tones. When piano accompaniment is provided by an instructor, the student can pay more attention to the technical and musical aspects, can perform vocal training exercises in a more focused manner, and can correct problematic behaviors, if any, as the instructor points them out.

When it comes to the mental states of students during the pandemic, most of those preparing for special aptitude tests were found to agree with the statement that the suspension of face-to-face education had given them more time to devote to test preparation. Having additional time for individual exercises of any kind may at first seem to be beneficial to students, although they were unable to make the best use of this extra time due to the heightened anxiety and lower motivation associated with the uncertainties related to the worldwide course of the pandemic and the situation in the country. Karakulak (2017), in her Master's thesis, claims that the uncertainties of people related to the world around them can create varying levels of stress, which is consistent with this finding. There are three components of special aptitude tests related to hearing, playing and singing, although the mental state of students, although not a formal component, can be considered another important aspect of these tests. The lack of any clear answers to the questions of whether the tests would be conducted, whether they would be conducted face-to-face or online, and whether high school education would continue to be conducted online added to the difficulties associated with test preparations. Uncertainties related to both the overall situation in the country and the aptitude tests increased the anxiety levels and decreased the motivation of students. In other words, the mental states of the students were negatively affected by the pandemic, which is a less visible, but important aspect of test preparation. According to Ekici (2017), the factors that increase student motivation include class interaction, good teacher-student communication, the way an instructor conducts classes, and the feelings of mutual trust, love, understanding and friendship associated with a class environment. The students who prepared for special aptitude tests during the COVID-19 pandemic were unable to benefit from any of these factors, all of which are conducive to motivation, thus hampering their test preparation.

Regarding the digital literacy preparedness of the students who took special aptitude tests during the pandemic,

less than half of the participants (42.3%) were found to have sufficient digital literacy skills. This figure, unfortunately, is far from ideal for online education at an undergraduate level. The students and teachers did their best to cope with the emergency distance education that was initiated following the announcement of the COVID-19 pandemic, which caught the entire world off guard, although for future online education to be more successful, both teachers and students need to develop stronger digital literacy, and to be better acquainted with educational technology applications.

CONCLUSION

This study, conducted with students who prepared for music aptitude tests of universities during the COVID-19 pandemic, aimed to examine their views on their preparations for the tests and their digital literacy skills. The following recommendations are made based on the findings of the study:

- The emergency distance education that was adopted as a result of the COVID-19 pandemic caught students preparing for music aptitude tests of universities off-guard, forcing them to continue their ear, vocal and instrument training exercises without the guidance of an instructor, with an overall negative effect on their test preparation. To minimize the negative effects arising out of the need to work without the guidance of an instructor, more attention should be paid to online classes at a high school level, individual; group lessons for ear, instrument and vocal training should be conducted on an ongoing basis; and measures should be taken to ensure good communication between teachers and students. This would allow students to prepare for music aptitude tests in a more comprehensive and professional manner.
- Preparations for tests are associated with high levels of anxiety and stress in students, and the COVID-19 pandemic has exacerbated the situation. To minimize these negative effects, decisions on whether and how to hold aptitude tests should be made as early as possible, reducing the students' anxiety arising from these uncertainties.
- This study found that students preparing for the music aptitude tests of universities had very low levels of digital literacy. To improve the success of online and distance education under the COVID-19 pandemic and future upheavals, measures should be taken to strengthen the digital literacy of both students and teachers, facilitating their adaptation to technology and the attainment of their teaching and learning needs, thus minimizing the negative aspects of the suspension of face-to-face education.

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