

**THE IMPACT OF BACKGROUND MUSIC ON STUDENT READING  
COMPREHENSION**

by

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CERTIFICATION OF THESIS/PROJECT CAPSTONE WORK

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## THE IMPACT OF BACKGROUND MUSIC ON STUDENT READING COMPREHENSION

**ABSTRACT**

Reading is the foundation for lifelong learning. It has been shown that music has an impact on students learning depending on what music you use in the classroom (Rashidi & Faham, 2011; Chew, Yu, Chua, & Gan, 2016; Chou, 2010). This brought up the problem of music impacting students reading comprehension. This problem led to the research question of does background music have an impact on students reading comprehension. An online survey was used to find if middle school general education and special education teachers used music in their classroom and if the music has an impact on the students reading comprehension. The results showed three major themes. The first theme was that music helps the student's comprehension. The second theme was that the music teachers used in their classrooms are a range from upbeat to slow soothing music. The third theme was that music that the participants who used music in their classroom found their students to be more engaged and focus more on the lesson. The teachers also stated that they would also recommend using music in the classroom to other learners. These findings were important to the research because they showed that more research needs to be done on this topic. The teachers found differing results from the research stated in this study. There are limitations and recommendations offered for a future study.

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## **Chapter 1: Introduction**

### **Statement of the Problem**

According to Su, Kao, Hsu, Pan, Cheng, and Huang (2017), reading has been the foundation of lifelong learning. The inclusion of music, sports, and more during reading periods helps to drive the interest of the student. Some teachers have started providing music in their classroom to help students concentrate and complete their work quietly (Rashidi & Faham, 2011; Chew, Yu, Chua, & Gan, 2016; Chou, 2010). Lehmann and Seufert (2018) found that music characteristics such as tempo and intensity influence our learning outcomes. Chou (2010), stated that the type of music that teachers play may have an impact on what their students are learning. He also stated that when we listen to music certain frequencies of sounds have positive effects on certain parts of the brain. which brings a calming effect to students. It has also been noted that when music is being played in the classroom, there is a notable change in student body temperature, blood pressure, breathing, and pulse rate (Rashidi & Faham, 2011).

This can lead to the problem of background music distracting students from their reading. This leads to the question, does background music have an impact on student reading comprehension? How are teachers using music to promote comprehension? This question can be answered through a survey of local teachers to investigate the impact that background music has on their students.

### **Background**

In my current position as a literacy specialist candidate, I have chosen this topic because of its importance in the literary world. Reading comprehension is an important skill for all students to have that will be beneficial throughout their life. Thompson, Schellenberg, and Letnic

(2012) have noted that reading a text uses many cognitive processes such as letter identification and semantic access. Reading is also very attention demanding process. When we listen to music while reading the music interferes with our reading comprehension. Both language and music perception rely on memory and the ability to break down the structural process. This results in using the same cognitive processes to understand both music and language.

### **Terminology**

There were key terms which were used in this proposal and may require further clarification. The first term is “cognitive process”, this is acquiring knowledge through our senses, thoughts, and experiences. The next term is “semantic access” this is looking into the long-term memory to remember common knowledge such as letter names, colors and other facts acquired over our lifetime. Another term is “episodic memory” this term addresses the memories we make through experiences. The next term is “phonological memory” this the process of understanding sounds in language, such as spoken and written language. The last term is “phonological loop” this term relates to the central concepts of working memory. It stores our verbal information as a rehearsal mechanism.

### **Theoretical Stance**

The theoretical stance supported by this research was the view of literacy through the automatic information processing model. This model supports the way we process information. The theory directly connects to this study. The way we process different information is very important when listening to music and reading in the classroom setting. This model has five major components: visual memory, episodic memory, phonological memory, semantic memory, and attention. Our attention is central for encoding information from our short term and long

term memory (LaBerge & Samuels, 1974). Several researchers (Su et al, 2017; Doyle & Furnham, 2012; Chou 2010) have discussed how the attention capacity of students plays an impact on our reading comprehension. There are also many other cognitive abilities to work together to help us comprehend our reading.

This topic directly connects to the International Reading Association (IRA) *Standards for Reading Professionals* (2010). Several of the Standards addressed the component of literacy development and influences on it. For example, Standard 1 is to analyze classroom environment quality for fostering individual motivation to read and write (e.g., access to print, choice, challenge, and interests), and to read and understand the literature and research about factors that contribute to reading success (e.g., social, cognitive, and physical). Addressed in Standard 6 is to use knowledge of students and teachers to build effective professional development programs.

### **Rationale**

Chew et. al. (2016) advocated that the effect of background music has on learning and academic performance is highly pertinent to everyday students around the world. A common habit of many students has become listening to popular music while studying or completing academic work. The concern is that the music may interfere with student learning and their performance on their work. It has been noted that background music negatively affects studying and learning because the brain uses some of the same functions to listen to music and learn the material.

Patston and Tippett (2011) have also investigated the effect of music training and background music on reading comprehension. They have found that students with music training

have heightened mood and motivation which increases the students' cognitive development. Like Patston and Tippet (2011), Doyle and Furnham (2012) noted that there were differences between student reading comprehension and background music with students who are creative vs non-creative students. They stated that introverts are more negatively affected by background music and extroverts are more positively affected by background music while learning. When listening to music it provides extra stimulation for students. All students are different and the way we react to these stimulations can depend on our personality.

## **Chapter 2: Literature Review**

### **Introduction**

In order to address the research question of how background music has an impact on students reading comprehension, a review of empirical research studies on the topic was conducted. The literature review began with a search of the major databases including, Academic Search Complete, ERIC, Education Source, PsycInfo, Music Index, and Teacher Reference Center. Keywords and phrases that were used in the searches are background music, reading, and comprehension. The search terms also included that results were shown from the years 2008 to 2018. All of the results were also only shown if they were peer-reviewed, and were a journal article.

The studies most relevant to the topic were grouped together below and organized by themes. The first theme dealt with the tempo and intensity of the music played in the background while completing school work. The next theme that was studied was that background music played was a distraction for students. The final theme was how listening to music and reading involves many skills to be used at the same time.

### **Background Music Is A Distraction**

While it has been discovered that the effects of the tempo and intensity can have an impact on learning, and also that the brain uses multiple skills to process information while reading and listening to music (Doyle & Furnham, 2012; Chou, 2010 ). It has also been found that background music is a distraction to student learning. One major theme found throughout many studies is that background media whether music or television interfered with concentration especially when working on cognitive tasks. (Doyle & Furnham, 2012). Lehmann and Seufert

(2018) along with Thompson et al, (2012) stated that listening to music while studying, especially fast tempo music is detrimental to learning. They noted that the distraction of music has a direct impact on the comprehension of students when reading. For many students, it is not just music that is distracting but any noise can be distracting while learning (Lehmann & Seufert, 2018; Thompson et al, 2012; Chou 2010; Doyle & Furnham, 2012). Some studies have shown that many students find music in the background while they are learning distracting and would rather have a silent room. They also state that the classical or Mozart music used in the classroom is not as distracting to them especially when reading they felt it to provide a calming environment (Anderson & Fuller, 2010; Su et al, 2017).

### **The Tempo And Intensity of Background Music**

It has also been found that certain sounds and frequencies have positive and negative effects on different parts of the brain. The changes seen in students is noticeable when music is being played in the classroom (Rashidi & Faham, 2011). Music such as Mozart and Classical music has been found to reduce anxiety, increase learning performance, increase cognitive ability, and provide a stimulating effect on students (Lehmann & Seufert, 2018; Su et al. 2017; Telesco 2010; Rashidi & Faham, 2011). Telesco (2010) and Lehmann and Seufert (2018) reported the tempo of music can impact how a student learns. The soft fast music can have a positive impact on student learning, while soft slow and loud slow music can hinder student learning. The tempo most influences student arousal when listening to music.

Comprehension has been shown to likely change depending on the characteristics of the music that we listen too (Lehmann & Seufert, 2018; Thompson et al. 2012; Su et al. 2017; Johansson, Holmqvist, Mossberg, & Lindgren, 2012). Some researchers such as Thompson et. al

(2012), Anderson and Fuller (2010) and Chew et al. (2016) have stated that background music has a negative impact on student learning. The fast tempo music can impact student comprehension and recall. Additionally, music that contains lyrics can have a negative impact on student comprehension and efficiency. Even though it has been noted that Mozart and classical music can have a positive impact, some state that lyrical, loudness of music and classical music can also have a negative impact although it is not significant (Chew et al, 2016; Anderson, & Fuller, 2010; Su et al. 2017; Thompson et al. 2012). All of these studies show that the tempo and intensity of music can play an impact on how the student learns.

### **Background Music Uses Multiple Skills**

Thompson et al, (2012), Doyle and Furnham (2012) and Chou (2010) noted that when listening to music and also reading the brain requires many functions that happen at the same time. Music processing takes up a lot of cognitive ability. When we listen to music with lyrics, the lyrics interfere with our brain processes, the brain has to process the lyrics and the melody separately. When you then add reading along with music that has lyrics the brain has three jobs it needs to complete at the same time. Since lyrics are auditive texts, the music with lyrics burdens the phonological loop. Learning difficulties can also happen when lyrics that are being listened too are close to the visual text being read. Many of the words can get confused when listening and reading (Su et al, 2017; Doyle, & Furnham, 2012). Chou (2010) discussed that the cognitive process' that we use when listening to music and when we read are shared which interferes with our learning. The cognitive resources we use while reading are automatic. These processes are letter identification and semantic access. There was also attention demanding processes used by the brain such as inference generation and text elaboration. (Thompson et al. 2012; Patston &

Tippett 2011; Anderson & Fuller, 2010; Lehmann & Seufert, 2018; Su et al. 2017; Doyle & Furnham 2012).

Anderson and Fuller (2010) found more about our brain and attention capacity. They state that our attention is taken from one task to the other. The amount of attention that can be deployed at one time is limited. The attention we have can be allotted in different amounts based on the different tasks and activities. The ability to perform the activities concurrently depends on the demand of every single activity in isolation (Chou, 2010). These studies state that the cognitive process we use for reading and listening to music happening at the same time, and can prove troublesome for the students when learning.

### **Summary**

While researching about how background music has an impact on students reading comprehension, it has been found that music is distracting for students while doing schoolwork. Reading comprehension, in particular, is most affected (Thompson et al. 2012; Patston & Tippett 2011; Anderson & Fuller, 2010; Lehmann & Seufert, 2018; Su et al. 2017). The research has also shown that the tempo and intensity of the music played in the classroom also affects students performance. While all music can be distracting, the slower classical music and Mozart is the most beneficial for the student to listen to when doing work. When a student listens to music that they are interested in or has a fast tempo they become distracted by that music (Telesco, 2010; Anderson & Fuller, 2010; Chew et al. 2016). The final theme found from the research is that when we listen to music and read we use many skills at the same time. Our brain can only process certain skills at a time and we have an attention capacity that tells our brain how much information we can handle at once. We need our brain to focus on the correct skills such as letter

identification and decoding words while reading, not the breakdown of the melodies we are listening to (Su et al, 2017; Doyle & Furnham, 2012).

### **Chapter 3: Methodology**

#### **Overview of Methodology**

The use of music in the classroom during instruction has an impact on students reading comprehension when working in the classroom and at home (Chou, 2010; Thompson et al. 2012; Doyle & Furnham, 2012). Is the music being played distracting? Does the type of music being played have an impact on students learning? This research question addressed the question of how does background music have an impact on students reading comprehension.

#### **Design of Study**

In looking at how students comprehend with background music, an electronic survey was being used to find themes and trends with this topic. The methodology for this research was a mixed method study. The empirical study was conducted using an electronic survey with a mix of both qualitative and quantitative questions. The principal investigator analyzed the results based on themes and trends in the data.

**Participants.** The participants in this study were teachers from a school in Western New York. The survey (Appendix B) was be sent via email to 35 teachers at the school on February 25th, 2019. A reminder email was also sent to the participants on March 4th, 2019. All participants were adults and range from age 22 to 65. Twelve participants consented to be part of the study. The participants were general education and special education teachers in the school. The participants taught in grade 6 through grade 8.

**Procedures.** Permission was given on December 10th, 2019 by the State University of New York at Fredonia Human Subjects Review Committee, to complete and conduct this research on January 22nd, 2019 (Appendix C). A reminder email was sent to the building

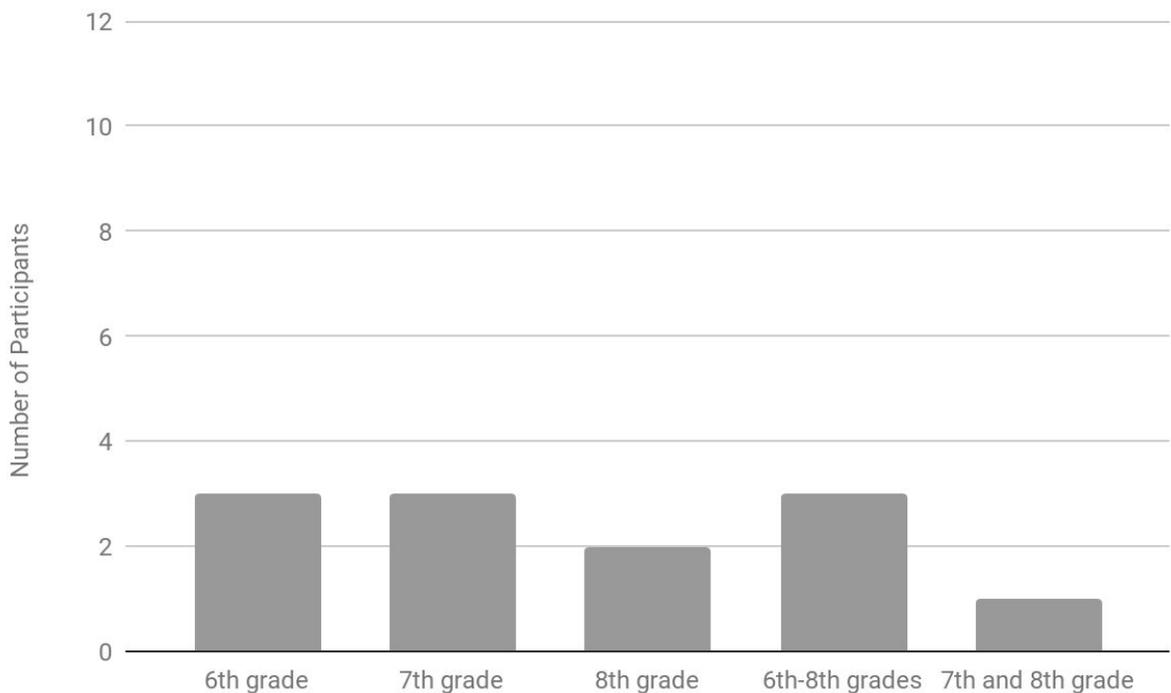
principal by the principal investigator. The surveys were then sent out electronically by the building principal. Once permission was received the survey was then sent to the 35 participants. Twelve participants gave consent. When the participants completed the survey they then received a follow up thank you email for their participation. The survey was sent with embedded consent to the principal who then sent the survey to their staff. The survey used for the research was adapted from a survey by Kevin White, Master of Education in Divergent Learning, Columbia College (SC), 2007. Permission to adapt this survey (Appendix A) was given to the principal investigator. By clicking on the survey, the teachers were then be provided a consent form where they agree to be in the study. The study took each participant approximately 20 minutes to complete. The survey consisted of 8 open-ended and 5 multiple choice questions. All consenting participants responded to the survey. Once the responses were received the principal investigator coded and analyzed all the data. The data was then be analyzed by finding themes and trends in the data. The data was then discussed in a mixed method format of both qualitative and quantitative data. The data received was stored on a password protected computer. The data was tracked by the principal investigator as the survey was being taken.

**Data Collection.** The data was collected through an anonymous Google form. Out of the 35 surveys sent, there were 15 responses. Of these responses, 12 participants gave consent to complete the survey and 3 did not want to be used in the survey. The next step was to transcribe the surveys from the Google form. All data was stored on a password protected computer. The data was also destroyed on July 1st, 2019 ensuring that the study is complete and the data can no longer be used.

### Data Analysis

The qualitative and quantitative data were analyzed after the surveys were completed. The quantitative was analyzed based on descriptive statistics and only reported for consistent responses. The following data was gathered from the survey results and used descriptive statistics to analyze.

Based on the overall survey results of the 12 participants, there were 3 participating teachers in sixth grade, 3 in seventh grade, 2 in eighth grade, 3 who taught grades six through eight and 1 that taught seventh and eighth grade (see Figure 1).

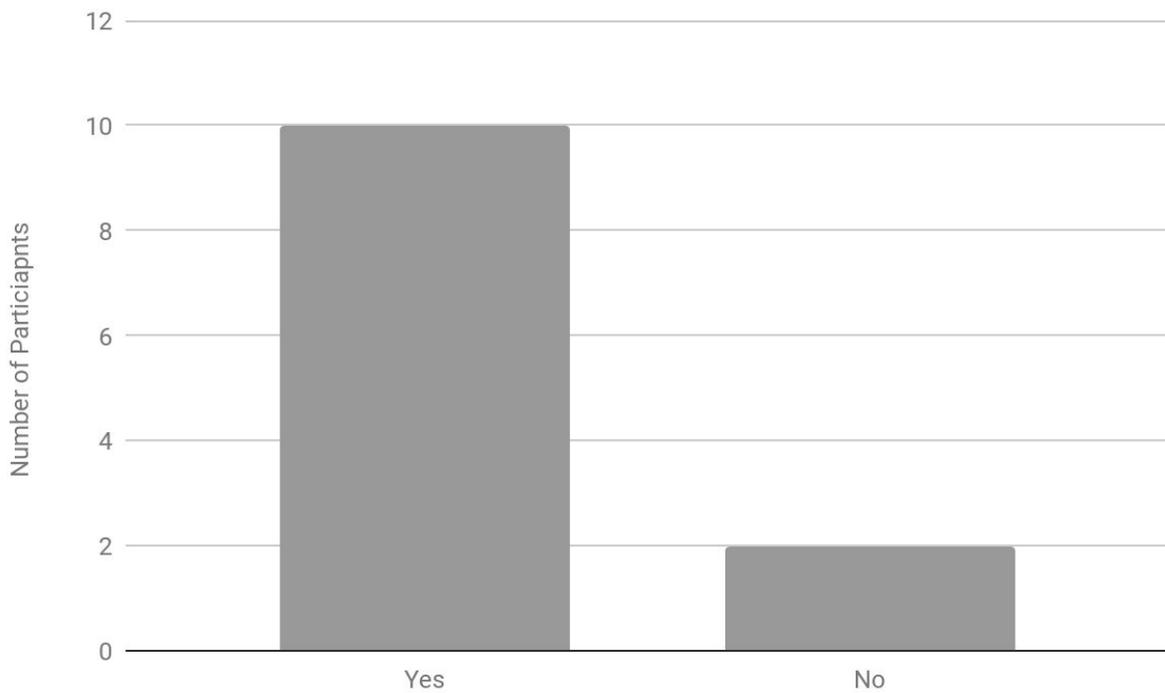


*Figure 1.* Grade levels taught by participants

Overall the quantitative survey results indicated that six participants (50%) taught English classes, the other subjects taught were Science, Academic Intervention Services (AIS),

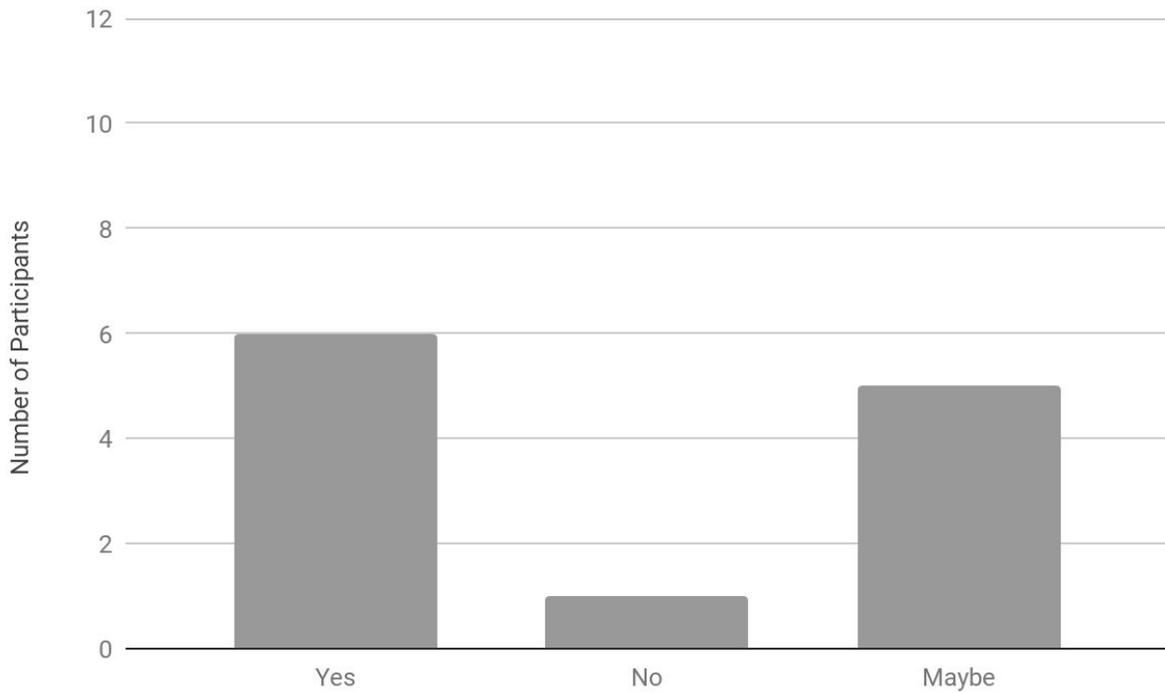
Special Education, Health, Social Studies, and French. Most of the teachers have been in the profession from 10 to 30 years. The average years taught by the teachers is 19 years.

Out of the twelve participants, ten participants (83%) stated that they would implement music in their classroom. Two participants (16%) stated they would not implement music in the classroom (see Figure 2).



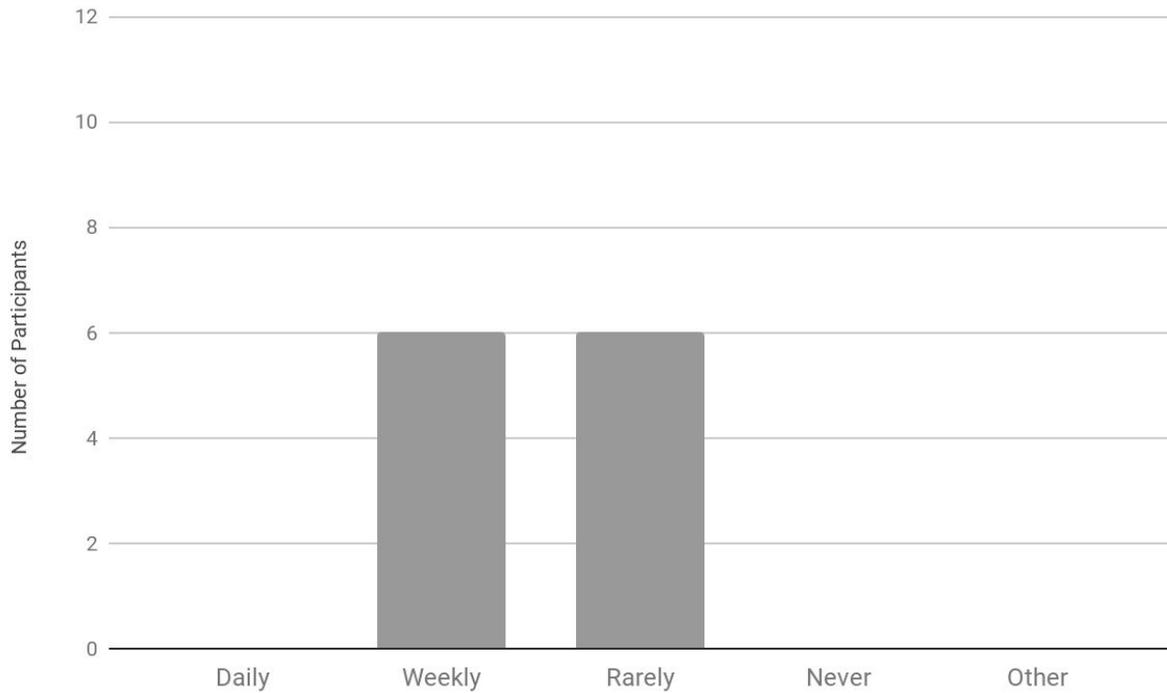
*Figure 2.* Implemented music in the classroom

Next, the participants responded that they implemented music in their classroom between 1 and 20 years. When the teachers were asked if they would recommend background music to another teacher (see Figure 3).



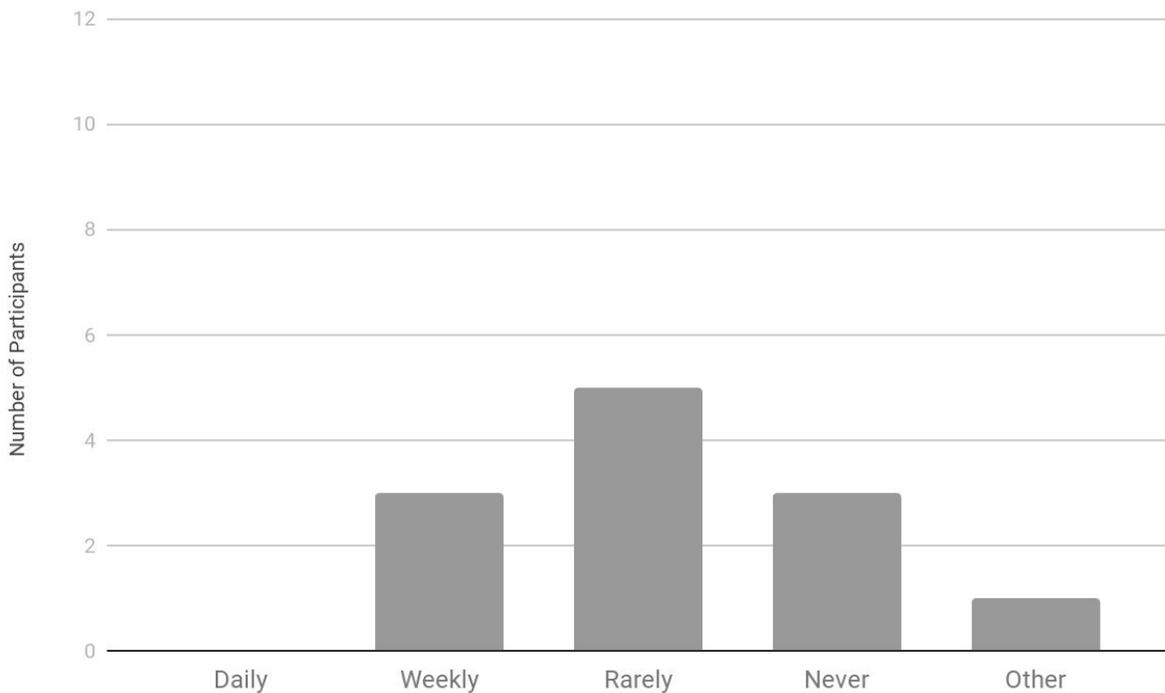
*Figure 3.* Participants considering implementation

When asked overall how often the participants used music in the classroom six participants (50%) use it weekly. While five participants (41.7%) rarely used music in their classroom (see Figure 4).



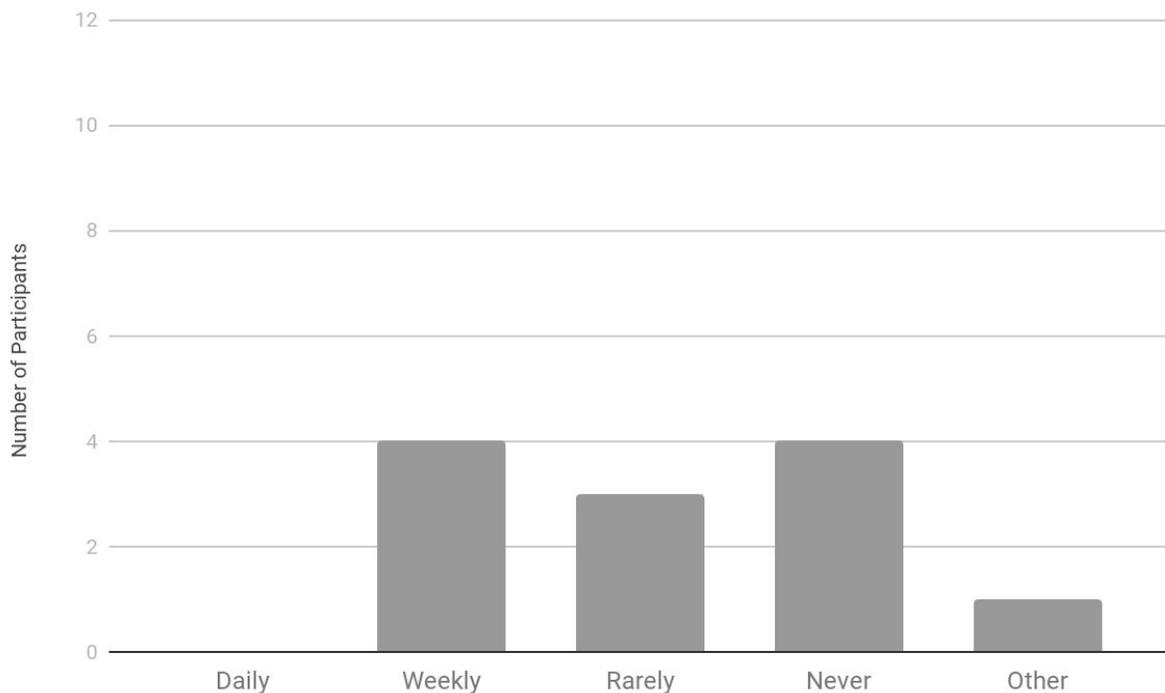
*Figure 4.* Use of music in the classroom

Participants allowed students to bring in the music of their own to the classroom very rarely. Five participants (41.7%) stated they rarely let students bring their own music. The participant that wrote in their own response stated that they only allowed music when they needed it in the class. This could be listening to a piece of music to critique or playing music from the time period they are learning about (see Figure 5).



*Figure 5.* Students bringing their own music

When asked how often they used music while students are reading in the classroom, four participants (33.3%) said weekly and four participants (33.3%) also said rarely. The participant who wrote in their own response stated that they only used music when it applied to the lesson (see Figure 6).



*Figure 6.* Playing music while reading

Next, the qualitative data were analyzed for themes and trends in the data. The themes found were determined by the data collected through the electronic survey. The data was then coded by common themes found in the data. The results were then discussed by the themes

found. All themes were determined by the principal researcher and a second reviewer to prove the results were reliable. The results were organized from most common to least common results.

The first theme found in the research was that participants have observed that music helps their students comprehend. The second theme found in the research was that the music used in the classrooms ranged from upbeat to slow soothing music. The third theme found in the research was that the teachers use music to enhance student engagement and understanding of a topic. The final theme showed that teachers found the benefit of implementing music and took the recommendation from others.

## **Chapter 4: Results and Interpretations**

### **Results**

Based on the findings from the data analysis, the principal investigator found that the participants who used music in their classroom discovered it enhanced students reading comprehension. The first finding was that participants used a variety of music styles from upbeat music to slow, soothing music. The second finding showed that participants had different views on students bringing music to the classroom and if the music was used in their classroom regularly. The third finding was that music in the classroom enhances students' engagement in the lesson. The final finding was that teachers took the recommendation from other teachers and recommended this practice to other teachers.

### **Reliability of Data**

The principal investigator administered the same electronic survey to all candidates through an email. All participants got the email with the survey on the same day. All participants had the same amount of time to complete the survey. All data was looked at by the principal investigator and a second reader in order to keep the data reliable. They came together on the same themes and trends to determine reliability.

### **Interpretation of Data/Results**

The data collected by the principal investigator showed that background music had a positive impact on students in this small population. The first finding stated that music used by the participants is a range from upbeat to soft soothing music. The one participant stated "I use top 10 current pop hits" One more pronounced "In my classroom, I like Spotify instrumental or YouTube nature sounds." The research shows that soothing music can be impactful, music such

as Mozart and Classical music has been found to reduce anxiety, increase learning performance, increase cognitive ability, and provide a stimulating effect on students (Lehmann & Seufert, 2018; Su et al. 2017; Telesco 2010; Rashidi & Faham, 2011). Unlike the research, the participants who used upbeat pop and hip-hop music also found that their students could still comprehend the reading. Thompson et. al (2012), Anderson and Fuller (2010) and Chew et al. (2016) have stated that background music has a negative impact on student learning. The fast tempo music can impact student comprehension and recall. A final participant stated, “soothing music is the primary use in my classroom.”

A second finding showed music to be used a variety of ways in the classroom. When analyzing the data of how often teachers used music in the classroom, half of the participants used the music weekly. One participant who used music stated,

Music is a great teaching tool during a unit. It opens the door to discussing the meaning...obtaining vocabulary, asking & answering questions. Students appear to look forward to entering the room to find out which artist is playing and very often enjoy the songs. They are looking them up on YouTube and have used vocabulary from song titles in other lessons. They also get excited about vocabulary that they know and hear in a song. I also create songs to help students memorize verb charts...it works and they love it!

On the other hand, the other half of the participants rarely used music in their classroom. When asked if students are allowed to bring music into the classroom, some participants responded rarely. A participant who rarely lets students bring music to the classroom stated “I am not sure how to use it. I do not trust students to choose their own music,” A few participants stated they

allowed music weekly and a few other participants stated that they never allowed students to bring their own music to the classroom. The participants who used music less in their classroom and do not allow music to be brought in by the students showed improvements in their students' comprehension. The participant who wrote in their own response stated that they only allowed students to bring music into the classroom when it applied to what they are learning in the classroom. Unlike the study results, the research by Chou, (2010) showed that the cognitive process' that we use when listening to music and when we read are shared which interferes with our learning. The cognitive resources we use while reading are automatic. These processes are letter identification and semantic access. Anderson and Fuller (2010) also found more about our brain and attention capacity. They state that our attention is taken from one task to the other. The amount of attention that can be deployed at one time is limited. The attention we have can be allotted in different amounts based on the different tasks and activities.

The third finding showed that based on the survey results using music in the classroom enhances students engagement and motivation in the lesson. The participants in the study stated that "Music is used in the background when students are playing kahoot, quizz-izz or quizlet live. Sometimes instrumental music is played during independent work." Another participant stated "I use music when transitioning during Kagan engagement strategies. Music is a prompt to begin moving around the room when the music begins and stopping when the music stops." A final participant declared,

I started using music as a way to engage students with difficult or inauthentic texts by pairing it with related, current music videos. Now I only use authentic texts throughout, but the music still offers students new insight from a different perspective.

Although the participants found the music to help student engagement, the research says the opposite. “Lehmann and Seufert (2018) along with Thompson et al, (2012) stated that listening to music while studying, especially fast tempo music is detrimental to learning. They noted that the distraction of music has a direct impact on the comprehension of students when reading. For many students, it is not just music that is distracting but any noise can be distracting while learning (Lehmann & Seufert, 2018; Thompson et al, 2012; Chou 2010; Doyle & Furnham, 2012)”.

The final finding was that teachers noticed the benefit of implementing music and took the recommendation from others. The one participant stated “Other teachers have found it beneficial to student learning. I took their advice and started implementing.” Another participant said “I saw others doing it. Their students enjoyed it so I wanted to give it a try.” The research supports using music in the following way, soft fast music can have a positive impact on student learning (Telesco 2010; and Lehmann & Seufert, 2018), Also music such as Mozart and Classical music has been found to reduce anxiety, increase learning performance, increase cognitive ability, and provide a stimulating effect on students (Lehmann & Seufert, 2018; Su et al. 2017; Telesco 2010; Rashidi & Faham, 2011). The research also disagrees with the study by stating that soft slow and loud slow music can hinder student learning. The tempo most influences student arousal when listening to music. Comprehension has been shown to likely change depending on the characteristics of the music that we listen too (Telesco, 2010: Lehmann & Seufert, 2018; Thompson et al. 2012; Su et al. 2017; Johansson, Holmqvist, Mossberg, & Lindgren, 2012).

## **Chapter 5: Discussion and Conclusion**

### **Overview of Study and Findings**

The purpose of this study was to find the impact of background music on students reading comprehension. The research questions were “Does background music have an impact on student reading comprehension? How are teachers using music to promote comprehension?”. Upon looking at the findings they showed that this population found that music in the classroom is used and helps their students. The first finding was that the participants used a variety of music styles in their classroom. The second finding was that the participants had different views on students bringing music to the classroom and if the music used in the classroom regularly. The third finding showed that the music used in the classroom enhances student engagement and motivation in the lesson. The final finding was that teachers took recommendations from other teachers and recommended this practice be used with other teachers.

### **Significance of the Findings**

The findings were significant in the research because the study conducted showed the opposite results from the literature found. While the participants stated that students learned best while having background music on. The background music used was a range of music. The researchers Thompson et. al, (2012), Anderson and Fuller, (2010) and Chew et al, (2016) found the opposite of the study results. The fast tempo music can impact student comprehension and recall. The participants in the study also stated that using music in their classroom made the students engage in lessons and enhance the learning along with having students stay on task. The research stated the opposite saying that it has also been found that background music is a distraction to student learning (Doyle & Furnham, 2012). This contradicts the findings that music

helps students focus and stay engaged in the lessons. For the finding that students listen to music in the classroom and teacher play music weekly in the classroom, this is also the opposite of the research. The research states that the brain uses multiple skills to process information while reading and listening to music, these processes cause a distraction to the student (Doyle & Furnham, 2012; Chou, 2010 ). The third finding of that music enhances student engagement and motivation was also disagreed with by the researchers stating that the cognitive process' that we use when listening to music and when we read are shared which interferes with our learning Chou (2010). The final finding was that the teachers took this recommendation from fellow teachers and would recommend this to other teachers. The research would not recommend using background music. The research stated the following, background media whether music or television interfered with concentration especially when working on cognitive tasks. (Doyle & Furnham, 2012). The literature and research found have the opposite results of the study conducted.

### **Limitations of the Findings**

There were a few study limitations that may impact the results if this study was repeated. This study had a very small sample size (12 participants) in one school in only one district in the area. This limits the number of responses and differentiation in responses. The time frame for the research was also a limitation. The survey was sent out two times. The participants had a week each time the survey was sent to be completed. If there was more time there may have been more participants.

### **Conclusion: Answer to the Research Question**

The research questions stated were “Does background music have an impact on student

reading comprehension? How are teachers using music to promote comprehension?" A survey was used as the instrument to collect the research data. The research answered these questions by stating that music does have an impact on students reading comprehension. The survey provided a platform for the participants to anonymously answer the questions. These questions then provided the answers needed to discuss the results. The participants stated that music improves students focus and concentration, while others state that they would like to learn more about the topic. The participants also stated that they use music in their classroom to promote comprehension by using music while students are reading. The music is related to the topic they are learning and enhances student understanding.

### **Recommendations for Future Research**

If this research was to be conducted again, it would be recommended to do the following. The first recommendation is to acquire a larger sample size. A number of participants more than 30 would be preferred. The next recommendation is to have multiple school districts from different geographical areas. This will provide data to show the impact in diverse settings. The final recommendation is to conduct a follow-up interview with the candidates individually. This will allow any further questions to be answered and for the research to get more information. These recommendations would provide the results to be more extensive and add more data to the current research.

### References

- Anderson, S. A., & Fuller, G. B. (2010). Effect of music on reading comprehension of junior high school students. *School Psychology Quarterly*, 25(3), 178–187. Retrieved from <http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ898960&site=ehost-live>
- Chew, A. S.-Q., Yu, Y.-T., Chua, S.-W., & Gan, S. K.-E. (2016). The effects of familiarity and language of background music on working memory and language tasks in Singapore. *Psychology of Music*, 44(6), 1431–1438. <https://doi-org.dbsearch.fredonia.edu:2443/10.1177/0305735616636209>
- Chou, P. T.-M. (2010). Attention drainage effect: How background music effects concentration in Taiwanese college students. *Journal of the Scholarship of Teaching and Learning*, 10(1), 36–46. Retrieved from <http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ882124&site=ehost-live>
- Johansson, R., Holmqvist, K., Mossberg, F., & Lindgren, M. (2012). Eye movements and reading comprehension while listening to preferred and non-preferred study music. *Psychology of Music*, 40(3), 339–356. Retrieved from <http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ968960&site=ehost-live>
- Doyle, M., & Furnham, A. (2012). The distracting effects of music on the cognitive test performance of creative and non-creative individuals. *Thinking Skills and Creativity*, 7(1), 1–7. Retrieved from <http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ955838&site=ehost-live>
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293–323. [https://doi-org.dbsearch.fredonia.edu:2443/10.1016/0010-0285\(74\)90015-2](https://doi-org.dbsearch.fredonia.edu:2443/10.1016/0010-0285(74)90015-2)
- Lehmann, J. A. M., & Seufert, T. (2018). Can music foster learning – Effects of different text modalities on learning and information retrieval. *Frontiers in Psychology*, 8. <https://doi-org.dbsearch.fredonia.edu:2443/10.3389/fpsyg.2017.02305>
- Patston, L. L. M., & Tippett, L. J. (2011). The effect of background music on cognitive performance in musicians and nonmusicians. *Music Perception*, 29(2), 173–183. <https://doi-org.dbsearch.fredonia.edu:2443/10.1525/mp.2011.29.2.173>
- Rashidi, N. N., & Faham, F. (2011). The effect of classical music on the reading comprehension of Iranian students. *Theory & Practice in Language Studies*, 1(1), 74–82. <https://doi-org.dbsearch.fredonia.edu:2443/10.4304/tpls.1.1.74-82>

*Standards*. (2010). Retrieved from International Literacy Association:

<https://www.literacyworldwide.org/get-resources/standards/standards-for-reading-professionals>

Su, Y.-N., Kao, C.-C., Hsu, C.-C., Pan, L.-C., Cheng, S.-C., & Huang, Y.-M. (2017). How does Mozart's music affect children's reading? The evidence from learning anxiety and reading rates with e-books. *Educational Technology & Society*, 20(2), 101–112.

Retrieved from

<http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1137512&site=ehost-live>

Telesco, P. J. (2010). Music and early literacy. *Forum on Public Policy Online*, 2010(5).

Retrieved from

<http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ913034&site=ehost-live>

Thompson, W. F., Schellenberg, E. G., & Letnic, A. K. (2012). Fast and loud background music disrupts reading comprehension. *Psychology of Music*, 40(6), 700–708. Retrieved from

<http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ982853&site=ehost-live>

White, K. (2007). The effects of background music in the classroom on the productivity, motivation, and behavior of fourth-grade students. *Online Submission*. Retrieved from

<http://dbsearch.fredonia.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED522618&site=ehost-live>

*Appendix A- Survey Approval*

Approval of Survey  Inbox x   

 **Lane, Jim** via [mycolumbiasc.onmicrosoft.com](mailto:mycolumbiasc.onmicrosoft.com) Thu, Nov 1, 2:41 PM (1 day ago)   

to me, Tracy ▾

Hey Amanda,

Dr. West and I discussed the use of a previous survey of a Divergent Learning student and have found out that we don't have a standard policy on the use of previous surveys, so in the absence of such a policy we are happy to allow you to adapt that survey for your use. We would request that you note in your work that the survey used was "Adapted from survey by Kevin White, Master of Education in Divergent Learning, Columbia College (SC), 2007."

I'm fine if you use this email as permission. However, if you need this communicated on college letterhead, just let me know. Have a great day and good luck on your research.

J Lane

*Appendix B- Survey*

## Survey Questions: Use of Music in the Middle School Classroom

1. The number of years in the teaching profession?
2. Name of grade, and subject you are currently teaching?
3. Overall, how often do you use music in your classroom?  
Daily    Weekly    Monthly    Rarely    Never
4. How often do you let students bring music to class?  
Daily    Weekly    Monthly    Rarely    Never
5. Please list all types of recorded music you play in the classroom
6. Please explain if and how music is used as a teaching tool
7. Where do you find music to use in your classroom?
8. Have you observed that background music helps your students comprehend a text?  
Yes  
No  
Other
9. How often do you play music while students are reading in the classroom  
Daily    Weekly    Monthly    Rarely    Never
10. Do you think music has an impact on student reading comprehension
11. How long have you been implementing music in your classroom? If you have not implemented music, why not?
12. What made you implement music in your classroom? If you have not implemented music, why not?
13. Would you consider implementing background music in the classroom to another teacher?  
Yes  
No  
Maybe

