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BACKGROUND MUSIC IN THE CLASSROOM AND STUDENTS' PERFORMANCE

Abstract

This paper investigates background music as beneficial to students' performance. It assesses the current state of the educational system and explores ways through which the educational system in Nigeria can harness the potency of music as a tool to influence behavior and drive performance. The study employs experimental research design for data collection. Previous results show that background music has a positive impact on students' performance and affects students' behaviour. This arguably, is still a contestable subject matter due to lack of sufficient evidence to verify such claims (Hallam & Price, 1994; Kiss & Linnell, 2022). Results obtained in this study suggests that background music has a positive impact on the student's performance as our findings show that the difference between the performance of the students tested with background music is significantly different from those of the same students tested without background music

Key words: Achievement, Attention, Background, Music, Performance

Background of the study

Introduction

The current study is necessitated by the personal experience of the researcher observing the use of background music (BM) in a highbrow (private) school here in Nigeria and the claim in some quarters that music (especially background music) possesses the power to positively affect behavior and influence performance. The claim with regards to the power of music in influencing behaviour and promoting academic performance has generated a plethora of arguments for and against. Scholars who argue against the claim do so on the ground that there is a lack of sufficient evidence to substantiate it (McClenaghan, 2019)

While this argument has been a validated part of academic conjectures in advanced climes, the import of background music is not a part of the norm in Nigeria as most of the schools are government owned with their inadequate facilities. The scanty available facilities are often from the private or rather public sector where a large percentage of the allocated time is hardly enough

to be assigned to music in the curriculum (due to the cost involved) not to mention having background music during school work and activities

The idea of incorporating 'Background Music' (BM) music into school work could present several possibilities which may not be immediately apparent unless attempts are made to test or verify its potency. Some studies lay claim to the power of music to influence behaviour. One such study holds that 'playing music in the classroom activates different brain receptors during study time' (Ray, 2023). Should this claim be true, then it behooves stakeholders in the educational sector to put in place measures that will aid the desirable advancements as not doing so will not only deprive young Nigerians of the benefits obtainable from BM but also put them at a disadvantage. For this reason, investigating the impact of the use of background music in the classroom is imperative in ascertaining and verifying current trends in music educational practices which is the focus of this study.

In this study, an attempt is made to examine reason(s) why music is claimed to be a powerful tool in influencing behaviour and promoting achievement. In addition, background music as a concept is reviewed and important themes are x-rayed in order to shed more light into the subject matter. This is necessary because of the various notions that the concept elicits. Some scholars see the idea of exposing everyone to background music as a worrisome concept, outright distraction while others claim it is beneficial.

Young people have been found to engross deeply with music listening and participation. Studies carried out in both the United States (US) and the United Kingdom (UK) has shown that the time spent in music listening among adolescents is so substantial that they "approximate those spent in the classroom from Kindergarten through High school" (Dobrota, 2014). This is so because music provides much utility for these adolescents that they find it so handy. Some of the possible benefits of background music in the classroom according to studies include shutting out distraction, conditioning mood, relieving boredom and helping to stay focused (Griffin, 2018)

Griffin, (2018) notes that if music listening takes such a huge part of youth life, why not consider including it in the classroom? Two possible reasons why educators should consider experimenting with background music according to Griffin include its influence on behaviour (it conditions the learning environment) and its ability to improve learning outcomes by improving the quality and quantity of students' work and achievement. Existing literature on the benefits of music to the young and how valuable background music is in promoting good behaviour and influencing achievement are abound, however, the question still remains how is the use of music possible in a classroom situation.

Griffin, (2018) cautioned that the music to be used as a background during class activities must be 'appropriately' selected due to the fact that background music may be distracting especially during very complex tasks—making one to ask, if its use in the classroom is still beneficial (Lehmann & Seufert, 2017)

Writing on the benefits of BM, some scholars observed that when children are still very little, music is often used to teach them skills like language, emotional development, sports, games and numeracy, but this is stopped as soon as they attain a certain age (Sigman, 2005; Ray, 2023) This ought not to be so (Ray, 2023). The author reasoned that, if music could get children this far, it can still hold some benefit such as helping to reducing stress, decreasing depression, enhancing

learning and memorization (Panam, 2019), boosting creativity and increasing concentration (Holly, 2024) among others

The business of education hinges upon the innate desire of man to understand the world around him and to be able to master it (Okafor, 2012). This mastery results in what is referred to as self-growth, which inadvertently builds self-esteem and a further desire for more knowledge (Griffin, 2006). Self-esteem ranks at the top of the ladder of human needs and "is essential for positive human behaviour and for further learning preparedness. It provides us with the courage to try new things and decreases our fear of failure" (Griffin, 2006). Upon the attainment of self-growth, the individual is ready with the needed skill to face life challenges. A goal that the educational system strives for is the continuous development of divergent learning methodologies and strategies for academic achievement or the development of man for mastery (Australian Education Research Organization, 2023). The attainment of this goal is to produce individuals capable of meaningfully contributing to the development of the society through their individual and or collective achievements

The educational system uses academic achievement as a yardstick for measuring self-growth among scholars and academic achievement which according to Zheng and Mustapha (2022), "is a direct manifestation of learning effectiveness". Since the aim of education is the development of the physical, mental, and social well-being of students, by exploring every means possible to help the scholar attain the set educational goal(s) and to retain such in both the short, medium, and long term, the educational system employs means such as the deployment of learning resources, the creation of the right learning atmosphere, and, of recent, the employment of BM to mediate between the learner, learning, and the readiness to learn in order to put the learner on the path to academic mastery of learned material

An outline of four key domains that sheds light on how mastery of learned material takes place was proffered by the Australian Education Research Organization (AERO, 2023) to show how these can be aligned with effective teaching. This model posits that first; learning is a change in the long-term memory due mainly to the interaction between the short- and long-term memories. In this model, the short-term memory-a kind of limited mental workspace, is where students actively engages with the learning material, the result of which is committed to the long-term memory for future use

Secondly, the model holds that learning is better maximized when the amount of information to be processed by the learner is given in manageable bits or steps since the short-term memory has a very limited space. Doing this in addition to feedback, scaffolding, guidance, and the opportunity to practice helps the learner to connect to and retain learning. The third step in AERO's model says that with the accumulation of knowledge in the long-term memory, growth is achieved, and this progresses to the ability to retrieve stored knowledge and competencies and to be able to combine the same in various ways to proffer solutions to new challenges and in new circumstances

The final key area that helps us to understand how learners learn is the understanding that a meaningful transfer of knowledge from short-term memory to long-term memory "requires the learner's focused attention and an active engagement in a supportive and responsive learning environment" (AERO, 2023). Focused attention helps the learner to learn, and this is further heightened by a supportive learning environment that encourages the learner to stay focused on

acquiring the skills necessary to remain successful in learning. How this (a focused attention) can be attained is where the use of BM comes in

The Research Problem

As a communicative art, music is utilitarian. This singular reason accounts for why people and localities immerse themselves in the enjoyment of it. The utility derived from music also places on it the benefit of being a universal language – one that is used and understood globally. For instance, as a cultural commodity, norms that are propagated through music are often strictly adhered to by the people and communities who own such norms because it provides cognition for them. The norms encoded in and conveyed through music form and put people in line with acceptable behavior or codes within their given society (OpenStax, 2011, p. 3)

Music has been put to different uses in history, as myriad of studies have shown. Studies on the effect of BM on people have advanced to areas covering music therapy, medicine, psychology, retail marketing (Aloisio, Tang & Pesonen, 2015; Griffin, 2006) as well as education (Lee & Welch, 2017). However, its use in school as a tool to influence behaviour and to drive performance is uncommon in Nigeria. For this reason, this study attempts to fill the gap by providing a home-grown study through which the claim on the power of music to influence behaviour can be tested in order to ascertain its veracity

Review of Related Literature

Discourses on the effect of music on people and situations have pervaded scholarly writings in musicology, ethnomusicology, and other branches of learning. These discourses hold that music is beneficial in many respects to humans as it conditions behavior in ways that are phenomenally unparalleled (Agu, 2012; Agu & Ezebube, 2022; Almasidis, 2021; Aloisio, Tang & Pesonen, 2015; Mbaegbu, 2015). Furthermore, music has been explored in time to provide a platform for the exploration of knowledge, creativity, collaboration, and expression (Hodges, as cited in Timothy, 2021). Ray (2023) opines that music can be used for various cognitive benefits since it in itself is an essential part of education. The author asserts that “music may be the most versatile teaching tool available to children”.

Music connotes different things to various people. According to Ray, (2023), “music resonates within the soul of every being differently” Frith (1996) opines that, “Music constructs people’s sense of identity...” Music becomes the lens by which people and indeed cultures not only read through the psyche of others but it is also a mirror through which they see and develop their sense of self or identity. Writing on Nigerian musical art, Sylvanus (2020) opines that a critical understanding of the depth of musical art in Nigeria will require both a ‘devotional’ as well as a ‘scientific’ approach – suggesting that the benefits contained in the Nigerian musical art result in adduced meanings and should elicit responses that are immediate in the first instance and mediated in the second. The potency of music is endless. This accounts for why Ray (2023) stated that “music can make us laugh, cry, and remember the forgotten...”

History revealed that music has been employed for different reasons and occasions (Inskip & MacFarlane cited in McClenaghan, 2019). This includes being used to ease off the drudgery of work and the boredom associated with it. It is a common sight in places like Langtang, Shendam, and other places around Plateau State and indeed the entire northern Nigeria to witness

communal farm work being accompanied with live drumming, singing, and music-making. Moreover, music has served as a dais for social reforms – creating, in some instances, cultures and subcultures. Music is known to have been used as a source of motivation when presenting a common front or fighting for a cause (Rollings, 2010). During the Nigerian Civil War of 1967–1969 for instance, soldiers on both sides of the battlefield relied on songs such as ‘*Ina Za mu ShaRuwa*’ and *NzobuEyiMba*’ to boost their morale. This attests to the potency of music

The use of background music is replete in contemporary society. Background music, in particular, has been “used in marketing, sports, medicine, and psychology. It is also used to reduce stress, create an illusion, manipulate perception, alter people’s emotional state, and enhance well-being” (Griffin, 2018). These and other uses that music is put into underscore the relevance of music in society, as observed by Ray (2023), who noted that “there is a reason why music has been the lifeblood and soul of every culture globally since the beginning of” time” – affirming Idolor’s contention that no phenomenon void of utility survives in a society (Idolor, 2002: p. 2)

Aim

The aim of this study is to investigate the claim that the use of background music in the classroom can positively impact on behaviour and subsequently drive performance. The study’s specific objectives are to find out:

- i. whether background music in the classroom actually affect behaviour
- ii. whether background music in the classroom actually affect behaviour in such a way as to drive performance

Research Questions

- i. Does background music in the classroom actually affect behavior?
- ii. Does background music in the classroom affect behaviour in such a way as to drive performance?

Research Hypothesis

H₀: $\mu_1 - \mu_2 = 0$

H₁: $\mu_1 - \mu_2 \neq 0$

H₀: There is no significant difference between the mean score of the test with BM and the test without BM

H₁: There is a significant difference between the mean score of the test with BM and the test without BM

Scope of the study/Delimitation

Several themes have emerged in the course of the study of the effect of BM on academic achievement. These include studies around the effect of BM on mood; effect of BM on students’ focus (Dobb et al; Hallam et al; Hetland; Lehmann et al; Rauscher & Ribar; Schellenberg as cited in Hargrove, 2022); how BM affect different population (Hargrove, 2022); how BM affect musicians and non-musicians (Hargrove, 2022); effect of BM on special education students (Aheadi et al; Črnčec et al; Katagiri; Legutko et al; Lum; Ockelford as cited in Hargrove, 2022),

effect of live BM on students' productivity (Hargrove, 2022); effect of BM on productivity and motivation (Speer, 2011; White, 2007); effect of BM on concentration (Sigman, 2005) and the effect of BM on workers' selective attention to mention few. However, this paper primarily focuses on the effect of BM on students' performance – it investigates specifically how BM influences behaviour and how this drives performance

Significance of the study

This study is significant because it attempts to domesticate a study considered to be very crucial to student's achievement in the classroom and from parts of the world considered to be advanced. It is also significant because it provides data that will better equip stakeholders with information on the importance of music in influencing students' behaviour. Furthermore, data from this study will help curriculum implementers gain more perspectives into how student's achievement in the classroom can be enhanced using music. Data from this study will also help educators in Nigeria to discover educational practices that may work for their scholars and their learning situation(s)

Theoretical Framework

Background music, as the name suggests, is the music that is played or heard in the background while people engage in other activities (Speer, 2011). This type of music is listened to passively because it does not require the listener to participate in identifying elements of music or to analyze as carried out during listening sessions. In the concert, the concert goer listens to the music to appreciate its value (Speer, 2011)

According to Stramkale (2020), "We often hear the background music in different life situations and places, cafes, shopping malls, lounges, hotel lobbies, or on the radio. The music is playing, but we are not listening to it". This means that the primary aim of BM is not the sole focus of the listener; rather, its character and/or ambience level are often deliberately chosen in such a way as to condition behavioral and emotional responses in the listener (Wikipedia, 2019). This study adopts the definition of BM by Griffin (2006), which states that BM is "music intended to be heard but not actively or purposely listened to," as its working definition

Broadly speaking, BM has been extensively used in different scenarios, including marketing, consumerism, shopping, reading, driving, cleaning, film, advertisement, sports, medicine, and psychology, etc. (Stramkale, 2020). In modern times, schools and teachers have employed background music to condition the learning environment, alter mood, or aid transition between classes, subjects, and topics. In addition, BM has been used to help students to relax, to introduce new concepts, to focus the student's attention, to calm restive scholars, and to mask out unwanted sound. BM is also used at playtime (Lee & Welch, 2017; Sigman, 2005)

Several studies have demonstrated the influence of background music on students and the learning environment. For instance, a study conducted in 1980 showed that music listening can have an influence on the way the body responds to changes in the environment. This study showed that music can "alter brain waves, heart and pulse rate, blood pressure, respiration rate, and muscular responses" (Sigman, 2005). Another study conducted in 1996 in a preschool showed that the pupils that were exposed to background music tire less quickly than those that were not exposed to music (Strickland as cited in White, 2007). According to Sigman (2005) and Hallam and Price (1996), soothing music can positively affect the behaviour of restive children.

Also, a study conducted in 2010 claims that the reason why some students perform tasks while listening to music is because it helps them to concentrate (Speer, 2011)

Given the foregoing, some studies show conflicting results on the impact of background music on students' performance. A study by Hallam et al (1996), cited in Speer, (2011), showed that although BM affects the speed with which tasks were completed by students, it did not impact the accuracy with which the task was performed. Several other studies also corroborate this (Cavanaugh, Hallam, Price & Katsarou, Haynes, Wolfe as cited in Speer, 2011)

Research Methods

The study employed experimental research design and observation. Using this, the subjects in the study were made to take two tests (a pre-test and a post-test). This is to determine whether the mean of the first test could be significantly different from the second. The pre-test was administered on the sample without exposure to BM, while the post-test was administered with BM

This study was conducted in a privately owned co-educational school consisting of pupils and students of Primary and Junior Secondary School in the Abuja Municipal Council Area of the Federal Capital Territory (FCT), Abuja, Nigeria. The population of the study consists of pupils and students of primary and junior secondary school, respectively. The study was conducted among students of Years 4, 5, 7, 8, and 9 (i.e., Primary 4 and 5; JSS 1, JSS 2, and JSS 3) in the same private school. There were a total of 18 students. Of these 18 students, four were from Primary 4 and another four from Primary 5, while the remaining ten students were from the Junior Secondary School (JSS 1, 2, and 3, respectively)

The Procedure

During the post-test, participants were placed in a separate hall for a Continuous Assessment Test (CAT), and BM was played to them. Before the commencement of this test, students were approached during a study time and exposed to background music and then asked if the music was a distraction, and all but one student responded in the negative

For this study, an MP3 player was provided in the hall used. This device played the BM. The BM used for this study was a collection of Mozart piano pieces (50 piano pieces). The reason for choosing lengthy duration music to be played was so that disruption may be curtailed while the test lasts. The choice of instrumental music was not only to follow the line of previous studies but also to take into cognizance the capacity of the working memory of the participants and to avoid information overload. The music selected for this test was of a medium tempo (60–120 beats per minute) and turned down to a very low volume

Discussion of Findings

Data analysis

Data collected in this study was analyzed using IBM SPSS. Using this, a matched or Paired Sample t-test was conducted on the Scores obtained from the two tests conducted

Result of the Study

Table 1

Paired sample t – test on performance with and without background music

Pairs	Mean	sd	t	df	P	Cohen's d
Pre-test	48.61	22.74	-3.013	17	.008	0.048
Post-test	59.00	18.35				

This study aims to investigate the claim that the use of background music in the classroom can positively impact behaviour. It was hypothesized that the mean score of the test with BM would be significantly different from the mean score of the test without BM. To test this, a paired sample *t* – test was conducted. Table 1 above shows that before the application of BM, the participants had a mean score of $M = 48.61$, $SD = 22.74$ and after the application of BM, the participants had a mean score of $M = 59.00$, $SD = 18.35$. A paired sample *t* –test revealed a significant difference between the two time points, $t(17) = -3.013$, $p < 0.05$. The effect size for the difference (Lenhard & Lenhard, 2022) is very small ($d = 0.048$). The 95% confidence interval for the mean difference ranged from -17.66287 to -3.11491 . This result suggests that background music had a positive impact on the student's performance since the calculated *p* value obtained (.008) in the study is smaller than the significance level (0.05)

Discussion of Findings

The report below highlights the findings of this study as contained in the research questions presented in this work:

- i. Does background music in the classroom actually affect behavior?
- ii. Does background music in the classroom affect behaviour in such a way as to drive performance?

Result from the study shows that although the effect size is very small, the difference between the performance of the students tested with music in the background and the performance of the same students tested without music in the background is significant. As a result of this, we reject the null hypothesis in support of the alternate hypothesis which states that, there is a significant difference between the mean score of the test with BM and the test without BM. This result obtained is significant for the following reasons:

- Besides the significant difference in the mean score of the two tests, result from the *t* – test conducted reveal that the difference between the two mean score obtained is -10.38889 which by the mere presence of the negative sign implies effectiveness in the treatment administered because the post-test score is greater than the pre-test score. This suggests a rejection of the null hypothesis and imply that this difference did not occur by chance
- Secondly, the *t* – value obtained (-3.013) although not too large, is greater than the critical value of *t* (2.567), meaning that the mean difference is statistically different from zero (the negative sign again indicating that the post-test score is greater than the pre-test score)
- Thirdly, the *p* – value (.008) at 2 – tailed is less than 0.05 meaning that the mean difference is statistically and significantly different from zero

- Finally, the lower and upper value of the 95% confidence interval of difference have the same (negative) signs and neither of them crossed zero, indicating again that the mean difference is statistically and significantly different from zero

As a result of the above, we conclude that there is a statistically significant difference between the pre-test and post-test scores. With this, we reject the null hypothesis because the BM used was effective in influencing the behaviour of the subjects tested.

Although the finding in this study is significant, it is important to discuss the tendencies associated with studies of this nature. Concerning the effect of music on the performance of students, the finding of this study aligns with the findings of McClenaghan (2019); Kiss and Linnell (2022); Ray, (2023); whose studies report that most of the subjects in their study who used BM during complex tasks or in the classroom performed better because the music helped them to calm down and to fully concentrate. This negates the findings of Lehmann and Seufert (2017), Speer (2011), Sigman (2005), and White (2007), whose study found no significant difference in the variables tested with or without BM in their study

Conclusion

In the course of carrying out this work, some problems arose that may have affected the quality of the findings. The first problem is related to the experimental process. Due to the limitation of time, the experiment was not repeated over time to really ensure the validity of results obtained. Secondly, some levels of resistance were encountered from teachers involved during invigilation of the examinations used for this study. This challenge affected the quality of the test because of the delay.

Recommendations

In the course of carrying out research, the researcher found that the present study is broad and requires a lot of time and experimental processes. Therefore, the following recommendations are suggested:

- Educators and schools' management should explore the use of background music in their educational systems because of its significant influence on student's behaviour
- Further research on the influence of background music on students' behaviour and performance should be encouraged
- Experimental research should be repeated by other researchers to produce a thorough report that is devoid of any bias.

Reference

- Australian Education Research Organisation (2023). How students learn best. ISBN 978-1-923066-13-7 (Online) retrieved from <https://www.edresearch.edu.au/resources/how-students-learn-best>
- Agu, D. C. C. (2012). Perpetuating Nigerian Cultures in Musical Arts Education within the Threshold of Current Global Environment. UJAH: Unizik Journal of Arts and Humanities Vol. 13 No 2, 2012
- Agu, D C.C. & Ezebube, A. C. (2022). Social and educative roles of the Bari Bii and Kanutete music groups in Ogoni Communities, Rivers State, Nigeria. Advance Journal of Arts, Humanities and Social Sciences. Advance Scholars

- Publication, International Institute of Advance Scholars Development.
Retrieved from
<https://aspjournals.org/ajahss/index.php/ajahss/index>
- Almasidis, W. (2021). Music effects on the Human Brain and Behaviour. Retrived from
https://www.researchgate.net/publication/349369817_Music_effects_on_the_Human_Brain_in_and_Behaviour
- Aloisio, L. Tang, K. & Pesonen, R (2015). *How music affects people – Music listening event at Salo's Clubhouse*. [Bachelor's Thesis, Turku University of Applied Sciences]. .CORE. Retrived from
<https://core.ac.uk/download/pdf>
- Dobrota, S. (2014). *The role of music education in preparing globally competent pupils.Part 3: Education Policy, Reforms and School Leadership*. ERIC – Education Resource Information Center (gov) retrieved from
<https://files.eric.ed.gov/fulltext/ED598076.pdf>
- Griffin, M. (2018). Background music in the classroom? professional-development.com.au
Retrieved from
[Background music in the classroom? - Professional Development \(professional-development.com.au\)](https://professional-development.com.au/Background-music-in-the-classroom?)
- Griffin, M. (2006). *Background Music and the Learning Environment: Borrowing from other Disciplines*. [Master Thesis, School of Education University of Adelaide].
Retrieved from
[Microsoft Word - MG Masters Background Music in Education.doc](#)
- Hargrove, M. (2022). *Effects of Background Music on Student Productivity in the Elementary Classroom*. [Master Thesis. California State University, San Marcos].
Retrieved from
[Effects of Background Music on Student Productivity in the Elementary Classroom \(calstate.edu\)](https://calstate.edu/Effects-of-Background-Music-on-Student-Productivity-in-the-Elementary-Classroom)
- Hallam, S. & Price, J. (1998). Can the use of background music improve the behavior and academic performance of children with emotional and behavioural difficulties? *British Journal of Special Education* Volume 25, No. 2
- Holly (2024). 8 Classroom Music Ideas and School-Appropriate Songs Perfect for Teachers. Teach Starter [Blog] retrieved from
[8 Classroom Music Ideas and School-Appropriate Songs Perfect for Teachers | Teach Starter](https://www.teachstarter.com/blog/8-classroom-music-ideas-and-school-appropriate-songs-perfect-for-teachers/)
- Kiss, L. & Linnell, K.J. (2022). Making sense of background music listening habits: An arousal and task-complexity account. Retrieved from
[Making sense of background music listening habits: An arousal and task-complexity account \(sagepub.com\)](https://www.sagepub.com/journalsPermissions.nav?doi=10.1177/00131644221100000000000000000000)
- Lee, Y. & Welch, P. (2017). Teachers' Perceptions about the Use of Background Music in Preschool Free Play Time. *Asia-Pacific Journal of Research in Early*

- Childhood Education. Vol.11, No.2, pp.85-106. ISSN 1976-1961 retrieved from
<http://dx.doi.org/10.17206/apjrece.2017.11.2.85>
- Lehmann, J.A.M. & Seufert, T. (2017). The Influence of Background Music on Learning in the Light of Different Theoretical Perspectives and the Role of Working Memory Capacity. Front. Psychol. 8:1902. doi: 10.3389/fpsyg.2017.01902
- Lenhard, W. & Lenhard, A. (2022). *Computation of effect sizes*. Retrieved from:
https://www.psychometrica.de/effect_size.html.Psychometrica.
DOI: 10.13140/RG.2.2.17823.92329
- Mbaegbu, C. C. (2015). The Effective Power of Music in Africa. Open Journal of Philosophy, 5, 176 – 183. Retrieved from
https://www.researchgate.net/publication/274076845_The_Effective_Power_of_Music_in_Africa
- McClenaghan, J. (2019). The effects of background music within the classroom: Part 2. Retrieved from
[The effects of background music within the classroom: Part 2 \(linkedin.com\)](https://www.linkedin.com/company/education-research)
- Okafor, R.C. (2012).
OpenStax (2011). Introduction to Culture. Introduction to Sociology. Retrieved from
<http://fileserver.net-texts.com/asset.aspx?dl=no&id=61558>
- Ray, B. (2023). How to Use Background Music in the Classroom - A Tutor. Retrieved from
<https://atutor.ca/how-to-use-background-music-in-the-classroom/>
- Rollings, N. Social Psychology of Music (April, 2010). Retrieved from
<http://musicalsocialpsych.blogspot.com.ng/2010/04/identity-in-music.html>
- Sigman, K. J. (2005). *Using Background Music in the Classroom to Effectively Enhance Concentration Within the Learning Environment*. [Master's Thesis Graduate School of Marietta College] retrieved from
[Microsoft Word - 1-640-updated.doc \(ohiolink.edu\)](https://ohiolink.edu/etd/1-640-updated.doc)
- Speer, S. (2011). *The Effect of Background Music, Speech and Silence on Office Workers' Selective Attention* [Master Thesis. The Florida State University College of Music] retrieved from
[https://diginole.lib.fsu.edu > PDF > download](https://diginole.lib.fsu.edu/>PDF>download)
- Stramkale, L (2020). Students' Perceptions about Using Background Music in Music Lessons. Rural Environment. Education. Personality. Vol.13. Issn 2255-5207. Retrieved from
[Students' Perceptions about Using Background Music in Music Lessons \(ihu.lv\)](https://www.ihu.lv)
- Sylvanus, E. P. (2020) Reflections on Nigerian musical arts and culture, Journal of the Musical Arts in Africa, 17:1, viii-x. Retrieved from
[Reflections on Nigerian musical arts and culture \(tandfonline.com\)](https://www.tandfonline.com)
- Tekman, H. G., Boer, D., & Fisher, R. (2012). Values, Functions of Music, and Musical Preferences. Retrieved from

http://icmpc-escom2012.web.auth.gr/sites/default/files/papers/372_Proc.pdf

Timothy, G. Z. (2021). The Zero Factor and Creativity in the Informal Musical Practices in Nigeria. Retrieved from

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White, K. N. (2007). *The effects of background music in the classroom on The productivity, motivation, and behavior of Fourth grade students*. [Master Thesis. Columbia College]. Retrieved from

[The Effects Of Background Music on Productivity In Classrooms \(seu.edu\)](#)

Wikipedia (2019). Background music. Wikipedia, the free encyclopedia. Retrieved from

https://en.wikipedia.org/wiki/Background_music

Zheng, Z. & Mustapha, S.M. (2022). A literature review on the academic achievement of college students. *Journal of Education and Social Sciences*, Vol. 20, Issue 1, (June) ISSN 2289-9855 retrieved from

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