
COVID 19 Lockdown: Learners' Perspectives on Online Music Education

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Abstract: *In response to the present pandemic environment created by COVID 19, there have been significant modifications in various elements of music instruction. All courses, not only those involving group work or theoretical concepts, will be affected by these shifts in the way they are taught and taken. In this day and age, remote emergency teaching and learning calls for cross-collaboration between the teams responsible for the material, the technology, and the training. In this study, we investigate the students' perspectives on online education, and we also give suggestions for making the format more effective and time-saving. The researchers made the decision to carry out their study with the aim of gathering input from undergraduate and master's degree music students after taking part in a university semester that took place in a lockdown setting. An important result of this research was the impact that perceived utility of e-learning methods had in modulating the correlations between compatibility of online approaches and enjoyment of using e-learning methods. A higher perceived utility, which in turn predicted a higher degree of satisfaction with e-Learning techniques, was influenced by the belief that e-Learning strategies are compatible with online music instruction. In spite of the fact that this time heightened apprehensions about social connection, anxiety connected to the unknown, and intolerance of ambiguity, none of these factors predicted levels of contentment in relation to the utilization of e-learning platforms. In conclusion, more educational efforts that support the use of distance learning strategies in the discipline of music education are required. Due to the lack of comparable study carried out in our nation, we came to the conclusion that more investigation into this subject is required.*

Keywords: *E-Learning in Music, Distance Education, Perceived Usefulness, Pleasure with Online Education, and Intolerance for Ambiguity.*



1. INTRODUCTION

The worldwide COVID-19 epidemic demanded a profound paradigm shift in how we communicate with one another and brought about significant changes to all part of our life. Social exclusion and enforced limitations have an impact on in-person education, particularly on music instruction. As a result, institutes of higher education for music were forced to modify their methods of teaching music. We saw an exceptional shift away from in-person music instruction to remote teaching methods at many universities across the world in order to preserve the smooth functioning of education and avoid the creation of a transmissible virus like COVID-19. Emergency remote teaching and learning, sometimes known as forced remote teaching, was called into question during the pandemic since neither students nor instructors were given a choice or enough preparation for the situation. Recent studies examine students' self-regulation, preparation for distance learning, experiences during this period, issues they encountered, and students' viewpoints (Hamdan et al., 2021). In recent papers, the experience of teachers who participated in the Emergency Remote Teaching procedure has been addressed and contrasted with that of the students. One research analyzed how the pandemic had changed music teachers' views about their own safety in the classroom. The results demonstrate that educators' mental health deteriorated from the onset of the epidemic until the start of the new school year in fall 2020. (Roseth & Blackwell, 2022).

Students in higher music education with professional aspirations place a premium on teaching and —practical, individual or group—learning activities. Previous studies have identified three distinct online education models: asynchronous learning activities, in which students are guided through independent study of course material; synchronous learning activities, in which students engage in real-time video conferencing via a shared platform; and blended learning, in which students are exposed to elements of each model. In the case of pupils, all three strategies were seen.

Up to the epidemic, university music classes were taught in-person. The move to online instruction during the COVID 19 epidemic resulted in "a loss of classroom awareness and social presence from both the instructor's and students' viewpoints" (Venkatesh et al., 2020). The benefits and drawbacks of online learning, which were discovered in this study, have previously been covered in other studies. The features provided by e-learning systems, such as texts, emails, message boards, file sharing, recordings, chat, and discussion forums, as well as enhanced time management as a result of flexible hours and access from anywhere, and time saved on travel, are thus included among the benefits. On the one hand, the drawbacks affect instructors, who were forced to quickly refresh their teaching offers and modify their objectives and plans of action in order to keep student engagement and motivation. On the other hand, students at this time had difficulty interacting face-to-face and resolving technical issues (IT equipment, network access), particularly those who attended schools in remote areas with high rates of poverty (Szymkowiak et al., 2021). The need to adapt to a new learning environment and the lack of rapid nonverbal contact with professors, which might have a detrimental effect on students' performance, could also be difficult.

After examining how college students feel about online education, we'll propose ways to make it more effective and efficient. We'll also discuss the pros and cons of using audio and/or video conferencing tools like Zoom, Jitsi, Big Blue Button, Microsoft Teams, Skype, Microsoft Teams, Google Meets, etc., to teach and learn music online.



Even in the instance of students who were in a generally positive, upbeat condition, the present pandemic setting has highlighted the dread of social contact and anxiety associated to the unknown (Erceg et al., 2020) (students' well-being having an influence on overall learning and academic progress). We conducted this study because there aren't many studies that have looked at the relationship between students' academic achievement and their ability to tolerate ambiguity during the COVID 19 pandemic. Due to the dearth of similar studies conducted in our country and the need of providing a broad overview of the subject, we believed that research addressing the challenges of higher music education was essential. This research aims to examine the attitudes of music students regarding distance learning during the COVID 19 epidemic, including their pleasure with online learning, the time they spend studying online, and their perceptions of its usefulness and compatibility with certain subject areas. We also aimed to identify differences in how people rated the effectiveness of online learning tools across different areas of music education. The study's secondary objective was to examine the links between students' attitudes toward online learning and their level of comfort with uncertainty, with the hope of highlighting the mediating role of perceived utility of e-learning methods in the prediction of satisfaction towards the use of e-learning methods (attitudes—both good and negative—and perceptions of the suitability of e-learning techniques for online music education).

Web-Based Music Lessons Throughout the Covid 19 Epidemic

The primary goal of this study was to ascertain the extent to which students believed that online learning was appropriate for the specific study of music. Most early research portray online music teaching as an additional tool, not an exclusive one, that is neither worse than nor superior to traditional coursework (Cayari, 2018). In a setting where they were not required to abandon conventional teaching, teachers were encouraged to utilize and investigate the efficacy of technological tools. The benefits and difficulties of synchronous and asynchronous learning were represented in this as a mostly favorable attitude toward technology tools. These techniques, which are modern, offer a tremendous lot of promise to improve music education (Liu and Shao, 2022). However, neither the disadvantages of exclusive nor required long-term consumption have been investigated. According to Cayari (2018), who looked at a number of university music education curricula, "these online degrees are neither worse nor better to conventional coursework but rather represent an extra instrument a university may deploy to reach and teach its ever-expanding population."

There are primarily two types of musical disciplines in higher education because of its distinctive characteristics: theoretical instruction and practical instruction/applied skills, each has unique qualities and problems. Applied classes, where the focus is on the improvement of individual and group musical abilities, are more difficult to provide and manage online since their content is mostly informative. In online lessons for performance lessons, the instructor is unable to improve the student's posture or finger positioning, nor can they use methods like performing piano compositions with four hands, which are crucial for displaying tone, rhythm, and phrasing but cannot be used in a virtual setting. Adapting to the online environment necessitates sacrificing the idiosyncrasies of group performance classes like orchestras, choruses, string quartets, and chamber music, which are vital to the development of students' performing skills. The performing arts or composition are less suited to online learning, and university music education professors lack expertise in remote learning. According to current



study, this method would be most suited for theoretical, group-related subjects (Anthropology, teacher preparation, aesthetics, semantics, music theory, composition, music history, etc.).

In this study, we used Skype and MIDI Internet to examine the benefits and drawbacks of three distinct approaches to distant learning: synchronous (real time), asynchronous (real time), and a hybrid of the two. As a result, these teachings have been shown to have a number of advantages, but it has also been noted that there may be some real-world issues due to technical challenges (Liu & Shao, 2022). One of the problems with this teaching approach, according to King et al. (2019) and McPhail (2018), is that neither the instructor nor the student have the necessary technical abilities to concentrate only on the expressive interpretation. This is valid for one-on-one remote instruction while learning to play an instrument from the whole orchestra. Physical engagement is essential for learning, even for pupils with highly developed technical abilities. Therefore, a crucial factor in determining how satisfied students are with their education is how well the e-learning approaches are judged to be compatible with the music education curriculum. Perceived compatibility, which is defined as the extent to which students consider an e-learning system to be consistent with their present beliefs, needs, and experiences, is a major predictor of both behavioral intention and perceived usefulness (Peng et al., 2018).

During the online education period, it is also important to track how much time students spend engaging in the three types of learning environments (individual, group, and theoretical) that are specific to the field of music: before, during, and after the COVID 19 epidemic. A important factor that influences the time parameter is the amount of time needed to experiment before selecting the ideal settings for online teaching and learning, especially when changing to musical activities. Numerous studies have shown a positive relationship between time management skills and the impacts they have on student performance and learning. A 2019 study demonstrates the connection between effective time management and increased academic achievement while highlighting the difficulties students have in balancing their personal and professional life (Adams & Blair, 2019).

Due to the time allotted for individual study plus the time spent meeting the specific technological requirements of online education, teachers and instructors, especially in the online music context, may want to consider expanding the instruction of time management skills beyond the vocational domain. We have not been able to locate any studies that examine whether or if students spend more or less time preparing for practical or theoretical tasks before or after the epidemic. Time-consuming chores unique to an online learning environment are identified in a research highlighting the significance of time management strategies. These tasks include account maintenance, course access, media downloads and uploads, and learning tasks (Ignacio et al., 2022). Uncertainty aversion is a third target; it's characterized as a personality trait that involves how one perceives, interprets, and reacts to uncertainty on a perceptual, interpretive, emotional, and behavioral level (Cowie et al., 2018). An intolerance for ambiguity may make one anxious by making them too sensitive to the ever-present possibility of negative outcomes.

Research has demonstrated that a lack of face-to-face connection between professors and pupils may lead to varying degrees of sensitivity to ambiguity, which can negatively affect academic or professional performance. Several studies have shown a favorable correlation between anxiety and performance when anxiety management is a personal trait, especially among highly

skilled individuals. An intolerance for ambiguity is also associated with a variety of mental health issues, such as eating disorders, obsessive compulsive disorder, panic disorder, social anxiety, and depression. According to the results of another research, students in humanistic faculties exhibit more intolerance for ambiguity than those in the medical, technical, and scientific fields (Patel et al., 2022).

According to studies, the success of learning systems and the effectiveness of education depend greatly on usefulness and satisfaction (Al-Samarraie & Saeed, 2018). The perception of utility is a key factor in enhancing learners' self-regulation in e-learning environments, and enhancing perceived utility also enhances learners' self-regulation of e-learning. The perceived utility measures how much a user—in this example, a student—of a given system thinks that system will help them do better in their studies than other options. Previous studies shown a favorable correlation between perceived utility or usefulness and user pleasure (Balci, 2021). The totality of interactive experiences impacted by emotive elements produced by human-computer interaction may be seen as the definition of e-learning satisfaction. Learner satisfaction is increased through online apps that are appealing, interactive, and compatible with the course material.

This investigation was motivated by the following hypothesis:

H1. For diverse learning settings, such as individual, group, and theoretical subject subjects, the compatibility and perceived value of e-learning approaches for music education vary, with the former being much greater for individual and theoretical than for group situations.

H2. For the three distinct learning environments, varying amounts of time are spent studying before to and during the COVID 19 pandemic (individual, group, and theoretical).

H3. Does a person's intolerance for ambiguity affect how satisfied they are with using e-learning platforms?

H4. The connections between compatibility of distance learning techniques, intolerance of uncertainty, and contentment with the usage of e-learning techniques are mediated by the perceived value of e-learning techniques.

2. METHODS

Participants and Procedure

A cross-sectional approach was used. The sample included 150 students (111 female and 39 male) with a mean age of 25.98 (SD = 8.48) from eight out of ten schools offering music degrees. We employed an internet distribution method for convenience sampling and to disseminate the surveys (Facebook groups and pages for music students; University professors from different institutions were requested to let their students know about the call for participation.). Google Forms was used to create the surveys. There has been a history of scientific partnership with the universities from which the responders were chosen. During the second semester of the 2020 school year, the surveys were distributed online and were active for a month. In order to maintain anonymity, the surveys were sent without collecting any personal, identifiable information and without requiring participants to sign in to their Google accounts. Each participant gave their written agreement before participating in the survey, which was completely optional. Prior to data collection, participants were informed of the study's goals, the confidentiality of participant data, and any ethical issues that were included in the survey's protocols. The questions were only accessible to individuals who indicated that



they had read, comprehended, and agreed with all of the content. The completion link was not made available to those who refused to provide their approval. The council of the music faculty and two experts from the psychology and education sciences faculties approved the research methodologies to be used in this study.

Measures

Three distinct pedagogical activity structures—individual, small-group, and theoretical—were evaluated to determine the extent to which students were satisfied with their online learning and teaching experiences. For all three situations, we employed the same three things: What are your thoughts on going to school as an individual, a group, or for theoretical purposes? A five-point Likert scale was used to rate how helpful respondents found each response to be. E-learning platforms and overall online-learning satisfaction were also examined by two additional questions. (What degree of satisfaction do you have with the e-learning platform and/or online learning? rated from not at all pleased to completely satisfied on a five-point Likert scale. Another test question examined how the students felt that online education had helped them build their competencies. (How much do you think taking online classes helped you get ready to study music?), The responses were evaluated on a five-point Likert scale with a range of very little to very much.

Additionally, the time spent on learning activities for the three types of learning contexts—individual, group, and theoretical—before and throughout the COVID 19 epidemic was examined (How much time did you spend one week prior to isolation studying a certain topic? vs. How many hours per week did you spend studying this topic on average throughout this time frame?). For 15 subjects, we surveyed students to see how well they thought the material would lend itself to online instruction and learning. These subjects fell into two broad categories: theoretical (such as music analysis, musical forms, music history, etc.) and group (e.g., directing, choral groups, orchestras, etc.). Each of the 15 questions was rated using a Likert scale, which has five alternatives ranging from strongly disagree to strongly agree. The eight questions used to measure the eight positive characteristics of online learning techniques in music education had a Cronbach's Alpha of 0.91, whereas the seven items used to measure the seven negative elements had a Cronbach's Alpha of 0.80. This made it possible to employ a total of sixteen measures to assess the perceived value of online learning techniques in music education. On a five-point Likert scale, fifteen different factors were evaluated.

Fifteen items were used to assess people's opinions of the e-learning tools deployed during the COVID 19 pandemic. Those who had a favorable impression of the tools were classified as having a "positive attitude" (consisting of 8 items with a Cronbach's Alpha of 0.90; items included statements like "it seems fascinating to use IT" and "I am enthusiastic about learning online"), while those with a negative impression were classified as having a "negative attitude" (7 items, Cronbach's Alpha of 0.85) toward the tools. If the instructor is not there, I find it very difficult to learn. In order to measure how much respondents dislike uncertainty, we administered the Intolerance of Uncertainty Scale, Short Form (Deniz, 2021). This scale is used to evaluate how one deals with future events, ambiguity, and uncertainty. Each of the ten questions used to gauge anxiety was accompanied with a five-point Likert scale, from 1 (completely not typical of me) to 5 (completely typical of me) (entirely characteristic of me). Five questions measuring prospective anxiety (Cronbach's Alpha=0.90) and five items



measuring inhibitory anxiety (Cronbach's Alpha=0.89) were then categorized into two categories.

Data Analysis

AMOS 23.0 was used to validate the CFAT measurement model. A somewhat excellent match for the measurement model was shown by the fit indices after the model modification methods. Minimum discrepancy (CMIN/ df) = 1.97, Comparative Fit Index (CFI) = 0.885, Root Mean Square Error of Approximation (RMSEA) = 0.064. Descriptive statistics were calculated to examine frequencies for several features of students' perspectives on online learning, as well as to ensure that the distributions were normally distributed. T-tests and multiple-sample t-tests Using analysis of variance (ANOVA), we compared the two settings (before and after the COVID 19 pandemic) on a wide range of factors, such as students' attitudes and commitment levels to online education. The values for all of the variables were within the typical range. The results of Mauchly's tests showed that the sphericity assumption was maintained in all repeated ANOVA tests. The connections between variables were also analyzed using Pearson correlation coefficients. To conduct the statistical analysis, we used SPSS 24.0. Satisfaction with online learning may be predicted by the predictors of perceived compatibility and tolerance of uncertainty, with perceived usefulness serving as a mediator. AMOS 23.0 was used to check this. Using a covariance matrix as input, maximum likelihood estimation was used to test a model that included both latent variables, providing a fuller view of the interrelationships between the predictors and the result. The mediation model has very good fit statistics, with a minimum discrepancy of 1.46, a Comparative Fit Index of 0.989, and a Root Mean Square Error of Approximation of 0.047.

3. RESULTS

Student satisfaction with e-learning platforms and online education as a whole was found to be in the middle of the scale (26.8%), with 35% reporting satisfaction and 16% reporting high satisfaction and 34.3% reporting poor satisfaction. Despite this, the vast majority of them believed that their professional growth was much aided by their online education during the COVID 19 epidemic, as shown below: About a quarter (21%) said online education had a major impact, another quarter (25.2%) thought it made a significant impact, and another quarter (26.6%) thought it made a moderate impact. Using repeated measures ANOVA, we compared how participants rated the usefulness of several online learning strategies (individual, group, and theoretical study) and how well those strategies aligned with the unique requirements of music education (Table 1). The repeated measures ANOVA showed that there were substantial variations along the two dimensions, with perceived utility being considerably greater for theoretical subjects than either individual or group subjects. Similarly, when asked about whether or not they thought online learning and teaching techniques were compatible with music education, respondents indicated that they thought these approaches were best suited to individual and theoretical study rather than group study.

Using repeated-measures ANOVA, we compared the time spent studying in each of the three settings before and after the COVID 19 pandemic to see whether there were any significant changes (Table 1). The Mauchly test confirmed that the sphericity assumption was correct. Study time spent was found to be comparable across all three settings before, during, and after the epidemic. Researchers discovered that both types of anxiety (prospective and inhibitory)



were linked to unfavorable opinions and perspectives on the efficacy of e-learning strategies and online education (Table 2). As was to be predicted, there was a positive correlation between a favorable impression of online music instruction and a favorable attitude.

Table 1. Variations in how online learning techniques are seen in various circumstances, as well as in the amounts of time spent studying for the three distinct contexts.

	Bonferroni comparisons	M (SD)	M (SD)	Mean diff.	F	η²
Features of online education						
Perceived utility	Individual—group	3.08 (1.37)	2.58 (1.43)	0.52***	60.35***	0.22
	Individual—theoretical	3.08 (1.37)	3.35 (1.28)	-0.26***		
	Group—theoretical	2.58 (1.43)	3.35 (1.28)	-0.75***		
Compatibility	Individual—group	2.42 (1.29)	2.20 (1.19)	0.25***	133.26***	0.34
	Individual—theoretical	2.42 (1.29)	3.19 (1.29)	-0.75***		
	Group—theoretical	2.20 (1.19)	3.19 (1.29)	-0.97***		
Learning environment						
Individual	Before—During	3.50 (1.55)	3.53 (1.28)	-0.04	0.16	0.001
Group	Before—During	2.95 (1.50)	2.96 (1.55)	-0.005	0.002	<0.001
Theoretical	Before—During	2.57 (1.26)	2.66 (1.45)	-0.08	1.15	0.005

F: Repeated measures ANOVA, η²: Eta squared, ***p < 0.001, N = 150. Adjustment for multiple comparisons: Bonferroni.

Table 2. Correlational analyses of the variables uncertainty tolerance, perceived usefulness, and attitudes toward online learning using the Pearson method.

	1	2	3	4	5	6	7	8	9
Prospective anxiety	1								
Inhibitory anxiety	0.859** *	1							
Perceived positive utility	-0.124	-0.081	1						
Perceived negative utility	0.371** *	0.335* **	-0.394 ***	1					



Negative attitudes	0.411** *	0.348* **	-0.388 ***	0.614** *	1				
Positive attitudes	-0.109	-0.110	0.610**	-0.255 ***	-0.354 ***	1			
Spending time online	-0.089	-0.060	0.024	-0.009	-0.003	-0.030	1		
Compatibility	-0.116	-0.117	0.585** *	-0.398 ***	-0.423 ***	0.545* **	-0.054	1	
Contentment	-0.175 ***	-0.159 *	0.437** *	-0.360 ***	-0.319 ***	0.249* **	0.132*	0.416* **	1

*p < 0.05, **p < 0.01, ***p < 0.001, N = 150.

A mediation model was evaluated in light of the connections between the variables and to prevent multicollinearity; positive and negative opinions regarding the e-learning programs utilized throughout the COVID 19 pandemic were excluded from the model because to their strong connections with the perceived utility; the external factors included a tolerance for uncertainty (various to the scale's due dimensions having a significant correlation, multicollinearity was avoided by include the scale's overall score in the mediation model), perceptions of online approaches' suitability for music instruction and internet use; satisfaction with the usage of e-learning platforms and techniques was the expected variable, and the mediator was perceived value of e-learning approaches.

In the mediation model for predicting satisfaction with e-learning methods and platforms, higher levels of compatibility and perceived utility between online approaches and the music education settings were revealed to have favorable direct impacts. Uncertainty aversion did not have a statistically significant impact on satisfaction (= 0.09, p = 0.069). To illustrate, here is Figure 1. Twenty-six percent of the total variance in Satisfaction with the use of e-Learning methods was predicted by Perceived usefulness, Compatibility of online approaches, Intolerance of uncertainty, and Time spent online. Although time spent studying online was positively associated with feelings of pleasure (= 0.14, p = 0.024) and perceived usefulness (= 0.05, p = 0.319), its direct influence was not statistically significant (= 0.02, p = 0.286). Happiness was favorably affected by perceived usefulness (= 0.29, p 0.001). Nonetheless, we observed that compatibility of online methods and e-learning satisfaction had a favorable and statistically significant indirect influence (= 0.15, p = 0.010). (Table 3). Perceived online method compatibility significantly increased both perceived usefulness and pleasure with e-learning (= 0.60, p 0.001). When asked about their experiences with online learning resources, students gave a more favorable response when they reported a higher degree of compatibility, suggesting that they found the resources to be more beneficial. The mediation failed to work because of the large direct influence that compatibility has on satisfaction with life.

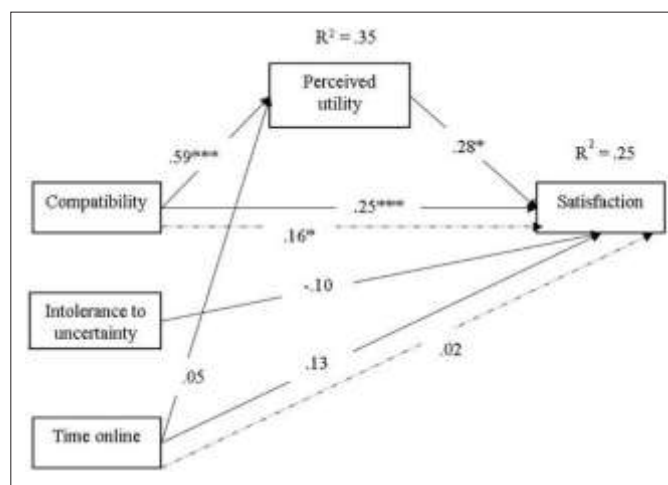


Figure 1. Model for mediating the prediction of user happiness with e-learning platforms and methodologies (* $p < 0.05$ *** $p < 0.001$). → Direct effect — Indirect effect.

4. DISCUSSION AND CONCLUSIONS

The courses offered by music departments included both theoretical and practical topics, which were covered either one-on-one (teacher-student) or in small groups (chamber music with two to five instrumentalists) (orchestra, choral ensemble). While the nuances of music theory are best learned in face-to-face classroom settings, the shift to an online environment has had little to no impact on the growth of the field since the platforms used to teach the subject feature specialized teaching tools.

As a result of issues with video and audio quality caused by the platforms or the quality of personal devices, a lack of physical proximity and eye contact (Hernández, 2021), a lack of personal musical instruments, and the inability to perform synchronously due to technical conditions, specific practical subjects have had to be adapted or replaced (e.g., lessons in opera, chorus, orchestra, and chamber music). Since the epidemic made it impossible for students to perform in public, they instead submitted recordings they had made in private. Separate recordings were also recorded for subjects that are often studied in pairs or small groups; they were eventually combined and mastered into a single presentation. Major components that could not be translated to the virtual world were the lack of in-person interactions between musicians and audiences or between learners and teachers, as well as the absence of students' performative experience.

Table 3. The path estimates and explained variation for the desirability of using online techniques

	Path	p	R ²
Predicting perceived utility			0.35
Availability of online tools	0.60	<0.001	
Spending time online	0.05	0.319	



estimating user satisfaction using e-learning approaches			0.25
Perceived utility	0.29	<0.001	
Availability of online tools	0.26	<0.001	
Intolerance of uncertainty	-0.09	0.069	
Spending time online	0.14	0.024	
Impact of compatibility indirectly via perceived utility	0.15	0.010	
indirect impact of perceived utility on time being spent online	0.02	0.286	

N = 150.

The first hypothesis was corroborated by the results from the research, which proved that online teaching and learning techniques may be more effective and suitable for music education than for theoretical and particular subject subjects. In order to promote more musical interchange and cross-cultural engagement, instructors may want to think about employing e-learning platforms for theoretical subjects in music education. The online environment's limitations on interpersonal interactions and the absence of options for socializing and collaborative music-making may be the cause of the group respondents' poor perceived efficacy. Our research shows that although online music instruction is an essential and valuable tool, there are certain hazards involved. Even while previous studies have established the value of online teaching in the context of instrument courses or in terms of creative, group music activities, our research shows that online music education is a necessary and worthwhile tool (Liu & Shao, 2022). We believe that online learning cannot replace face-to-face teaching, such as private instrument lessons or practical courses in orchestra, choral group, or chamber music, but rather serves as an ancillary, supplementary type of education. It was a worldwide occurrence that rehearsals for choirs, orchestras, bands, and chamber ensembles could not take place during the epidemic. This has led to the development of technologically-enabled replacements for traditional means of facilitating collaborative musical activities. The advantages of students being able to participate from anywhere, students being able to express themselves and focus on improving their individual parts, and students being able to perform without fear of public performance are undeniable, but we cannot ignore the obvious drawbacks, such as a decline in group musical activity. The pupils had to rededicate themselves to working together, this time in an unfamiliar setting.

Since there was no change in study duration between the three settings before and after the COVID 19 pandemic, the second hypothesis was not validated (individual, group, and theoretical). Students with full- or part-time employment may have greater flexibility in their



course load because to the availability of online courses and programs, so this argument goes. When gas and time are factored in, online courses are less expensive than going to class in person. However, we wanted to see if there were significant differences between the three learning contexts, such as in the perceived utility of the online learning methods, and whether or not the time allotted for studying had increased in light of the technical requirements of the e-learning platform compared to the time before the pandemic. Given the correlation between study time and achievement, it is critical to analyze the parameter describing study time. Therefore, the amount of time a student dedicates to independent study will have an impact on the development they make. As previous research have shown, students generally found it more difficult to manage their time and regulate their learning after the switch to online instruction, spending more time and energy on independent study (Hamdan et al., 2021). Utilizing plug-ins and software for audio and video recording is also part of the technology underpinning online music education, and developing proficiency in their use takes a lot of work.

Despite the background of uncertainty caused by the COVID 19 pandemic, the results did not support the third hypothesis, showing that intolerance of uncertainty did not predict satisfaction with the usage of e-learning platforms. Our research confirmed the fourth hypothesis by showing that the connection between the acceptability of online strategies and satisfaction with their usage was mediated by the participants' perceptions of the approaches' utility. Consistent with previous studies, we discovered that the degree to which students believed that e-learning methods were appropriate for the content they were studying was a significant predictor of both their level of satisfaction with the experience and their opinion of the platform's overall value in the classroom setting (Peng et al., 2018). Our results corroborated previous studies showing that students' perceptions of e-usefulness learning's are a strong predictor of their happiness with the format. This positive perspective would lead to higher perceived utility, which in turn would be a stronger predictor of e-Learning satisfaction if the e-learning platform is suitable for the research.

Implications

The findings of the study showed a number of benefits of online learning. The possibility for students to attend classes whenever and wherever they want, as well as the reduction of travel, lodging, and study expenses on campus, are the first points we want to make. The use of technology allows for the development of new abilities. The instrumentalists, who must record their performances in order to be judged, are another issue. As a result, repetition aids in improved repertoire acquisition as well as self-analysis and more accurate assessment. Other academics have discussed restrictions, pointing out a variety of problems that make it difficult to effectively teach and learn music (Hernández, 2021). Thus, the issue of resolving the technical requirements of online teaching has frequently come up because there are instances where the servers cannot support a large number of users concurrently and can crash due to overload; issues can also arise because students may not have access to computers and other IT equipment, such as wi-fi, in their homes.

Online is very individualized; the camera and modern communication methods only highlight the person who talks or reacts, excluding everyone else from the conversation. As a result of this factor, students may get bored and unfocused because they feel excluded from the process since they are often required to switch off their microphones when the instructor talks. Due to the internet connection, sound-picking microphones, and personal sound reproduction systems, the lack of sound quality and fidelity of the sound reproduction is another restriction of this



learning process in the context of music education. Due to the platform, there is a lack of synchronization, particularly in chamber music, directing, and choral ensemble sessions, which negates the advantages of group performance. However, as other scholars have noted, the COVID 19 epidemic gave instructors and students the chance to employ technology, to concentrate more on personal musicianship, and to concentrate their instruction on music theory, history, and culture (Azhari & Fajri, 2022).

In-person music education relies heavily on the teachers' nonverbal cues, such as their body language, facial expressions, voice, and attitude. Because education requires more than simply the transfer of knowledge, including the use of all five senses (olfactory, tactile, visual, and aural), the sudden change in educational offers brought on by the COVID-19 health emergency is a significant negative (Jaboska, 2021). Also, without face-to-face interaction, pupils become isolated and stop contributing to the learning process.

Limitations and Future Research Directions

There are a number of issues with our study that should be noted and should be resolved in follow-up investigations. First of all, since the study was cross-sectional, it was impossible to interpret the data causally. The postulated associations should be tested longitudinally and in a conventional online environment, as opposed to unique contexts like the emergency remote teaching brought on by the COVID 19 epidemic. Second, there are other significant factors that were not examined in this study but could contribute to understanding the results of e-learning system use. These factors include personal traits (technology phobia, online self-efficacy, e-learning platform experience, and learning engagement), as well as aspects of technology acceptance models (performance expectations, social influence, effort expectations, or enabling circumstances) (Taherdoost, 2018). Future studies should take a deeper look at how these factors affect learners' happiness or intentions to continue using online tools, as well as more complicated learning outcomes like academic success (Ch et al., 2020). Future research will also focus on treatments to reduce stress and anxiety, as well as the development of self-regulated learning skills and autonomous learning in music students (Bonneville-Roussy et al., 2020). The current study is also constrained by the absence of qualitative research, therefore future studies may include it. The need for peer cooperation in online contexts, the flexibility of teachers and students, and the growth of teacher-student relationships are all topics that might be addressed with a qualitative approach. To encourage online distance learning in music, more educational activities are required. Since we have not yet come across any studies that address the relevance of college choirs, orchestras, chamber music, and bands in the midst of this pandemic, we want to include this problem into future research.

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