

# Challenges and Solutions in Developing Right Hand Techniques in Amateur Violin Education

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## Abstract

*Amateur music education, which individuals pursue with a hobbyist spirit based on their own desires and interests, can be defined as music education received for personal enjoyment. In Turkey, it is observed that individuals engaged in amateur music education mostly focus on instrumental training, with the violin being one of the most preferred instruments. In the process of violin education, which holds significant importance in both professional and amateur instrumental training, the identification and resolution of issues related to the right hand is crucial for a healthy progression of the education process. This study, which aims to examine various right-hand problems encountered by amateur violin students and to offer solutions, uses a mixed-methods approach that collects and analyzes data from both qualitative and quantitative sources. The related literature was examined in the qualitative portion of the research to identify the right hand-based challenges faced in amateur violin education and to expose the current state of the problem. The quantitative data utilized in the study were gathered by the researcher's examination of the participants' video recordings (n=10) in which they perform assigned musical exercises that require different bowing techniques. The six relevant items of the "String Performance Rating Scale" developed by [Zdzinski and Barnes \(2002\)](#) were used in the evaluation of the participants' video recordings. Based on the obtained data, solution proposals were developed for resolving the issues related to the right-hand technique.*

**Keywords:** Amateur Violin Education, Right-Hand Techniques, Bow Techniques.

## Introduction

Learning to play the violin is a rewarding yet challenging endeavor, especially for amateur students. One specific area that poses difficulties for these learners is the right-hand technique. The right hand is responsible for bowing the strings, controlling dynamics, articulation, and expression. The proper positioning and movements of the right hand are essential for tone production, intonation, and overall musicality. Therefore, addressing the problems encountered in this aspect of amateur violin education early on in a student's education is essential to ensure effective skill development and improve overall musical performance. Despite its importance, limited research has been conducted on this topic, making it an area worth exploring further. This research aims to investigate the various right-hand problems faced by amateur violin students and provide suggestions for solutions.

## Literature Review

Several studies have been conducted regarding right hand problems in violin education, shedding light on key findings and identifying gaps in existing literature. [Topper \(2002\)](#), in his doctoral thesis titled "Correcting the Right Hand Bow Position for the Student Violinist and Violist", examined the progression of the right-hand concerning the evolution of the bow, as well as the explanations of pedagogues regarding contemporary methods and the mechanical implementation on the instrument. Through a collective agreement, a definitive position for the correct right-hand placement was established based on the writings of esteemed instructors. The author shares their own interpretation of the most effective

technique for holding the bow, drawing from these writings, personal research, observations, and conversations with other violinists and teachers.

[Taylor \(2006\)](#), in his article titled “An Investigation of Tone Production in Relation to Management of Bow Weight and Speed Among Beginning and Intermediate String Players: A Pilot Study”, examined the abilities of beginning and intermediate string players in managing bow weight and speed control. The investigation focused on a limited sample of middle school and high school students, aiming to understand their proficiency in tone production. The data presented in this study consisted of visual graphs created from digital analog recordings. These graphs were examined to assess the changes in amplitude over time, specifically in relation to how weight and speed are managed. The findings indicate that inconsistent handling of weight and speed by young string players may lead to subpar tone production.

[Thiriot \(2022\)](#), in her master’s thesis titled “Developing Right-Hand Finger Flexibility in Young Violinists: Teaching Colle, Martele, Spiccato, and Sautille through the Suzuki Literature”, conducted a survey and interviews with violin and string instrument teachers to determine how and when they teach right-hand skills, and then created a timeline using the music in the Suzuki method and directed the teachers to train students on developing these skills.

[Zhou \(2023\)](#), in his doctoral thesis titled “The Right-Hand Technique in Violin Playing: A Focus on Collé Action”, introduced complementary concepts in right-hand technique such as five finger movement, four pressure positions, articulated and non-articulated bow strokes, four-stage movement of the collé, and applied these concepts to tone production, bow changes, string crossings and different bowing techniques such as martelé, staccato and spiccato.

Despite these valuable contributions, there remains a lack of comprehensive studies that address all aspects of right-hand problems faced by amateur violin students and propose effective solutions. This research aims to fill this gap by examining various elements related to right-hand technique among participants receiving amateur violin training.

### Research Objectives

The primary objective of this study is to identify the common right-hand problems encountered by amateur violin students. To achieve this objective, the following research questions guided:

1. What are the most prevalent issues encountered by amateur violin students regarding their right-hand technique?
2. What solutions can be developed for the right-hand problems encountered by amateur violin students?

### Significance of the Research

Poor right-hand technique can impede a student’s advancement and restrict their capabilities as musicians, potentially discouraging them from pursuing their study of music altogether. The limited literature related to right-hand issues in amateur violin education emphasizes the necessity for further investigation in this field. Through the identification and resolution of these challenges, educators and instructors can formulate more efficient teaching methodologies and approaches that enhance the learning process for amateur violin students. Moreover, comprehending the specific obstacles encountered by amateur violinists can facilitate the creation of targeted interventions and exercises aimed at improving right hand technique and minimizing the risk of injuries or discomfort.

### Theoretical Framework

“Amateur is derived from the Latin word *amo* (love) and literally means an amateur musician, a person who is devoted to music with love” ([İmik & Dönmez, 2017, p. 118](#)). Amateur music education, rather than a professional occupation, expresses the musical learning process in line with personal interests and for hobby purposes. It covers a wide range of activities, such as singing in a choir, playing an instrument in a band, or taking music lessons for personal enjoyment. According to [Uçan \(2005\)](#):

*Amateur music education aims to provide individuals who are willing to learn with the necessary musical behaviors to provide pleasure and satisfaction. It can be at any level and is optional. In formal education, it takes place with club activities, elective vocal and instrument ensembles, private and group music courses. In non-formal education, courses, private lessons, concerts, festivals and competitions organized by private institutions have a very important place for amateur education. (p. 27)*

Amateur music education supports cognitive development as well as technical competence. [Chen-Hafteck & Schraer-Joiner](#) (2011, as cited in [Alba & Díaz-Gómez, 2018](#)) found that contact with music at an early age develops the senses, activates observation

skills, contributes to motor coordination and activates listening skills. In addition, participating in group music-making activities such as a choir or brass band further improves cognitive abilities and encourages social interaction & cooperation (Einarsdottir, 2014).

Amateur music education also has social and emotional benefits. The results of Bailey & Davidson's (2005) study on the effects of singing and performing in groups with marginalized and middle-class singers show that singing and performing in groups provides emotional, social and cognitive benefits for both marginalized and middle-class individuals, and that participating in musical activities by joining musical ensembles such as choirs develops a sense of belonging.

One of the major areas of amateur music education is instrument training. Amateur instrument training refers to the process of learning to play an instrument for individuals who do not aim for a professional career in music. One of the most important findings of the research on this field, which is open to individuals of all ages unlike professional instrument training, is its positive effect on personal development and self-realization. The results of the study conducted by Taylor (2010) to determine the experiences of amateur keyboardists over the age of fifty-three reveal that learning an instrument as an adult can lead to significant changes in the lives of musicians, and that many participants turn to the keyboard instrument as an older adult because of their desire for self-actualization. The results of the study underlined the role of social support and encouragement from friends in motivating individuals to take up recreational instrument training. The participants in the study stated that they developed a personal and social musical identity through the amateur music education they received, which contributed to their overall well-being and sense of fulfillment.

Amateur instrument education also provides opportunities for social interaction and community participation. Pitts et al. (2015)'s qualitative research on why amateur musicians quit or continue their membership in performance ensembles reveals that musical participation provides a sense of belonging and friendship among ensemble members, & playing instruments in a group environment allows individuals to cooperate, communicate and develop interpersonal skills.

In addition to its personal and social benefits, it has been proven that amateur instrument education has

positive effects on cognitive development. Jentsch et al. (2014), in which the effects of the instrument study time of aspiring musicians on the relevant behavioral and neural mechanisms were investigated, it was concluded that advanced amateur musicians devote significant amounts of time to instrument study and that their instrument study time is directly proportional to their reaction speed to the test used as a measurement tool. The research results are also in line with the results of a study by Gruhn et al. (2003), which showed a positive correlation between mental speed and musical ability.

Amateur violin education can be defined as the process of learning to play the violin by people who do not have professional music education. This type of education, which includes the acquisition of violin playing skills and performance techniques through individual study, private lessons, and group lessons, is preferred by people who have a passion for music and violin but do not intend to pursue career in music.

*In recent years, the violin is a frequently preferred instrument due to its ease of transportation, the fact that it is not very costly at the beginning, and that it is a universal instrument suitable for all kinds of music that has found a place for itself in different cultures and geographies. Due to this intense demand, it is possible to say that violin education is also given in almost all the institutions that provide amateur music education today. (Tokatlı & Mustul, 2021, p. 6598)*

Amateur violin education is open to individuals of all ages and levels of readiness and provides benefits to individuals in many areas. The results of the study conducted by Shahin et al. (2008) show that among the subjects who received amateur instrument training, violin players, certain brain activities such as gamma band activity associated with perceptual and cognitive processes were improved. This result suggests that violin training may increase auditory perception, attention, memory, and pattern recognition skills by improving cognitive abilities and brain functions.

It is thought that amateur violin education has positive effects on the mental health and emotional states of individuals. It can be said that playing the violin as a form of expression helps to reduce stress and anxiety by directing the emotions, as well as improving the sense of success and self-confidence in individuals in parallel with the progress of violin playing skills. In addition, attending group violin lessons and/or collective performances can improve social skills, team spirit, and a sense of belonging to a community of fellow musicians.

Amateur violin education offers several benefits in different areas such as the development of musical skills and abilities, cognitive progress, emotional development and strengthening social bonds, but it also involves many challenges due to the nature of instrument training. First, learning to play the violin is a complex task that requires the development of various cognitive and motor skills. According to [Yıldırım \(2010\)](#):

*Factors such as the fact that the violin is a fretless instrument, the use of the bow and the movements required in violin playing are not used in any other field in daily life, and therefore the body does not easily adapt to these movements make the violin a difficult instrument to learn from the beginning. Due to these difficulties, many violin students quit playing the violin at the beginning stage or think that they cannot succeed. Overcoming this challenging period in a healthy way is extremely important for the student's progress. (p. 142)*

One of the difficulties encountered in amateur violin education is maintaining motivation and discipline during the instrument practice process. Unlike professional musicians who may be exposed to external pressures and often must act according to a specific practice schedule to reach the targeted level of performance, amateur musicians often must rely on their own motivation to practice regularly. When the results of the research conducted by [Ericsson et al. \(2011\)](#) to determine the relationship between practicing an instrument on a regular basis and the skill performance at a given level of expertise are examined, it is seen that the amount of instrument practice by professional musicians is approximately ten times higher than that of amateur musicians. These results also highlight the importance of the time spent practicing the instrument and the quality of the work in achieving musical competence.

In addition to the other factors mentioned, the biggest challenge faced by students who begin amateur violin training is struggling with technical problems. These technical problems can also negatively affect the development of more advanced skills if a proper foundation is not established. For this reason, in amateur violin education, it is important that students are skillfully taught the technical aspects and that they develop the habit of practicing regularly. By building on a solid foundation, students can be more successful in stepping into more advanced skills.

## Research Methodology

The research employs a mixed-methods approach, combining quantitative and qualitative data collection and analysis. In the qualitative part of the research, the relevant literature was reviewed to identify the right-hand based problems encountered in amateur violin education and to reveal the current state of the problem.

The quantitative data used in the study were obtained through the researcher's evaluation of the video recordings of participants performing assigned musical exercises that require different bowing techniques according to the "String Performance Rating Scale". This scale was developed by [Zdzinski and Barnes \(2002\)](#) and provides a comprehensive assessment of various aspects of violin performance, including right-hand technique. In this study, the items selected from the scale and used to assess right hand performance are as follows:

1. Subtle nuances lacking: This item assesses the ability of the participants to incorporate delicate nuances in their playing technique.
2. Appropriate range of dynamics: This item examines the participants' capability to control and vary the volume of sound produced by their right-hand movements.
3. Student using correct proportion of weight: This item evaluates whether the participants can apply the appropriate amount of pressure and weight on the strings, resulting in optimal sound production.
4. Maintains proper contact point: This item focuses on the participants' ability to maintain consistent contact between the bow and the strings, ensuring accurate and controlled playing.
5. Arm weight draws full sound from string and speed with bow: This item assesses the participants' efficiency in utilizing their arm weight to produce a rich and resonant sound, while also maintaining appropriate bow speed.
6. String crossings are controlled/smooth: This item evaluates the participants' proficiency in executing smooth and controlled string crossings, without any noticeable disruptions in sound.

The Likert scale used in the evaluation ranged from 1 (Very Poor) to 5 (Excellent), with variable scores given to each participant based on their individual performance.

The participants of the study (n=10) consisted of students receiving amateur violin education in Çankaya district of Ankara province. Ethical

considerations include obtaining informed consent from all participants and ensuring confidentiality of any personal information shared during observations.

### Findings from the Literature Review

When the related literature is reviewed, the findings regarding the problems related to right hand in amateur violin education are as follows:

Regardless of whether professional or amateur, one of the most important technical problems encountered in beginning violin education is the application of bowing techniques and problems related to the right hand, which plays the leading role in sound production.

One of the most common problems with the right hand encountered in violin education is improper bow grip. The way the bow is held and controlled greatly affects the quality of the sound produced. An inappropriately held bow, which is not moved with consistent speed and pressure, causes both a weak or unbalanced sound and difficulties in producing dynamics and articulation. According to [Ergün \(2023\)](#): *“The first aim in all types of instruments such as the violin is to achieve a clean, beautiful sound. The performer should initially succeed in making a beautiful sound from the violin as a start. Achieving a beautiful sound constitutes the initial stage of the technical infrastructure”* (p. 147).

Acquiring the ability to perform with correct articulation is a challenging task for many amateur violinists. The concept of articulation, which is related to the coordination between the bow movements of the right hand and the finger movements of the left hand, expresses the clarity and precision of each note or phrase. Poor articulation can lead to unclear sounds and passages, making it difficult for the listener to distinguish notes and/or musical phrases.

Developing dynamics & expression in bowing is particularly important for musicality. Beginning violinists frequently struggle with controlling the dynamics that present the variation in volume & intensity of sound. This may result in a lack of contrast in terms of loudness between quiet and loud passages, making the performance less expressive and exciting. Dynamic control demands development of abilities that might be difficult for beginners to master, such as bow speed & pressure control, as well as fine-tuning the point at which the bow touches the string.

String crossing, defined as switching from one string to another while playing with the bow, is regarded as one of the most fundamental and challenging skills for beginners in violin instruction.

One of the most difficult aspects of mastering string crossing is achieving the necessary coordination between the right and left hands. The bow must be moved smoothly from one string to the next while maintaining consistent pressure and speed, and left hand’s fingers must be precisely positioned on the fretboard to achieve the desired pitch. This coordination requires fine motor skills and a deep understanding of instrument mechanics ([Min et al., 2009](#)).

In order to maintain the rhythm and achieve the desired articulation in violin playing, string crossings must be correctly foreseen and applied. From the perspective of amateur violinists, string crossings can be more challenging, especially when playing complex passages involving simultaneous bow and string changes. The results of a study conducted by [Schoonderwaldt & Altenmüller \(2014\)](#) to reveal coordination behavior in complex bowing patterns, including bow direction changes and string crossings, showed that string crossings are consistently timed before bow changes, and violinists tend to predict string crossings to provide smooth transitions between strings. Other results obtained in the study are also important in terms of revealing that professional violinists are more successful than amateur violinists in coordination behavior.

Another problem with the right hand in amateur violin education is the limited variety of bowing techniques. Most beginners tend to use only one bowing technique, such as *detaché* on the full and half bow, and neglect to explore other techniques such as *spiccato*, *sautille*, *martelé*, and the like. This often limits the violinist’s expressive possibilities, resulting in monotonous and less interesting performances. The problem progresses to another dimension as different bow techniques start to take place in the works played over time. This time, the violinist, who tries to apply successively variable bow techniques in the works, also has difficulties while struggling with both these bow techniques, which he/she is a novice in, and other motor skills required by playing the violin, and this may result in an inadequate application of the relevant bow techniques.

Basically, it is possible to say that all these problems are caused by a right hand that is not sufficiently strengthened and skillful enough. Although it seems to be the left hand’s job to produce intonationally correct and timbre-quality sounds on the violin, the right hand, which is responsible for



## Discussion

These findings align with previous studies on right hand problems encountered by amateur violin students, highlighting areas that require attention for improvement (Topper, 2002; Taylor, 2006). It is crucial to address these issues promptly because they can hinder technical progress, impede musical expression, and potentially lead to injuries or physical discomfort if not corrected early on. Possible explanations for these challenges may include insufficient focus on technique during the initial stages of training or inadequate guidance from teachers who may prioritize repertoire over foundational skills development.

## Suggestions

To address the challenges faced by amateur violin students regarding their right-hand technique, it is crucial to offer targeted exercises that address each individual issue. These exercises should be carefully crafted with the specific problems in mind.

**1. Focus on proper bow grip and control:** To effectively overcome the issue of incorrect bow grip and control, it is crucial to offer precise and comprehensive guidance regarding the appropriate hand placement and bowing approach. Instructors should emphasize the significance of a relaxed and supple hand, accurate positioning of the fingers on the bow, as well as the utilization of the forearm and wrist for optimal control. Consistent practice sessions and targeted exercises concentrating on enhancing bow grip and control can facilitate the development of muscle memory and lead to advancement in technique.

**2. Bow speed and pressure control:** Exercises targeting altering the speed and pressure applied to the bow can improve students' control and provide consistent tone quality. Techniques such as "bow circles" or "jumping bows" can be used for practice.

**3. Bowing hand tension:** Excessive tension in the bowing hand can reduce sound quality and cause discomfort or weariness. Students should practice maintaining a relaxed hand position, keeping their fingers soft and flexible and eliminating unnecessary tension. Regular stretching exercises and awareness of hand posture can assist relieve tension.

**4. Inappropriate bow angle:** Inappropriate bow angle can lead to poor tone production and inconsistent sound. Students should be aware of the bow angle in relation to the strings and perform exercises aimed

at maintaining a consistent proper angle. Correcting and enhancing bow angle requires proper supervision from a teacher.

**5. Provide comprehensive bowing technique training:** To solve the issue of limited variety in bowing techniques, comprehensive training on different bowing approaches is essential. This includes teaching the various bow strokes, such as legato, staccato, spiccato, and martelé, as well as their associated bowing motions. Teachers can expose students to a variety of repertoire that shows different bowing approaches and encourage them to implement these techniques into their practice.

**6. Focus on articulation exercises:** To address the difficulties in producing proper articulation, it is beneficial to implement articulation exercises and drills such as scales and arpeggios that focus on developing articulation skills. Teachers can also advise students on how to coordinate the bowing action of the right hand with the finger placement of the left hand to achieve accurate and clean articulation.

**7. Incorporate dynamic control exercises:** It is critical to incorporate exercises that especially target this aspect of violin playing to develop dynamic control. These exercises may include practicing crescendos and diminuendos, playing at varying levels of intensity, and experimenting with different bowing techniques to generate various dynamic effects. Teachers can help students comprehend the relationship between bow speed, pressure, and location in controlling dynamics, as well as providing comments on their performance.

## Conclusion

In summary, it is seen that the right hand plays an especially vital role in violin performance and amateur violinists often experience problems with bowing. These problems include improper bow grip, deficiencies in bow control, poor articulation, insufficient application of dynamics, difficulties in string crossing, and inability to reflect the musical expression at the desired level due to limited bowing techniques that were limited at the beginning but increased over time. To solve these problems, it seems extremely important to develop appropriate suggestions by the educators, to provide a comprehensive education on bowing techniques, to encourage students to explore different techniques, to focus on articulation exercises and to include dynamic control and string crossing exercises in the training

process. Individuals who receive amateur violin training can improve their right-hand techniques and performance skills by applying the solutions suggested by the educators after they gain awareness of these problems.

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