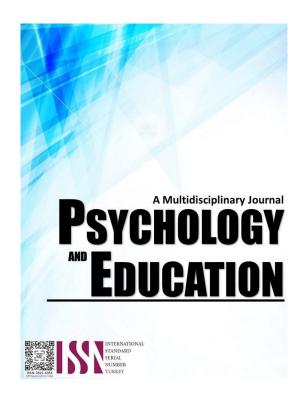
BENEFITS OF BACKGROUND MUSIC WHILE STUDYING LESSONS OF SELECTED COLLEGE STUDENTS IN A PRIVATE INSTITUTION IN GUMACA, QUEZON



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Benefits of Background Music While Studying Lessons of Selected College Students in a Private Institution in Gumaca, Quezon

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Abstract

This study aimed to determine benefits of background music while studying lessons of selected college students in a private institution in Gumaca Quezon. The study involved 80 college students from Eastern Quezon College; Inc located in Penafrancia Gumaca Quezon. The researcher used questionnaires to gather reliable data to be answered by the target respondents. The proportionate random sampling was used to gather the data needed to determine the benefits of background music while studying lessons. Most respondents were female (57%) while the remaining are male (43%). The highest frequency according to age with the range of 20- 21 years old (68%), and the lowest frequency according to age with the range of 22 years old and above (26%). Majority of respondents were enrolled in BSBA (44%), and the lowest is BEED (16%). The result indicates that, in terms Memory Retention, the most significant benefits of background music while studying helps them to retain information easily with a mean score of 4.74. For Cognitive Performance, background music was found to enhance creative thinking, with a mean score of 4.14. This implies that the age of respondents could be a factor in how background music affects their studying experience. The same when it is grouped according to sex and program as it was shown that the null hypothesis is rejected. The findings suggest that most students use background music to reduce their stress and improve their mood.

Keywords: background music, lessons, memory retention, concentration, cognitive performance

Introduction

There is more to music than merely amusement. It is a universal language that can communicate with people of many backgrounds. It can also have a variety of effects on students' focus, attitude, and performance. To improve their concentration and productivity, many students turn to music while they study. The impact of background music on cognitive tasks like verbal or spatial aptitude tests has been well investigated. It is any background music or sound that is played while working, learning, or performing other chores. While some people think that background music improves their ability to concentrate and makes learning more enjoyable, others prefer to study in total silence.

Conversely, different kinds of music might affect your ability to focus and remember things differently. While some people feel that listening to music helps them focus when working or studying, others find that any background noise makes it difficult to concentrate. Several studies have even demonstrated that, for brief periods of time, background music can enhance students' performance on certain activities. According to other studies, music therapy helps lessen stress and anxiety levels and is a potent tool for emotional regulation.

Accordingly, several students struggle to concentrate in noisy or distracting settings, such as coffee shops, library, or hostel. Some students decide to use music to improve their focus and reduce their stress.

The purpose of this study is to identify the benefits of background music while studying lessons of selected college students in Eastern Quezon College during S.Y 2023-2024.

Research Ouestions

This study aimed determine the benefits of background music while studying lessons of selected college student in a private institution in Gumaca, Quezon. Specifically, it sought to answer the following questions:

- 1. What is the profile of the respondents in terms of:
 - 1.1 age
 - 1.2 sex, and
 - 1.3 program?
- 2. What are the benefits of background music while studying lessons of the respondents in terms of:
 - 2.1 memory retention
 - 2.2 concentration, and
 - 2.3 cognitive performance?
- 3. Is there any significant difference on the perceived benefits of background music while studying lessons when the respondents are grouped according to profile?

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Methodology

Research Design

This study used descriptive method of research to determine the benefits of background music while studying lessons of college students in Bachelor of Secondary Education (BSED), Bachelor of Elementary Education (BEED), Bachelor of Science in Business Administration (BSBA), and Bachelor of Arts (AB). According to Alberto (2010), descriptive method is also known as statistical research; it describes data and characteristics about the population or phenomenon being studied.

Participants

This study was conducted in Eastern Quezon College, Inc., since the respondents were selected as college students of the school. Eastern Quezon College, Inc. is a private and non-sectarian institution located in Brgy. Penafrancia Gumaca, Quezon.

The researcher used proportionate random sampling to the selected college student in Eastern Quezon College, Inc. with a total of 80 respondents. According to Adam Ka Lok Cheung, proportionate random sampling as a technique where the probability of selection for each sampling unit in the population is proportional to an auxiliary variable, such as population size or geographical size. This method is particularly useful in survey research when sampling units vary in size or other important aspects that researchers want to account for in the sample design.

Research Design

The researcher used self-made questionnaire in part I for the profile of the respondents such as age, sex, and program. Part II, she used leading questions to identify the data from the respondents about the benefits of background music while studying lessons of the students using Liker scale of; 5 - Strongly Agree (SA), 4 - Agree (A), 3 - Fairly Agree (FA), 2 - Disagree (D) and 1 - Strongly Disagree (SD) as perceived by the selected college student in a private institution in Gumaca, Quezon.

To test the internal consistency of the questionnaire using Cronbach's Alpha, a pilot testing conducted at Southern Luzon State University Gumaca, Quezon (SLSU) with 12 respondents. The result is 0.90, which is interpreted as excellent and acceptable.

Procedure

The letter requesting permission to conduct research in the selected school submitted to the Dean of College of the school. The researcher personally came to the school, explained the purpose of the study, and arranged the data for administering the questionnaires. The descriptive research method using likerts scale was used in order to rate the benefits of background music while studying lessons. Data was gathered through "proportionate random sampling". The questionnaire administered to 17 selected students of Bachelor of Secondary Education (BSED), 13 selected students of Bachelor of Elementary Education (BEED), 35 selected students of Bachelor of Science in Business Administration (BSBA), and 15 selected college students from Bachelor of Arts (AB) of Eastern Quezon College, Inc.

Results and Discussion

This section presents the presentation, analysis and interpretation of data. All the data gathered were presented here in tabulated form with corresponding interpretation. The first part described the profile of the respondents in terms of age, sex, and program. The second part is the Benefits of Background Music While Studying Lessons in a Private Institution in Gumaca Quezon.

Table 1. Frequency and Percentage Distribution of the Respondents

Accoraing to Age.		
Age	Frequency	Percentage (%)
18-19 years old	22	28
20-21 years old	37	46
22 years old and above	21	26
Total	80	100

Table 1 shows frequency and percentage distribution of the respondents according to age where 28% are 18-19 years old, 46% are 20-21 years old and the remaining 26% had an age range of 22 years old above. Kotsopoulou and Halla (2006). Age differences in listening to music while studying. This research aimed to explore age differences in the perceived effects of playing music in the background while studying a range of different tasks. The study involved administering rating scale questionnaires to six hundred students in three age groups, 12-13, 15-16, and 20-21, and analyzed the extent of listening to music while studying, the kinds of tasks where background music was played, and the perceived effects of music on studying 1.

De la Mora and Hirumi (2020). The effects of background music on learning: a systematic review of literature to guide future research and practice. This systematic review synthesizes thirty studies examining the effects of background music on learning from 2008 to 2018. The review highlights differential significant effects of background music based on age, with some studies reporting positive effects for very young participants and others noting benefits for older age groups 1.

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Table 2. Frequency and Percentage Distribution of the Respondents According to Sex

Gender	Frequency	Percentage (%)
Male	34	43
Female	46	57
Total	80	100

Table 2 shows frequency and percentage distribution of the respondents according to gender. 43% of them are male, and 57% are female, which describes that most of the students- respondents are female. Tiu (2013). The Effect of Background Music to College Students' Academic Performance. This study examines the effect of background music on the academic performance of college students in the Philippines, with a particular focus on biological sex (sex) differences and music genre preferences. It provides insights into how background music may influence academic outcomes differently for male and female students, highlighting that female showed a higher frequency of positive effects when studying with background music.

Table 3. Frequency and Percentage Distribution of the Respondents

According to Program

Ticcording to I rogram		
Program	Frequency	Percentage (%)
BSED	17	21
BEED	13	16
BSBA	35	44
AB	15	19
Total	80	100

Table 3 reveals frequency and percentage distribution of the respondents according to program where 21% are BSED, 16% are BEED, 44% BSBA and 19% are AB, which describes that most of the respondents are students from BSBA. A study conducted by Oxford learning (2023) revealed a positive correlation between listening to background music while studying and academic performance. Those who listened to music were likely to achieve a GPA above 3.2, indicating that music can contribute to higher grades. Plus, students who listened to music reported finding the learning experience more enjoyable (81%) and feeling more prepared for their classes regularly (80%).

Memory Retention

Table 4. Benefits of Background Music While Studying Lessons in terms of Memory Retention

Indicators	Weighted Mean	Verbal Interpretation
1. Listening to background music helps me to retain information easily.	4.05	Agree
2. It can enrich the pleasure of learning and enhance my memory.	3.84	Agree
3. Listening to background music improves recall of verbal information.	3.71	Agree
4. It strengthens my memory and pay attention more to details.	3.66	Agree
5. It can increase my concentration and focus.	3.71	Agree
Grand Mean: 3.79		Agree

Legend; "Strongly Disagree (1.00-1.79)", "Disagree (1.80-2.59)", "Fairly Agree (2.60-3.39)", "Agree (3.40-4.19)", "Strongly Agree (4.20-5.00)"

Table 4 shows the benefits of background music while studying lessons in terms of memory retention. As shown in the table, respondents agreed that listening to background music helps them to retain information easily with the mean of 4.05. The lowest mean is indicator 4 because the benefits of background music while studying lessons cannot strengthen their memory and pay attention more to details. It also revealed that the average mean of total respondents is 3.79 which means agree. Fawzy et al., (2022). The Effect of Listening to Music While Studying on Memory Retention. Science Open Posters. This research aimed to determine if listening to music while studying affects the retention of information. The study compared the effect of instrumental and lyrical music, as well as silence, on first-year medical students' memory retention and learning outcomes. The results indicated that the effect of listening to music on memory retention is highly individualized and based on personal factors.

Concentration

Table 5. Benefits of Background Music While Studying Lessons in terms of Concentration

Indicators	Weighted Mean	Verbal Interpretation
1. It helps focus on the activity while listening to background music.	3.89	Agree
2. It helps me to reduce stress and improve my mood	4.74	Strongly Agree
3. It helps me to concentrate relevant task and ignore irrelevant stimuli, depending on the type of music, task, and personal preference	3.95	Agree
4. Background music helps me to focus by making the task at hand more engaging, less, dull, and easier to concentration on.	4.11	Agree
5 . Background music boosted my concentration while studying and doing relevant academic performance.	3.94	Agree
Grand Mean: 4.13		Agree

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Legend; "Strongly Disagree (1.00-1.79)", "Disagree (1.80-2.59)", "Fairly Agree (2.60-3.39)", "Agree (3.40-4.19)", "Strongly Agree (4.20-5.00)"

Table 5 presents the benefits of background music while studying lessons in terms of concentration. As shown in the table, respondents agreed that listening to background music helps them to reduce stress and improve their mood with the weighted mean of 4.74. The lowest mean is indicator 1 because they cannot focus on their activity while listening music with the weighted mean of 3.89. It also revealed that the average mean of total respondents is 4.13 which means agree.

Miranda (2019) reported that at a physiological level, being exposed to music may reduce stress as evidenced by a decrease in its biomarkers (e.g., cortisol). Thus, music can be effective in relieving anxiety, or the reaction to stress. Interestingly, following stressful interpersonal conflicts with peers, adolescents may not only listen to songs to manage their mixed feelings (emotional process) but also to think about solutions to the conflicts (cognitive process), or else to simply distract themselves and sidestep doing anything about it (behavioral process.).

Cognitive Performance

Table 6. Benefits of Background Music While Studying Lessons in terms of Cognitive Performance

Indicators	Weighted Mean	Verbal Interpretation
1. Background music gives me a way to express myself, thoughts and opinions.	4.11	Agree
2. Listening to background music can enhance and unleash my creative thoughts.	4.14	Agree
3 . Using background music while studying enhance my knowledge and comprehension.	3.79	Agree
4. It develops my creative/ prolific style.	3.91	Agree
5 . Background music can increase my productivity through managing stress and learn new material more easily.	3.99	Agree
Grand Mean: 3.99		Agree

Legend; "Strongly Disagree (1.00-1.79)", "Disagree (1.80-2.59)", "Fairly Agree (2.60-3.39)", "Agree (3.40-4.19)", "Strongly Agree (4.20-5.00)"

Table 6 shows the benefits of background music while studying lessons in terms of cognitive performance. As shown in the table, respondents agreed that listening to background music helps them to enhance and unleash their creative thoughts with the weighted mean of 4.14. The lowest mean is indicator 3 because they cannot enhance their knowledge and comprehension while listening background music with the weighted mean of 3.79. It also revealed that the average mean of total respondents is 3.99 which means agree.

Threadgold et al., (2019). Background music stints creativity: Evidence from compound remote associate tasks. Applied Cognitive Psychology This study explores how background music with foreign lyrics, instrumental music, and music with familiar lyrics can significantly impair performance on tasks that are thought to tap into creativity, such as Compound Remote Associate Tasks (CRATs). The findings challenge the common belief that background music always enhances creativity and suggest that it may actually have a stifling effect depending on the type of music and the nature of the creative task.

Xiao et al., (2023). The dual effect of background music on creativity: perspectives of music preference and cognitive interference. Frontiers in Psychology. This research indicates that background music can have a dual effect on creativity, influenced by factors such as emotional arousal, cognitive interference, music preference, and psychological restoration. It suggests that not only positive but also negative background music can enhance creativity, challenging the conventional understanding.

Table 7. Summary Table on the perceived benefits of background music while studying lessons of selected college students.

Benefits	Average Mean	Verbal Interpretation
Memory retention	3.79	Agree
Concentration	4.13	Agree
Cognitive Performance	3.99	Agree
Grand Total	3.97	Agree

The summary table shows the average mean and verbal interpretation of memory retention with a weighted mean of 3.79 which means agree, concentration with a weighted mean of 4.13 which means agree, and cognitive performance with a weighted mean of 3.999 which means agree. This implies that the observed difference in the perceived benefits of background music while studying is unlikely to have occurred by chance, and there is a statistically significant effect when considering the respondents' profiles. This conclusion allows for a deeper exploration into how background music may influence study habits and learning efficiency, potentially leading to more tailored educational practices.

A survey reported by SWNS Digital (2022) found that nearly two-thirds of Americans said they were able to study better with sound on in the background, suggesting a positive correlation between music and study habits.

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Table 8. Significant difference on the perceived benefits of background music while studying when the respondents are grouped according to age

тевропастив ате	grouped de	cording to age				
Groups	N	Median	df	P - value	Significant Level	Decision
18-19 years old	22	3.91				Daisat
20-21 years old	37	3.95	2	0.00354	0.05	Reject Null
22 years old and above	21	3.90				Null
H	15.644					

The data presented in Table 8 suggests a significant difference in the perceived benefits of background music while studying among different age groups. The Kruskal-Wallis H test, indicated by an H value of 15.644, shows that there is enough evidence to reject the null hypothesis for the three age groups compared. With a p-value of 0.00354, which is below the significance level of 0.05, the results are statistically significant. This implies that the age of respondents could be a factor in how background music affects their studying experience.

A study by Kotsopoulou and Hallam (2006) investigated age differences in the perceived effects of playing music while studying, revealing significant variations across age groups in terms of the extent of listening to music, the types of tasks where music was played, and the perceived effects of music on studying.

Table 9. Significant difference on the perceived benefits of background music while studying when the

respondents are grouped according to sex

Groups	N	Median	df	P - value	Significant Level	Decision
Male	34	4.40	1	0.00036	0.05	Reject
Female	46	4.15	1	0.00030	0.03	Null
H	12.7493					

Table 9 presents the significant differences on the benefits of background music while studying lesson of selected college students when grouped according to sex. The P value of 0.00036 is well below the significance level of 0.05, leading to the rejection of the null hypothesis. This implies that, statistically, there is a significant difference on the perceived benefit of background music while studying lessons when comparing the different sexes within this sample.

Lehmann and Seufert (2017). The influence of background music on learning in the light of different theoretical perspectives and the role of working memory capacity. This study investigates how background music influences learning from various theoretical perspectives and considers the role of working memory capacity. It also touches upon individual differences, which may include sex as a factor, in the context of learning with background music.

Table 10. Significant difference on the perceived benefits of background music while studying when

the respondents are grouped according to program

Groups	N	Median	$\frac{f}{df}$	P - value	Significant Level	Decision
AB	15	4.00				
BEED	13	3 .77	2	0.01042	0.05	Reject
BSBA	35	4.11	3	0.01042	0.03	Null
BSED	17	3.76				
H	15.644		•			

The data presented in Table 10 suggests a significant difference in the perceived benefits of background music while studying among different academic programs. With a p-value of 0.01042, which is below the significance level of 0.05, the null hypothesis is rejected for all groups. This indicates that the type of academic program may influence students' perceptions of the effectiveness of background music for studying. The highest median score is observed in the BSBA group, suggesting that students in this program might perceive the most benefit from background music, while the BSED group has the lowest median score. The H value of 15.644 further supports the presence of a significant difference across the groups studied.

The study of Muslimah and Apriani (2020) showed that 18 (75%) of 24 students prefer to listening to music while study meanwhile, 6 (25%) students prefer to do not listen to music while studying. 83.3% of students agree that listening to music while studying can keep their mind calm and it can increase their concentration while studying.

Additionally, a study conducted by Oxford learning (2023) revealed a positive correlation between listening to background music while studying and academic performance. Those who listened to music were likely to achieve a GPA above 3.2, indicating that music can contribute to higher grades. Plus, students who listened to music reported finding the learning experience more enjoyable (81%) and feeling more prepared for their classes regularly (80%).

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Conclusion

In terms of the profile of the respondents, most were female, accounting for 57% of the total, while the remaining 43% were male. The age group with the highest frequency was 20 to 21 years old, representing 68% of the participants. The lowest frequency was among those aged 22 years and above, comprising 26%. In terms of academic programs, the majority of the respondents were enrolled in the Bachelor of Science in Business Administration (BSBA) program, making up 44% of the participants, while the fewest came from the Bachelor of Elementary Education (BEED) program, with only 16%.

Regarding the benefits of background music while studying, the results revealed several key findings. In terms of memory retention, students indicated that background music helps them retain information more easily, with a mean score of 4.05. When it comes to concentration, background music was particularly helpful in reducing stress and improving mood, which received the highest mean score of 4.74. For cognitive performance, background music was found to enhance creative thinking, yielding a mean score of 4.14. Overall, the findings suggest that most students use background music as a way to manage stress and improve their emotional well-being during study sessions.

The study also examined whether there is a significant difference in the perceived benefits of background music while studying when grouped according to profile. It was found that there is a statistically significant difference among different age groups. The Kruskal-Wallis H value of 15.644 indicated sufficient evidence to reject the null hypothesis across the three age groups, and the p-value of 0.00354, below the significance level of 0.05, confirmed the significance of the results. This implies that age may influence how students perceive the effects of background music on their studying. Similarly, when the data were grouped according to sex and academic program, the null hypothesis was also rejected. These results suggest that the impact of background music while studying significantly differs depending on the respondents' demographic profile.

Based on the results of the study, several conclusions were drawn. The majority of the respondents were female students aged 20 to 21 years old and enrolled in the BSBA program. Among the three variables examined—memory retention, concentration, and cognitive performance—concentration had the highest mean score of 4.13. Specifically, students strongly agreed that listening to background music helped reduce their stress and improve their mood. Additionally, the study found that there is a significant difference in the perceived benefits of background music while studying, depending on the respondents' age, sex, and academic program.

Drawing from the findings and conclusions, several recommendations are proposed. School administrators may consider establishing designated areas on campus where students can listen to music while studying, ensuring it is not disruptive to others. Parents are encouraged to support their children's interest in listening to music during study time by providing access to a variety of musical genres and helping them find which types work best for their focus and mood. Teachers may integrate background music into classroom settings when appropriate, to enhance students' concentration and memory retention. Students, on their part, are advised to select music that aids their concentration and to be mindful of how it affects their study effectiveness. Lastly, future researchers are encouraged to explore the long-term effects of background music on academic performance and cognitive development to build on the current study's findings.

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