ISSN: 2146-1961

Çit, U. (2023). The role of mental practice and technology in traditional violin teaching and learning, *International Journal of Eurasia Social Sciences (IJOESS)*, 14(51), 349-364.

DOI: http://dx.doi.org/10.35826/ijoess.3238

Makale Türü (ArticleType): *Research Article*

THE ROLE OF MENTAL PRACTICE AND TECHNOLOGY IN TRADITIONAL VIOLIN TEACHING AND LEARNING

Uğur ÇİT
Doktor Öğretim Üyesi, Munzur Üniversitesi, Tunceli, Türkiye, ugurcit@gmail.com
ORCID: 0000-0002-4822-4551

Gönderim tarihi: 20.11.2022 *Kabul tarihi: 12.02.2023* *Yayım tarihi: 01.03.2023*

ABSTRACT

Music is a creative art that requires spontaneous emotional expression. This art necessitates proficiency with musical instruments, such as the violin. Despite the fact that the approaches for advancing the skill of violin playing are generally recognized, new teaching methods have emerged as a result of the Internet and technological breakthroughs. Based on this context, this study aims at examining how the advances on the Internet and technology are affecting violin education and learning, and accordingly, the effects of YouTube, an online Web 2.0 tool, and Suzuki and Zhang's audio and online video teaching methods on violin education. Document analysis, a qualitative research method, was used in the research methodology. As the working document of the research, the teaching techniques of violin instructors who use the traditional approach method for the applicability of new learning approaches in violin education were analyzed, and their individual teaching experiences were discussed. The results of these experiences show that there is a consensus regarding the significance of mental practice in developing mind-body coordination during the initial stages of learning to play the violin. The research findings demonstrate that the online method, one of Suzuki and Zhang's technological approaches, lags behind the traditional approach method. It was found that technological approaches, in particular, are insufficient in meeting the needs of students in violin education and in guiding the learning development of their mental practices. However, YouTube has also been deemed significant because it allows students to view masterclasses and performances by renowned musicians and orchestras.

Keywords: Violin, violin instruction, technology, Suzuki, Zhang.

INTRODUCTION

Ina the 21st century, technological developments have become important both in business life and in communication between individuals. Computers have a larger data storage capacity than the human brain, which is the main explanation for this. In addition, with the development of wearable technology, internet access is provided not only through desktop computers but also through tablets, smartphones, and smartwatches. As an effect of this, online lectures and courses have become widespread, especially in universities and other higher education institutions. At this point, it is safe to say that technological developments bring benefits and conveniences to teaching and learning systems for learners in the comfort of home, independent of time and space. In music teaching, which is the focus of the research, technology is involved with the utilization of audio-visual, interactive and other computer-based teaching materials. As an example, it is seen that internet-based Web 2.0 applications have been specially developed with interactive education to provide audiovisual music education. For example, the applications developed by the Australian Music Examinations Board for grades one to eight provide materials that enable individuals to analyze measures, pitches, and rhythms in music education with both audio and Z-book applications. Similarly, the "Sight-Reading Trainer" application developed by the United Board of the Royal British Schools of Music for piano learning provides users with a game-like content to improve their sight-reading skills level by level. These two applications are important examples of the growing number of applications used for music education. Blogs are also important content that serve as a social network for the dissemination of musical pedagogical content and ideas. Goetz Richter's blog, for example, offers a point of view on the philosophy of music in his area of research and encourages users to comment or brainstorm and discuss the topic. Furthermore, websites such as violinmasterclass.com and stringpedagogy.com offer live interactive/simultaneous online lessons, providing both individual and interpersonal interaction for teachers and students. In addition, tuning and metronome tools are traditional auxiliary instruments used to help musicians tune their instruments and maintain a steady tempo. Also, technology in the form of recording and digital film has been utilized to record a concert or live performance for evaluation and improvement. The main purpose of utilizing technology here is to provide users with audio and video-based learning materials as in the Suzuki and Zhang methods, which is quite different from the purpose of using technology today. Because the learning stages of violin playing are taught through imitation and repetition from beginner to advanced level.

Imitation and repetition are important components of cognitive brain development from infancy to adulthood. These components enable the acquisition of language, the storage and transfer of knowledge, and the development of conceptual understanding through connections between old and new concepts. While this development takes place as a result of the interaction between the child and his/her environment, imitation and repetition, which are the focal points in all stages of development, are the basic components of the learning process. Accordingly, it can be said that individual differences in a child's development affect the effectiveness of imitation and repetition.

Mental Practice against Imitation and Repetition

Cognitive training is defined as the brain visualizing the desired movement/behavior before performing a physical act (Driskell, Copper & Moran, 1994: 481). To put it differently, it is the imitation of movement using imagination. In violin practice and performance, it is important to consider the pitch of the sound and the sense of movement before starting physical movement. This mental practice refers to the optimum use of sensitivity in strengthening the nerve connections between the brain and the limbs by increasing concentration in individuals.

If we consider the distinction between imitation and repetition, imitation is the act of copying the actions of another individual or a model. In contrast, repetition is the practice of repeating the same body movements or phrases over and over again. Imitation occurs when a violin student observes a teacher's performance and then replicates his or her movements. Repeated practice by the student also strengthens his/her memory of finger movements. In the relevant literature, the leading names in the field of violin education emphasize the mental aspect. In this respect, Flesch, Dounis and Galamian, who are among the scholars in the field of violin education, argue that practicing the violin requires a lot of imitation and repetition. However, Flesch (2000: 82) argues that "endless repetition, which is habitual and devoid of thought, destroys the individual's spontaneous feeling of the immediate situation". He emphasized that imitation and repetition, especially in the practice of technical skills, should be done sparingly but frequently in order to achieve mastery (Flesch, 2000). According to Flesch (2000), "repetition of the necessary movements leads to greater fluency, but music deals with emotions. The process of adding emotion to the instrument, which requires the fingers to glide over the bow, comes to the fore. Although bridging notes are important in changing innovative learning methods, it is stated that repetition and imitation should not be used when obtaining aesthetic musical expression of emotions such as passion, anger, excitement, and despair. For this reason, technique is important in violin playing stages, which is important to acquire. However, it can be argued that excessive repetition in practice will destroy the individual's own original basic musical expression while playing the violin.

According to Dounis (2005), a violin instructor and medical doctor specialized in the field of neurology and psychiatry, the idea of repetition and imitation is stated as follows: "No one can learn how to play by repeating finger exercises, scales, or all of the daily exercises for the violin every day. Such boring and uninteresting practices are not effective". This view emphasizes the significance of the brain in practices and the necessity of cognitive training based on this context. Moreover, according to Dounis (2005), actions should be perceived "distinctly and clearly" because they are images in the brain's memory, and it is argued that technically expressed actions are a series of movements reflected by the brain. It is also possible to suggest that the mental continuation of the actions is related to the brain's memory and prediction abilities while creating the image pattern. Galamian (1985) also expressed a view on the function of repetition that agrees with Flesch and Dounis. Galamian (1985) emphasizes the importance of "mental acuity in practice". Because, according to Galamian (1985), he argues that continuous repetition in practice is "a waste of time and effort". In addition, it

is believed that if the mind and ear lose focus due to excessive repetition in cognitive training, the correct note feeling and the desired sound to be formed will be ignored, causing repeated and internalized mistakes. This view emphasizes Galamian's belief that "the mind must always anticipate the physical action to be performed before sending the command to be carried out" (Galamian, 1985: 95).

Based on this context, the focus of the research is to examine the effects of internet and technological developments on violin education and learning. The focus of the study is to examine the effects of Suzuki and Zhang's audio and online video teaching methods in violin education and YouTube, one of the online Web 2.0 tools. Accordingly, the problem statement of the research is discussed below:

- Given that the traditional violin approach is the accepted method to improve the art of violin playing, what is the role of mental practice and technology in traditional violin teaching and learning?

METHOD

The research model is document analysis, one of the qualitative research methods. Qualitative research is an approach that emphasizes investigating and understanding social phenomena within their environment with an understanding based on theory building. According to this definition, when a research question is aimed at producing explanatory or descriptive information, it can be said that qualitative research methods are the most appropriate methods (Yıldırım & Şimşek, 2018). Document analysis, one of the qualitative research methods, is an important research method that many social sciences researchers consider meaningful and appropriate in the context of research strategies, as in some cases, the research question may compel the researcher to use the document analysis method. Since the purpose of this study is to examine the extent to which technology can improve violin education and learning, the views of violin scholars on the learning stages of violin playing for the mental component, Suzuki and Zhang's methods of using technology and YouTube for teaching and learning were examined.

FINDINGS

Within the scope of the purpose of the research, the sources handled by document analysis are discussed under the following theme headings:

Technology and YouTube, the Suzuki and Zhang Method in Violin Learning

Founded in 2005, YouTube's success is significant in informal education as it allows users around the world to share their personal interests by uploading videos. As an interactive platform, it also facilitates social discourse and community building. Since new videos are constantly being uploaded in almost every field, including music, YouTube has become a platform used not only for entertainment but also for education. Thanks to this feature, it meets the needs of individuals in individual learning and facilitates informal self-directed music learning as the performances that users upload to this platform receive feedback through comments (Waldron, 2013).

Based on this point, YouTube also provides many advantages for musicians. These include enhancing creativity by providing a free platform for musicians to share their compositions and performances and allowing musicians to popularize themselves with their work without the need for intermediaries. YouTube is also used to introduce young musicians to various genres of music and to record, edit and monitor their own performances (Cayari, 2011). In addition, YouTube is used in specialization trainings to offer students the opportunity to watch violin lessons given by world-renowned violinists. As a result, professional musicians can watch and learn from a variety of famous artists' interpretations of the same piece on YouTube.

The Suzuki Method

Shinichi Suzuki, a Japanese violinist and teacher, adopted a new method of violin training. The Suzuki method was featured in an American movie in 1958 featuring a thousand Japanese children performing Bach's Double Concerto (Suzuki et al., 1973). The impact of this method on music educators led to the creation of the Suzuki method and teachers traveling to Japan to study with Suzuki. The epistemological development of the Suzuki method was found to be particularly applicable to the education of young students as it was based on the principle of "mother tongue". Although Suzuki was teaching at the Imperial Conservatory in 1932, he had no experience teaching children under the age of five. One day, while rehearsing with the Suzuki quartet, he said, "Why, all Japanese children speak Japanese!" and it occurred to him that all individuals all over the world were educated in their mother tongue, a traditional method in childhood (Suzuki, 1969). Based on this, it is known that in mother tongue education, each individual pronounces the words one by one before forming a sentence and imitates them without understanding their meaning. In mother tongue education, which is the basis of the traditional education approach, individuals learn unconsciously as they listen, observe, and imitate what they hear and see. The most important factor in mother tongue education is the positive or negative behaviors of parents as role models. Accordingly, it is very important for the family to have the desired behavior patterns in education. Therefore, parents in an encouraging environment have a great impact on the development of preschool children. As a result, Suzuki concluded that "the environment is the most important factor in the success of the mother tongue education approach" (Bigler & Lloyd-Watts, 1979). This concept was later applied in music education with the suggestion that students should listen to a high level of quality music both inside and outside the classroom. Therefore, collaboration and interaction between teachers and parents is necessary to create the student's musical environment. As a result, a sound recording that has become a technological instrument in the stages of violin education and learning was created. The "mother tongue" principle is based on the mother's encouragement and motivation of her child to show desired behaviors while providing the necessary educational environment.

Suzuki's strategy of learning the violin by ear rather than by notation places parental involvement at the center of learning. Parental involvement is typical in the stage of learning to play an instrument, with even Mozart receiving parental support and assistance in practice (Wagner, 1998).

The most important element in this method is the problem of relying on the auditory element to play the melody, since the child has not yet learned to read notes. This is because the learning of the notes is not started until the child is "eight or nine years old" (Bugeja, 2009), and until this time the parent is more involved in the learning process than the child in this approach. This suggests that the child lacks independence during the initial stages of learning to play the violin and that parental cooperation should decrease as the child's violin skills improve. In this case, it can be argued that parents' inability to always adapt to their children's ever-changing musical abilities is also an important problem. In his research, Bugeja (2009) took this direct quote from the reflective diary of a student who was practicing the Suzuki method: "I was practicing the violin, but my mother was yelling at me from the kitchen". Based on this quote, it can be said that parental involvement is effective in the initial phases of learning but should be limited in the later stages; as the stages of learning to play the violin progress, the parent cannot offer feedback to correct any mistakes since he/she does not have sufficient command of the process. There is another important disadvantage that arises from the fact that students do not learn the notes from the beginning of violin studies in the stages of the Suzuki method. According to David Jacobson (2016), "preschool children can read words until the age of three or four", so why not use this method to learn notes while note reading is so simple for children in this period. In fact, it is believed that this "limits the scope, and consequently the depth, of the approach that can be used to help individuals learn basic skills through the use of materials outside of books that discuss the Suzuki method". Therefore, this perspective leads to a misconception about the basis of parental collaborative violin education (Jacobson, 2016). As a result, it can be argued that adhering completely to the method of Suzuki's violin teaching approach has a negative effect rather than promoting progress. In the related literature, the use of technology to assist violin teaching and learning is seen as important in terms of the use of the technology approach in the researches with consensus and disagreement about the Suzuki method. Zhang developed the "sound to teach sound, movement to teach movement" method as a result of a belief similar to the "mother tongue" principle with the advances that followed with the development of the internet (Zhang Violin Method, 2015).

Background of the Zhang Method

Zhang's motivation for using technology in violin teaching stemmed from his travels to China, where he was invited to give master classes to students. Zhang came to the realization that the geographical isolation of certain towns in China meant that teachers lacked adequate training. He identified the issue that contributes to students' inability to comprehend not only basic violin techniques but also proper posture. (Zhang & Lu, 2009). He also found that there are no violin instructors in these regions. As a result, Zhang decided to use technology to design a teaching program that would help both teachers and students. Therefore, Zhang published a DVD in 2003 along with a book to overcome the problems of teaching and practicing. This book provides a teaching curriculum that is accessible to all, giving clear instructions and materials to aid teaching and providing indicators and guidelines to help students in their practice. Designed in video format, the clips are organized by level, from simple to difficult, slow to fast tempo with a metronome, measure by measure, section by section,

and piece by piece. In addition, it is designed to provide the opportunity to be repeated as many times as desired by the students individually or in groups with the piano accompanied by a CD. By 2015, the extensive use of the internet led to the introduction of Zhang's method on a website. This website is: www.zhangviolin.org.

Zhang's Online Method

Both teachers and students collaborate in learning through user-to-user interaction on the website. There are five membership types in this online approach. These are: beginner, intermediate, advanced, teacher and school membership. The teacher membership has seven different lists: control panel, students, account profile, books, playlist and activities list. An instruction file explaining how to use Zhang's online method to meet individual needs is available at the bottom of the dashboard. Zhang emphasizes that the challenge of teaching violin is to transform the silent note into sound and movement. Zhang recognizes the value of imitation in the learning period, similar to Suzuki's idea of "mother tongue". In this regard, he makes the following explanation: "For example, children imitate their parents' speech to learn how to speak and copy their parents' movements to learn their own movements". Based on this view, it can be concluded that if children can attend violin concerts and training every day, their development and violin playing skills will be as impressive as their language learning skills. Accordingly, learning with sentences composed of words is built on this principle (Zhang Violin Method, 2015).

Zhang's use of the mother as a demonstrator differs significantly from Suzuki's view of the mother as a teacher. The personal interaction between mother and child, the feeling of love and affection, which is the basis of Suzuki's "mother tongue" approach, is very different from the impersonal demonstrator on the computer screen. Therefore, although the basic principles of both methods are similar in terms of imitation and repetition, their applications are quite different. In addition, while Suzuki's method allows interaction, Zhang's method does not allow interaction between individuals. Suzuki and Zhang agree that having a model to observe in the methods they developed is very impressive in the learning process. However, the difference between these two methods is that according to Zhang, a professional model should be used instead of a novice parent. In addition, Zhang explains that "the native language cannot be used for individual learning of music", and that by listening to the recording repeatedly, students can better understand the music and progress faster by listening to it, comparing the parts of their playing that need improvement. Students are often taught by their teachers to play "faster", "softer" or "slower", but by listening to a piece repeatedly, they can capture the musical expression and feel (Zhang & Lu, 2009). Therefore, Zhang states that music can be taught by sound and movement, not by word of mouth. Therefore, he believes that the online teaching tool is the best way to utilize this idea. Therefore, he believes that the online teaching tool is the most effective method to make use of this idea.

The Relationship between Violin Learning Methods of Violin Studies and Technology

There have been many studies in the literature on the extent to which successful violin ensembles utilize technology when learning a new piece. Susan Hallam, for instance, looked into how professional musicians of varying levels of experience and playing a variety of instruments approach learning and interpreting new music. The research involved individual professional violinists, but each was given a piece of music with which they were completely unfamiliar. Each musician was then asked to describe the process they would use to learn the piece. According to the findings, 77% of the musicians decided to listen to the entire work holistically because doing so would provide them with an overview, a sense of the tempo, and the ability to identify challenging sections for particular techniques. There were two groups of musicians who took the holistic approach. These included those who opted to listen to a variety of musicians' interpretations of the work, and those who avoided listening to a variety of interpretations and used the expression "deciding what I want to do for myself." (Hallam, 1995). Most of the musicians stated that “auditory elements" are important and that "auditory elements are an important element in expressing the music internally" (Hallam, 1995). Accordingly, it is seen that musicians use technology as a tool in violin education. As a result of this, it is concluded that musicians use learning styles appropriate to their individual needs. The results of the obtained research indicated that it is not possible to find a recording made by a professional musician in the development of the auditory awareness of the artists.

Analysis of Traditional Violin Teaching and Learning Methods

The violin learning stages of famous violin instructors from traditional violin scholars such as Carl Flesch, Demetrius Constantine Dounis, Ivan Galamian, Yuri Yankelevich and Dorothy DeLay are analyzed below. In addition, it is believed that these methods will be important in terms of determining the advantages of technological approaches to be used in violin education.

Flesch (1873 - 1944)

Flesch, a Hungarian violinist and teacher, was the first violin educator to recognize the connection between psychology and physiology in determining violin sound production. The methodology used by this violin teacher includes highly methodical and analytical approaches to teaching the violin technique. According to Flesch (2000), three phases exist in the learning process within the framework of "movements from conscious to subconscious". In the first stage of this learning process, the student examines the notes given, the examined notes can be individually sorted and grouped by the student, and finally, since the student will memorize the notes, there is no need for symbols in the process. Since finger placement and spring contact point change the dynamics and need to be consciously thought about at the beginning before they become unconscious movements, the conscious learning that occurs during the learning of these movements prepares for the transition to unconscious learning. Therefore, according to Flesch (2000), "technique is safer the more subconsciously the necessary movements are executed". Accordingly, playing the violin necessitates a clear

memory of a figure in order to consolidate the conscious awareness of various complexities. However, conscious awareness is important for artistic expression and artistic creation; without conscious thinking, individuals' performances become mechanical, lacking the diversity of expression and interpretation. Richter (2013) on this subject: "interpretation... is creative because it makes sense of what is given and goes beyond it". Based on this, as Richter (2013) emphasizes, the essence of musical art can be interpreted as a conscious expression of emotions. Because it is not entirely clear, Flesch's definition of unconscious practice can be questioned. Based on this context, inferences can be made about whether the individual makes conscious or unconscious finger movements during the violin playing learning stages. However, Flesh's method is simplistic and ignores the various levels of conscious and unconscious functioning. In his method, Flesch does not state that the performance of a piece is unconscious. This is because when musicians play in an orchestra, they need to be sensitive to other musicians as they collaboratively interpret the piece. For this reason, it's critical to make a distinction between the conscious creativity, imagination, and responsiveness that make each performance unique.

Dounis (1886 - 1954)

Dounis, a successful violinist at a young age and a medical doctor, presented a successful teaching approach in violin education. Dounis reflected the individual approach to the difficulties faced by each violin student with his diagnosis in the medical field (Stewart, 2013). As a result, exercises were developed to address specific problems that arise during the learning stages of violin playing from the very beginning. Dounis' medical knowledge indicated that there are important functions of the brain during violin playing practice. According to Dounis (2005), the techniques developed in violin education are a series of brain-reflection movements. In other words, the technique consists of three intensive steps: a clear mental image, brain control, a movement plan and coordinated physical actions. It can be stated that the description of the exercises developed in coordination of the fingers with the mind requires discipline from a cognitive point of view.

Galamian (1903 - 1981)

Galamian's methodology emphasizes that there are differences in each student's individual learning and that the teaching method should be modified to suit these individual differences. According to Galamian (1985), the teacher's strategy should include an assessment of the student's physical condition, such as short or weak fingers and joints, as this will affect the student's execution and performance (Galamian, 1985). In addition, the teacher should assess the personality of all his/her students in order to adapt a learning program according to the needs of each student. Galamian (1985) states that there are three different influences on the development of musicians. These are: physical factors, mental factors, and aesthetic-emotional factors. He states that these factors are the basic components of being a good musician. According to Galamian (1985), the physical factors required to produce an effective tone depend on the proper posture of the body, including the arms, fingers and hands, and the balance of flexibility of the lower limbs and muscle movement that cooperate

with the physiological functioning between the playing movements. It is emphasized that this physical coordination depends on the capacity of the mind to prepare, direct, and control the muscles. Galamian refers to this connection as "correlation" between the mental anticipation of a physical action and the mental command to carry it out (1985). Elizabeth, one of Galamian's students, made the following comment about this teaching method: "There is a sharp control mechanism in this method. This is because the instructions necessary for the formation of this control mechanism ensure that the mind is constantly and carefully engaged. Only in this way can successful correlation take place.

Yankelevich (1909 - 1973)

Yankelevich, a Russian violin instructor, agreed with Flesch, Dounis and Galamian that the art of playing the violin is formed in the "mind" and not in the "hand" (Lankovsky, 2014). Yankelevich's method of learning the violin uses three mental steps. These include consciousness and comprehending the nature and purpose of the movements, considering the fact that the primary objective of violin pedagogy is the coordination of the mind and body.

Central to Yankelevich's method is adaptability, exemplified by the unique motivation of his students. As a result, Yankelevich rejects a singular method or approach as he is of the opinion that the diversification in students' physiology and psychology should be comprehended by the teacher and incorporated into the students' creative approach. However, regarding violin education, according to Yankelevich, many teachers ignore the individual differences of students and only believe in correct posture and sound. According to Yampolsky, Yankelevich's teacher, the biggest problem for teachers in violin education is the orientation towards correct movement, hand technique and posture without paying attention to auditory elements (Lankovsky, 2016). Yankelevich argued that the instructor should help the student discover their position according to their individual differences despite the fact that this might not be ideal. Therefore, right-left hand technique, playing movements, fingers, tone production, repertoire selection, musical content and individual development are important in discovering these differences. (Lankovsky, 2016). This perspective argues that there should be no imitation and repetition in the teaching method because it values individual experience. It can be said that imitation and repetition in violin education cause problems as well as preventing the individual personality development of the student. The main purpose of this method is to discover and maximize the inner expressive power of individuals. This reveals the importance of the development of individual independence in the technical learning process. To summarize, Yankelevich argues that the selection of repertoire according to the student's personality and skill level in the learning stages of violin education will facilitate the dynamic contrast of emotional skills and violin technique by matching the right musical style with the student's personality. He also suggests that when learning a new piece, the student should listen to the composer's various works such as symphonies, quartets, and other compositions and take the composer's style as an example. With this suggestion, he also emphasizes that the student should compare various

interpretations of the same music by "listening to at least three to four recordings" in order to evaluate various techniques and emotional expressions (Lankovsky, 2016).

DeLay (1917 - 2002)

Dorothy DeLay, an American violin instructor, believes that all teachers have unlimited potential that can be developed through a psychological approach to understanding the personality of each student. Therefore, the core of her teaching approach is to ensure that the student never experiences failure by fostering confidence in them through the language used to teach the violin. "Never, never make a student feel small, incompetent or incapable. If you do this at that moment, you will cause the destruction of all the existing capacity of the individual". DeLay expressed this view with a teaching method consisting of three elements. The first of these elements is the identification and solution of errors instead of directly pointing out the problem in students' violin education. Accordingly, the most important element in DeLay's teaching method is that the instructor is a role model. Therefore, in difficult violin techniques, it is essential for the instructor to provide a variety of options that are tailored to each student's unique needs (Koornhof, 2001). According to Sand (2000), DeLay's method is to encourage students to explore the diversity of musical direction as a guide instead of directly telling them what to do in the transition of musical expression from one theme to another theme (Sand, 2000). Based on this context, DeLay's method aims to enable students to think independently by actively taking part in the learning process and finding their own options. The aim of this method is to enable students to interpret each student's music in a way that reflects their personalities. The third element of DeLay's teaching strategy is the internalization of music education into students' lives. Accordingly, it is the use of a holistic approach that takes into account the problems of individuals in their daily life routine, at work, at home and with their friends. In this regard, it is thought that DeLay's method enables individuals to use their potential both linguistically and psychologically individually, which helps them to achieve their musical goals.

CONCLUSION AND DISCUSSION

Flesch, Dounis, Galamian, Yankelevich and DeLay, who are important violin scholars that address the traditional violin teaching approach, which is the focus of the research, as the accepted method for developing the art of violin playing, were examined. These violin scholars agree that the highest level of violin learning and playing can be achieved according to the violin instructor's personal assessment of each individual's physical condition, mental abilities and unique characteristics. When this consensus is evaluated in terms of the role of technology in traditional violin teaching and learning, the technology-based teaching approach emerges as a method in which individual differences and interpersonal interaction are ignored. If the issue of whether the advancement of technology is beneficial for students in violin education is addressed, technology, according to Flesch’s point of view, a violin scholars, is not effective in the application of the learning method because it cannot bridge the conscious and unconscious learning process of individuals to the active learning process. Because, during the observation and listening of a musician playing the violin, it can be said that the realization of this process with

technology instead of using cognitive skills in terms of mental aspects of how a technique is applied by the sound element, finger pressure, bow contact point and articulations of the violin is no more than a method of imitation and repetition of movements. In this regard, Dounis' insistence on a series of mentally challenging warm-up exercises before a piece is performed highlights the inadequacy of technological training. Technology-based applications can show users finger exercises, but it is essential to have interaction between teacher and student to correct and communicate the sense of finger articulation. Additionally, according to Galamian (1985), "the teacher must be a good psychologist" for the teacher to effectively guide the student. In other words, he/she should be able to comprehend the student's behavior and mental processes. This means that the mental factor and the aesthetic-emotional factor cannot be adequately provided by an online teaching method, as technology is inadequate to assess the individual needs of today's students and solve their body coordination problems through specific mental exercises. Similarly, Yankelevich's view that there is no single model of correct posture or practice style for the concept of "correct posture" renders online learning methods ineffective for violin playing technique. In online-based applications, since the instructor cannot evaluate the individual physical condition of the student, he/she cannot provide the correct technique suitable for the student. On the other hand, it can be said that Yankelevich's violin method is suitable in terms of using YouTube as an educational environment and providing students with the opportunity to listen to various compositions of a composer and also the interpretations of various interpreters. However, Yankelevich's method is not fundamentally applicable to the technology-based teaching approach. Similarly, since DeLay's teaching method focuses on the personal involvement and relationship of his students, teaching with technology does not meet DeLay's expectations for learning outcomes, especially when it comes to the language used to encourage independent thought. According to the perspectives of the violin scholars using five traditional violin education approaches that are discussed in the research, technology is not an effective enough element in teaching methods.

In addition to focusing on mental control in the stages of learning to play the violin, violin scholars emphasize the importance of individuals actively taking part in the learning process independently at each stage. It can be said that this situation provides individuals with guidelines regarding their emotional skills before performing the piece, as the independent participation of individuals in the learning process will have a significant impact on their preparation for various situations in their music careers. This emphasizes the importance of individuals' original skills in interpreting a new piece without the help of a musician. In conclusion, the violin teaching methods used in violin education to learn the auditory skill before the performance of the piece and to develop this skill step by step are important for the student to comprehend the musical style, correct articulation, the story of the piece and to express himself/herself uniquely through music. From another point of view, both Suzuki and Zhang consider imitation and repetition as practice methods in the approaches they advocate, while Suzuki states that he prefers "parental involvement", and Zhang prefers online education with a practitioner. Watkins and Scott (2012) say that the imitation and repetition teaching method is not the best tool for practice: "Young musicians may proceed in the manner prescribed by the violin instructor as they feel

that imitation of musical performance is essential for the application of 'correct' technique. However, internalization has an important place in the use of musically correct expression." Based on this view, the dependence on violin education prevents the development of learning skills that require creative interpretation, which is necessary for the art of music. Therefore, it can be suggested that Zhang's view that the practice can be learned through imitation is also limited. Because students can imitate a piece, it can be said that the technique used during the performance will not reflect the students' skills uniquely. For example, if students perform "Ritardando" at the end of a piece shown in a video and repeat it, this practice does not necessarily imply that they comprehend why they must slow down as a result of it. Students will be able to use musical expressions when they perform various compositions if they understand them. However, if students only imitate the musical expressions in one piece, it can be said that a video will always be needed to show the tempo and emotion. In this respect, since all musical terms and dynamic markings in a piece represent the composer's musical concept, students should interpret the music from their own point of view after receiving detailed theoretical and practical knowledge of musical terms.

In conclusion, it can be stated that the advancement of technology has an impact on violin playing learning processes. However, there are some limitations; when determining the extent to which technology can be used to improve the learning process, the age of the student, parental involvement, the most appropriate time to learn the notes and the need to grasp the emotion of the music should also be taken into account. However, although technology facilitates the arrangement of works in accordance with the levels, the imitation of the instructor in the video is incomplete in terms of student-teacher interaction and observation that takes place in face-to-face education. In this respect, an online application does not fully replace a course given with traditional education methods. As a reason for this, the teacher's providing feedback to the students during the application can be shown as an important detail. However, online applications appear in the form of various course contents where individual differences are not addressed, and the same instructions are presented to everyone. However, it is seen that student-centered education is more important than teacher-centered education in education. In other words, in student-centered face-to-face education, the teacher is required to lead the students by means of the interaction between teacher and student. In this respect, it is seen that the teacher is a complementary element in the learning process and should encourage students to take an active part in their individual learning; if not, students will continue to fall into the same misconceptions in the learning process in which they do not include their cognitive skills. It can be said that the situation in which these misconceptions do not continue will be realized in violin education with traditional teaching methods.

RECOMMENDATIONS

According to the results of the document analysis used in the research, traditional violin pedagogy continues to be the most effective method for teaching and learning violin. The traditional approach to violin education, which supports mental control and independent learning, can be said to shape artistic musicianship through individuality, interpretation, feeling and expression. Accordingly, there are drawbacks to relying solely on

technology as a teaching tool. However, it can also be argued that YouTube plays an important role in enabling musicians to observe and learn from famous violinists' performances and master classes. It is thought that this research will provide violin instructors with information about various violin learning and teaching approaches. It can be said that the principles of traditional violin education continue to be the basis of the art of violin education. However, with the advancement of technology, it can be said that violin education can be used in a hybrid form in addition to the individual approach. In this context, it is believed that advanced multimedia and internet technology will reduce the basic awareness of violin performance and musical internalization in the learning and teaching processes of violin playing.

ETHICS TEXT

"In this article, journal writing rules, publication principles, research and publication ethics rules, and journal ethics rules have been followed. The responsibility for any violations that may arise regarding the article belongs to the author." The research model is document analysis, which is one of the qualitative research methods. Therefore, it does not require ethics committee approval.

Author(s) Contribution Rate Statement: Author's contribution rate is 100%

REFERENCES

Bigler, C.L. & Lloyd- Watts, V. (1979). *Studying Suzuki Piano: More than Music: A Handbook for Teachers, Parents, and Students*. Athens, Ohio: Ability development Associates. https://books.google.com/books?hl=tr&lr=&id=248kYqVefgcC&oi=fnd&pg=PA1&dq=Bigler,+C.L.+%26+Lloyd-+Watts,+V.+(1979).+Studying+Suzuki+Piano:+More+than+Music:+A+Handbook+for+Teachers,+Parents,+and+Students.+Athens,+Ohio:+Ability+development+Associates.&ots=TE-ps5extd&sig=9l-d_BinyKkl9tEvMWXQYtjySR8

Bugeja, C. (2009). Parental involvement in musical education of violin students: Suzuki and 'traditional' approaches compared. *Australian Journal of Music Education*, *1*, 19-28. https://files.eric.ed.gov/fulltext/EJ912407.pdf

Cayari, C. (2011). The YouTube Effect: How YouTube Has Provided New Ways to Consume, Create, and Share Music. International journal of education & the arts, 12(6), 6. Retrieved from: http://www.ijea.org/v12n6/

Dounis, D.C. (2005). *The Dounis Collection: Eleven Books of Studies for the Violin*. New York: Carl Fischer. https://www.thefreelibrary.com/The+Dounis+Collection%3A+Eleven+Books+of+Studies+for+the+Violin.-a0139967129

Driskell, J.E., Copper, C., & Moran, A. (1994). Does Mental Practice Enhance Performance?. *Journal of Applied Psychology*, *79*(4), 481-492. https://doi.org/10.1037/0021-9010.79.4.481

Flesch, C. (2000). *The art of violin playing book one*. New York: Carl Fischer. https://juilliardstore.com/products/flesch-art-of-vln-playing-bk-1-o5365

Galamian, I. (1985). *In Principles of violin playing and teaching* (3. Edition). Michigan: Shar Products Company. https://www.abebooks.com/9780962141645/Principles-Violin-Playing-Teaching-Ivan-096214164X/plp

Hallam, S. (1995). Professional musicians' approaches to the learning and ınterpretation of music. *Psychology of Music*, *23*,111-128. https://journals.sagepub.com/doi/pdf/10.1177/0305735695232001

Jacobson, D. (2016). *Lost Secrets Of Master Musicians: A Window Into Genius*. San Francisco, California: SFIM Books. https://www.walmart.com/ip/Lost-Secrets-of-Master-Musicians-A-Window-Into-Genius-Paperback-9780996957915/54943036

Koornhof, H. P. (2001). *The Basic Teaching Strategy of Master Violin Teacher Dorothy delay* (Unpublished master's thesis). Potchefstroom University, Potchefstroom. http://repository.nwu.ac.za/handle/10394/2628

Lankovsky, M. (Ed.). (2014). 'Russian violin teacher Yuri Yankelevich on how to achieve quick reflexes in your playing'. https://www.thestrad.com/russian-violin-teacher-yuri-yankelevich-on-how-to- achieve-quick-reflexes-in-your-playing/4675.article

Lankovsky, M. (2016). The Russian Violin School: The Legacy of Yuri Yankelevich. In M. Glezarova (Ed.), *Aspects of Yankelevich's Teaching Methods*. Oxford Scholarship Online. https://books.google.com/books?hl=tr&lr=&id=TVisDAAAQBAJ&oi=fnd&pg=PP1&dq=Lankovsky,+M.+(2016).+The+Russian+Violin+School:+The+Legacy+of+Yuri+Yankelevich.+In+M.+Glezarova+(Ed.),+Aspects+of+Yankelevich%E2%80%99s+Teaching+Methods.+Oxford+Scholarship+Online.&ots=hUm0lDoRiN&sig=4WCQXSrLHJMlHy6mVDWzscc_42Q

Richter, G. (2013). On the study of violin playing: Creativity and imagination in performance and practice. http://www.goetzrichter.com/pages/Teaching.html

Sand, B. L. (2000). *Teaching Genius: Dorothy DeLay and the Making of a Musician*. Portland, Oregon: Amadeus Press. https://www.abebooks.co.uk/9781574671209/Teaching-Genius-Dorothy-DeLay-Making-1574671200/plp

Stewart, E. K. (2013). *Demetrios Constantine Dounis: The philosophy behind the methods* (Unpublished doctor's thesis). Boston University College of Fine Arts, Boston. https://search.proquest.com/openview/6d65d3fd29092daf54d81687d07a5126/1?pq-origsite=gscholar&cbl=18750

Suzuki, S., Mills, E., Ferro, M., Behrend, M.S.L., Jempelis, A. … & the American Suzuki Institute- West. (1973). *The Suzuki Concept: An Introduction To A Successful Method For Early Music Education*. In E. Mills, T. C. Murphy,M. Honda (Eds.), Berleley, California: Diablo Press. https://www.abebooks.com/9780872970038/Suzuki-Concept-Introduction-Successful-Method-0872970035/plp

Suzuki, S. (1969). *Nurtured by Love: A new approach to education*. Melbourne: Centre Publications. https://www.abebooks.com/first-edition/Nurtured-Love-New-Approach-Education-Suzuki/20901367716/bd

Wagner, M. (1998). Mozart: An anomaly in the history of music?. *High Ability Studies*, *9* (1), 115-124. https://doi.org/10.1080/1359813980090108

Waldron, J. (2013). YouTube, fanvids, forums, vlogs and blogs: Informal music learning in a convergent on and offline music community. *International Journal of Music Education*, *31*(1), 91-105. doi: 10.1177/0255761411434861

Watkins, C., & Scott, L. (2012). *From the stage to the studio: How fine musicians become great teachers*. *Oxford Scholarship Online*, 1-31. https://books.google.com/books?hl=tr&lr=&id=KmVpAgAAQBAJ&oi=fnd&pg=PP1&dq=Watkins,+C.,+%26+Scott,+L.+(2012).+From+the+stage+to+the+studio:+How+fine+musicians+become+great+teachers.+Oxford+Scholarship+Online,+1-31.+&ots=eI8TF066KU&sig=4fEeGzQJh_3hdR6_0v8SgTKx9Ho

Yıldırım, A., & Simsek, H., (2018). Qualitative Research Methods in Social Sciences . Ankara: Seçkin Yayıncılık.

Zhang, S. X., & Lu, X. L. (2009). *Conversations with violin professor Zhang Shixiang*. Shanghai: SMPH. https://www.simplyforstrings.com.au/products/conversations-with-violin-professor-zhang-shixiang-smph

Zhang Violin Method. (2015). http://www.zhangviolin.org/