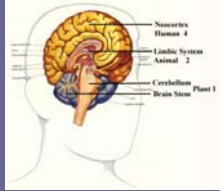


# The Effects of Calm Music & Silence on Reading Comprehension

By: Alex Stone

## Introduction

- Reading comprehension is the ability to assess the material and express apprehension.
- The outer surface of the brain, the Neocortex, is responsible for our reading capabilities, whereas many areas of the brain process music, there is not an official "music center" of the brain.



Source:  
[www.chanceandchoice.com/.../chapter4.html](http://www.chanceandchoice.com/.../chapter4.html)

## Introduction continued/ Materials

- The objective is to study the rate of success on reading comprehension test; Group A, will test with non-vocal classical music opposed to Group B, will take reading comprehension tests in silence.**
- Materials:**
  - 1) Tchaikovsky Romeo & Juliet Sleeping Beauty CD--Romeo & Juliet Fantasy Overture 18:08
  - 2) Boom box
  - 3) Abcteach tests
  - 4) 10 subjects
  - 5) Pens and pencils

## Hypothesis/Factors

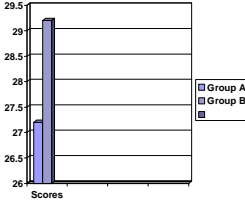
- My hypothesis:** Group A, will perform very well in a silent environment in comparison to Group B, who will not do well with non-vocal classical music.
- Factors:** For the first week Group A, will test in silence while Group B, will test with classical background music. Secondly, the test will be administered for 20-30 minutes only for each group. Thirdly, in the second week the groups will still take the same kind of test. It may be hard for the students to test well if they are too stressed or distracted by the silent environment. If they are not used to performing cognitive tasks, such as homework and reading under this condition or while listening to non-vocal classical music it may be a difficult for them while taking their tests.

## Procedures

- Group A (5 beacon female students) will be in a silent environment for the first week of testing and take a reading comprehension test.
- Group B (5 beacon female students) will take a different reading comprehension test while listening to non-vocal classical background music for the first week.
- As repeated under "Hypothesis/Factors" both groups will not have more than 30 minutes to complete their test; they will be timed.
- The second week: group A will take the test that group B did in the first week and vice versa, under the same environments to maintain control conditions.
- The third/fourth week: the same procedures.

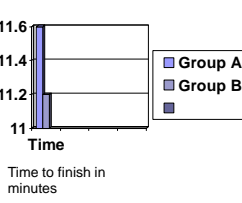
## Results for the 1st test

Scores on the 1<sup>st</sup> Test

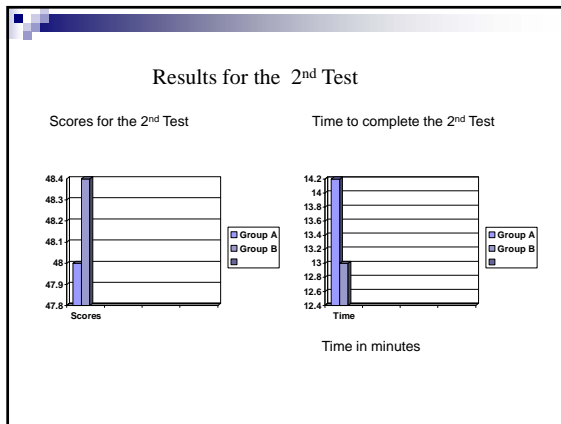


Group	Score
Group A	29.2
Group B	27.2

Time to complete 1<sup>st</sup> test



Group	Time (minutes)
Group A	11.6
Group B	11.2



## Inferences/Analysis

- It was interesting that Group B, the one who listened to classical background music scored better on both test and took less time than Group A.
- The non-vocal classical music could have been very relaxing for them or encouraged them to take the test faster because they did not like it; this could suggest that Group B's dislike for the music made them test better because they forced themselves to focus.

## Conclusion

- If I were a professional scientist with unlimited resources I would have had the Group A, in one room and Group B, take the test together in one room opposed to individually. In addition, the same classical song for the classical group was played throughout the experimentation. This could have suggested that the subjects were used to the song so it did not have much of an effect on how they tested. If I were to conduct this experiment again I would use a different classical song for each time the groups were tested.
- My study could have been extended so that the subjects could take two tests in one week to have more data and make more inferences.