

# The Importance of Playing from Memory: Considering the Multi-Sensory Approach in Memorizing Music

Xuyan Chen\*

Hunan University of Information Technology, Changsha City, Hunan Province

\*Corresponding author: Xuyan Chen, 15111153612@163.com

**Copyright:** © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** It is important for students to play from memory in musical learning. However, some students are afraid of memory lapses. This paper will focus on the benefits of performing from memory in terms of performers and audiences and then introduce the advantages and disadvantages of three types of sensory memory: kinesthetic memory, visual memory and aural memory. Finally, this essay will emphasize the importance of a multi-sensory approach to memorizing music. After that, some methods can be considered by instrumental teachers to help students memorize music.

**Keywords:** Play from memory; Musical learning; Memory lapses; Multi-sensory approach

**Online publication:** July 29, 2024

## 1. Introduction

Playing from memory is a common issue in musical learning. A large amount of literature supports that developing students' ability to play without music sheets is necessary because of social conventions and audiences' expectations <sup>[1]</sup>. In addition, mastering how to perform from memory is essential for students to become professional musicians <sup>[2]</sup>. That is why some exams or public concerts require musicians to perform without music sheets. However, some people argue that playing from memory may bring anxiety because some musicians are afraid of memory lapses <sup>[3]</sup>. It is a common problem, not only for experienced professional musicians but also for novices. Memory failures are inevitable, but some strategies can be considered to help musicians memorize music effectively and reduce memory lapses.

This paper will consider the benefits of playing from memory for musicians themselves and audiences, which can motivate students to try to play from memory. In addition, instrumental teachers can also consider the benefits of motivating and encouraging their students to try playing from memory. After that, this study will mainly focus on using a multi-sensory approach to help musicians reduce memory lapses. Finally, instrumental teachers can consider some suggestions to help students memorize music.

## **2. Benefits of performing from memory**

Performing from memory plays a role in musicians' musical development because it can enhance their musicality <sup>[4]</sup>. Memorized performances need more time to practice, and musicians' musicality can develop in extra time spent practicing, such as their skills and musical expression. Additionally, playing from memory can also benefit audiences <sup>[5]</sup>.

### **2.1. In terms of performers**

Memorizing music is a complex and cognitive process. Performers can analyze the structure and emotion of the piece, which leads to a deeper understanding of the piece.

There are also some practical advantages to playing from memory. The first one is that if musicians can play from memory, they do not need to pay attention to turning pages while they perform <sup>[6]</sup>. Playing from music sheets means that musicians need to think about when they can turn pages and may also worry about whether they can turn pages successfully while performing. They may be distracted by these reasons while performing. By contrast, playing from memory can enable musicians to pay more attention to monitoring the physical aspects of performances <sup>[7]</sup>.

Additionally, playing from memory can enable performers to feel free to perform. Without music sheets, performers do not need good light to ensure they can look at a music sheet clearly. They have more freedom to position themselves wherever they wish on the stage. In addition, performers will not be distracted by some factors, including music stands, turning pages and lighting, they can get more involved in music and focus on expressing their music.

### **2.2. In terms of audiences**

Playing from memory can also give audiences benefits. It can improve communication between performers and audiences. Playing from memory means without a music stand. Some musicians argue that a music stand has just a small influence on audiences <sup>[8]</sup>. However, without music stands, performers can provide better visual information including facial expressions, body movements, and eye contact to audiences. Visual information can reveal what performers want to express and what they think about the music. Audiences can understand the performers' emotions and expressions through this visual information. Juchniewicz J (2008) compares pianists' physical movements to prove that performers' body movements, particularly head and facial movements, will significantly influence audiences' feelings and evaluation of the performance <sup>[9]</sup>. Consequently, playing from memory can provide more freedom for performers to show their body and facial movements to audiences. Watching performers' movements and listening to music simultaneously may be more likely to enable audiences to get engaged in music and have a pleasant experience of watching the performance. That is why some people choose to go to concerts instead of listening to music at home. Playing from memory can benefit both performers and audiences. Consequently, some strategies can be considered to help musicians memorize music effectively and reduce memory lapses.

## **3. The multi-sensory approach**

There are three main types of sensory memory that help musicians remember music: kinesthetic memory, visual memory and aural memory <sup>[10]</sup>. Each type of memory has its own characteristics. Combining the three types of sensory memory is a useful way to memorize music.

### **3.1. The characteristics of kinesthetic memory**

Kinesthetic memory can also be called motor memory and rote memory. This kind of memory is perhaps the

most popular in playing from memory <sup>[11]</sup>. It means that people use joints, muscles, and touch to memorize actions automatically. Instrumental musicians can remember the movement of fingers and patterns of finger movements through kinesthetic memory. One feature of kinesthetic memory is that the process is unconscious. Performers may remember a piece unconsciously by repetition.

Even though kinesthetic memory is important in learning instruments and reciting music, it lacks security. Ginsborg J (2004) states that kinesthetic memory is vulnerable to interference because the process of kinesthetic memory is unconscious. If musicians use kinesthetic memory to play, they always rely on their muscle memory. This is dangerous because if they begin to think about what next phrase they need to play or other factors interrupt their playing, it is hard for them to remember what they need to play and they may need to play the piece again from the beginning. As a result, if it happens at a concert, this situation may influence the musicians' emotions as they may feel more anxious and may reduce their confidence. Additionally, kinesthetic memory is useful for memorizing short and easy pieces but may be ineffective for longer and difficult ones. Difficult pieces may have a more complex structure and relying only on motor memory to memorize difficult pieces may be unreliable.

### **3.2. The characteristics of visual memory**

The second one is visual memory. The visual memory includes the image of the music sheet and the image of movements in the instruments. Visual strategies are less popular than kinesthetic and aural strategies for memorizing music. However, visual information is also useful in learning memorization, particularly in the early and later stages of memorization. In the early stage, when musicians begin to learn and practice a new piece from a music sheet, they need to read a music sheet and know where they play on the page. In the later stages, when musicians perform from memory, they may focus on their hands and where their hands are in the instrument.

However, relying only on visual memory is also unreliable. Albasini Garaulet O (2019) supports that memorizing music only through visual strategies cannot ensure that musicians can perform from memory successfully because if musicians only memorize music by looking at the music sheet and their instruments, they cannot feel the feeling of playing the piece and what the piece sounds like. Thus, it is difficult for them to remember.

### **3.3. The characteristics of aural memory**

Aural memory also plays an important role when performing from memory because pitch is one of the most salient factors that influences musicians to remember a piece. When musicians remember music, they sometimes can recall music while listening to the pitch or melody. Musicians can use aural memory to remember what they hear and imitate music. Compared to kinesthetic and visual information, aural feedback is more important if musicians want to play from memory. Aural feedback is a crucial factor that influences musicians' performances <sup>[12]</sup>. However, like kinesthetic and visual memory, aural memory alone is unsafe for memorizing music. Albasini Garaulet O (2019) supports this view because if musicians only rely on their aural memory, it may be hard for them to monitor where they play and where they are going to play. For example, if musicians are interfered with by other sounds while they are playing from memory, their aural memory may be interrupted, and they may not remember where they play, which may result in memory lapses.

## **4. The role of instrumental teachers**

Before introducing using multiple senses to help students memorize music, the first step is that instrumental teachers can select suitable pieces according to students' personalities and individuality <sup>[13]</sup>, for example, their ages and their abilities, because students can only memorize what they already know. If a piece is over a

student's level and is difficult to memorize, they may feel more anxious and even lose confidence in performing this piece from memory. Once students lose confidence, they may no longer be willing to play from memory.

After that, according to the above section, using only one kind of memory is unreliable because different memories have their own disadvantages. The more effective method to memorize music is by combining multiple sensory memory. Visual, aural and kinesthetic are all sensory information essential for producing and memorizing music. Combining different sensory information will help musicians memorize music because the information will bring associations and connections. When instrumental teachers teach their students to memorize music, they can enable students to connect different information through playing their instrument, hearing the sound of the music, and looking at the musical music sheet. For example, when students look at a music sheet, they can chant the rhythm or pitch while fingering the melody. In addition, instrumental teachers can enable students to look at the music sheet while listening to the recording or singing the melody. At the same time, they can enable students to use colourful pens to label where they think it is difficult to play. These signals can be viewed as visual information to help them memorize. When students look at the signals, they may be aware of memorizing the difficult part while practicing because signals remind them.

In addition to a real awareness of sensory information, memorizing music also involves kinesthetic, visual, and aural imagery. Imagining the sounds and how it would feel to play from a music sheet is also a common strategy in memorizing music. This view can be seen in Davidson-Kelly K *et al.* (2015), who state that imagery can be used in playing from memory because imaging music is closely related to mental rehearsal <sup>[14]</sup>. Mental rehearsal can add the security of memory in performance because, through mental rehearsal, important information can be vivid in the mind <sup>[15]</sup>. For example, the loud notes and difficult gestures. Consequently, instrumental teachers can combine real and imagined awareness to help students memorize music. For example, listening to a recording of music while imagining every single movement in hands, looking at a music sheet while thinking about the difficult technical part of a piece and then imagining how it plays on the instrument and imagining the movement of fingers while singing before performing from memory.

## 5. Suggestions for future research

A large amount of literature considers when musicians memorize music and what instrumental teachers can do to help them. However, little literature considers the role of parents in helping students memorize music. In addition to instrumental teachers, parents are an important part of students' music learning, particularly for children. Parents can also help students learn and practice instruments <sup>[16]</sup>. In instrumental lessons, instrumental teachers can teach students how to memorize music and they can recommend some strategies. However, instrumental teachers cannot attend students' daily practice. Memorizing music successfully needs a large amount of practice time, and the process of memorizing music happens at students' homes. In terms of using multiple senses, how can parents encourage their children to use kinesthetic, visual, and aural information to memorize music? In addition, how do parents know the methods are useful for their children when they memorize music at home? Particularly, some parents who do not have musical knowledge, how can they help their children memorize music? Consequently, future research can focus on these aspects to help students memorize music effectively and play from memory successfully.

## 6. Conclusion

This essay considers the benefits of playing from memory at first. In terms of musicians, playing from memory can deepen musicians' understanding of a piece, and musicians can have more freedom to express music. In

terms of audiences, audiences can get more engaged in music because memorized performances can improve communication between performers and audiences. This study also analyses using multiple senses, including kinesthetic, visual, and aural information, to memorize music, which can enhance the security of memorized performances. Finally, this essay also gives some suggestions about the role of parents in future studies.

## Reference

- [1] Herrera M, Cremades R, 2020, The Study of Memorisation in Piano Students in Higher Education in Mexico. *Musicae Scientiae*, 24(3): 330–341.
- [2] Rubinstein B, 2022, The Pianist’s Approach to Sight-Reading and Memorizing. *DigiCat*, Czechia, 1–80.
- [3] Wilson E, Simanjuntak S, Apalat A, et al., 2022, Perceptions and Memorization Strategies of Piano Students Toward Piano Performance: A Phenomenological Study. 8<sup>th</sup> International Scholars’ Conference Proceedings: Arts and Education, 16–25.
- [4] Vieira M, 2021, Using Performance Cues as a Memorization Strategy with Group Piano Students by Implementing Teacher and Student-Directed Learning Approaches, thesis, Louisiana State University and Agricultural & Mechanical College.
- [5] Chun H, 2022, Exploring Effective Memorisation Methods for Advanced Pianists: A Systematic Literature Review. *Art and Performance Letters*, 3(4): 54–60.
- [6] Ginsborg J, 2004, Strategies for Memorizing Music. *Musical Excellence: Strategies and Techniques to Enhance Performance*. Oxford University Press, Oxford, 123–141.
- [7] Wang Y, 2022, Strategies for Improving Piano Performance Memorization Ability. *Contemporary Music*, 2022(4): 124–126.
- [8] Kopiez R, Wolf A, Platz F, 2017, Small Influence of Performing from Memory on Audience Evaluation. *Empirical Musicology Review*, 12(1–2): 2–14.
- [9] Juchniewicz J, 2008, The Influence of Physical Movement on the Perception of Musical Performance. *Psychology of Music*, 36(4): 417–427
- [10] Fonte V, Pipa L, Williamon A, et al., 2022, Memorising Contemporary Piano Music as Described by Professional Pianists. *Music & Science*, 2008(5): 1–12.
- [11] Albasini Garaulet O, 2019, Piano and Memory: Strategies to Memorize Piano Music, thesis, Classical Music Institution.
- [12] Liang F, 2023, Exploration of the Value of Hearing Cultivation in Piano Performance Teaching. *Popular Literature and Art*, 2023(16): 160–162.
- [13] Crappell C, 2019, *Teaching Piano Pedagogy: A Guidebook for Training Effective Teachers*. Oxford University Press, Oxford, 1–270.
- [14] Davidson-Kelly K, Schaefer R, Moran N, et al., 2015, “Total Inner Memory”: Deliberate Uses of Multimodal Musical Imagery During Performance Preparation. *Psychomusicology: Music, Mind, and Brain*, 25(1): 83.
- [15] Iorio C, Brattico E, Munk Larsen F, et al., 2022, The Effect of Mental Practice on Music Memorization. *Psychology of Music*, 50(1): 230–244.
- [16] De Vries P, 2021, *Music at Home with the Under-Fives: What is Happening?*, *Music in the Lives of Young Children*. Routledge, London, 59–72.

### Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.