Perception Towards Classical Music and Academic Performance of SHS Students

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Abstract

This study aimed to understand how SHS students perceive classical music and examine its relationship to their academic performance. The study employs a correlational approach, utilizing a 4-point Likert scale to assess perception, the 1st Semester Average as a measure of academic performance, and employing a Pearson Correlation to determine the significance of the relationship between the two variables. By employing a purposive sampling technique, 50 SHS students were selectively chosen for this study. The research utilized mean and standard deviation calculations, as well as the Pearson product-moment correlation, to analyse the data. The research findings indicate that students possess a positive perception of classical music and perceive it as a source of increased enjoyment while studying. It also showed that there is no significant relationship between classical music and academic performance. Thus, listening to classical music does not thoroughly affect the academic performance of the students.

Keywords: classical music, academic performance

1. Introduction

According to Rono (2013), academic performance of students is a key feature in education. It is also the students one of the vital elements through which the whole education system revolves. Abdullah (2016) defined academic performance as the knowledge gained which is assessed by marks by a teacher and/or educational goals set by students and teachers to be achieved over a specific period. They added that these goals are measured by using continuous assessment or examinations results. They opined that the academic performance of students determines the success or failure of any academic institution. Additionally, M.S. Farooq (2011) emphasized that the topmost priority of all educators is academic performance of students. Dimbisso (2009) stated that academic performance refers to the completion in a particular subject area; the academic performance is measured by the students' achieved grades, marks, and scores percentage.

Johnson (1999) said that there have been numbers of studies determine the positive effects of listening to music has on learning. Based on the study of N. Kumar (2016), listening to music while studying has become a usual practice in the student population. While one group of students claim it would enhance their curricular efficiency, on the other hand, some researchers deny such assumptions.

According to Dewar (2022), in the popular culture, "the Mozart effect" refers to the claim that listening to Mozart's music can increase your general intelligence, or IQ. In the scientific community, the term refers to something more specific: the contention that people enjoy brief (10-15 minute) improvements in visual-spatial

reasoning after listening to short excerpts of Mozart's music. The term has also been used to describe the apparent health benefits of listening to music — including benefits for people suffering from anxiety, hypertension, and epilepsy.

Some studies use baroque classical music for their study since according to Team (2018), baroque music generally travels within 50 to 80 beats per minute, it "stabilizes mental, physical, and emotional rhythms," which creates a strong mental environment for studying. And other studies on music and concentration have concluded that baroque music is a particularly useful study music, this study will focus to another genre of classical music.

2. Literature Review

The good academic performance of students at the Senior High School is of paramount importance in every educational system. Brew et al. (2021) emphasized that it is highly significant to note that a human being's entire existence is commonly based on the amount of knowledge he or she acquires, how much this knowledge is utilized in developing himself, his country, and the world at large.

As stated by Sanz (2021), academic performance is not only associated with intellectual quotient (IQ) but there are multiple variables and dimensions to which a certain predictive value can be attributed. Having a background music while studying increase student motivation, positive behaviour, relaxation and staying on task (White, 2007).

According to Mustafa (2022) scientific research has identified that music has the potential to help boost a student's creativity while at the same time giving them a fresh perspective on learning. When it comes to concentrating on homework turns out classical music could be the key to helping you reach that top grade. A new US study claims that students who listen to classical music during lectures, studying or while they sleep will person butter in exams (Asprou, 2020). Summary research from the Institute of Education (IOE) revealed that children listening to classical music can exchange their careful listening skills as well as their ability to concentrate (Ottewill, 2014).

Luisa (2013) stated that the influence of background music on rates of learning has been the subject of research for several decades, but researchers are now still trying to find out the nature of its benefit for learning, and if such benefit does exist. (Namwamba)'s research investigates the effect of background classical instrumental music on algebra test scores of an engineering college student and the corresponding algebra-ability of self-efficiency. The research found evidence that correlates the average of student's algebra test scores and average test completion time with the volume of background music that previous research had not considered.

In accordance with research, experimental data revealed higher incidence (15%) of correct answers while listening to soft music than other fast track or instrumental music. The student was conducted to explore the effect of music on curricular activity of student and whether this trend is to rule out it is beneficial to the students in their academic performance (Naveen, Kumar Wajidi, Mohamad; Chian, Yong Tai; Vishrooth, S., 2009).

University research in France students who listened to a one-hour lecture where classical music was played in the background scored significantly higher in a quiz on the lecture when compared to a similar group of students who heard the lecture with no music. The researcher speculated that the music put students in a heightened emotional state making them more receptive to information. It is possible that music provoking a change in the learning environment influenced the student's motivation to remain focused during the lecture which led to better performance on the multiple-choice quiz they wrote.

Moreover, study revealed Filipino students acquired good grades but can't be directly, attributed to music alone because not all students listen to music (Blanco, Desserie; Nartea, Mecmack, 2020). Results also revealed no significant relationship between year level and impact of listening to music to the academic performance, but significant to college and time length of listening. Type of music and GWA also were significant to the impact of listening to music.

Additionally, music accounted for an additional part of variance the effects of music on academic

performance is not only about affects and further research should investigate the underlying mechanism resulting from a charge in the perception of the learning environment (Dosseville Fabrice; Laborde Sylvain; Scelle Nicolas, 2012). Research was conducted to investigate the influence of music during learning on the academic performance of undergraduate students and more particularly the influence of include by music. There were 249 students that was involved while conducting the study they were divided into 2 groups a control group and on experimental group. Both groups attended the score videotaped lecture just after the lecture both groups had to fill out a multiple-choice questionnaire (MCQ) aimed to assess their learning during the lecture. The MCQ scare of the experimental group was significantly higher than that of the control group.

3. Methodology

The main purpose of the study is to understand how SHS students perceive classical music and examine its relationship to their academic performance. This research uses a correlational method. According to Cherry (2022), correlational study is a type of research design that looks at the relationship between two or more variables. Correlational studies are non-experimental, which means that the experimenter does not manipulate or control any of the variables. The group of respondents were determined using non-probability sampling technique. According Nikolopoulou (2022), non-probability sampling is a sampling method that uses non-random criteria like the availability, geographical proximity, or expert knowledge of the individuals you want to research to answer a research question. Non-probability sampling is used when the population parameters are either unknown or not possible to individually identify. According to Crossman (2017), a purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study. The sampling technique used in the study is purposive sampling. The respondents consisted of 50 SHS students at Dagatan National High School.

After determining the respondents of the study, the researchers prepared a Likert scale for them to answer. According to Nikolopoulou (2022), a Likert scale is a rating scale used to measure opinions, attitudes, or behaviors. It consists of a statement or a question, followed by a series of five or seven answer statements. Respondents choose the option that best corresponds with how they feel about the statement or question. Because respondents are presented with a range of possible answers, Likert scales are great for capturing the level of agreement or their feelings regarding the topic in a more nuanced way. Aside from the Likert Scale, the researchers will also measure the academic performance of respondents by determining their general average grades in the 1st Quarter. According to York (2015), academic achievement is almost entirely measured with grades (by course or assignment) and GPA. This is unsurprising since grades and GPA measures are by far the most readily available assessments for institutions. The accomplishment of learning objectives and the acquisition of skills and competencies can be measured at the course, program, and institutional level.

To answer the descriptive questions, mean and standard deviation will be used. According to Sykes (2016), mean (average) is the most common measure of central tendency and refers to the average value of a group of numbers. Sergent (2022) defined standard deviation (SD) as a measure of the extent of scattering in a set of values, typically compared to the mean value of the set. The calculation of the SD depends on whether the dataset is a sample or the entire population. Ideally, studies would obtain data from the entire target population, which defines the population parameter. However, this is rarely possible in medical research, and hence a sample of the population is often used.

To answer the inferential question, Pearson Product Moment of Correlation will be used. According to Chee (2015), Pearson's product moment correlation coefficient, or Pearson's r was developed by Karl Pearson in 1948 from a related idea introduced by Sir Francis Galton in the late 1800's. In addition to being the first of the correlational measures to be developed, it is also the most used measure of association. All subsequent correlation measures have been developed from Pearson's equation and are adaptations engineered to control violations of the assumptions that must be met to use Pearson's equation.

4. Results and Discussion

This chapter presents the tables that display the findings of the study, along with the interpretation and analysis of the collected data. The entire process of performance and investigation was guided by the problem statement outlined in Chapter 1, ultimately leading to the formulation of conclusions and recommendations.

Table 1. Motivation of the Respondents

Indicators *Listening to classical music ...	Mean	Standard Deviation	Interpretation
1. creates positive environment for my studies.	3.22	0.51	Agree
2. boosts my concentration while studying.	3.16	0.62	Agree
3. enhances learning efficiency.	3.00	0.67	Agree
4. contributes significantly to my intelligence.	2.94	0.62	Agree
5. improves the performance of my brain.	3.26	0.60	Strongly Agree
6. improves my abilities in memorizing.	3.16	0.79	Agree
7. makes my thinking clearer.	3.22	0.68	Agree
8. brings positive influence on learning.	3.30	0.61	Strongly Agree
9. indulge me in studying.	2.98	0.68	Agree
10. improves academic performance.	3.16	0.65	Agree
11. reduce my academic stresses.	3.34	0.63	Strongly Agree
12. gives me good learning productivity.	3.26	0.66	Strongly Agree
13. makes me more receptive to information.	3.06	0.68	Agree
14. boosts my thinking skills.	3.28	0.67	Strongly Agree
15. helps me enjoy while studying.	3.54	0.54	Strongly Agree
Overall	**3.19**	**0.64**	**Agree**

Legend: 3.50-4.00- Strongly Agree (Very High); 2.50-3.49- Agree (High); 1.50-2.49- Disagree (Moderate); 1.00-1.49- Strongly Disagree (Low)

Table 1 shows the perception of SHS students towards classical music. Indicator 15 which states that "Listening to classical music helps me enjoy while studying." obtained the highest mean of 3.54 and a standard deviation of 0.54 with an interpretation of "strongly agree". According to Zatorre studies, when we listen to music, our brains release dopamine, which in turn makes us happy. That is why students enjoy listening to classical music while studying.

On the other hand, indicator 4 which states that "Listening to classical music contributes significantly to my intelligence obtained the lowest mean of 2.94 and standard deviation of 0.62 with an interpretation of "agree". This indicator got the lowest score as according to Mussachia et al. (2020), subsequent studies showed that listening to music does not actually make you smarter, but rather raises your level of enjoyment and decreases your feelings of stress, which sometimes result in better focus and improved test scores.

Taken as a whole, the perception of the SHS students towards classical music has a mean of 3.19 and a standard deviation of 0.64 interpreted "agree". Since the overall interpretation on the perception of the students towards classical music is "agree", it can be inferred that listening to classical music can do the following indicators listed. Listening to classical music does have a positive influence on students according to their perception.

Table 2. Academic Performance of SHS Students based on their 1st Quarter General Average

Indicators	Minimum	Maximum	Mean	Standard Deviation
1st Semester General Average	80	94	87.48	3.97

The table shows the 1st Semester Grades of Senior High School students in Dagatan National High School. Given the minimum grade of 80 and the maximum of 94, it can be said that they are not chosen by their grades. The overall mean of 50 students is 87.48 and its standard deviation is 3.97. Their overall mean is above average; it can be inferred that students who listen to classical music have a passing grade.

Table 3. Relationship between Classical Music and Academic Performance

	Academic Performance		
Classical Music	**p-value**	**r-value**	**Interpretation**
	0.06	0.69	Not Significant

Legend: p-value<0.05 Significant; p-value>0.05 Not Significant

Table 3 shows the result of test correlation between classical music and academic performance of Senior High School students.

It can be seen from table 3 that the p-value is 0.06. This means that classical music is not significantly related to the academic performance of SHS students. This may be because music has the power to improve intellectual performance and cognitive function but not raising the IQ (Coast, 2019).

According to Dr. Frances Rauscher cited by Higgins (2012), one of the researchers behind this experiment, has repeatedly emphasized that the results only had to do with spatial-temporal reasoning, not general intelligence. Thus, no research has ever demonstrated that merely listening to Mozart's music can have a lasting impact on general intelligence or IQ (Dewar, The Mozart effect: The truth behind the claims, 2022).

5. Conclusion

This study's main purpose is to understand how SHS students perceive classical music and examine its relationship to their academic performance. The study revealed that students hold a positive perception towards classical music. Additionally, it was found that listening to classical music while studying enhances the enjoyment of the task. However, there was no significant evidence to suggest that listening to classical music contributes to one's intelligence. The result revealed that there is no significant relationship between classical music and academic performance of students. Therefore, the hypothesis stating that there is no significant relationship between classical music and academic performance of students is accepted at 0.06 level of significance.

strength and guiding them on the right path.

References

Abdullah, A. N. (2016). Academic Performance of Senior Secondary School Students: Influence on Parental Encouragement and School Environment. Rupkatha Journal on Interdisciplinary Studies in Humanities.

Asprou, H. (2020). Chopin and Beethoven helps students pass exams, classical music study reveals.

Blanco, Desserie; Nartea, Mecmack. (2020). Music and Academic Performance; Impact of Listening To Classical Music.

Brew, Evans Austin ; Nketiah, Benjamin ; Koranteng, Richard . (2021). A Literature Review of Academic Performance, an Insight into Factors and their Influences on Academic Outcomes of Students at Senior High School. Open Access Library Journal.

Brydon-Miller, D. C. (2014). Tge Sage Encyclopedia of Action Research.

Chee, J. (2015). Pearson's Product-Moment Correlation: Sample Analysis.

Cherry, K. (2022). What is a Correlational Study?

Coast, S. C. (2019, October 30). The effects of classical music on the brain. Retrieved from https://www.symphonycentralcoast.com.au/author/symphony-central-coast/

Crossman, A. (2017). understanding purposive sampling: an overview of the method and its implications.

Dewar, G. (2022). The Mozart effect: the Truth Behind the Claims.

Dewar, G. (2022). The Mozart effect: The truth behind the claims.

Dimbisso, T. (2009). Understanding Female Students' Academic Performance: an Exploration of the Situation in South Nation's Nationalities and People's Regional State Etiopia.

Dosseville Fabrice; Laborde Sylvain ; Scelle Nicolas . (2012). Music during lectures: Will students learn better? Learning and Individual Differences, Volume 22, Issue 2, 258-262.

Higgins, K. M. (2012). The music between us: is music a universal language?

Johnson, M. (1999). Communication in Classroom.

Luisa, A. (2013). The Effect of Classical Music on the Comprehension of Selected Grade 9 Students.

M.S. Farooq, A. C. (2011). Factors Affecting Students Quality of Academic Performance; A Case of Secondary School Level. Journal of Quality and Technology Management.

McCobes. (2019). Descriptive Research:Definition,Types,Methods and Examples.

Mussachia, Gabriell; Khalil,Alexander. (2020). Music and Learning: Does Music Make You Smarter?

Mustafa, B. (2022). The powerful effect of music on academic performance of college students.

N.Kumar, M. W. (2016). The effect of listening to music on concentration and academic performance of student: cross-sectional study on medical undergraduate students. Research journal of Pharmaceutical, Bio;ogical and Chemical Sciences, 1190-1195.

Namwamba, J. (n.d.). Effect of Background Classical Instrumental Music on Performance in Algebra Test and Algebra Self-Efficacy of College Students .

Naveen,Kumar Wajidi, Mohamad; Chian, Yong Tai; Vishrooth, S. (2009). he effect of listening to music on concentration and academic performance of the student: Cross-sectional study on medical undergraduate students.

Nikolopoulou, P. B. (2022). Non Probability Sampling.

Ottewill, J. (2014). Listening to classical music improves concentration.

Rono. (2013). Factors Affecting Pupils' Performance in Public Primary Schools at Kenya Certificate of Primary Education Examination in Emgwen Division,Nandi District, Kenya.

Sanz, M. (2021). Exploring Academic Performance: Looking beyond Numerical Grades.

Sergent, O. a. (2022). Standard Deviation.

Sykes, G. V. (2016). Statistical Terms: The Meaing of Mean, and other statistical terms commonly used in medical research. South African Dental Journal.

Team, S. (2018). Music Genre That Help You Study.

Thakur, H. (2021). Research Design.

White, K. (2007). The Effects of Background Music in the Classroom on the productivity motivation and behavior of fourth grade students.

York, G. a. (2015). Defining and Measuring Academic Success.