THE EFFECTS OF BAROQUE MUSIC EXPOSURE ON STUDENTS DURING WRITING A NARRATIVE TEXT

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ABSTRACT
This research aims to uncover the effects of Baroque music exposure on students during a narrative writing, and is motivated through the popular beliefs of Mozart effect which can enhance human’s intelligence and performance in cognitive tasks. This research is conducted from January 18 until February 15, 2018. This research is presented by using qualitative design and method to describe and analyse the result of the interview. The population in this research is the eleventh grader students of Math and Science-1 of State Senior High School 1 Gununghalu and there are three interviewees. This research uses description and interpretation technique data analysis. The findings show that the exposure of Baroque music during the narrative writing activity gives positive effects to 66% of the participants. It helps them to relax and to soothe their emotional state, and eventually affects their brain activity to create imagery visions. However, it can also be harmful to others, where 34% of the participants consider the music as a distraction to their activity and reducing their concentration. In the end, the result of the participants’ writing products is determined through additional factors and conditions besides music.

KEYWORDS
Baroque Music, Mozart Effect, Narrative Text, Creative Writing

INTRODUCTION
Writing is defined as a cognitive process consists of four interactive components; task, environment, the writer’s long-term memory, and the composing processes (Flower and Hayes, 1981). From a student’s point of view, writing might be a hard and dreaded exercise of attempting to place thoughts on paper while developing mastery on the rules of writing, such as spelling, citation format and grammar (Defazio et al., 2010). In general, indeed, this skill is considered as the most difficult skill to master among the other three: listening, speaking, and reading. This is in line with Tangpermpoon (2008) who defined that writing is known as the most complicated, if not difficult, skill to master for language learners. One of the reasons for this view is because the skill needs to have proper language use or specific lexicon with which the writer desires to deliver to the audience.

Some schools usually provide writing test in a form of an essay in the school or semester final tests for language subjects, and English subject is not an exception. This leads the teacher to explore a number of methods during the teaching and learning activity, at least in order to engage the students to write. Judging from this fact, being unable to write well might affect the students’ grades in that particular subject, and on a broader context, the lack of writing skill might affect one’s ability to communicate during their professional situation that demands them to be able to write. Beginner writers could be engaged in narrative writing or creative writing as the first attempt to practice writing, since narrative writing consists of expressing freedom of thoughts, or as a major way of expressing the experiences that one has undertaken overtime in their lives. Gutiérrez and Galvis (2015) also said that narrative writing is a versatile type of writing which makes itself to be the most suitable genre to teach in the classroom, especially for younger language learners. Furthermore, Defazio et al. (2010) detailed that whatever the reasons may be, the main thing is that the majority of students do not possess the skills necessary to communicate
in a written format effectively which is possible to enable them to become successful upon graduation.

Consequently, teachers are demanded to explore variety of methods for improving students' writing skill. One of the methods proposed to teach writing is through music. enhance cognitive abilities (Hall, in Harmon et al., 2008). This phenomenon is often called Mozart effect, where the participants are being engaged in a cognitive activity while being exposed to classical music in the background. Furthermore, Lesiuk (in Harmon et al., 2008) has suggested that music emotionally influences those who listen to it. Lesiuk also reported that the emotional state of being, such as anxiety, is decreased when music was used in advance of and during the course of a creative task, in other words, it has positive psychological impact on their performance. In addition, Ise, Daubman and Nowicki (in Harmon et al., 2008) has suggested that the emotional state of being affects one’s performance on cognitive tasks. As a result, if these ideas are linked, it can be summarized that music influences students’ emotional state of being, and this state of being might influence their cognitive skill – which in this case is writing skill. A similar phenomenon is shown in a study entitled The Baroque Music’s Influence on Learning Efficiency Based on the Research of Brain Cognition by Rong Gu, Jie Zhang, Junhe Zhou, and M. S. Tong (2014), it was showed that Baroque music could stimulate alpha brain waves, increase the amplitude of ERP, shorten the reaction time, improve the response accuracy, improve the memory and attention of brains, and it can really make a person to be in a balanced, stable, calm state of mind, and improve their learning efficiency.

Baroque music is a music generated within the period of 1600-1750 which stands between Renaissance and the Classical Eras, and this music forms the major portion of the classical music canon (Pieri, 2017). The composers of the Baroque Era include Johann Sebastian Bach, George Frederic Handel, Antonio Vivaldi, and Johann Pachelbel among others. Its rhythm at 50 to 70 beats per minute is ideal to enhance learning efficiency (Gu et al., 2014). This is reflected in the effect on the brain alpha wave.

Regarding aforementioned descriptions, through the inducements of music, it is possible to influence the students’ performance during a cognitive task such as writing. Thus, the purpose of this type of aid (Baroque instrumental music) is attempting to seek its psychological impact on one’s performance in cognitive activities, where during the observation (teaching and learning process), the students are asked to produce a narrative text while Baroque music is played in the background. Also, this is to confirm whether or not Mozart effect through classical music such as Baroque could affect the learners through simple method of observation.

Although it is accepted that the effectiveness of Baroque music is influential on certain aspect, such as in learning efficiency through the aforementioned research by Gu et al., very few has assessed the effects of the music in its relation to narrative writing performance through an interpretation of the respondents’ point of view and actual experience; in fact, this research could be considered as a development of researches within the same field that is established on the difference of research method, variable, object, and results, which representatively showed its originality compared to other researches.

Finally, the main goal for the composition of this research is to seek any effect of the exposure of Baroque music on students’ performance during a narrative writing activity. Hopefully, the result of this research could contribute further ideas on the theories of music and its relation in cognitive development, also, the theoretical development could be brought with careful consideration on the age groups and cognitive development of the students, so it could afford beneficial results. Furthermore, this research is expected to be a reference and an alternative teaching and learning technique to improve the students’ achievement in producing cognitive tasks such as writing, especially for English language, also, it could be a recommendation to be further developed on other sample and population by other researchers.
LITERATURE REVIEW

Narrative Writing
According to Barber (2006), narrative is the most free form of writing. For the students, they could use dialogue to show characters’ personality, internal thoughts and feelings, or to provide background information. The main goal is to entertain the readers. In Gutiérrez and Galvis (2015), Abbott (2002) stated that “narrative is present in our lives almost from the moment we begin putting words together”. It means that narrative writing is a major way of expressing the experiences that one has undertaken overtime in their lives. Gutiérrez and Galvis (2015) also said that narrative writing is a versatile type of writing which makes itself to be the most suitable genre to teach in the classroom, especially for younger language learners.

Creative Writing
The fact that most narrative writing activity is considered to create imaginative tasks puts the term “creative writing” to fall into this category. Poetry and stories are types of imaginative tasks that are considered as creative writing. GaffieldVile, in Harmer, stated that creative writing is „a journey of self-discovery and self-discovery promotes effective learning’. Creative writing could gear up the motivation of the students in writing, since the chance of them being expressive could be further increased; they could write anything they like, such as a poem about someone they care about and a story about their childhood. In line with what Harmer has said in his book, this provides powerful motivation to find the right words to express their experience into a paragraph.

There will always be some challenges for the teachers too, when the time their students find writing – even imaginatively – is a difficult thing to do. Harmer said that this may be associated with their minds with sense of frustration and failure, and eventually makes them find that writing is a painful and demotivating experience. This, again, demands the teacher to keep encouraging the students and applying the concept of building their writing habit’ as has been discussed above.

Baroque Music and Mozart Effect
Berk (2008) has reviewed some studies that used several kind of music to see whether they have any positive effects on learning. He listed music types that are categorized into the following: (1) Sesame Street, (2) “Mozart Effect’ or not, (3) "active” and “passive” concerts, and (4) music and learning by subject area.

Sesame Street refers to an education television programme for children that typically use music throughout its programs in segments with live people, animation, and the Muppets (the term of a group of puppets representing characters in the said programme). "Mozart Effect” or not refers to a study on the effects of listening to music which could influence the brain activity, such as priming or warming up the neutral transmitters for doing spatial reasoning tasks. Music and learning by subject area refers to the studies that used music in relation to increase learning. Some studies that have examined were the effects of background music on writing tasks, behaviour and mathematics performance, reading, memory and reading comprehension, and science.

Meanwhile, “active” and “passive” concert refers to the use of background music that lies at the foundation of his techniques, that is, a couple of very different but equally effective learning environments, or concerts. Some studies has found that the use of background music could enhance the students’ learning and memory. As cited in Berk (2008), Bulgarian psychiatrist Lozanov explored techniques to use music to increase learning and memory in the 1960s. The developed theories, research, and strategies emerged into accelerated learning.

Quoted from Berk:
“An active concert activates the learning process mentally, physically, and/or emotionally by playing an up-tempo piece of music and reading or reciting language phrases in time with the music. This has been found to produce high memory retention. An active concert during movement activities can increase productivity, energize students, grab students’ attention, and make learning fun.”

Baroque music, however, falls into the category of a passive concert. It involves slower music, in contrast to the active concert, to relax the students’ alpha brain-wave state and soothe their mental, physical, and/or emotional rhythms so they could absorb information better. When the music is being played, Berk states that:

“Students enter into a relaxed state of awareness, opening their minds to incoming information. The music helps them maintain focus and concentration. By tapping into the pleasant emotions of the limbic system, information passes into long-term memory.”

According to aforementioned explanation, Baroque music could be highly recommended to enhance students in their learning. Related to writing as the main focus of this research, it is a skill which requires high concentration and expanded thinking skill. The influence of Baroque music as a passive music might increase those requirements. This is in line with the finding of Lozanov (in Berk) that students could learn language skills at least four times faster by using this approach compared with traditional methods, in other words, doing “accelerated learning.” The statement is also further supported by Brewer (1995, in Berk) who had recommended that background “passive” music can be played while students study, read, or write to increase attention levels, improve retention and memory, extend focused learning time, and expand thinking skills. This music can also be effective during reviews and tests. Furthermore, these techniques also included other ways to promote a positive learning environment.

RESEARCH METHOD

This research is delivered in qualitative design since it is going to describe any possible effects of Baroque music that is played during the students’ performance in a cognitive activity (writing narrative). In a qualitative research, the researcher becomes the main instrument in order to collect the data. Some supporting tools were used to gather the data, such as interview guidelines, a sound recorder, and camera. A tape recorder was used to record the answers given by the respondents so there were no single data missed to be noted during the interview, while a camera was used to document important and supporting events. Basically, this research could have been conducted without demanding the respondents to produce narrative texts. However, to ensure the qualified respondents and the quality of the result, it has been decided to choose the potential respondents through selection of the score of their narrative products.

For this research, a qualitative observation and a qualitative interview were chosen. During the observation, the population’s activities were observed thoroughly through a teaching and learning activity and narrative writing tests, in which their achievements were noted and recorded in a hard drive. The observation section was done in three weeks (three meetings, with 80 minutes per meeting) of teaching and learning activity. These achievements were the candidates of selection for the potential respondents for the interview section afterwards. The respondents are selected from the gap of their scores of the first and the last product. The respondents that were chosen were based on the following categories:

- the score for the first and last product showed relatively small gap (20 points or less)
- the score for the first and last product showed relatively big gap (30 to 50 points)
the whose score for the first and the last product showed no gap at all (stable)

The data recording procedure during interview session was using interview protocol (an interview guideline) in order to obtain the data about the possible effects of Baroque music for the respondents during their activity in writing a narrative text, which was done during the observation period. Generally, every respondents were given the same question which consisted of questions about their preferences to playing music (or not) during a cognitive activity. However, most of the questions were asked accordingly to the unforeseen answers of the respondents, resulting in collecting more supporting details of the main wanted data. Some questions were also used correspondingly to the different achievements of every interviewee, i.e. the question(s) examining to the reason why this person could achieve such score was asked with different focus depending on his or her own results. The information was also recorded by audiotaping. Meanwhile, the data analysis technique in this research was done through following the qualitative data analysis proposed by Creswell (2009), as summarized below:

a. The raw data (transcripts of the interview) was organized thoroughly.
b. The data was read carefully in order to obtain a general sense of the information and to reflect its overall meaning.
c. The organized data was underwent a coding process where the data were re-organized into segments.
d. The segmented data was further interrelated with a generated description, which involves a detailed rendering of information. After that, a small number of themes or categories were generated, in which would appear as major findings in this research.
e. The description and themes were represented in a narrative passage to convey the findings of the analysis.
f. The data was interpreted thoroughly. In this research, the interpretation process was done through comparison of the findings with information gleaned from theories, in which the findings could confirm past information.

RESEARCH RESULT AND DISCUSSION

From the total of 3 respondents, the results of the interview showed that 66% of them admitted that the music gave positive effects on their writing activity and achievement; meanwhile, the 34% stated that the music gave the opposite effect instead. The following table shows the results which was based on the score of narrative tests that were achieved by the selected respondents. Three out of 32 students were chosen since their achievements matched the category for the respondent selection. Every single of the category is unique to one respondent, thus, each respondent has different characteristic of the category from each other.

Table 1 Summary of Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Score</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2</td>
<td>3 Gap 1 and 3</td>
</tr>
<tr>
<td>1.</td>
<td>Student 1 (female, 17)</td>
<td>75 80</td>
<td>85 10</td>
</tr>
<tr>
<td>2.</td>
<td>Student 2 (female, 15)</td>
<td>45 65</td>
<td>70 35</td>
</tr>
<tr>
<td>3.</td>
<td>Student 3 (male, 16)</td>
<td>60 60</td>
<td>60 0</td>
</tr>
</tbody>
</table>
According to Swartz (2015), the influence of Mozart Effect on intelligence was first invented in the October 14, 1993 by Frances Rauscher, Gordon Shaw, and Katherine Ky, within a one-page article entitled "Music and spatial task performance". Their research, showed a statistically significant improvement in scores from students who had listened to the Mozart sonata; however, the response was phenomenal. There are pros and cons, inconsistencies of results among researches that attempted to replicate this experiment (and willingly prove the effect of Mozart music on intelligence). The respondents’ answers that basically include beliefs on the positive effects of Mozart effect and its influence on intelligence could be thought as temporary assumption, since the view should be further studied through thorough experiments. When one feels agree that Mozart effect could make themselves smarter, as the student-1 had stated, and the cause was what she called ‘inspiration’, this might came from a theory in which arousal or mood states that are responsible for the effect itself. Swartz (2015) explained about evidence in a research where one will perform better at abstract reasoning tasks when they are mildly aroused and in a good mood, further linking it with the effect of music that could place someone in a mildly aroused, happy state. Thus, the statement of which the student-1 stated might be based on the factor where music could raise her mood, and as the result, this emotional variable enhancing one’s intelligence, although most certainly short-term.

However, the student who does not believe (or mostly uncertain) about this phenomenon could not be blamed either; Gorman (2017) described some explanation of the inconsistent results of researches on Mozart Effect. There are certain conditions to achieve the desired results during the first experiment of Rauscher and Shaw; among them are aspects of spatial tasks, the experiment design, the procedure, the choice of music, and a mood-state explanation. These considerations led other researchers to replicate the experiments to ensure its validity and determine the extent of the Mozart Effect. However, even such attempts to reproduce the 1993 have met with mixed results, where some have reproduced the findings, while others showed failures to show significant effect of listening to Mozart’s music.

One could make a good writing with or without exposure to music, although music is their very learning style, but the main consideration is their own writing ability. However, these kinds of writer might seek another way to fulfill their needs of music if the situation is not supportive. According to Howard Gardner theory (1983) on multiple intelligence (MI), where musical intelligence being one of them, a person who possesses musical intelligence has unique qualities such as show sensitivity to rhythm, melody, and sound, also, they may study with music in the background, play an instrument, notice non-verbal sounds in the environment, and learn more easily if sung or tapped out (in Piper, 2004). Student-1 chose to hum, sing quietly, and listening their own music through earphone during a writing test where music was not turned on. This implied the musical intelligence that the respondent has, by unconsciously showed her musical habit even during a test.

Some research showed that background music has rather positive effects on the level of concentration, which then contribute to the performance level (Mori, Naghsh, and Tezuka, 2014). Another research done by Jones (2010) also showed that music had impact on cognitive process (and affective process as well), not to mention that a significant number of students changed their music preference to a softer classical music in order to study since it might improve concentration or relax.

It cannot be blamed if most of the answers of the students are that listening to music is merely for self-satisfactory. In Robert, Christenson, and Gentile (2003), there was an explanation about a study of Swedish adolescents done by Roe (1985) which presented possible reasons for listening to music and asked students to indicate how often each applied to their listening. Factor analyses revealed three general trends: (1) atmosphere creation and mood control, (2) silence filling and passing the time, and (3) attention to lyrics. Of the three types of uses, the research showed that atmosphere creation and mood control emerged as the most important for both male and female listener. Thus, our respondents’ responds are basically in line with this factor, and it
might not be a new thing to be surprised about. However, the results are not always true for each case. The findings of this study, for instance, showed that other students in the observation rather took advantage of silent situation to get the best out of their ability to write a good story, because they claimed that music was becoming a distraction during their activity. Moreover, a classroom that was not conducive rather made the academic environment not enjoyable for those respondents, and the background music lost its purpose in the process.

There was a unique case in the finding of this research where a respondent, whose preference was writing without music, said that she receive imagery during writing where Baroque music was being played. This could be assumed whether it is realized or not, consciously or not, does affect the writing process and progress of the students. The response was as follows:

“I admit that the music distracts me during writing activity, but at some point I suddenly gain a picture in my mind about fairy tales… I feel that I was the citizen of dreamland in which I always watch in princesses movies.”

This finding is similar to a research done by Pugh (2014), where the researcher asked the participants to describe the type of movie scene would fit into certain music they listened beforehand. The participants gave various responds; but the mutual thing was, they could describe imagery vision based on the music they listened to. This suggests that “music can directly affect our creative writing. Even nonlyrical music that someone has no connections to can produce powerful imagery”, Pugh said. This finding might be a stepping stone of a student to gain imaginative vision which is very useful for making creative writing.

Music could affect cognitive and affective aspect might neither be just random answer nor uncertain possibilities. The answers from our respondents were showing that music, whether it is lyrical or not, might have chance to affect someone’s mind set, and even human behaviour. How come is music capable of doing such things? There are explanations and examples among results that have been experimented in some study. Many researches have been conducted with focus on the improvement in a range of cognitive tasks. In the case of the effects on cognitive aspect, as has been discussed in Rickard, Toukhsati, and Field (2006), a research done by Abikoff et al. (1996) found a significant improvement in arithmetic performance in children with attention deficit disorder during exposure to music relative to silent or speech condition. Other research, also in Rickard, Toukhsati, and Field (2006), done by Thompson, Moulin, Hayre, and Jones (2005), also found that exposure to Vivaldi’s Four Seasons (Winter), which is included as Baroque music, improved performance of both healthy older adults and Alzheimer’s patients during a category fluency task.

Meanwhile, the effect on affective aspect such as moral, behaviour, and attitude due to music (especially its lyrics), was described in one study by Rouner (1990) in Robert, Christenson, and Gentile (2003). Statistically, 16% of high school student ranked music among the top three sources of moral guidance, and 24% placed music in the top three for information on social interaction. Furthermore, it was also stated that “lyrics are often attended to, processed, discussed, memorized, and even taken to heart.” However, music lyrics could appear to be difficult to understand, thus making it to be rather interpreted differently by different people.

CONCLUSION

The result showed that the exposure of Baroque music could potentially be something of a double-edged sword. Mozart effect is also a subject to be further researched and the effect is very demanded with certain circumstances, among them are aspects of spatial tasks, the experiment
design, the procedure, the choice of music, and a mood-state explanation. Even the reproduced researches showed different results than the earliest one in 1993. Furthermore, the respondents for the observation in this study also provided different results regarding the effect of whether or not Mozart effect affecting their intellect, based on their achievements. In other words, not every experiments involving Mozart effect are guaranteed to be successful.

The results of writing test might not only be determined by the exposure of background music (in this case, Baroque music) during the activity, it is more likely also affected by external factors such as the writer’s writing skill level and their respective learning styles.

Background music could give relaxation to most of people. It could also raise concentration in academic situation to some people, but this effect might be not true to others. However, this indicates that the exposure of music (in this case Baroque music) might be more useful for relaxation purpose rather than as a companion for teaching and learning activities in the classroom, since creating conducive environment in the classroom is very situational. Nevertheless, background music, in this case Baroque music, during creative writing activity has unique effect to provide imaginary vision unconsciously to the listeners. The example of the vision was picturing oneself in an imaginative place where fictional fairy tale creatures exist, and ironically, this vision was described by a student who considered music as a distraction during the writing activity.

In general, music has effects that influence cognitive and affective aspect of its listeners. On the cognitive traits, music, whether lyrical or not, could improve the learners’ performances in a range of cognitive tasks, such as in arithmetic performance and in a category fluency task. On the affective side, the main role is the lyrical music, which could affect elements such as moral, behaviour, and attitude, since lyrics are often attended to, processed, discussed, memorized, and even taken to heart by the listeners.

Based on the conclusion, some suggestions will be directed toward teachers and the other researchers. For the teachers, the use of music for improving certain skills or accompanying the instruction in the classroom could be implemented not only for English subject and during writing task, but might be able to be carried out in other subjects and tasks which demand the students to concentrate, such as mathematics, science, or perhaps national and other foreign languages. However, it should be noted that implementing music to improve students’ performance needs wise choice of music and thorough preparation.

Meanwhile, for other researchers, this research could be further improved by selecting respondents from different graders which have not been attempted to be observed. The next researchers may also enlarge the observed language skill into other skills, such as reading and grammar comprehension. Also, since the focus of the research is the use of Baroque music, it is worth trying for the next researchers to use true classical music instead, or perhaps modern time music (lyrical or not), to see whether or not there are similar (or different) effects on certain aspects of the observed students.

REFERENCES


Pieri, D.A. (2017). The Effect of Background Baroque Music on Work Accomplishment and Student Concentration on Days of Rapid Weather Changes, masters of Arts in Education Action Research Papers, Vol. 219, St. Catherne University, St. Paul, Minnesota: USA


