The Impact of Music on Academic Performance of Students

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ABSTRACT

The study aimed at examining the impact of music on students' academic performance. Music education has been decimated in schools around the globe, due to competition with academic subjects and an increasing lack of funding. These days, the opportunity to learn an instrument is seen as more of a luxury than a necessary part of education. It was discovered in this study that students in high-quality school music programs score higher on standardized tests compared to students in schools with deficient music education programs, regardless of the socioeconomic level of the school or school district. Studies have also revealed that music helps in improving concentration. Now, an experiment by a primary school in England has revealed that music can also help in improving academic performance among learners. One of the recommendations was that teachers should use soft music melodies in class and at interval, especially, when trying to help the learners relax their memories.

KEYWORDS: Music, Academic performance and Students.

Introduction

Music has an impact on the moods, emotions, and behaviour of groups of people, as well as individuals. Background music can be used to create a positive atmosphere. Background music can influence student behavior, as well as physiological, emotional and cognitive processes. Kuzmich, (2010) stated that engagement with music can create positive and lasting effects on brain function. Listening to music stimulates cognition (Southgate, 2009), improves memory (Kang, & Williamson, 2014), increases attention, provides inspiration and motivation, and facilitates a multi-sensory learning experience (Brewer, 2005; Brunken, Plass & Leutner, 2004). Aktaş and Gündüz (2004) suggested that if music is listened to improperly, there are two negative effects on focusing on the topic. Firstly, allocating time for listening to music reduces the time spent for studying. It is mostly common among younger learners. Secondly, listening to music while reading inhibits the individuals' critical reading skills and deeper understanding of the text (Aktaş and Gündüz, 2004). Odabaş et al. (2008) did not support the view that listening to music facilitates the understanding of the text that is being read. Instead, like other external stimuli, listening to music inhibits the concentration during the process of reading and understanding, and that listening to music while reading inhibits the individuals' focus on the text and impairs the setting of the critical reading (Odabaş et al., 2008). Structured music lessons significantly enhance children's cognitive abilities — including language-based reasoning, short-term memory, planning and inhibition — which lead to improved academic performance.

Published in Frontiers in Neuroscience, the research is the first large-scale, longitudinal study to be adapted into the regular school curriculum. Visual arts lessons were also found to significantly improve children's visual and spatial memory.

Concepts of Music

The Oxford Dictionary defines music as "the art of combining vocal or instrumental sounds (or both) to produce beauty of form, harmony, and expression of emotion". Music can also be defined as the considerably use of timing in arranging sounds to produce a composition of melody, harmony, rhythm, and timbre. Music usually has a regular beat. It is one of the universal cultural aspects of all human societies. Music is sound that has been organized by using rhythm, melody or harmony. Rhythm is the way the musical sounds and silences are put together in a sequence. Every tune has a rhythm that can be tapped. Permana (2018) stated that Music became a unifying language among nations and involves various components, among others, melody, chord, tempo, rhythm, instrument, even language or lyrics of a nature. Music is one way for passing out messages, invoking/adulating ancestral or religious deity, entertainment, and relax, or undergo a perceived effect, motion, charisma etc. According to Barras (2014), the earliest known musical instruments are just 40,000 years old. Musical instruments appear to be a relatively recent innovation, but music itself is almost certainly significantly older. About a million years ago, the common ancestor of Neanderthals and modern humans had the vocal anatomy to "sing" like us, but it's impossible to know if they did. According to Tagg (2002), Music does not exist unless it is heard by someone, whether out loud or inside someone's head. Sounds which no-one hears, even a recording of music out of human earshot, is only potentially, not really, music. According to recent neurological research, Sousa, (2011) posits that the ability to perceive and enjoy music is an inborn human trait. Some of the questions concerning the biological evidence of music's hardwiring include (1) whether or not it is present in all cultures; (2) if the ability to process music appears early in life, i.e., it is found in infants; (3) if examples of music are found in the animal world; and (4) if there are specialized areas of the brain dedicated to it.

Types of Music

Classifications of music are often arbitrary, and may be disputed and closely related forms often overlap. Larger genres and styles comprise more specific sub-categories (Wikipedia, 2020). A music genre is a conventional category that identifies some pieces of music as belonging to a shared tradition or set of conventions. It is to be distinguished from musical form and musical style, although in practice these terms are sometimes used interchangeably (Samson, 2012). Music can be divided into genres in varying ways, such as into popular music and art music, or religious music and secular music (Wikipedia, 2017).

➢ *Popular music*: according to Collins English Dictionary (2019), popular music is music with wide appeal that is typically distributed to large audiences through the music industry. These forms and styles can be enjoyed and performed by people with little or no musical training. It stands in contrast to both art music and traditional or "folk" music (Denis, 2013). Art music was historically disseminated through the performances of written music, although since the beginning of the recording industry, it is also disseminated through recordings. Traditional music forms such as early blues songs or hymns were passed along orally, or to smaller, local audiences (Denis, 2013). Popular music is found on most commercial and public service

radio stations, in most commercial music retailers and department stores, and movie and television soundtracks. Manuel (2008) states that one criticism of popular music is that it is produced by large media conglomerates and passively consumed by the public, who merely buy or reject what music is being produced.

➢ *Art music:* Art music is an umbrella term that describes music originating from Western classical music. In other definitions, for example, Catherine Schmidt-Jones defines art music as music which demands more work and attention from the listener for full appreciation than the average popular music. To Catherine, art music includes challenging music types such as Jazz, Rock, and Classical. In general, art music is highly formalized music in which most if not all elements are specified in advance in written form, and not improvised or left to the performer's discretion. Art music refers to classical traditions that focus on formal styles, inviting technical and detailed deconstruction and criticism, and at the same time requiring significantly more effort by the listener. Art music is primarily a written musical tradition, preserved in music notations as opposed to oral, note, or recording transmissions as seen in modern and traditional music.

➢ *Secular music:* Secular music is any music not written for the church. There's got to be more to it than that, right? Nope, that's it. It's a really broad category that encompasses everything from contemporary pop music to early troubadours. Here's the thing about that though: the earliest forms of written music were almost entirely for the church, called sacred music. Secular music wasn't typically written down. Why? A couple of reasons really. First, paper was expensive and hard to get in the 900s, so why waste it on music that didn't need to be written down? Second, sacred music was written down so it could be passed out to congregations to perform. If you're making money as a secular musician, you don't want somebody else to have access to your music and take money away from you. Third, early secular music was an oral tradition, the purpose of which was purely entertainment. The largest collection of secular music from this period comes from poems of celebration and chivalry of the troubadours from the south of France (STANDS4, 2020). These poems contain clever rhyme-schemes, varied use of refrain-lines or words, and different metric patterns.

Concept of Music Melody

Melody is one of the most basic elements of music. A melody is a collection of musical tones that are grouped together as a single entity. Most compositions consist of multiple melodies working in conjunction with one another. Melody is a linear sequence of notes the listener hears as a single entity. The melody of a song is the foreground to the backing elements and is a combination of pitch and rhythm. Sequences of notes that comprise melody are musically satisfying and are often the most memorable part of a song. Vernon (2005) reported that the melodies existing in most European music written before the 20th century, and popular music throughout the 20th century, featured "fixed and easily discernible frequency patterns", recurring "events, often periodic, at all structural levels" and "recurrence of durations and patterns of durations". Melody is to music what a scent is to the senses: it jogs our memory. It gives face to form, and identity and character to the process and proceedings. It is not only a musical subject, but a manifestation of the musically subjective. It carries and radiates personality with as much clarity and poignancy as harmony and rhythm combined. As such a powerful tool of communication, melody serves not only as protagonist in its own drama, but as messenger from the author to the audience (Wikipedia 2021).

Concept of Study Concentration

Concentration refers to the ability to give something undivided attention to the exclusion of other distractions. Most students report dissatisfaction with their ability to concentrate and feel they do not work as efficiently as they would like. You need to bear in mind that most adults can concentrate on a task for a period of 35 to 45 minutes before growing distracted. However, there are some techniques that you can utilize that may help minimize external and internal distractions so you can use your study time more effectively. Ways of build concentration are

 - ➢ *Develop an interest:* An excellent way to do this is by previewing the material. This will acquaint you with the subject and give you some background information. You may also write some questions that you think will be answered through the reading. This will focus your attention.
 - ➢ *Set a goal:* Be specific in setting goals. Don't just say you are going to "study chemistry." Set a definite plan: "I will read ten pages and answer five questions." By setting a goal you have established an objective for your study time. Otherwise, how do you know when you are done?
 - ➢ *Prepare to concentrate:* Study in a place designed only for study. Have the books and supplies you need in your study area. Every time you have to get up to get something, you break your concentration.
 - ➢ *Vary the activity:* Concentration is a demanding mental task. No one can sustain peak attention over a prolonged period. Anticipate this by varying your activity from time to time. Read for a period of time, and then switch to taking notes or reciting aloud. By doing this, you will find that you won't tire as easily.
 - ➢ *Prevent daydreaming*. Everyone daydreams. The best way to overcome daydreaming is to often have nothing to concentrate on. If your approach to the assignment is unplanned, that in itself may become a distraction. You need to organize the assignment into a series of specific tasks. By previewing the material, first you are better able to organize the assignment.

Concept of Academic Performance

Academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measures achievement using classroom performance, graduation rates and results from standardized tests. Academic performance has always been associated to the evaluation of tests result, which are corresponding to student's IQ, and leaving aside other personal characteristics. Academic performance refers to the learning outcomes which are often used in manners that create understanding of different academic levels which are measurable and observable in schools. For instance, students' performance based on reading, selection of one or more schools within each district, Academic performance is a multidimensional construct composed of the skills, attitudes, and behaviors of a learner that contribute to academic success in the classroom (Hijazi & Naqvi, 2006). It is a satisfactory and superior level of performance of students as they progress through and complete their school experience (Tinto, 2003). The implication of this definition is underscored by research which repeatedly demonstrates that the vast majority of students who withdraw from school do so for no reason other than poor academic performance (Hijazi & Naqvi, 2006; Tinto, 2003). Although the importance of academic achievement is rarely questioned, reaching unanimity regarding its measurement has been elusive. The measurement of students' academic performance continues

to be a controversial topic among policymakers, measurement experts, and educators (Elliot, 2007; Johnson, 2003). Researchers have used a variety of ways to measure academic achievement such as report card grades, grade point averages, standardized test scores, teacher ratings, other cognitive test scores, grade retention, and dropout rates (Burns & Darling, 2002). However, for the purposes of this study, student academic performance is defined by the degree to which a student is able to accomplish a given class work in the school setting.

Music and Improvement of Academic Performance

Music is an essential ingredient that boosts inspirational IQ of students towards academic improvement. It carries a powerful emotional effect on students' academic performance. Also, the positive impact of music on populace has increased the level of listeners globally. The power of music was the major reason why educational sector adopt the placement of TV and other listening gargets in their various offices. According to (Schellenberg 2004), listening to music can improve one's intellectual sagacity. Moreover, musical aptitude is related to general intelligence (Lynn et al. 2009). Thus, it can be argued that learning music can probably improve musical aptitude as well as non-musical abilities (Schellenberg 2004). This assumption is in line with the concept of "musical aptitude in development," since musical potential is affected by the quality of environmental aspects. Additionally, musical aptitude is also related to better academic achievement (Johnson 2000). Music lessons produce a small increase in IQ (Schellenberg 2004) and have slight positive associations with measures of intelligence. Schellenberg (2006) reported that music enhances academic performance even after individual differences in general intelligence were established. Many researchers in field of neuromusicology shows that music is power tool for improving special-temporal reasoning. That is cognitive ability to observe in detail pictures and to recognize, compare and establish relations between patterns and details of some subject. Temporal element hires child ability to think in advance. Johnson (2017) stated that students in high-quality school music programs score higher on standardized tests compared to students in schools with deficient music education programs, regardless of the socioeconomic level of the school or school district. All these activities require a level of concentration, ability to memorize, motor coordination and recognition of symbols. Because of all those activities, those children have higher level of executive functions which includes playing, strategizing attention to details and require simultaneous analyses of both cognitive and emotional aspects. Music has provided many students with an exposure to a variety of learning experiences that can manifest a positive and lasting influence on youth development. This emphasis on core subjects and standardized tests, as the primary measure of academic performance, has had the effect of marginalizing non-core subjects such as physical education, art, chorus, and instrumental music (Armstrong, 2006).

Challenges in Music Education

There are challenges of little music-making in many music lesson classrooms reported at both primary and secondary levels. Reasons for this vary according to context, but are centered on lack of teacher confidence, poor spaces, resources, teaching strategies over-weighted to verbal and written analysis. As stated by Hamlyn (2021) the power of music as a force for good in the lives of children, their families and the cultures of schools is not yet widely understood nor consistently realised at the school level. Mostly as a result of:

Discipline: Demonstration of unacceptable behaviors is also due to a number of other factors, including weak teacher-student relationships, lack of motivation from the student, and low expectations from the instructor (Dolezal, Welsh, Pressley, & Vincent, 2003; LePage et al., 2005; Rozmajzl & Bourne, 2006). Despite teacher's best efforts, students will make decisions opposite to the expectations set forth in the classroom. When this occurs, some form of intervention should be implemented (Dougherty, 2002; Evertson & Poole, 2008). For less severe behaviors, non-verbal cues such as eye contact and proximity can be effective, while verbal reminders and planned ignoring are also recommended (Burden, 2000; Dougherty, 2002).

Retention and progression in music: Retention and progression in music continue to be poorly understood and imperfectly tracked. Schools, teachers and music leaders are often unclear on how to consider retention and progression; with a range of flawed measures, inappropriate assessment strategies and unhelpful targets being deployed. Challenges in understanding retention and progression connect to questions of pedagogy, teacher experience, and understanding of pupils' wider music lives as well to the structure of the National Curriculum. There is often a lack of effective connection between music within the classroom and music beyond the classroom. This means that young peoples' engagement and progression are not always fully recognised, nor well-supported.

Conclusion

Based on the findings of the study, music education has been annihilated in globally, especially in the udder developed and developing countries due to competition with academic subjects and an increasing lack of funding. Also, the opportunity to learn an instrument is seen as more of a luxury than a necessary part of education. Students exposed high-quality school music programs score higher on standardized tests compared to students in schools with deficient music education programs, regardless of the socioeconomic level of the school or school district. It is also concluded that music helps in improving concentration.

Recommendations

1. Teachers should use soft music melodies in class and at interval, especially, when trying to help the learners relax their memories.

2. Ministry of Education should ensure that music is made mandatory in all schools so that it can help improve the learner's attitude and academic performance in any given subject.

3. There is need for music educators to embark on research that can improve the brain and Individuals interest for given subject or course through music.

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