

Perceptions and Memorization Strategies of Piano Students Toward Piano Performance: A Phenomenological Study

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Abstract

For many piano students, it has always been a challenge to memorize pieces. Most of them would admit to making mistakes and experiencing a mental block during a performance. Difficulty in memorizing may cause difficulty in playing the piano. Though some studies about this case have already been done, this research tried to look for new findings regarding the perceptions of piano students about memorization as a major element for piano performance. The study also described the memorization strategies utilized by the students. Through purposive sampling, ten piano students were selected to participate in this phenomenological study. They were also observed during their piano practices to confirm gathered data from a semi-structured interview. An interview guide was utilized to gather information which was transcribed, categorized, and thematically analyzed. The results revealed that the piano students highly preferred to memorize because it helps boost confidence, focus, and interpret the music well. It was also revealed that during practice, certain memorization strategies such as separation of hands, repetition, singing of the melody, and listening to recordings were used to perform by memory. However, the process of being able to perform by memory takes a lot of hard work and discipline. Therefore, it is recommended for students and teachers to work together in the learning and memorization process.

Keywords: piano performance, memorization, music piece, music theory

INTRODUCTION

Music performance is an important part of the life of a musician, as a student and a professional, because performance is how musicians share and communicate. As a doctor diagnoses a patient and a researcher publishes the findings of the research, so does a musician communicate through performance. Robinson (2018) stated that music connects people experientially and can be a powerful element; however, before a performance comes rigorous practice. Part of the practice is the memorization of repertoire. Memorizing is one of the most challenging aspects of music performance. A significant part of the success of music training is performed by memory. Therefore, music students who are taking performance and music education as a degree are required to perform music using the memorization strategy. Performing a piece from memory indicates mastery, thus, allowing the performer to express more freely and communicate with the audience better (Chua, 2015). The understanding of memorization

techniques is one of the important goals of music students or future musicians, especially to attain the standard of music performance. For many students, it has always been a challenge to memorize pieces.

While each instrument has its own challenge with regards to mastery for performance level, from a layman's perspective, the piano could be especially challenging because of the number of notes the performer has to play. Whereas for vocalists or string players, memorization typically involves only a single line of notes. On the other hand, the pianist has to memorize chords for two hands, with 88 keys to choose from. Because piano performances require mastery, there could be ways for the student to make the journey to memorization and performance, not all vain repetition. Structured practice and analysis are necessary (Toptas, 2016; Yucetoker, 2016). The majority of students have a natural way to memorize music, usually by relying on muscle and aural techniques. It means most of the students use their auditory and kinesthetic skills to memorize their pieces. This could be a handicap for visual learners. Using as many senses as possible and building more connections in the brain may lead to faster memorization (Toptas, 2016). Also, memory strategies depend on the skill of the performer and the style and difficulty of the music to be memorized. The ability to memorize seems to be enhanced by studying music theory and analysis. Moreover, learning improvisation in the style of music could be helpful. Memorizing a piece could force music students to really learn their pieces. They have to be aware of the details of piano performance at all times: notes, rhythms, articulations, dynamics, phrasing, fingering, etc. Memorizing forces, them to understand the piece in a way that is needed when they just read from a page.

The researchers observed that recently not all piano students memorized their pieces very well. Going through a pandemic, with the stress of uncertainties, lack of proper practice environment, and lack of social interaction and "face to face" support from friends and classmates, it became more difficult for music students to memorize their required pieces. Most performers would admit making mistakes and having a "mental block" are the fearful side of a performance. Difficulty in memorizing may cause difficulty in playing as a whole, anxiety at concerts, confusion in locating the themes, and similar negative effects (Yucetoker, 2016). Their failure to memorize the piece results in a lack of confidence in playing, which in turn may become a substandard performance.

Significance of Teacher-Student Connection in Memorization

Stokes (2016) mentioned that the greatest benefit of memorization to the performer could be summed up as increased artistic control and freedom. Memorization frees up the conscious mind of the performer and enables the mind to focus on things other than the reading of a script. The conscious mind is free to focus on the more important musical aspects of the performance. Moreover, Yucetoker (2016) mentioned that there are three identified types of students in piano playing, visual, aural, and kinesthetic students. Memorization could be a challenge depending on the type of learner. Teaching technique is also important to guide the students in the process of memorizing. Learning by heart is necessary to record knowledge. It is also necessary to store knowledge in the memory for a long time (Toptas 2016). Hence, in the process of learning the piece by analyzing, practicing, and repeating difficult parts, the memorization process is functioning at the same time. According to Yucetoker (2016), structural analysis of the piece is the "most central feature" of memorization. This includes formal structure analysis, harmonic structure analysis, melodic structure analysis, hand-position analysis, and dynamic structural analysis.

In most cases, the teacher gives feedback only during the once-a-week lesson. For the rest of the practice, the student is left alone to gauge his performance. Part of the teacher's role is to prepare the student for this independent practice (Chen, 2018; Rigby, 2017). Forrester (2018) emphasized in a study that teachers can effectively assist the students in their piano performance through a deliberate and structured approach, taking into consideration what the students have previously learned and connected with that learning to the new concept or skill. Thus, the students must be careful to practice the right way because the wrong practice may lead to bad habits which may be harder to break. Mindful, conscious practice is the most effective way of practicing and, in turn, memorizing (Toptas, 2016). Instead of relying only on repetition and muscle memory, engaging more senses, such as the connection of aural to kinesthetic learning (Lam, 2020), and the aural to visual learning (how does this particular chord written in the music sheet sound like) may lead to better memorization and longer retention.

The aural element of music may be closely related to physical movement, and connecting the two may further enhance muscle memory, failure of which is what musicians may experience as a "mental block" during a performance (Lam, 2020). Additionally, consciously working involves proper planning (Toptas, 2016). According to Rigby (2017), "practice requires generating specific goals for improvement and monitoring various aspects of performance" (p. 11). It involves exceeding the individual's previous performance limits, which requires full concentration and effort.

Memorization is a process that includes significant self-regulation from the student. Self-regulation and self-evaluation include goal-setting for the practice to be effective (Rigby, 2017). Facilitation of reflection is also important in deeper learning (Robinson, 2018), and giving music students ample time for reflection could be something beneficial for the students' learning process (Forrester, 2018).

The learning process, and in turn, memorization, is a lot about connecting information, which includes previously learned knowledge, delivery of new knowledge from a teacher, and connecting the previously learned and the new knowledge. Memorization involves a process of acquiring information and storing it in the brain, which can later be retrieved, either for recall or for introducing a new concept, the process of which is important for long-term retention (Chua, 2015; Toptas, 2016). The connection also can be the connection of the different elements of music such as the melody, harmony, rhythmic patterns and characters, technical structure, progression, themes, and historical background (Toptas, 2016; Yucetoker, 2016), and connecting these elements allows the learning to play "by heart." Learning the music by heart, not just learning the notes, may become a key for long-term retention (Toptas, 2016).

Short but frequent practice or "spaced repetition" helps with long-term memory retention (Choffin, 2019). However, due to time constraints, either unforeseen or due to negligence, some students would resort to less frequent but long practice sessions, which then limits the long-term retention. Transfer of knowledge and instruction may also have a significant part in the learning process, i.e., in the memorization journey of the student (Forrester, 2018). The way students learn is different depending on many factors such as their mental development, previous knowledge, learning styles – visual, auditory, and kinesthetic, among others. A mismatch with the teacher's approach may lead to slow progress (Aycan, 2018).

LITERATURE REVIEW

Until now, studies about this case are rarely discussed since memorization is often considered one of the most challenging aspects of music performance. Therefore, the researchers decided to study memorization strategies that may help not only music majors but also non-music majors enrolled in piano lessons. There is no found qualitative study regarding memorization in terms of piano performance during the conduct of the study. Since the researchers observed and noticed the problem of memorization among music majors, this study has the purpose of filling the need through a qualitative approach.

This research aims to understand the experiences of students as well as to find memorization strategies they use when preparing for the performance during the pandemic. It answered the following questions:

1. What are the perceptions of piano students about memorization?
2. How do the students memorize during practice in this pandemic time?

Conceptual Framework

As this study is focused on the perception and memorization techniques of music students, the researchers decided to set Mihály Csíkszentmihályi's (1990) concept of *Flow* state in positive psychology and *Chunking* by Lehmann et al. (2007) as the basis of this study.

Flow

In positive psychology, a flow state, as named by Mihály Csíkszentmihályi, also known colloquially as being in the zone, is the mental state in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. Flow is characterized by the complete absorption in what one does and a resulting transformation in one's sense of time (Csíkszentmihályi, 1990).

Research has shown that performers in a flow state have a heightened quality of performance as opposed to when they are not in a flow state (De Manzano et al., 2010). Greater intrinsic motivation, improved performance, learning and skill development, and more creativity are some of the benefits of flow (Cherry, 2021).

Chunking

Chunking is an important psychology's term in memorization processing. Smaller meaningful units and a musical section are likely to contain several chunks. The size of chunks is variable and depends on the level of expertise. Chunking is, in essence, a memory mechanism that links our perception to previously-stored knowledge (Lehmann et al., 2007).

These concepts fit the study because it supports the purpose of the research. Knowing the reason for memorizing and setting goals is the start of a flow state of the mental condition of a pianist. As the piano student is more immersed in memorizing, strong concentration and focused attention are gained. Chunking, the memorization process, will become more effective.

METHODOLOGY

This study used the phenomenological study to understand the experiences of students as well as to find memorization strategies they use when preparing for the performance. There were ten purposively sampled participants. They were music students who were piano majors in a Christian

university in Cavite. The selected participants are piano majors in different levels of applied piano. A semi-structured interview guide validated by experts was used to gather data, while observations during practice were done to support and validate the information gathered from the participants. Consent was sought prior to the conduct of the study to ensure that the participation was voluntary. After the data gathering, the data were transcribed, analyzed, and thematically grouped to form themes that answered the research questions. A follow-up interview was also conducted after the data analysis for credibility and validity purposes.

RESULTS AND DISCUSSION

Perceptions of Piano Students about Memorization

Three perceptions of piano students about memorization emerged. They were: Memorization helps boost students' confidence, enhances students' focus, and helps in the students' interpretation of the music.

Memorization helps boost piano students' confidence

The participants mentioned that although they feel nervous in every performance, they still feel confident because they have memorized the piece. The confidence they gain from memorization makes them enjoy and feel satisfied with their performance.

As stated by the participants:

"I can overcome the nervous feeling when I start to play..." (Participant 3). *"I can play the piece better, and I feel more confident..."* (Participant 8). *"I really enjoyed when I can play the right notes by memory."* (Participant 1). *"I feel satisfied because I really did my best. I was able to produce it better."* (Participant 2).

Confidence may also be referred to as self-esteem. When a specific piece of music is memorized, more confidence is seen during the performance. Part of memorizing is to be prepared to be nervous or anxious. The highest levels of performance anxiety are generally triggered by solo performances (Spahn et al., 2016). However, if the memory is secure, anxiety will not cause memory issues. Stokes (2016) mentioned that the more completely individuals had memorized the work, the more they will reap the benefits.

Memorization enhances the piano students' focus

The participants mentioned that when they had memorized their music, they became more focused on the performance, making sure that they played each note right and perfectly. Thus, when they are focused, concentrated, and confident on what they have memorized, they perform better. *"I feel that I can do it right and perfect and less nervous."* (Participant 4) *"I can play the piece better."* (Participant 8) *"With playing without piece, you can put more expression ... more focus and that is the standard of a performer. We can communicate more to your audience..."* (Participant 10)

Studies have been proven that playing the piano stimulates the brain, making it more active. According to Hoque (2018), memory exercises help students practice focus as students spend time memorizing passages and tables; hence, anything they learn to find focus. Therefore, the ability to memorize may increase audio information (Moawad, 2019). When memorization, including mental practice, is effectively used, it results to contribute and helps enhance the focus during the

performance. Mental practice by pianists improved their performance compared with no practice. The combination of mental practice and physical practice improves both notation and performance tasks. Furthermore, musicians can use both practices to improve long-term retention and reduce physical workload and playing-related overuse injuries (Iorio et al., 2021). Thus, proper mental and physical practice may lead to good memorization, focus, and better performances.

Memorization helps in the piano students' interpretation of the music

The participants mentioned that playing by memory helps them to put more expression and give a good interpretation of the music during the performance. One participant mentioned that expression comes out naturally when music is memorized. *"Every time I practice with musical pieces, I really can't put emotion and expression. But when I go up on the stage with confidence and play by memory, suddenly the emotions will come out naturally."* (Participant 9). *"You can interpret your piece easily."* (Participant 2). *"With playing without piece, you can put more expression or feeling, interpretation and more focus ... We can communicate more with your audience."* (Participant 10)

When playing a piece by memory, the performer has more artistic control and freedom of the piece being performed (Stokes, 2016). It helps the performer to be more expressive by playing with better musical expressions (Ross, 2021). The mind is cleared from worrying whether to turn the page or memorize some part of it. Instead, they can focus more on the musical aspects of the piece, such as tone, dynamics, musicality, and interpretation. This is what is meant by "being in the moment." It gives the performer the opportunity to be absorbed into the music when it is memorized.

Memorization Strategies of Piano Students During Practice

Four memorization strategies of piano students during practice have emerged, as confirmed by interviews and observation. These are: separation, repetition, singing the melody, and listening.

Separation

"I train my fingers with different rhythms or separately so I will not be lost." (Participant 4). *"When I practice, I do step by step and separate it by part."* (Participant 6).

One effective way of memorization is practicing the hands separately. By doing so, it helps in the development of the technique for the fingers rather than learning a piece with hands together. It is advised that developing techniques should not be acquired by learning a piece with hands together as it is much more difficult, time-consuming, and a bit dangerous for the hands and fingers (Chang, 2016). Learning scales and arpeggios – where separate hand practice may be beneficial – as patterns would help in processing the information to smaller bits instead of looking at each of the notes, which could translate to 6-8 patterns instead of 40-100 notes. Other than the cognitive aspects of memorization in music performance, it is also a physical process (Garaulet, 2019).

Repetition

In order for the participants to master and memorize the piece, they keep on repeating playing the music by parts. *"I keep playing, playing and playing until I master the melody and my muscles have used to it..."* (Participant 2). *"I keep repeating the same part until I play correctly."* (Participant 6).

Repetition aids in memorization, both in the short term and long term. According to Voice and Stirton (2020), memory involves a "forgetting curve," and when information is revisited less, there is an "exponential decay of information from memory." On the other hand, if the information is revisited, the rate of decay reduces, thus allowing for ever-increasing time intervals between repetitions to retain long-term memory of it. A learner may make use of massed repetition (repeated in succession) or spaced repetition (repetitions with breaks in between). Spaced repetition is superior to massed repetition because it allows information to be retained long term (Choffin, 2019), particularly if the learning is intentional (Samudra et al., (2019).

Singing the melody

Some of the participants sing the melody while playing the notes. It helps them familiarize the flow and structure and remember the piece. *"I also sing the melody of the piece for me to recall and memorize faster."* (Participant 2). *"I sing to fully feel and understand the flow of the music, especially when it is melodious"* (Participant 10).

Melodies are some of the easiest elements of music to memorize. The brain can easily memorize melodies when singing. Singing, as cited by Osman et al. (2016), combines language, music, and instinctive human behavior to enhance brain stimulation. Ross (2021) mentioned that singing through music helps with understanding what's happening harmonically. It is also a great way to label musical landmarks. It allows a pianist to memorize a piece when certain changes are going to occur. Moreover, it also helps solidify the rhythms.

Listening

The dominant working memory for most musicians is aural memory. Participants have mentioned that listening is very important in memorization that even if the music sheet is removed, they can still hear the music in their minds and transfer it on the keyboard. *"I always listen every day, before I go to sleep when I wake up, ... I always listen to the music every time I go."* (Participant 3). *"Like now, I can still imagine the first note of Bach. The note on my right hand is C, and my left hand is C C G E E C G (in singing). I can recall the notes aurally."* (Participant 4) *"I always practice while listening to music recording at the same time."* (Participant 5) *"I will listen into music recordings"* (Participant 10) *"I will inner hear the music. If the audience is noisy, I will look at the key, and suddenly, the notes and pieces appear on my mind."* (Participant 9)

When hearing something, the auditory nerve sends the sound to the brain. It transmits electrical signals. Echoic memory or auditory sensory memory occurs when this information is received, held by the brain, and stored in the primary auditory cortex (PAC) of the brain (Moawad, 2019). Auditory memory is one of the most strongly related to memorizing. The more refined the audition of one person is, the stronger his auditory memory will be (Garaulet, 2019).

Pianists use aural memory to know they play the correct notes and to anticipate what they will play in the next few seconds (Wilson, 2018).

CONCLUSION

The study revealed that playing by memory has a big part in the musical growth of every pianist. Also, in memorizing pieces, one strategy is not enough. The memorization process is a combination of all the working memories and memorization strategies. However, while performing by memory is highly recommended both by the students and teachers, it is still an

option for the performer. A good performance does not come naturally without any hard work and practice, and while it is not the sole indicator, playing by memory is often the result of long hours of hard work and mindful practice. Based on the perceptions found in the study, memorization - playing from memory - helps performers to bring out their own artistic style based on their understanding and interpretation of the piece. They become more expressive, more focused, and are able to be in the music to communicate well with their audience, all of which translates to good performance. Though the process of being able to achieve this performance requires a lot of hard work, hours and hours of practice, the guidance of the teacher, and a lot of other factors and strategies, which include mental practice, separation of the hand, repetition, singing the melody, listening to recorded music, watching music videos, and watching other artists perform, reading a lot about the composer, piece and style, combined with dedication and discipline, the result is very rewarding. Thus, memorization has given music students a sense of critical thinking, time management, and prioritization, developed discipline and confidence, and, lastly, enhanced musicianship. In every applause at the end of the performance, then and there, a musician will realize that he or she has achieved success. Therefore, a sense of accomplishment and achievement is incomparable.

Memorization can be difficult but trying to make it a more engaging and enjoyable process can make it more fulfilling to students. Based on the results, the researchers recommend the following: (a) students should better understand the way in which they learn best and then experiment with a variety of strategies and eventually tailor it to individual needs; (b) mindful practice is as beneficial as engaging various senses in the process of learning. Teachers should also be aware of how their students learn best to help them better and guide them in their journey of learning and performing a piece; (c) future researchers may replicate the study by expanding it to a larger number of participants and/or utilize a quantitative design to find more new results.

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