

**Teenagers' Reasons for Listening to Music and the Students'
Perception of the Effects of Listening
When Completing School Assignments¹**

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Introduction

Music is a significant part of our lives. People listen to music on the radio at home and in their car; they watch music videos on television or hand held technology; they buy CDs or download music; and they attend concerts. People also hear music in stores, restaurants, sporting events, and doctors' offices (Schellenberg, Peretz, & Vieillard, 2008). Music is very important to many adolescents and they spend a considerable amount of their time listening to music. One study with $N = 2,465$ adolescents ages 13 and 14 found that participants listened to music for an average of 2.45 hours per day (North, Hargreaves, & O'Neill, 2000).

Music has become a personal accompaniment in many teenagers' lives because of the availability and popularity of personal music listening devices. In 2009, Jaffray released the results from the 18th semi-annual survey, "taking stock with teens." The team of researchers surveyed approximately $N = 1,200$ students, with an average age of 16.3, in 12 cities across the United States and received an additional $N = 10,000$ online responses. The results showed that 92% of teenagers reported owning a personal music player. As a result of the popularity of these players, music has become individualized, especially for teenagers. It is also considered one of the influences in the development and identity of adolescents (North & Hargreaves, 1999). However, "What is music? To many, 'music' can only mean the great masters – Beethoven, Debussy, and

Mozart. To others, 'music' is Busta Rhymes, Dr. Dre, and Moby" (Levitin, 2006, p.1).

Clearly, music is an important aspect in many people's lives, especially teenagers but research on this topic is limited. In particular, there is minimal research about the effects of "popular" background music on academic tasks. Researchers have been investigating students' homework environment and the subsequent effects on homework performance for decades (Patton, Stinard, & Routh, 1983; Pool, Koolstra, & van der Voort, 2003; Pool, van der Voort, Beentjes, & Koolstra, 2000). In 1983, Patton, Stinard, and Routh asked the question, "where do children study," and their results influenced many future studies. The researchers surveyed $N = 387$ students in Grades 5-9 about his or her homework environment when reading or completing written or mathematic assignments. The study showed that most students preferred a quiet environment when reading but completed mathematic and written assignments in the presence of music or the television. Students rated the effects of different stimulations while completing academic tasks and indicated that the television was considered a moderate distracter but the students reported the music as beneficial. Patton, Stinard, and Routh's study showed that students read in a quiet setting but then changed their environment for different homework tasks; thus showing an awareness of what they feel is their best homework environment and a level of maturity by the students in making that choice.

In more recent years, many of the studies examining the effects of background music have utilized classical music (Jones & Estell, 2007; Nantais &

Schellenberg, 1999; Standing, Verpaelst, & Ulmer, 2008; Thompson, Schellenberg, & Husain, 2001); however, classical music may not be popular with today's youth. A survey conducted by North, Hargreaves, and O'Neill (2000) asked participants their preference in response to eight different types of music. Researchers concluded that the $N = 2,465$ participants, ages 13 or 14, had a preference for dance and pop music, enjoyed rap, soul, and rock music, but strongly disliked opera, folk, and classical music. This suggests that studies utilizing classical music may not be relevant to today's youth. The current study examined the genres of music teenagers prefer, why they listen to music, their self-efficacy regarding homework, and if teenagers listen to music while completing mathematic, reading, and/or writing assignments. The following sections describe the need for additional research to add to the current literature of teenagers and music and explain the purpose and significance of the present study.

Problem Statement

Music is important to many people; especially teenagers and they listen frequently. A study with over $N = 600$ eighth and ninth graders found that participants reported listening to music for almost 21 hours per week (Gentile, Lynch, Linder, & Walsh, 2003). Individuals working at middle schools, high schools, and colleges may have noticed in recent years the emerging popularity of personal music listening devices. One of the most popular devices, the iPod from Apple, sold 141 million devices by 2008 (Kot, 2009). A survey conducted with over $N = 10,000$ teenagers showed that 92% reported owning a digital music

player, with 87% of those participants indicating that they own an iPod (Jaffray, 2009). Recent technological advances, especially the iPod, provide teenagers instantaneous access to their choice of music.

In 1993, Rauscher, Shaw, and Ky completed a study measuring the spatial reasoning abilities of $N = 36$ college students after participants listened to a Mozart sonata, a relaxation tape, or sat in silence. The researchers found a temporary enhancement of spatial reasoning abilities after participants listened to Mozart. This phenomenon received national attention and became known as "The Mozart Effect" (McKelvie & Low, 2002). Many researchers then studied if background music influences the performance of many different tasks; for example, spatial activities (Jones & Estell, 2007; Jones, West, & Estell, 2006; McKelvie & Low, 2002; Nantais & Schellenberg, 1999; Thompson, Schellenberg, & Husain, 2001), math performance (Hallam & Price, 1998; Hallam, Price, & Katsarou, 2002), and reading comprehension, mental arithmetic, and prose recall (Furnham & Strabac, 2002). However, throughout the research, there has not been a consensus concerning the relationship of background music on academic performance. Some studies have shown that background music does not have an effect, positive or negative, on the accuracy or the time it takes to complete the examined task (Hallam & Price, 1998; Hallam et al., 2002; Nantais & Schellenberg, 1999; Thompson et al., 2001). In contrast, there have been other studies that suggest that background music had detrimental effects on the individuals' performance during the specified task (Cassidy & MacDonald, 2007; Furnham & Allas, 1999; Furnham & Strbac, 2002; Jackson & Tlauka, 2004;

McKelvie & Low, 2002). Since the research on background music is inconclusive, further research needed to be completed.

Clearly music is an important part of many teenagers' lives but the literature on teenagers and music is limited with respect to the effects of "popular" background music on academic tasks. Many of the studies examining the effects of background music have utilized classical music (Jones & Estell, 2007; Nantais & Schellenberg, 1999; Standing, Verpaelst, & Ulmer, 2008; Thompson, Schellenberg, & Husain, 2001); however, classical music may not be particularly popular with today's youth. For example, Jones and Estell (2007) investigated the possible relationship of listening to music composed by Mozart and performance on spatial IQ tests for high school students. The researchers concluded that higher arousal levels improved spatial task performance but Mozart did not increase arousal levels for high-school-aged participants. Jones, West, and Estell (2006) believe that a variety of genres of music may have differing effects on students' spatial performance depending upon the individual's opinion of the music. Because teenagers may not choose to listen to classical music (North, Hargreaves, & O'Neill, 2000), studies utilizing classical music may not be relevant to today's youth.

The current research was prompted by the growing use of personal music listening devices by young people in the United States. Teachers, administrators, and parents observe this phenomenon daily and as a result, school districts have developed and implemented policy and procedures to address the growing use of personal listening devices.

Although technological advances over the past decade have been phenomenal and

have had a dramatic and revolutionary effect on educational environments, not all changes have been positive. Most school administrators have struggled to manage the issue of students who possess or use electronic devices on campus. (Brunner & Lewis, 2008, p. 69)

The policies and accompanying procedures typically limit the use of such technology during school hours. However, is it possible that personal music listening devices can be used positively in an academic environment? This study explored teenagers' behavior with music, including: when they listen, why they listen, and the preferred genres of music. This research had a particular focus on determining if teenagers listen to music while completing school assignments and, if so, why they choose this working environment. Students were asked if he or she listens to music while completing mathematic, reading, and/or writing assignments. This allowed a distinction to be made between the specific academic task and the frequency of music listening. Patton, Stinard, and Routh (1983) found that middle school aged students preferred a quiet environment when reading but completed mathematic and written assignments while watching television or listening to music. Furnham and Strbac (2002) evaluated the performance of $N = 76$ participants (average age of 16.75) on reading comprehension, mental arithmetic, and prose recall tasks in the presence of background music, noise, and silence. Furnham and Strbac found that participants performed better in silence on the reading comprehension and prose recall tasks but the results were not significant in the mental arithmetic task. Both studies show that music may have different distraction levels depending on the academic task. The following sections provide the research questions, the methodology used in this study, and the principal findings.

Research Questions

The following are the research questions for this study.

1. Is there a significant relationship between student performance in the subjects of math and English and the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?
2. Are there differences among grade levels (9, 10, 11, 12) with respect to the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?
3. Are there gender differences with respect to the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?
4. Is there a significant relationship between a student's self-efficacy with respect to doing homework and the following variables: a) student performance in the subjects of math and English, b) a student's grade level in school (9, 10, 11, or 12), and c) gender groups?
5. Why do some high school students listen to music while completing school assignments?

Methodology

A sequential mixed method single case study approach using both quantitative and qualitative data was utilized. A quantitative approach allowed participants to react to a specified set of questions; thus, allowing comparisons within the data. Qualitative data, on the other hand, provided an in-depth understanding of the situation being studied. It enabled participants to share their experiences and perspectives (Patton, 2002). Case studies are a preferred method of research when a contemporary phenomenon is being examined within a real-life context (Yin, 2009). This approach was used in addition to survey

research and focus groups to learn the reasons why high school students listen to music and to understand why some students listen to music when completing academic tasks.

Sample

The case study was conducted in a suburban, middle class community in southern New England. The town has a population of $N = 17,906$ with a per capita income of \$29,653. The participants in the study were students in grades 9-12 enrolled at School A ($N = 793$).

Instrumentation

Questionnaire. The first phase of this research study utilized a five-part questionnaire that explored teenagers' behavior with music, including: when they listen, why they listen, and the preferred genres of music. The questionnaire also examined students' self-efficacy regarding homework and if they listen to music while completing mathematic, reading, and/or writing assignments. Evidence of content validity was supported from the literature (North, Hargreaves, & O'Neill, 2000; Rentfrow & Gosling, 2003) and the judgment of a panel of $N = 6$ educational professionals; teachers and administrators.

Focus Groups. In addition to the questionnaire, single category focus groups were utilized. Focus groups are used to uncover factors that influence behavior, gain a range of ideas about a particular subject, and help explain quantitative data previously collected (Krueger & Casey, 2009). Focus group participants were chosen randomly from the students who volunteered on the questionnaire. The four focus groups, one for each grade level, had $N = 5-7$ participants,

depending on the number of students who chose to attend. Participants discussed why students' listen to music and why they listen to music while completing academic tasks.

Data Collection

Questionnaire. The questionnaire was provided to all $N = 793$ students at School A during an Advisory period. Fowler (2002) states that group-administered questionnaires are often a preferred method because this approach results in a high response rate. Survey research is also a positive method when participants have an interest in the subject, knowledge of the subject, perceive the importance, and identify with the issue (Fowler, 2002). The purpose of the survey and the directions for completion were explained by utilizing the school's interactive announcement system. This allowed the participants to receive the same instructions from one individual. Teachers kept extra copies of the questionnaire for absent students who may have wanted to complete the instrument upon arrival back to school.

Focus Groups. The researcher administered the $N = 4$ focus groups during the 55-minute lunch block at the school. Parental permission was obtained for all students participating in focus groups by completion of the informed consent form. For subsequent transcription and analysis, all interviews were recorded on audiotape. The groups were provided lunch while participating in the discussion.

Data Analysis

Trustworthiness of the data was obtained from three sources: the questionnaire, the focus groups, and the literature. This triangulation of the

different data sources helped develop a “coherent justification for themes” (Creswell, 2003, p.196). Research Question 1 was analyzed using a series of Pearson product-moment correlations. Students’ math and English grades were correlated with the three variables listed. Correlations were completed at the dimension and item levels. Research Question 2 was analyzed using a one-way Analysis of Variance (ANOVA). The independent variable was grade level (9, 10, 11, 12) and the dependent variables were the extent of music listening, the genres of music, and the reasons for music listening. Research Question 3 was analyzed using t-tests. The independent variable was gender and the dependent variables were the four variables listed. The fourth research question was analyzed using correlations, a one-way ANOVA, and t-tests. The fifth research question provided qualitative data. The focus group interviews were transcribed verbatim and then analyzed to determine themes, as well as, provide an audit trail. Triangulation of the data sources, member checking after the focus group interviews, and peer debriefing helped to ensure credibility.

Principal Findings

Research Question 1: Is there a significant relationship between student performance in the subjects of math and English and the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?

1. The questionnaire asked participants how often they listen to music during three academic tasks: 1) when working on a math assignment, 2) when reading for a school assignment, and 3) when writing an assignment for school. The responses were correlated with students’ most recent math and English report card grades, as provided by the participants. A significant relationship was found

between participants' reported math grade and both listening to music while reading for a school assignment ($r = -.15$, $r^2 = .02$, $p = .001$, effect size = small) and listening to music while writing an assignment for school ($r = -.18$, $r^2 = .03$, $p = .001$, effect size = small). Similarly, a significant relationship was found between participants' reported English grade and both listening to music while reading for a school assignment ($r = -.16$, $r^2 = .03$, $p = .001$, effect size = small) and writing an assignment for school ($r = -.12$, $r^2 = .02$, $p = .002$, effect size = small). The results show that students who listened to music when reading for a school assignment or when writing an assignment for school tended to have lower math and English grades. However, there was not a significant difference in math and English grades for students who listen to music when working on a math assignment.

2. Participants' reported math and English grades were correlated with the 16 genres of music that students prefer. The results show that students who listen to Heavy Metal ($r = -.16$, $r^2 = .03$, $p = .001$, effect size = small), Rap ($r = -.13$, $r^2 = .02$, $p = .001$, effect size = small), and Techno ($r = -.20$, $r^2 = .04$, $p = .001$, effect size = small) music tended to have lower math grades. The results also showed that students who listen to Heavy Metal ($r = -.15$, $r^2 = .02$, $p = .001$, effect size = small), Rap ($r = -.12$, $r^2 = .01$, $p = .002$, effect size = small), and Techno ($r = -.19$, $r^2 = .04$, $p = .001$, effect size = small) music tended to have lower English grades. On the other hand, students who listen to Pop music ($r = .21$, $r^2 = .04$, $p = .001$, effect size = small) tended to have higher English grades.

3. The reasons for listening to music provided on the questionnaire were then correlated with the participants' reported math and English grades.

Students who listened to music to reduce loneliness tended to have lower math grades ($r = -.12$, $r^2 = .01$, $p = .003$, effect size = small) but none of the reasons for listening showed a significant relationship with English grades.

Research Question 2: Are there differences among grade levels (9, 10, 11, 12) with respect to the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?

4. No significant differences were evident between the four grade levels in terms of listening to music during the three academic tasks: 1) when working on a math assignment, 2) when reading for a school assignment, and 3) when writing an assignment for school.

5. The genres of music participants listen to were then analyzed for possible differences between grade levels. There were no significant differences for fourteen of the genres of music but Soul/Funk ($p = .003$, $\eta^2 = .022$, effect size = small) and Techno ($p = .001$, $\eta^2 = .034$, effect size = small/medium) had significant differences between grade levels. Ninth grade respondents listened to the two genres of music less frequently than sophomores who listened less than juniors who also listened less than seniors.

6. No significant differences were evident between the four grade levels in terms of the eleven reasons given for listening to music.

Research Question 3: Are there gender differences with respect to the following variables: a) the extent to which students listen to music while completing academic tasks, b) the genres of music they choose to listen to, and c) the reasons for listening to music?

7. Females tended to listen to music more frequently than males when completing math assignments ($t = -2.77$, $p = .006$, $d = .22$, effect size = small), but there were no significant differences between gender groups in terms of listening to music while reading or writing.

8. The genres of music participants prefer were then analyzed to determine possible gender differences. Nine musical genres had significant differences for males and females. Females tended to listen to Electronica ($t = -4.95$, $p = .001$, $d = .40$, effect size = small/medium), Soundtracks ($t = -5.37$, $p = .001$, $d = .43$, effect size = small/medium), Country ($t = -8.78$, $p = .001$, $d = .71$, effect size = medium/large), Hip-Hop ($t = -4.03$, $p = .001$, $d = .32$, effect size = small), and Pop ($t = -13.39$, $p = .001$, $d = 1.07$, effect size = large) music more often than males. However, the results showed that males tended to listen to Heavy Metal ($t = 7.28$, $p = .001$, $d = .59$, effect size = medium), Jazz ($t = 3.60$, $p = .001$, $d = .29$, effect size = small), Rock ($t = 4.25$, $p = .001$, $d = .34$, effect size = small), and Blues ($t = 4.31$, $p = .001$, $d = .35$, effect size = small/medium) music more frequently than females.

9. The data indicate that males and females differed in the reasons for listening to music. Females tended to listen to music more than males for the following reasons: 1) to relieve boredom ($t = -2.86$, $p = .004$, $d = .23$, effect size = small), 2) to get through difficulties ($t = -5.04$, $p = .001$, $d = .39$, effect size = small/medium), and 3) to relieve tension ($t = -5.09$, $p = .001$, $d = .41$, effect size = small/medium). However, males tended to listen to music more than females to

1) please parents ($t = 2.86$, $p = .004$, $d = .24$, effect size = small) and 2) to please friends ($t = 3.62$, $p = .001$, $d = .30$, effect size = small).

Research Question 4: Is there a significant relationship between a student's self-efficacy with respect to doing homework and the following variables: a) student performance in the subjects of math and English, b) a student's grade level in school (9, 10, 11, or 12), and c) gender groups?

10. The results indicated that there was a significant relationship between a student's self-efficacy regarding homework and their performance in the subjects of math and English. Students who agreed with the following statements tended to have higher math and English grades: *I am confident that I do a good job on my homework* (Math: $r = .37$, $r^2 = .14$, $p = .001$, effect size = medium, English: $r = .32$, $r^2 = .10$, $p = .001$, effect size = medium), *I put a 100% effort into completing my homework* (Math: $r = .38$, $r^2 = .14$, $p = .001$, effect size = medium, English: $r = .30$, $r^2 = .09$, $p = .001$, effect size = medium), *I know the homework habits that make me most successful* (Math: $r = .26$, $r^2 = .07$, $p = .001$, effect size = small/medium, English: $r = .25$, $r^2 = .06$, $p = .001$, effect size = small/medium), and *I am confident that I complete my homework in the best environment for me* (Math: $r = .21$, $r^2 = .04$, $p = .001$, effect size = small, English: $r = .18$, $r^2 = .03$, $p = .001$, effect size = small). However, there was not a significant difference between math and English grades and the statement, *I feel that homework is important for my academic success*.

11. The five statements regarding participants' self-efficacy were also analyzed to determine possible differences among grade levels. Four of the statements did not have a significant difference among grade levels; however, *I put a 100% effort into completing my homework* ($p = .003$, $\eta^2 = .021$, effect size =

small) showed a significant difference between the four grade levels. Students in ninth grade agreed with this statement more frequently than students in the tenth, eleventh, and twelfth grade.

12. The five statements were then examined for possible differences between males and females. Three of the statements were associated with significant gender differences. Females had a higher mean than males for the following statements: *I am confident that I do a good job on my homework* ($t = -3.44$, $p = .001$, $d = .27$, effect size = small), *I put a 100% effort into completing my homework* ($t = -4.33$, $p = .001$, $d = .33$, effect size = small), and *I know the homework habits that make me most successful* ($t = -5.21$, $p = .001$, $d = .42$, effect size = small/medium).

Research Question 5: Why do some high school students listen to music while completing school assignments?

13. Participants reported that they listen to music during many academic tasks, but typically not during reading assignments because music acts as a distraction while reading. However, they feel that background music helps them concentrate by blocking other noises and it helps to stop their mind from wandering. Some participants also felt that homework is often tedious and boring and music helps pass the time.

Discussion and Conclusions

The major findings of this study can be supported by previous research and the literature. The current study found that students who listen to music while completing reading and writing assignments, tended to have lower math and English grades. However, listening during a math assignment did not have a

significant effect on participants' math and English grades. This finding may be supported by the research of Furnham and Strbac (2002). They found that adolescents performed better in silence than with background music during a reading comprehension and prose recall task but the results were not significant in the mental arithmetic task. Furnham and Strbac hypothesized that the reading comprehension achieved significant results because it was the most cognitively complex task and research shows that background music and noise affects complex tasks the greatest. This may explain why listening to music during math assignments did not have a significant effect on participants' math and English grades.

Qualitative data from the questionnaire and focus groups indicated that many students listen to music while completing academic tasks because they feel the work is boring and tedious. The music helps them stay focused on the task, in their opinion. McKelvie and Low (2002) found that participants might experience an increased arousal level after listening to an enjoyable stimulus, which may positively affect his or her ability to process information and persevere during cognitive tasks. On the other hand, arousal levels may decrease after listening to a repetitive or boring stimulus, possibly having a negative affect on persistence, speed, and attention. Participants shared that listening to music helped them stay focused and on-task even if the task was repetitive because they enjoyed the additional stimuli.

In addition, the major theme that emerged from the qualitative data on the questionnaire and focus groups was that students who listen to music during

academic tasks do so because they feel it helps them concentrate. DeNora (2000) determined that for some individuals, an environment with music helped facilitate the focus and concentration necessary to complete certain mental tasks such as balancing a checkbook, writing, or studying. Background music helped some individuals stay focused as opposed to allowing the mind to wander.

The current study found that males and females differed in the reasons for listening to music. Females tended to listen to music more than males to get through difficulties, and to relieve tension and boredom. Males tended to listen more than females to please parents and friends. North, Hargreaves, and O'Neill (2000) also examined possible gender differences for the 11 reasons used on the questionnaire. Their research supports the current findings. They concluded that males were more concerned with the external impression; for example, pleasing people and females were more concerned with how music could aid their emotional needs; for example, relieving tension and getting through difficult times.

Students with higher self-efficacy beliefs regarding homework tended to have higher math and English grades. Bandura (1986) suggested that the beliefs individuals hold about his or her skills and the results of his or her efforts strongly influence his or her behavior. Successes raise efficacy levels, failures lower them. It is logical that students who hold higher self-efficacy beliefs about homework, tended to have higher academic grades. However, there was not a significant relationship between math and English grades and the statement, *I feel that homework is important for my academic success.* Warton (2001)

suggests that there is little research to show that students recognize the purposes of homework. She suggests that students should feel that homework has value, either for improving academic grades, seeking teacher approval, or other factors. Understanding students' ideas about the value and purpose of homework is important to understanding students' homework performance and motivation.

Although the current study adds to the literature on adolescents and music, further research needs to be completed. The following section provides recommendations for current practice and future research.

Recommendations

1. School districts should reexamine policies that prohibit student use of personal music listening devices in the classroom. Many students feel that music helps them concentrate during methodical tasks and the data shows that math and English grades are not affected by listening to music during math homework.

2. Additional research should be completed on the effects of listening to music while completing academic tasks. This research relied on students' providing their performance based on most recent report cards but further research where students' grades are obtained from school records might reinforce these results. Also, the effects of listening to a variety of genres should be examined since classical music is often utilized, although the genre is not popular with today's youth.

Summary

Students reported that, in their opinion, listening to music during some academic tasks helps them concentrate and stay focused, especially during tedious, repetitive tasks. However, most participants shared that they don't listen to music while reading because it acts as a distraction. This may help explain the data showing that participants who listen to music during reading and writing assignments tended to have lower math and English grades. Adults often believe that adolescents are not mature enough to understand their most successful homework habits, but the current research contradicts this opinion.

As Bandura suggested in 1986, the beliefs individuals hold about their own skills influences their behavior and results. Therefore, it is expected that adolescents with higher self-efficacy beliefs regarding homework will tend to have higher academic grades, which the current data supports. Educators and parents should strive to help children and adolescents improve their self-efficacy beliefs because research shows that a higher level of self-efficacy improves students' academic performance.

Most research regarding the effects of background music has utilized classical music, a genre not popular with today's youth. The current research also concluded that participants do not prefer classical music. However, the current research concluded that students who listen to Heavy Metal, Rap, and Techno music tended to have lower math and English grades. The research on background music should be expanded to include popular genres that adolescents' today prefer.

The current research also supported the previous literature that suggests that males and females listen to music for different reasons. Females tend to listen to music to fulfill emotional needs, whereas males were more concerned with the external impression. Understanding the reasons why adolescents listen to music may help parents and educators accept that music helps some students “get through the day.” As one participant said, “I hope this survey encourages people to look at music as a motivation, not as being something bad.”

References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Brunner, J. M. & Lewis, D. K. (2008). *Safe & Secure Schools: 27 Strategies for Prevention and Intervention*. Thousand Oaks, CA: Corwin Press.
- Cassidy, G. & MacDonald, R. A. R. (2007). The effect of background music and background noise on the task performance of introverts and extraverts. *Psychology of Music, 35*, 517-537. doi:10.1177/0305735607076444
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- DeNora, T. (2000). *Music in everyday life*. New York, NY: Cambridge University Press.
- Fowler, F. J. (2002). *Survey research methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Furnham, A. & Allass, K. (1999). The influence of musical distraction of varying complexity on the cognitive performance of extroverts and introverts. *European Journal of Personality, 13*, 27-38. doi:10.1177/0305735607076444
- Furnham, A. & Strbac, L. (2002). Music is as distracting as noise: the differential distraction of background music and noise on the cognitive test performance of introverts and extraverts. *Ergonomics, 45*, 203-217. doi:10.1080/00140130210121932
- Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence, 27*, 5-22. doi:10.1016/j.adolescence.2003.10.002
- Hallam, S. & Price, J. (1998). Can the use of background music improve the behaviour and academic performance of children with emotional and

- behavioural difficulties. *British Journal of Special Education*, 25(2), 88-91.
- Hallam, S., Price, J., & Katsarou, G. (2002). The effects of background music on primary school pupils' task performance. *Educational Studies*, 28, 111-122. doi: 10.1080/03055690220124551
- Jackson, C. S. & Tlauka, M. (2004). Route-learning and the Mozart effect. *Psychology of Music*, 32, 213-220. doi:10.1177/0305735604039285
- Jaffray, P. (2009, October 7). Teen spending survey points to early stages of a discretionary recovery and fashion replenishment cycle. *Taking Stock with Teens*. Retrieved from: <http://www.piperjaffray.com/1col.aspx?id=287&releaseid=1339605>
- Jones, M. H. & Estell, D. B. (2007). Exploring the Mozart effect among high school students. *Psychology of Aesthetics, Creativity, and the Arts*, 1, 219-224. doi:10.1037/1931-3896.1.4.219
- Jones, M. H., West, S. D., & Estell, D. B. (2006). The Mozart effect: Arousal, preference, and spatial performance. *Psychology of Aesthetics, Creativity, and the Arts*, 5, 26-32. doi:10.1037/1931-3896.5.1.26
- Kot, G. (2009). *Ripped: How the wired generation revolutionized music*. New York, NY: Scribner.
- Krueger, R. A. & Casey, M. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Thousand Oaks, CA: Sage.
- Levitin, D. J. (2006). *This is your brain on music: The science of a human obsession*. New York, NY: Dutton.
- McKelvie, P. & Low, J. (2002). Listening to Mozart does not improve children's spatial ability: Final curtains for the Mozart effect. *British Journal of Developmental Psychology*, 20(2), 241-258.
- Nantais, K. M. & Schellenberg, E. G. (1999). The Mozart effect: An artifact of preference. *Psychological Science*, 10, 370-373. doi:10.1111/1467-9280.00170
- North, A. C. & Hargreaves, D. J. (1999). Music and adolescent identity. *Music Education Research*, 1(1), 75-92.
- North, A. C., Hargreaves, D. J., & O'Neill, S. A. (2000). The importance of music to adolescents. *British Journal of Educational Psychology*, 70, 255-272.
- Patton, J. E., Stinard, T. A., & Routh, D. K. (1983). Where do children study?

- Journal of Educational Research*, 76(5), 280-286.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed). Thousand Oaks, CA: Sage.
- Pool, M. M., Koolstra, C. M., & van der Voort T. H. A. (2003). The impact of background radio and television on high school students' homework performance. *Journal of Communication*, 53(1), 74-87.
- Pool, M. M., van der Voort, T. H. A., Beentjes, J. W. J., & Koolstra, C. M. (2000). Background television as an inhibitor of performance on easy and difficult homework assignments. *Communication Research*, 27, 293-326. doi: 10.1177/009365000027003002
- Rauscher, F. H., Shaw, G. L., & Ky, K. N. (1993). Music and spatial task performance. *Nature*, 365, 611. doi:10.1038/365611a0
- Rentfrow, P. J. & Gosling, S. D. (2003). The do re mi's of everyday life: The structure and personality correlates of music preferences. *Journal of Personality and Social Psychology*, 84, 1236-1256. doi:10.1037/0022-3514.84.6.1236
- Schellenberg, E. G., Peretz, I., & Viellard, S. (2008). Liking for happy- and sad-sounding music: Effects of exposure. *Cognition and Emotion*, 22, 218-237. doi: 10.1080/02699930701350753
- Standing, L. G., Verpaelst, C. C., & Ulmer, B. K. (2008). A demonstration of nonlinear demand characteristics in the 'Mozart effect' experimental paradigm. *North American Journal of Psychology*, 10(3), 553-566.
- Thompson, W. F., Schellenberg, E. G., & Husain, G. (2001). Arousal, mood, and the Mozart effect. *Psychological Science*, 12(3), 248-251.
- Warton, P. M. (2001). The forgotten voices in homework: Views of students. *Educational Psychologist*, 36, 155-165. doi:10.1207/S15326985EP3603_2
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Appendix A

Teenagers and Music

Please complete the following questionnaire. Thank you for participating in this study.

My Music Listening Habits:

- 1) I listen to music for approximately _____ hours per day (on average).
- 2) I listen to music for approximately _____ hours per day when completing school-assigned tasks (on average).
- 3) I own a personal music listening device (iPod, MP3 player, portable CD player, etc.). Yes No
- 4) I listen to music when I work on a math assignment. Never Sometimes Often Always
- 5) I listen to music when I read for a school assignment. Never Sometimes Often Always
- 6) I listen to music when I write an assignment for school. Never Sometimes Often Always

Types of Music:

7) Circle the number that describes how much you listen to a particular type of music. Use the following scale:

	1	2	3	4	5		1	2	3	4	5
	Not at All						A Lot				
a. Alternative	1	2	3	4	5	i. Blues	1	2	3	4	5
b. Classical	1	2	3	4	5	j. Country	1	2	3	4	5
c. Electronica/Dance	1	2	3	4	5	k. Folk	1	2	3	4	5
d. Heavy Metal	1	2	3	4	5	l. Hip-Hop	1	2	3	4	5
e. Jazz	1	2	3	4	5	m. Pop	1	2	3	4	5
f. Rap	1	2	3	4	5	n. Religious	1	2	3	4	5
g. Rock	1	2	3	4	5	o. Soul/Funk	1	2	3	4	5
h. Soundtracks	1	2	3	4	5	p. Techno	1	2	3	4	5

Things I can do:

Circle the number that gives your opinion about the following statements. Use the following scale:

	1	2	3	4
	Strongly Disagree	Disagree	Agree	Strongly Agree
8) I am confident that I do a good job on my homework.	1	2	3	4
9) I put a 100% effort into completing my homework.	1	2	3	4
10) I am confident that I know my best homework habits.	1	2	3	4
11) I am confident that I complete my homework in the best environment for me.	1	2	3	4
12) I feel that homework is important for my academic success.	1	2	3	4

Why I Listen to Music:

Please use the following scale to share the reasons why you listen to music. Circle your response.

	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
I listen to music to:				
13) Enjoy the music	1	2	3	4
14) Be creative/use my imagination	1	2	3	4
15) Relieve boredom	1	2	3	4
16) Help get through difficult times	1	2	3	4
17) Be trendy/cool	1	2	3	4
18) Relieve tension/stress	1	2	3	4
19) Create an image for myself	1	2	3	4
20) Please my parents	1	2	3	4
21) Please my friends	1	2	3	4
22) Please my teachers	1	2	3	4
23) Reduce loneliness	1	2	3	4

Other reasons I listen to music:

Information about me:

- 24) Gender: Male Female
- 25) Grade Level: 9 10 11 12
- 26) My most recent math grade on my report card was a A B C D F
- 27) My most recent English grade on my report card was a A B C D F

Comments:

Thank you !