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# A Study on the Influence of Background Music on Students' Study Habits, Concentration Levels, and Academic Focus

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***Abstract:*** ***In recent years, music has become a more prevalent accompaniment for students during their study sessions. Thanks to the abundance of streaming platforms and mobile devices, learners can easily access a wide range of music genres, including instrumental and lo-fi beats, pop, classical, and ambient sounds. Numerous students hold the belief that listening to music while studying aids in their concentration, motivation, and stress management. Nevertheless, there is still disagreement, and the exact influence of music on academic performance remains uncertain.***

***The objective of this study is to investigate the connection between music and study habits among students, with a particular emphasis on concentration, memory retention, time management, and emotional regulation. The study aims to investigate whether listening to music has a positive, negative, or neutral impact on a student's capacity to complete academic assignments. The study will also examine the music preferences of students during their study sessions and determine if certain genres are more advantageous for specific tasks, such as reading, writing, or problem-solving. Information will be gathered using an online survey created by Google, which will be shared with a group of 50-100 students from various academic disciplines.***

***The survey will consist of a combination of closed-ended and open-ended questions to collect comprehensive data on study habits, music choices, and perceived results. The responses will be examined using Microsoft Excel and Google Sheets to identify any patterns or correlations. The anticipated results of the study suggest that instrumental and slow-tempo music, like lo-fi or classical, are more likely to enhance concentration and minimize distractions, whereas lyrical or loud music may hinder tasks that involve reading or memorization.***

***The study also predicts that students who regularly incorporate music into their study routine may experience enhanced emotional regulation and extended, more efficient study periods. Ultimately, the research seeks to offer evidence-based insights and practical recommendations for students, educators, and academic support teams. The organization aims to assist students in developing more efficient and tailored study spaces that incorporate music as a strategic aid for achieving academic excellence.***

## I. INTRODUCTION

### *A. Background of the Study*

In today's digital and fast-paced academic environment, students are constantly exploring strategies to enhance their learning and concentration. One widely adopted approach is listening to music while studying. Whether it is classical music, lo-fi beats, or popular songs, many students prefer background music as a companion during academic tasks. For some, music acts as a tool to increase focus, reduce stress, and maintain motivation (Lesiuk, 2005). However, for others—especially when engaging in cognitively demanding tasks like reading comprehension or solving mathematical problems—music can serve as a distraction, disrupting their concentration (Perham & Vizard, 2011). This contrasting experience prompts a critical question: does music improve academic performance or hinder cognitive functioning?

Research in neuroscience and psychology suggests that music has a significant impact on the brain, influencing memory, attention, and emotional regulation. Studies indicate that slow, instrumental music may reduce stress and promote a calming atmosphere conducive to better focus and productivity (Thompson, Schellenberg, & Husain, 2001). Conversely, fast-paced or lyrical music may compete with verbal working memory and reduce processing efficiency (Salamé & Baddeley, 1989). As platforms like Spotify, YouTube, and Apple Music continue to make music highly accessible, thousands of curated "study playlists" are used daily—often without students knowing whether the effects are genuinely beneficial or detrimental. Therefore, it is necessary to investigate how different genres and usage patterns of music impact concentration, study habits, and academic outcomes in student populations.

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### B. Problem Statement

Although listening to music while studying is a common practice, there is no clear answer to whether it truly benefits academic performance. Some students claim it helps them concentrate and study longer, while others say it makes them more distracted. Different studies have shown mixed results—some support the idea that music improves focus and memory, while others suggest that music can reduce reading comprehension or slow down task completion. This research aims to explore this issue in more detail by studying students' real-life experiences with music during study sessions.

### C. Purpose of the Study

The main purpose of this study is to examine the impact of music on students' study habits and focus. It aims to find out if music helps students concentrate better, retain information, and manage their study time effectively. The study also focuses on the types of music students prefer—such as instrumental, lyrical, or lo-fi—and how these choices affect different study tasks. By collecting responses from students through a survey, this research will provide useful insights into how music can be used more effectively in academic environments.

### D. Scope of the Study

This study focuses on college students and their study behaviour while listening to music. It explores how music affects areas such as focus, memory, emotional state, and academic performance. The research will consider different types of music, the kind of academic tasks students do while listening, and their study environment (e.g., headphones, volume level, and time of day). However, the study does not include clinical brain measurements or long-term academic tracking. It relies on self-reported data through a structured survey form.

### E. Significance of the Study

This research is important for several reasons. First, it helps students become more aware of their study habits and how music affects their focus. Second, it can guide students in choosing the right type of music to support different study tasks. Third, the findings can help educators and academic counsellors understand how music plays a role in learning, which can help in designing better study environments. Lastly, the study adds to existing research on learning strategies and provides up-to-date information on how today's students use music as part of their academic life.

## II. LITERATURE REVIEW

### A. Music and Academic Performance

A study conducted by Cabanac, Perlovsky, and Bonniot-Cabanac (2013) in Quebec, Canada, examined the relationship between musical involvement and academic performance among secondary school students. The researchers compared the academic results of students who actively participated in music education with those who did not, across subjects such as mathematics, science, language, and social studies.

The findings revealed that students engaged in music consistently outperformed their peers in multiple academic areas. This outcome led the researchers to explore whether musical training directly contributes to academic success or if high-performing students are simply more inclined to enroll in music programs. They proposed that musical engagement might alleviate "cognitive dissonance"—the mental stress that arises when dealing with difficult academic tasks—thus allowing students to maintain better focus and emotional balance.

Moreover, the study pointed to evidence from neuroscience indicating that music training enhances critical brain functions such as memory, attention span, and self-regulation. Students with musical backgrounds were found to have improved working memory and better cognitive organization. However, the researchers also acknowledged that their results do not definitively establish a causal link. It remains possible that students who excel academically may already possess advantageous learning habits or benefit from supportive environments that contribute to both their academic and musical success.

In summary, while the study by Cabanac et al. (2013) supports a strong association between music education and academic achievement, it also emphasizes the need for further research to determine whether music directly improves learning outcomes or is correlated with other influencing factors.

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*B. Classical vs Rap Music*

A recent study conducted by Buerger-Cole et al. (2023) investigated the impact of two contrasting music genres—classical and rap—on students' memory retention and stress levels. The researchers selected classical compositions by Mozart, known for their calming and structured nature, and rap tracks by Eminem, recognized for their energetic beats and complex lyrics. The aim was to understand how these musical styles influenced academic performance and physiological stress indicators, such as heart rate and blood pressure.

During the experiment, students were asked to complete academic tasks while listening to either classical or rap music. They were then tested on the material immediately after the activity and again two weeks later to assess both short-term and long-term memory retention. The hypothesis was that classical music would enhance relaxation and improve recall, whereas rap music, due to its intensity, might elevate stress and hinder academic performance.

Surprisingly, the findings revealed minimal differences between the two groups. Both sets of students showed improved scores in the second round of testing, which suggests that the repetition of content over time played a more significant role in memory improvement than the genre of background music. Additionally, the physiological stress indicators did not differ significantly between the groups, indicating that the type of music did not have a strong influence on physical stress responses.

These results challenge the common assumption that calm music is always better for studying and highlight the importance of individual preferences and study habits in learning outcomes (Buerger-Cole et al., 2023).

*C. Music and Focus in the Classroom*

Strachan (2015) conducted an action research project in a Montessori school to explore the influence of background music on young children's focus and emotional behavior during learning time. The study involved 61 early childhood students across three classrooms and aimed to assess whether soft instrumental music could positively shape the classroom environment, especially during times of independent work.

To ensure the music supported learning without causing overstimulation, the researchers selected instrumental tracks with a slow tempo (around 60 beats per minute), no lyrics, and low volume. Teachers and observers closely monitored the students' behavior under two conditions—when the music was playing and when it was not. They observed signs such as attention span, restlessness, and time spent actively working.

The findings suggested that students were more attentive and engaged when soft music played in the background. They appeared to stay on task for longer periods and exhibited fewer distractions. Teachers also reported that the classroom atmosphere became calmer, and students seemed more emotionally settled, contributing to a more peaceful learning environment. However, when the music was turned off, children were noticeably more restless and took more time to focus.

Despite the benefits, Strachan (2015) emphasized that music should be used selectively. While it worked well during individual learning activities, it was not recommended during teacher-led instruction or test-taking situations. In those moments, students needed to concentrate on verbal directions or recall information, and music could potentially disrupt that process.

This research underlines the importance of timing and context when integrating music into classrooms. When used thoughtfully, background music can enhance student focus and emotional regulation, but it must be aligned with the task at hand.

*D. Lyrical vs. Instrumental Music in College Students*

Lutmer (2018) conducted a study to explore how different types of music—specifically instrumental music, lyrical music, and silence—affect college students' ability to learn and retain information. The experiment involved 30 college students who were randomly divided into three groups. Each group was instructed to study a list of unfamiliar vocabulary terms for one minute under different auditory conditions: one with instrumental background music, one with lyrical music, and one with complete silence.

Following a brief break, all students took a multiple-choice quiz to assess how well they remembered the vocabulary words. The group exposed to instrumental music achieved slightly better scores than the other two groups. However, the differences between the groups were not statistically significant, meaning the improvement was not strong enough to confirm that instrumental music consistently enhances study performance.

Lutmer's findings align with the psychological theory of **selective attention**, which suggests that individuals can filter out distractions and maintain focus on important tasks. This theory implies that students vary in how they process background noise—some may tune out music and remain focused, while others, particularly when exposed to lyrical music, may find it more distracting.

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Interestingly, Lutmer's study contrasts with earlier research that concluded lyrical music can negatively affect reading and memory-based tasks. His findings highlight the importance of context: the effectiveness of background music during study sessions likely depends on the nature of the task, individual learning styles, and the specific characteristics of the music being played.

In conclusion, this study emphasizes that the impact of music on studying is not universal. What helps one student might hinder another, depending on their personal preferences, the difficulty of the material, and whether the music includes lyrics.

## III. RESEARCH METHODOLOGY

This research adopts a mixed-methods approach, combining both quantitative and qualitative data collection and analysis. This approach offers a more complete understanding of how music affects students' ability to concentrate, manage time, retain information, and maintain motivation while studying. While the quantitative data provides measurable insights into trends and preferences, the qualitative elements add depth by exploring personal experiences and patterns not captured through numbers alone.

### *A. Data Colletion Method*

Quantitative Data Collection

Primary Data

- The primary data for this research was collected using a Google Form survey, distributed among students across different academic levels and fields of study.
- The survey aimed to assess students' study behaviour, music preferences, and self-reported changes in concentration, productivity, and memory when listening to music during study sessions.
- The survey included multiple-choice and checkbox questions and collected data on the following:
    - Frequency of studying with music (Always / Often / Rarely / Never)
    - Types of music preferred (Lo-fi, Instrumental, Classical, Pop, etc.)
    - Tasks made easier by music (e.g., writing, solving problems, memorizing)
    - Perceived impact on focus, mood, time management, and academic performance
    - Emotional responses to music during study (e.g., reduced stress or anxiety)

Secondary Data

- Secondary sources include academic research papers, journal articles, and published reports that explore the psychological and cognitive effects of music on learning.
- Key references used in the methodology and literature review chapters include:
    - Cabanac et al. (2013) – Music and academic performance
    - Lutmer (2018) – Lyrical vs instrumental music and student focus
    - Strachan (2015) – Music and attention in classroom settings
    - Buerger-Cole et al. (2023) – Genre-specific effects on memory and stress
- These papers were used to develop survey questions and understand key variables like memory retention, cognitive load, and motivation.

Qualitative Data Collection

Open Ended Questions

- In addition to structured questions, the survey included open-ended questions asking students to share their personal experiences and opinions regarding the impact of music on their study routine.
- These responses were analysed thematically to identify common insights, emotions, and study strategies involving music.

Case Observed Questions

- Select student responses were used to build brief case-style insights showing different patterns (e.g., students who depend on lo-fi music to reduce anxiety vs. students who avoid music altogether for better concentration).
- These examples help illustrate individual differences in how music is used as a learning aid.

### *B. Sampling Techniques*

The following sampling techniques were employed to ensure a meaningful, diverse, and informative dataset for analysing the impact of music on students' study habits:

● Quantitative Data (Survey):
Convenience Sampling with Snowball Sampling:
The survey was initially distributed through convenience sampling by sharing a Google Form within personal networks—such as classmates, college WhatsApp groups, Telegram, and social media platforms like Instagram.
To increase reach and gather more varied student responses, snowball sampling was also used by encouraging participants to share the survey link with their peers and classmates. This helped widen participation beyond the researcher's direct contacts.
Quota Sampling (Potentially):
If further data collection is conducted, quota sampling may be considered to ensure responses are balanced across variables such as academic stream, year of study, or preferred study environments. For example, certain quotas might be set to compare responses between students who regularly use music and those who do not.

● Quantitative Data (Secondary Research):
Sampling Method:
This research utilized purposive sampling to select case studies that directly relate to the influence of background music on students' academic behaviors. The inclusion criteria focused on studies examining the impact of music on study habits, concentration, memory retention, and academic motivation within educational settings.
Selected Case Studies:

- Bradford (2012) conducted a qualitative investigation involving high-performing high school students identified as gifted readers. Although the primary focus was on deep reading strategies, the study revealed that participants often relied on quiet environments or specific types of background music to sustain attention and minimize distractions during study sessions.
- Sarı Yıldırım and Taşpınar (2023) explored how listening to music affected vocabulary learning in young learners studying English as a second language. Their findings showed that students who studied in quiet settings outperformed those exposed to background music, indicating that music could interfere with language-based memory tasks.
- Wiebe (2007) carried out an in-depth case study on a student with ADHD, documenting the positive effects of music on focus, motivation, and task completion. The participant reported improved concentration and memory recall when allowed to listen to music while studying, highlighting music's potential as a self-regulation tool for students with attention-related challenges.

These case studies provided valuable insights into how music can both enhance and impair academic performance, depending on the context and individual learner needs. The data served as a foundation for understanding the broader impact of music on student learning behavior.

● Qualitative Data (Open-Ended Responses):
○ Purposive Sampling:
Open-ended responses from the survey were manually reviewed and selected using purposive sampling. Responses that reflected unique personal experiences, strong emotional feedback, or detailed comparisons of music vs. silence were analysed more deeply. This allowed the study to highlight examples of students who rely on music for mood management or who avoid music entirely for better focus.

● Qualitative Data (Case Observations):
○ Purposive Sampling:
Student behavior patterns identified from the survey were also used to form brief case-style examples, selected for their ability to reflect distinctive study habits or preferences. These cases help illustrate key themes—such as students who find lo-fi music calming, those who lose concentration with lyrics, or those who feel more emotionally stable while listening to music.

### *C. Analysis Techniques*

The collected data will be analysed using a combination of quantitative and qualitative techniques to provide both a broad and in-depth understanding of how music affects students' study habits, focus, and academic performance.

● Quantitative Data Analysis:
○ Descriptive Statistics:
Descriptive analysis will be used to calculate frequencies, percentages, and mean values of the responses. This includes identifying how many students prefer certain types of music, how often they use music while studying, and how they perceive its effect on concentration, memory, and productivity. Bar graphs and pie charts will be used for clear visual presentation of this data.
● Qualitative Data Analysis:
○ Thematic Analysis:
Open-ended responses collected through the survey will be examined using thematic analysis. This will involve reviewing answers, identifying recurring words or ideas, and coding these into larger themes such as:

- "Music helps reduce stress"
- "Lyrics distract me from reading"
- "Lo-fi helps me focus for long hours"
- "Music makes studying feel less boring"

These themes will help explain the personal reasons behind students' preferences and study outcomes.
○ Narrative Analysis (Optional):
In select cases, narrative analysis may be used to explore individual student experiences in more depth. For example, a student who describes their complete study routine and how it changes with or without music might provide valuable insight into personal motivation, discipline, and emotional balance.
● Triangulation of Findings:
The findings from quantitative and qualitative data will be combined (triangulated) to build a more complete and reliable understanding of the research questions.

- Quantitative data will help highlight general trends—such as how many students believe music improves focus.
- Qualitative insights will explain why students feel this way—for example, by sharing personal experiences with stress reduction, emotional comfort, or better focus due to specific music genres.

This mixed-methods approach ensures that the conclusions are both statistically sound and emotionally grounded, providing a well-rounded view of how music influences study behaviour.
Google form: https://forms.gle/JidKGwYmfvHpk5Mx5
Case Studies:
A Case Study Examining the Reading and Study Habits of Gifted Readers in the Context of Deep Reading https://digitalcommons.kennesaw.edu/etd/510
A Case Study Investigating the Impact of Music Listening on Vocabulary Development During Foreign Language Learning https://doi.org/10.53016/jerp.v4i2.176
ADHD, the Classroom and Music: A Case Study https://harvest.usask.ca/handle/10388/etd-09262007-145527

## IV. FINDINGS AND ANALYSIS

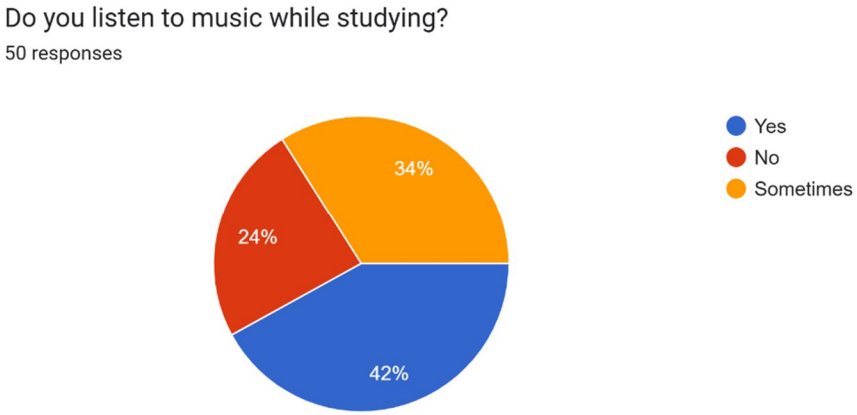
This chapter presents the findings of the research conducted on the influence of background music on students' study habits, concentration levels, and academic focus. The analysis is based on data collected through a structured Google Form survey filled out by 50 student participants from various academic backgrounds.

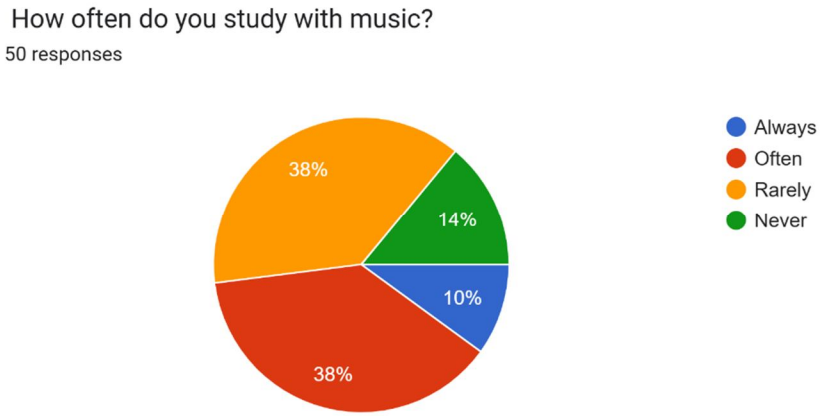
### *A. Overview of Data Collection*

The data was gathered using a Google Form that included both multiple-choice and open-ended questions. The survey was designed to gather information on music listening habits during study sessions, preferred music genres, emotional responses, task-specific impact, and self-reported academic effects. A total of 50 responses were collected through convenience and snowball sampling methods.

### *B. Students' Music Listening Habits*

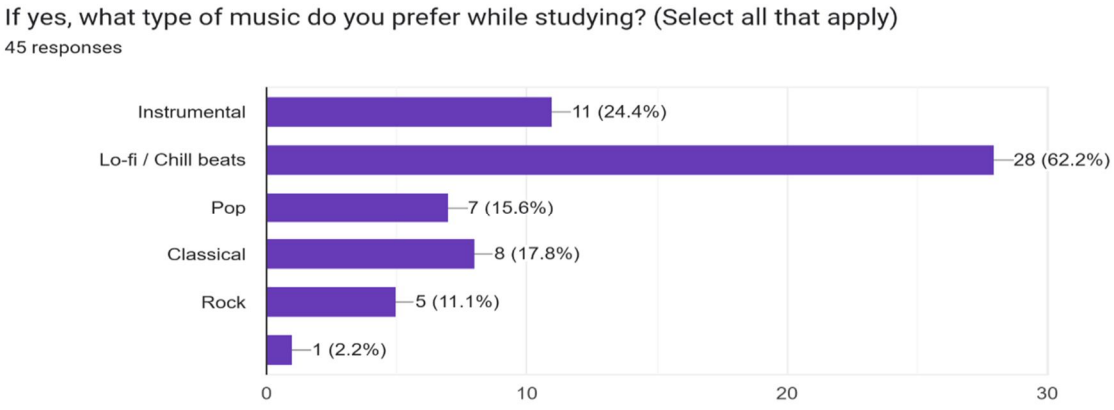
When asked whether they listen to music while studying, 42% of respondents answered "Yes," 34% said "Sometimes," and 24% responded "No." On the frequency of usage, 10% of students reported that they always study with music, while 38% said often, 38% said rarely, and only 14% reported never using music while studying. These results suggest that a majority of students incorporate music into their study routines to some degree.



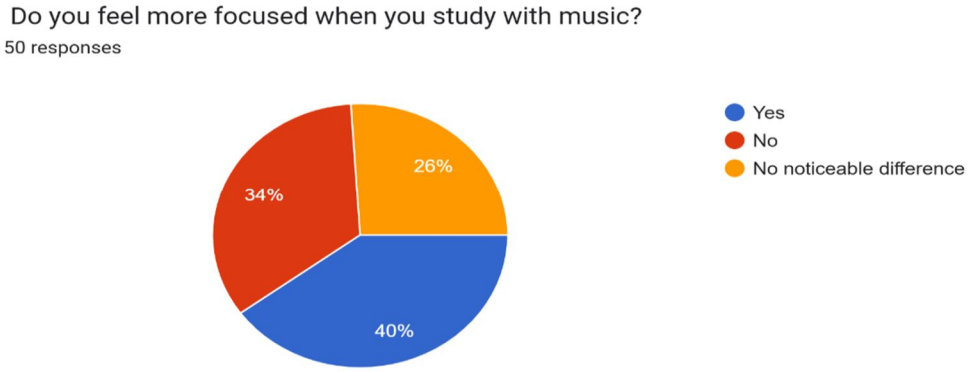

*C. Preferred Types of Music*

Students were asked about their preferred genres of music while studying. Lo-fi or chill beats emerged as the most popular choice (62.2%), followed by instrumental music (24.4%), classical music (17.8%), pop (15.6%), and rock (11.1%). The preference for instrumental and non-lyrical genres suggests that students favour music that is calming and less distracting.



*D. Perceived Impact on Focus and Productivity*

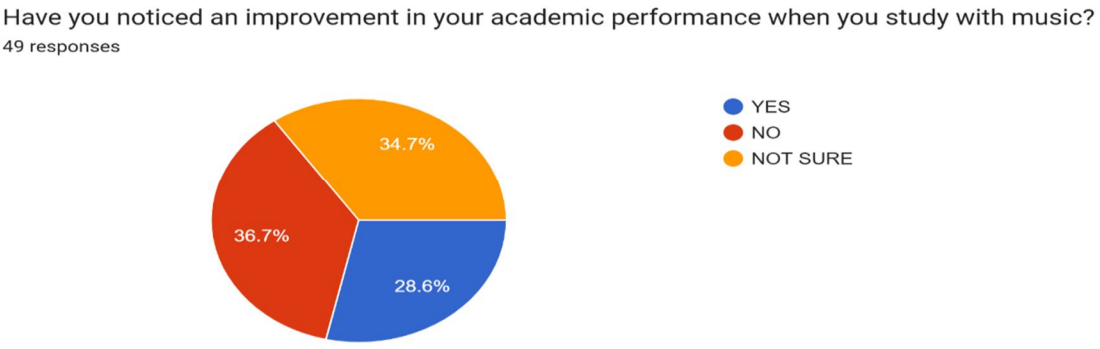
Regarding the impact of music on focus, 40% of respondents stated that it helps them concentrate better, while 34% disagreed and 26% noticed no significant change.




Similarly, when asked if music improves productivity, 40% said yes, 36% said no, and 24% were unsure. These results indicate that the impact of music on academic performance is subjective and varies among individuals.

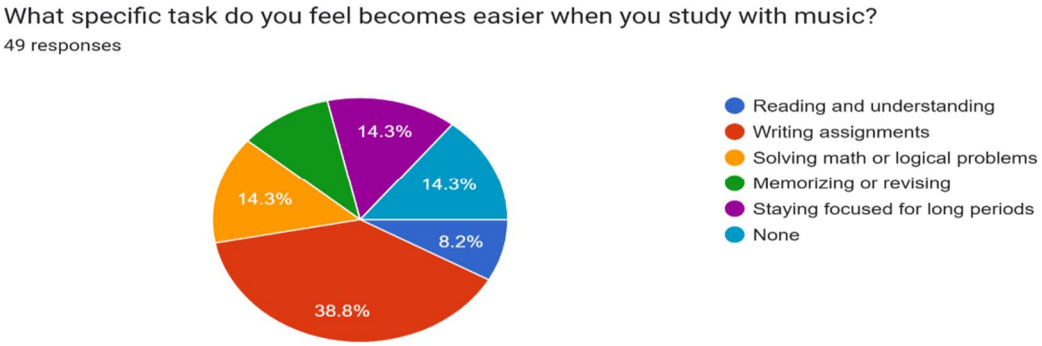

Only 20.4% say music always helps complete goals, while 30.6% say it delays them. Music's impact on goal completion is thus uncertain or negative for some.

34.7% say yes, 36.7% no, and 28.6% not sure. This shows mixed perceptions about music's impact on academic outcomes.



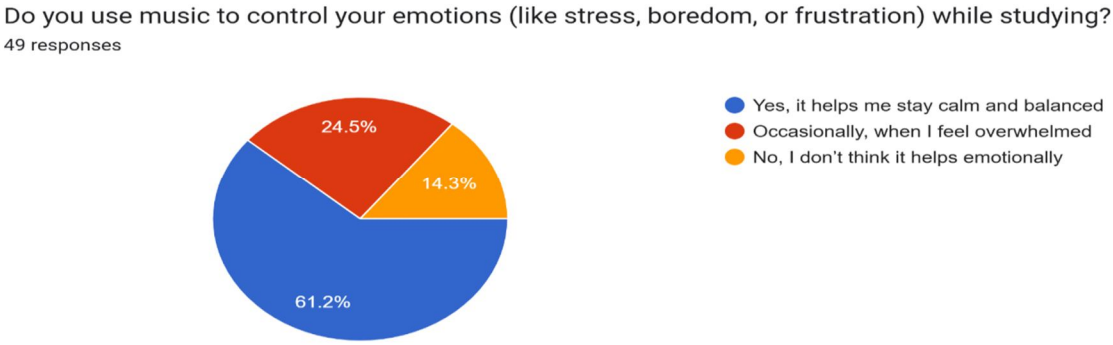

*E. Academic Tasks Influenced by Music*

Students were asked which specific study tasks were made easier by listening to music. Writing assignments were the most commonly mentioned (38.8%), followed by solving problems (14.3%), memorizing (14.3%), and staying focused for long periods (14.3%). Only 8.2% found reading easier with music, while 14.3% felt that music did not help with any tasks. This shows that music may be more effective for certain types of academic activities than others.




*F. Emotional and Cognitive Effects*

From an emotional perspective, 61.2% of students reported that music helps them stay calm and balanced while studying. An additional 24.5% use music occasionally for emotional control, and 14.3% do not find it helpful in this regard.

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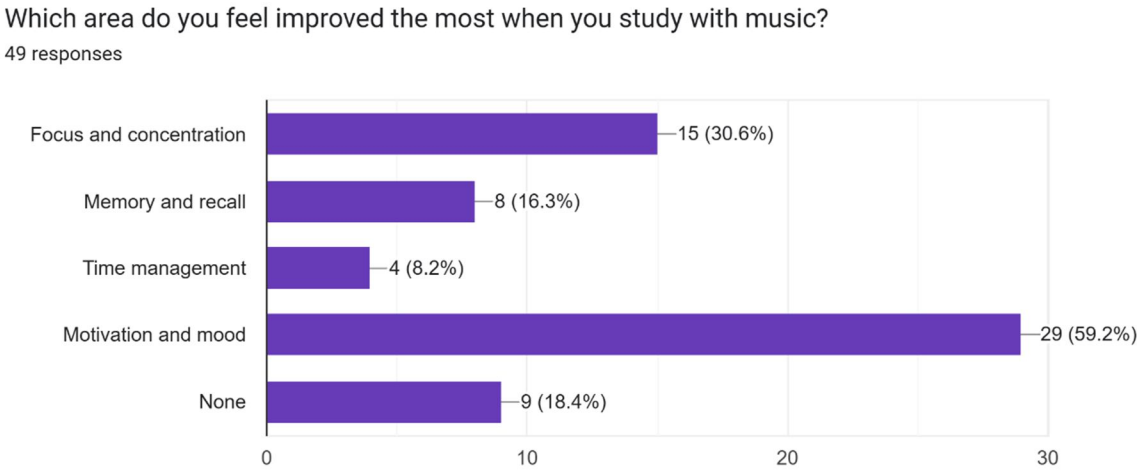
When asked which area improved the most due to music, 59.2% cited motivation and mood, followed by focus and concentration (30.6%) and memory and recall (16.3%).




*G. Insights from Literature*

Several research studies support the findings observed in this survey:

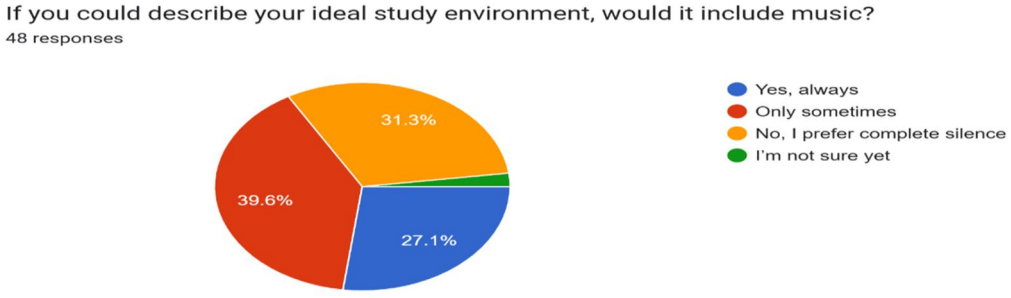
- Cabanac et al. (2013) found that students engaged in music classes showed improved academic performance, potentially due to enhanced memory and reduced stress.
- Lutmer (2018) compared instrumental and lyrical music, reporting a slight edge for instrumental music in improving focus during study sessions.
- Strachan (2015) demonstrated that calm background music helped students maintain concentration during classroom work.
- Buerger-Cole et al. (2023) noted that genre preference may be less important than personal comfort, as no major differences in memory retention were observed between classical and rap music.

These studies complement the mixed findings from the survey and highlight the importance of music type, personal preference, and task relevance.

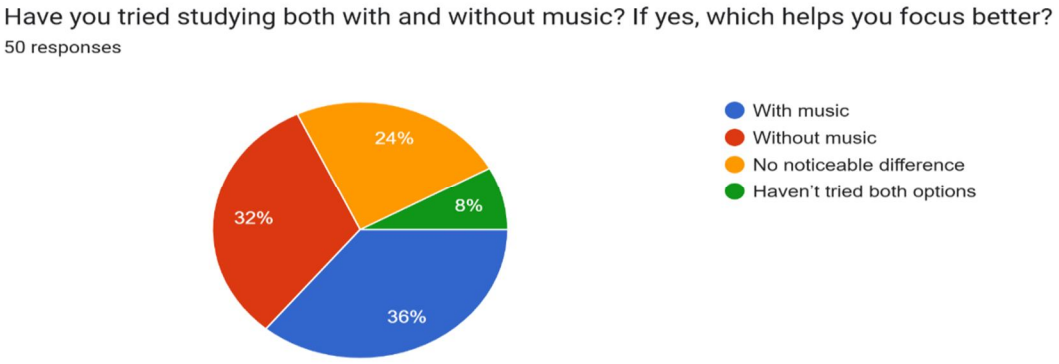
*H. Thematic Insights from Open Responses*

Open-ended responses provided deeper insights into student experiences. Several respondents mentioned using music to manage stress and boredom, especially during long or repetitive study sessions. Others emphasized that music with lyrics can be distracting, while lo-fi and instrumental music create a relaxed environment that promotes longer focus periods. These individual experiences reinforce the survey's broader trends.

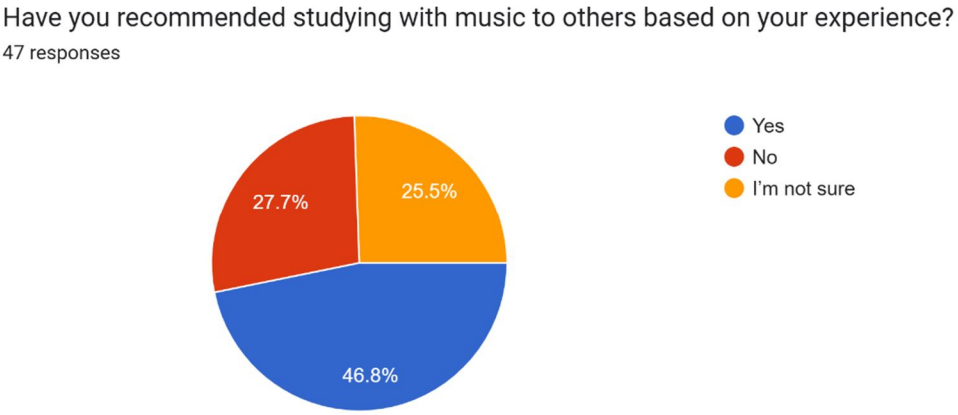
31.3% want music always, 39.6% sometimes, and 27.1% prefer silence. This shows no single ideal, highlighting individual differences.

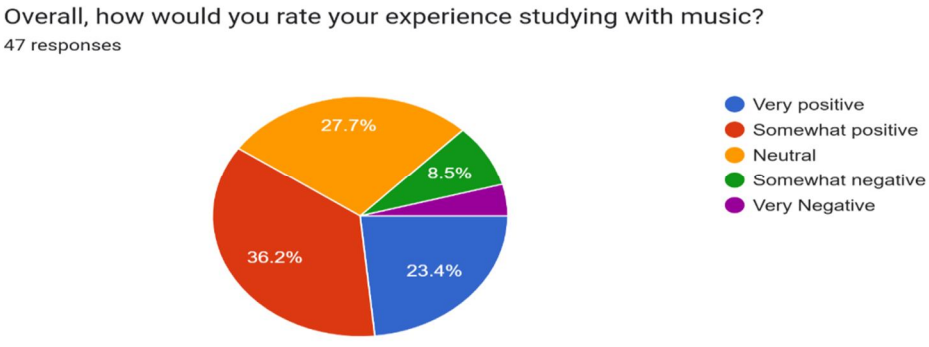


24% say studying with music helps focus better, 32% say no difference, and 36% haven't tried both. This shows some students have explored both options to find what suits them.




Only 25.5% recommended music for studying, 27.7% did not, and 46.8% were unsure, indicating mixed experiences lead to uncertain recommendations.

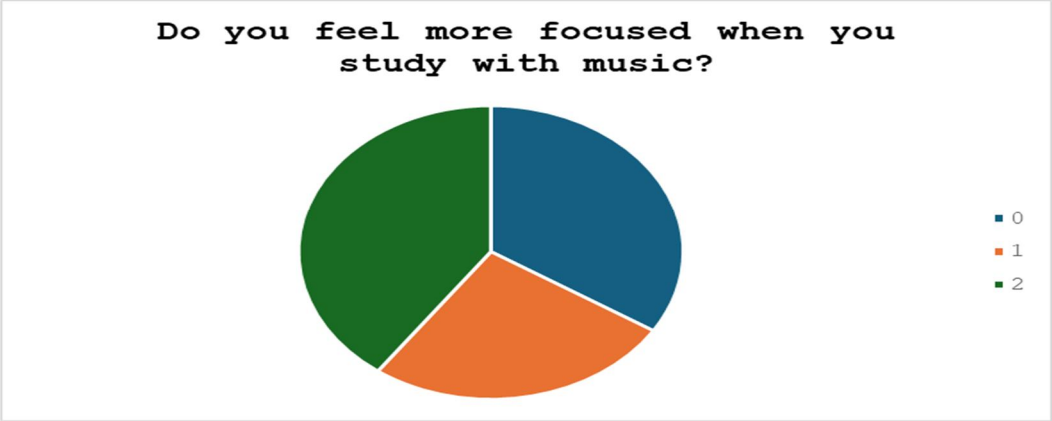


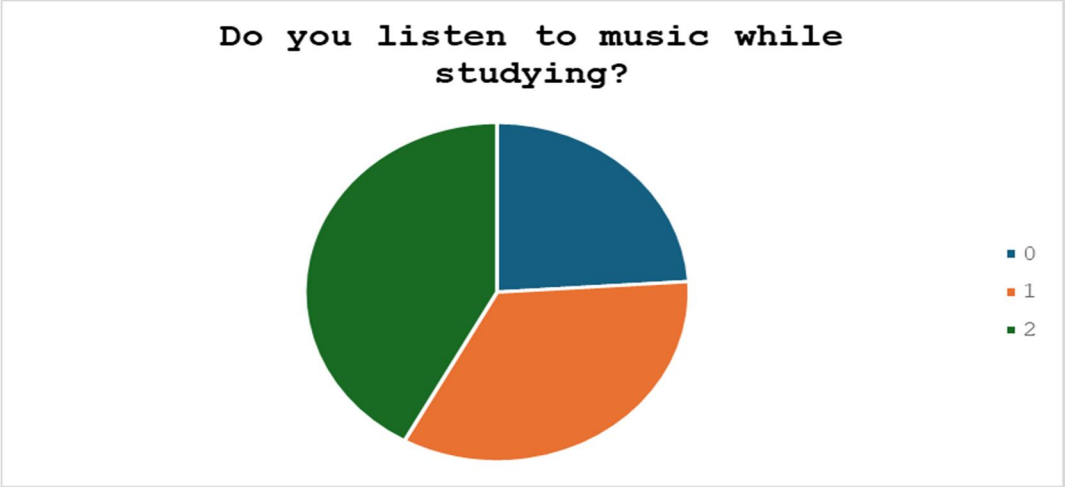

- Somewhat positive (36.2%): Most students had a moderately good experience with music while studying.
- Neutral (27.7%): Many felt music had no major impact—positive or negative.
- Very positive (23.4%): A good number found music highly beneficial for focus and mood.
- Somewhat negative (8.5%): A few felt mildly distracted by music.
- Very negative (4.3%): Only a small group reported a clearly negative impact on their study performance

## V. DASHBOARD

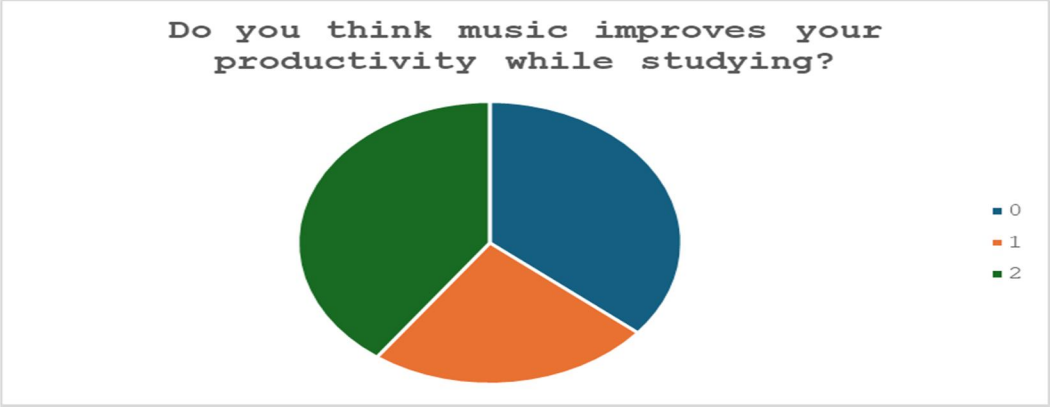
This dashboard explores how students use music during study sessions and the effects it has on their productivity and performance.




A large portion of students feel more focused with music, indicating it helps block distractions and maintain attention. However, a smaller group finds it distracting, showing individual differences




Most respondents regularly listen to music while studying. This suggests it's a common strategy, likely used for motivation, comfort, or creating a consistent environment.




Many students believe music increases productivity. For them, music may help sustain energy and reduce monotony, though some feel it has no effect or is a distraction.

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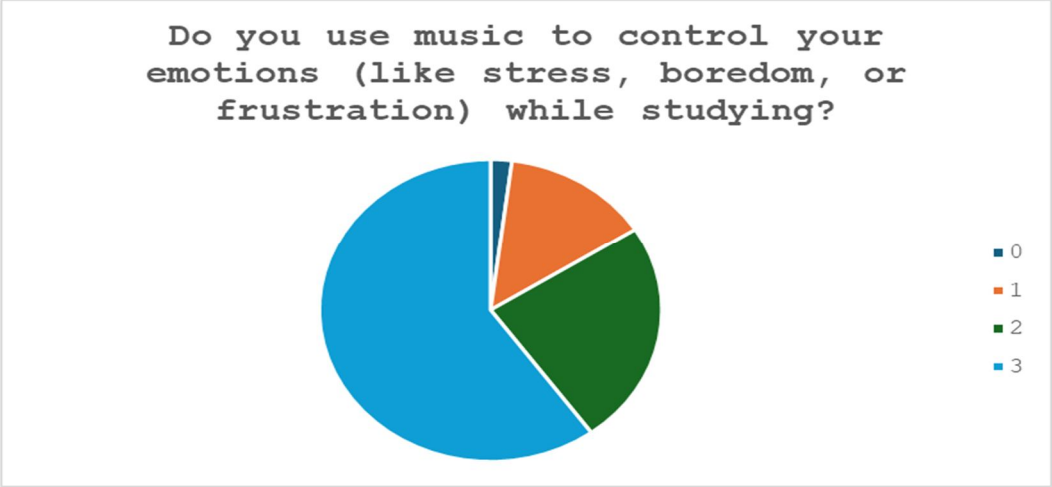
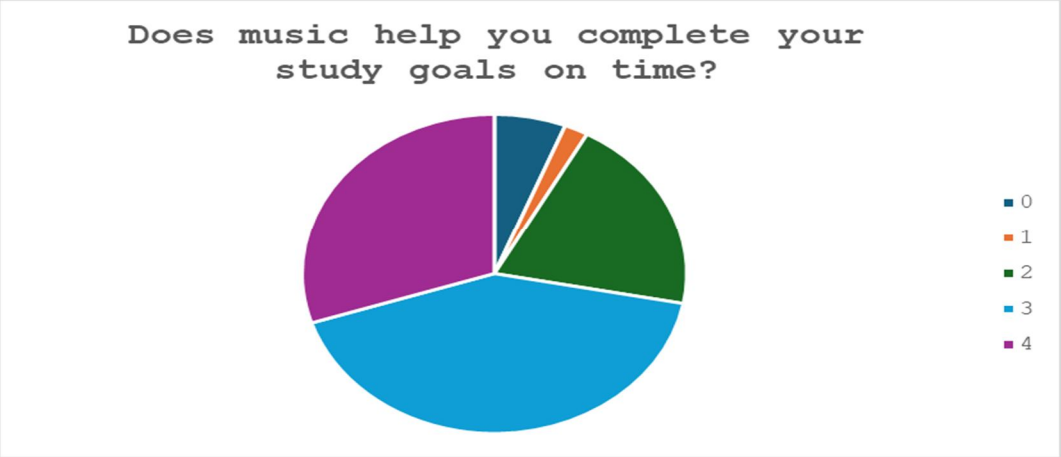
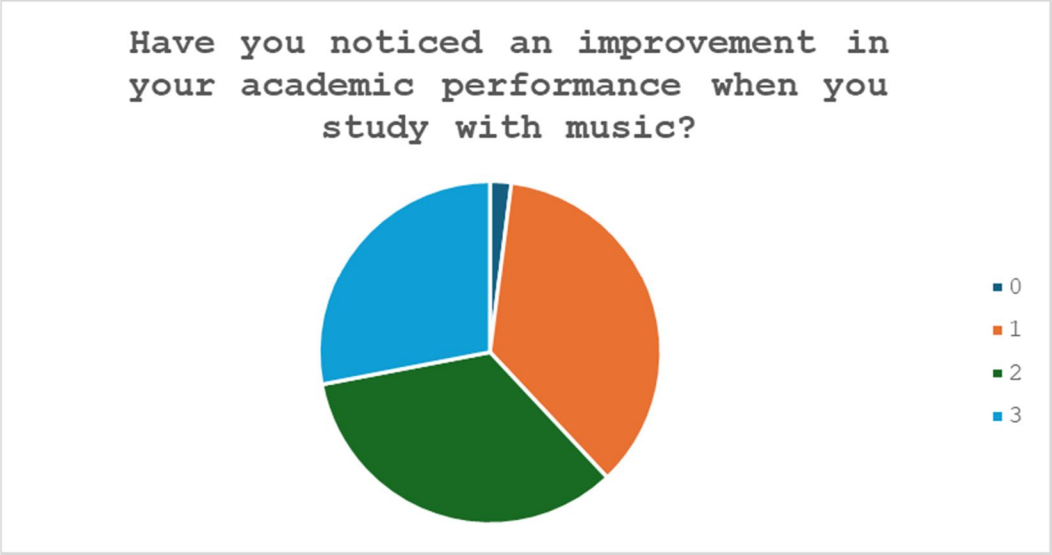



Most students use music to manage stress, boredom, or frustration. This shows that music plays a psychological role in helping students stay emotionally balanced during study sessions.




Responses are mixed. Some students find music helpful in staying on track, while others feel it either doesn't affect or may even delay their task completion.




While some students believe studying with music improves their grades, others see no clear impact. This reflects how the benefits of music can be subjective and dependent on study style.

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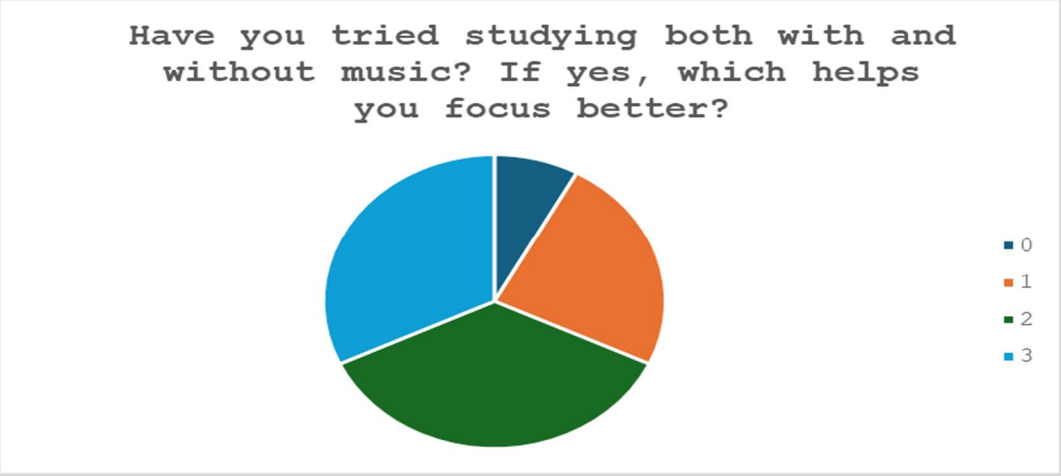
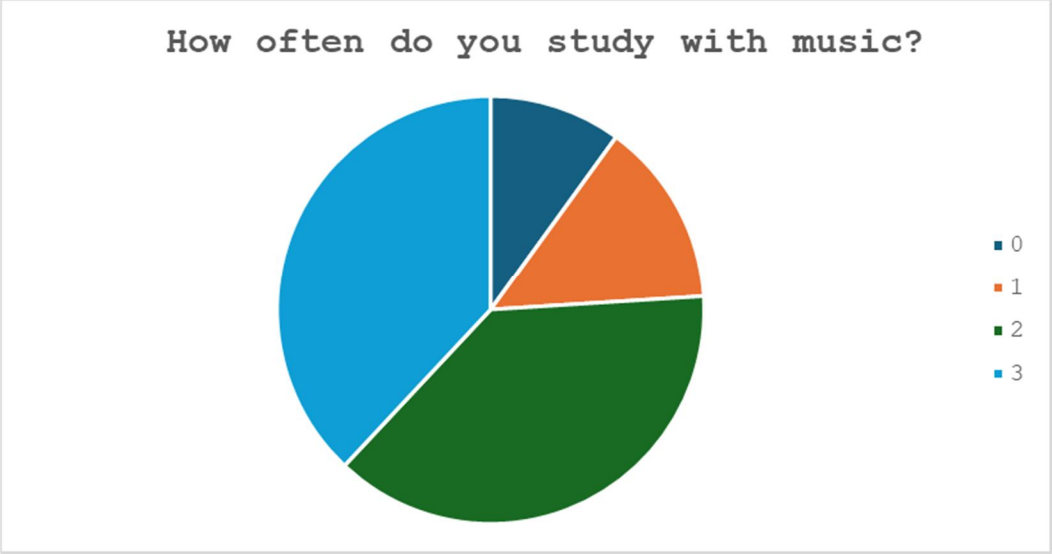
Most students have recommended studying with music, suggesting a positive personal experience and perceived benefits.




The majority say studying **with music** helps them focus better, indicating music's positive role in attention for many.

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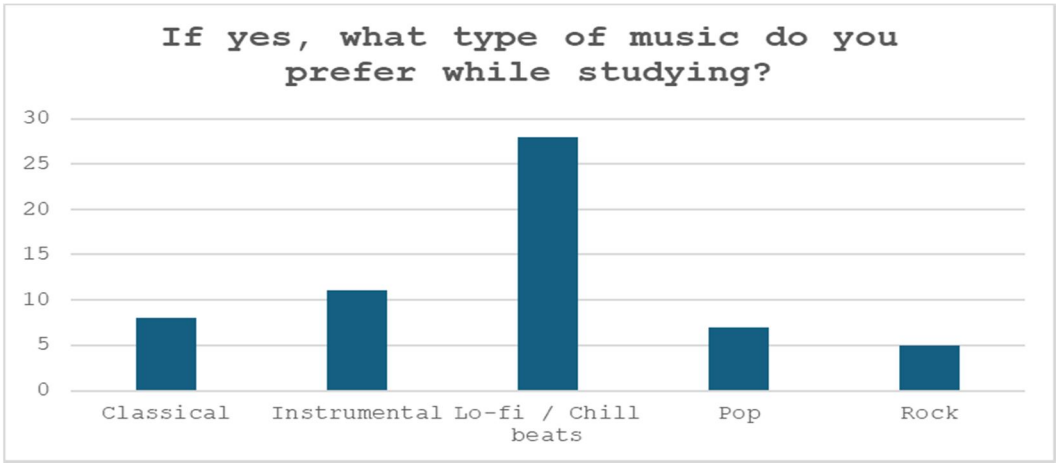
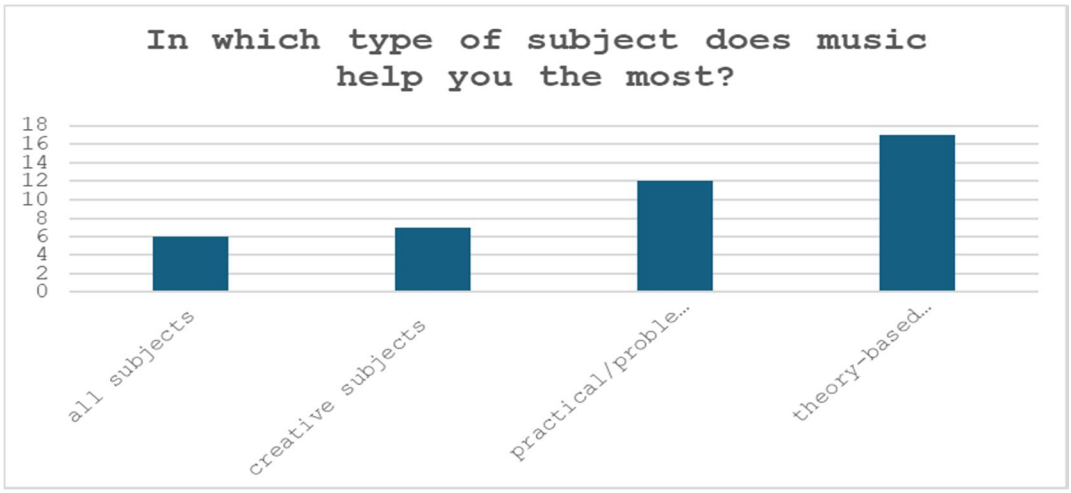
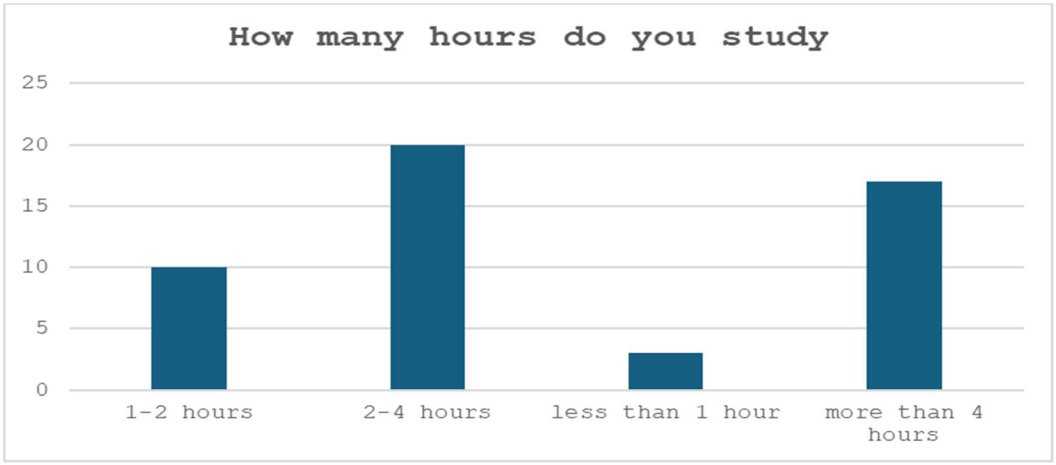
Many students frequently study with music, showing it's a regular part of their study habits.




**Lo-fi/Chill beats** are the most preferred, followed by instrumental music. These genres are likely chosen for their calming, non-distracting nature.




Music is seen as most helpful in **theory-based** and **practical/problem-solving** subjects, suggesting it supports structured thinking and task flow.




Most students study for **2–4 hours**, followed by 1–2 hours. This gives context to how often music is likely integrated into their routine

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## VI. CASE STUDIES

### *A. Background Music and Study Focus in Gifted Readers*

*(Adapted from Bradford, 2012)*

Although Bradford's (2012) study focused on deep reading among gifted students, it offers relevant insight into how background music and sound environments affect concentration and study habits. The four high-achieving students in the study emphasized the need for controlled study environments. They reported that either absolute silence or low-level, non-distracting background music helped them concentrate better when preparing for exams or assignments. This preference was categorized as part of the "Artificial Environment" in the study's "Three Common Cores of Control" — which also included isolating from others and minimizing technology use (Bradford, 2012).

While not all students used music, those who did were selective about the type — opting for instrumental or ambient tracks that blocked distractions without drawing attention. The findings suggest that background music can enhance focus when used intentionally, but silence was often preferred for tasks requiring deep mental engagement (Bradford, 2012).

### *B. The Effect of Music Listening on Vocabulary Learning Performance*

*(Sarı Yıldırım & Taşpınar, 2023)*

This case study directly evaluated how listening to music affected students' ability to learn and retain new vocabulary in a foreign language. Twenty Turkish elementary students, aged 10–11, were divided into two groups. One group learned English vocabulary using flashcards while listening to music; the other group studied in a silent environment. Results showed that the group in silence outperformed the music group, scoring an average of 85.8 points compared to 77.6 points by those who listened to music (Sarı Yıldırım & Taşpınar, 2023).

The findings reveal that music may negatively impact academic focus, especially in language learning tasks that require high verbal memory and concentration. Although music is often believed to enhance motivation or reduce stress, this study demonstrates that a quiet setting may yield better academic results during vocabulary acquisition (Sarı Yıldırım & Taşpınar, 2023).

### *C. Music as a Learning Aid for a Student with ADHD*

*(Wiebe, 2007)*

Wiebe's (2007) case study explored how music influenced study habits and concentration for an adolescent diagnosed with ADHD over a 14-week period. The student used music during homework and classwork to block distractions and regulate focus. Interviews with the student, parents, and teachers revealed that music helped him maintain attention, improved memory recall, and enhanced his overall attitude and motivation toward academic tasks (Wiebe, 2007).

The student particularly benefited from using headphones to listen to preferred music, which helped reduce environmental noise. However, the study also revealed institutional barriers, as school policies often restricted the use of music devices. Despite these challenges, the student reported that music made academic work feel more enjoyable and manageable. This case highlights how background music, when personalized and permitted, can be an effective strategy for enhancing academic focus, particularly for students with attention difficulties (Wiebe, 2007).

## VII. RECOMMENDATIONS

This chapter offers comprehensive suggestions derived from the findings of the study titled "a study on the impact of background music on students' study habits, concentration levels, and academic focus". The findings derived from the survey responses, complemented by scholarly articles and psychological theories, suggest that music can serve as a beneficial resource in educational environments when employed strategically. However, its influence can differ based on factors like the type of music, the complexity of the task, and personal preferences.

### *A. Use low-fi or instrumental music to enhance concentration and reduce distractions.*

In the survey, a substantial portion of students expressed a preference for lo-fi or instrumental music while studying, with 62.2% choosing these genres. These students indicated greater levels of attentiveness and ease. Music without lyrics is less likely to disrupt cognitive tasks like reading or writing, as it does not contain distracting words. Lo-fi, in particular, is known for its consistent beat and gentle sounds that contribute to a peaceful study atmosphere.

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Suggestion:: It is advisable for students to listen to lo-fi, ambient, or classical music while studying, particularly when engaging in activities that demand concentration, such as writing or reviewing notes. Educational institutions can also create curated playlists or suggest existing ones that are appropriate for academic purposes.

*B. Refrain from listening to music with lyrics while engaging in verbal or language-based study tasks*

The dual-task interference theory suggests that music with lyrics can interfere with the brain's ability to focus on verbal processing, particularly when engaging in activities like reading comprehension or writing essays. In their open-ended responses, several students expressed that lyrical music hindered their comprehension and retention of study material.

Suggestion:: Students are recommended to refrain from listening to music with lyrics while performing tasks that require language skills, such as reading academic texts, studying for theory-based exams, or writing assignments. Instead, instrumental background tracks or soft music without lyrics can be more beneficial.

*C. Employ music for emotional control and mood adjustment.*

The majority of students (61.2%) stated that music played a significant role in helping them remain calm, motivated, and emotionally stable while studying. Numerous individuals expressed that music played a significant role in alleviating stress, combating boredom, or making lengthy study sessions feel less draining. This aligns with the mood regulation theory (juslin & sloboda, 2010), which emphasizes the impact of music on emotional states.

Suggestion:: Students can utilize music as a means of emotional support while studying, particularly during demanding periods such as exam preparation. Music can serve as a source of motivation, particularly when students experience mental exhaustion. Educational establishments may contemplate establishing designated areas where students can utilize headphones and listen to their preferred music, thereby enhancing their mental well-being and motivation.

*D. Tailor music use based on the type of task and individual learning style.*

The results indicate that the efficacy of music is highly influenced by the nature of the task being performed. Students shared that they found writing tasks easier when accompanied by music (38.8%), but tasks such as reading or solving math problems were less supported. This aligns with the task complexity and music match hypothesis (dobbs et al., 2011), which suggests that music is more effective for repetitive or creative tasks.

Suggestion:: Students should be motivated to assess their own performance when engaging in different tasks, both with and without the presence of music. Teachers can assist by teaching students techniques to evaluate how music impacts them individually during various academic tasks and make necessary adjustments

## VIII. CONCLUSION

This study aimed to investigate the impact of background music on students' study habits, concentration levels, and overall academic focus. In the modern era, numerous students incorporate music into their study regimen—some employ it to maintain focus, others to alleviate anxiety, and some simply to evade complete silence. The objective of this research was to determine whether the presence of background music has a positive impact on students' academic performance or if it serves as a distraction. A survey was carried out with 50 college students hailing from diverse backgrounds. The responses indicated that a significant number of students have a preference for listening to music while studying. The most favored genres of music were lo-fi beats and instrumental tracks, which were selected by more than 60% of the students.

These genres are mellow, gentle, and don't have any words—making them less likely to divert attention and more effective in maintaining focus. According to students, these types of music aid in their ability to focus for extended periods and alleviate the stress associated with studying. Nevertheless, not all pupils discovered music beneficial. Some argued that listening to music with lyrics hindered their comprehension of written material or their ability to express themselves through writing. Some students also believed that they were more efficient when studying in a quiet environment.

This demonstrates that music influences each person uniquely. The choice of music depends on the individual's preferences, the nature of the task at hand, and the genre of music they are currently listening to. For instance, one student might excel in writing essays while listening to lo-fi music, while another student may find any kind of background noise to be distracting when solving math problems. From the information gathered, we also observed that a significant number of students utilized music not only for concentration but also for emotional support.

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Music served as a source of tranquility during their intense study sessions, particularly when they were preparing for exams or managing a demanding workload. Over half of the students claimed that music had a positive impact on their mood, motivation, and ability to stay focused on their academic objectives. These findings align with prior investigations. For example, research conducted by cabanac et al. (2013) and strachan (2015) demonstrated that listening to calm music can enhance learning abilities by alleviating stress and promoting better concentration among students.

Similarly, the arousal theory and cognitive load theory explain that moderate background music can be beneficial in providing the appropriate level of mental stimulation—but excessive or inappropriate music (such as loud or fast music) can hinder thinking. One significant discovery was that music tends to be most effective when paired with specific types of tasks. Students expressed that music played a significant role in assisting them during tasks such as writing assignments, reviewing notes, or maintaining concentration for extended durations.

Conversely, tasks that required memorizing information or solving logical problems were not always aided by music. This supports the notion that students should align the genre of music they listen to with the task they are engaged in. It is also worth noting that some students mentioned that they were unable to study without music, while others stated that they never relied on it. This demonstrates that music is a subjective learning tool, and what resonates with one student may not resonate with another. Hence, students should engage in experimentation and attempt to comprehend the impact of various genres of music on their academic performance. Although the study offered valuable information, it also had certain limitations. The sample size was limited to only 50 students, and the results were derived from students' self-reported experiences rather than objective measures of grades or performance.

Despite this, the data provides a comprehensive overview of students' perspectives on the role of music in their everyday academic experiences. In summary, this research demonstrated that music can serve as an effective aid in studying—but only when utilized appropriately. Numerous students find that it enhances their concentration, maintains emotional stability, and enhances their enjoyment of studying. Nevertheless, music isn't always beneficial in every circumstance, and its efficacy relies on various factors such as the type of task, genre, and individual learning preferences.

Students should develop self-awareness and experiment with various techniques to determine how music can assist them in achieving their learning objectives. By adopting the appropriate strategy, background music can transform from a mere source of amusement into a catalyst for productiveity and motivation during the study process.

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## APPENDICES

**Questionnaire**

**1. Do you listen to music while studying?**

☐ Yes
☐ No
☐ Sometimes

**2. If yes, what type of music do you prefer while studying?** *(Select all that apply)*

☐ Instrumental
☐ Lo-fi / Chill beats
☐ Pop
☐ Classical
☐ Rock
☐ Other: _____

**3. How often do you study with music?**

☐ Always
☐ Often
☐ Rarely
☐ Never

**4. Do you feel more focused when you study with music?**

☐ Yes
☐ No
☐ No noticeable difference

**5. Do you think music improves your productivity while studying?**

☐ Yes
☐ No
☐ Not sure

**6. On average, how many hours do you study per day?**

☐ Less than 1 hour
☐ 1–2 hours
☐ 2–4 hours
☐ More than 4 hours

**7. Have you tried studying both with and without music? If yes, which helps you focus better?**

☐ With music
☐ Without music
☐ No noticeable difference
☐ Haven't tried both options

**8. Have you noticed an improvement in your academic performance when you study with music?**

☐ Yes
☐ No
☐ Not sure

**9. Which area do you feel improved the most when you study with music?**

☐ Focus and concentration
☐ Memory and recall
☐ Time management

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☐ Motivation and mood
☐ None

**10. What specific task do you feel becomes easier when you study with music?**
☐ Reading and understanding
☐ Writing assignments
☐ Solving math or logical problems
☐ Memorizing or revising
☐ Staying focused for long periods
☐ None

**11. Do you use music to control your emotions (like stress, boredom, or frustration) while studying?**
☐ Yes, it helps me stay calm and balanced
☐ Occasionally, when I feel overwhelmed
☐ No, I don't think it helps emotionally

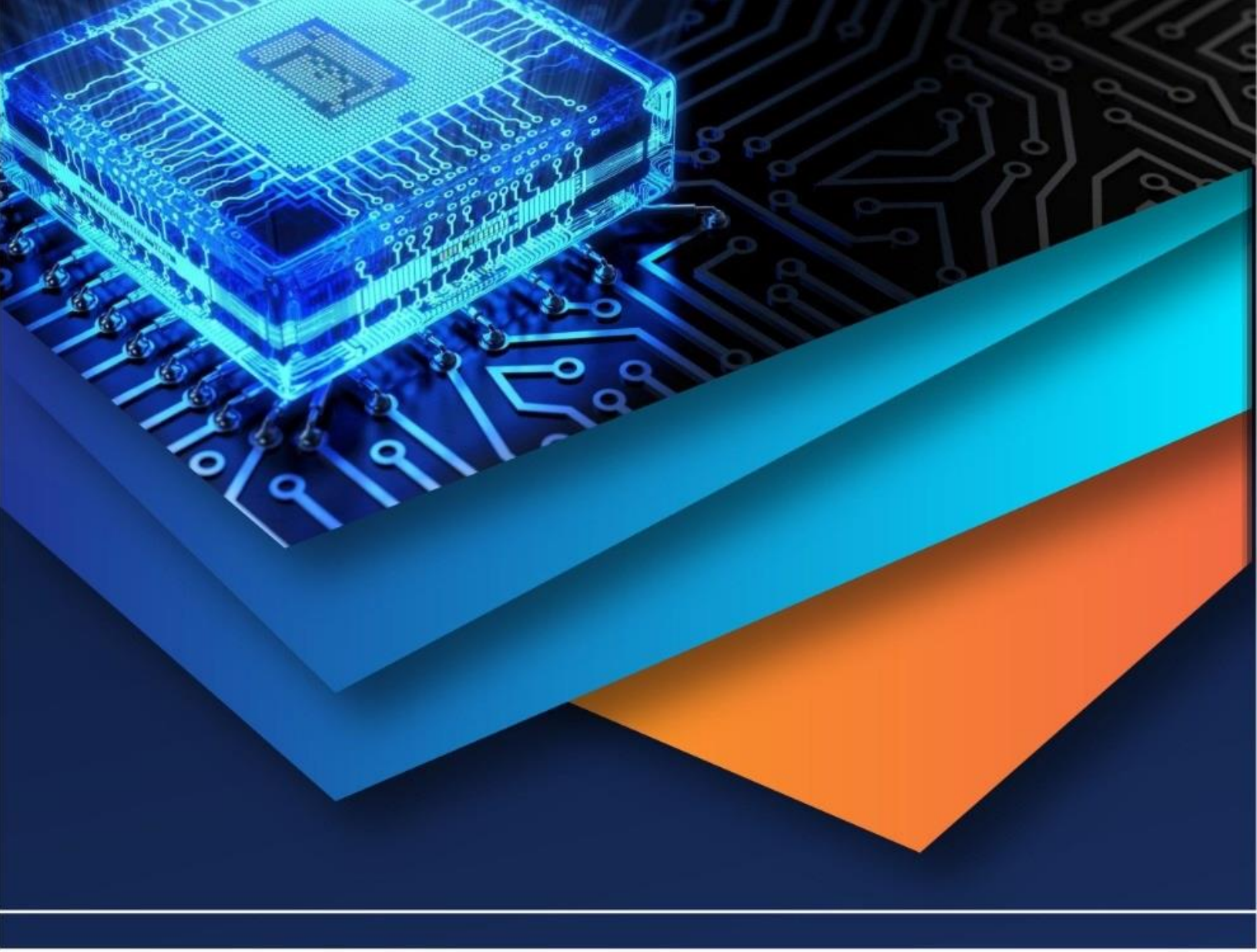
**12. Does music help you complete your study goals on time?**
☐ Yes, always
☐ Sometimes
☐ No, it delays me
☐ I don't set study goals
☐ Other: _____

**13. In which type of subject does music help you the most?**
☐ Theory-based subjects (e.g., History, Biology)
☐ Practical/problem-solving subjects (e.g., Math, Physics)
☐ Creative subjects (e.g., English, Arts)
☐ All subjects
☐ None

**14. Have you recommended studying with music to others based on your experience?**
☐ Yes
☐ No
☐ I'm not sure

**15. If you could describe your ideal study environment, would it include music?**
☐ Yes, always
☐ Only sometimes
☐ No, I prefer complete silence
☐ I'm not sure yet

**16. Overall, how would you rate your experience studying with music?**
☐ Very positive
☐ Somewhat positive
☐ Neutral
☐ Somewhat negative
☐ Very negative



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