CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY

Name(s)
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Project Number
38593

Project Title
The Earworm Effect

Abstract

Objectives/Goals
Which gender, between eleven to thirteen year olds, will experience INMI (Involuntary Musical imagery) more, after listening to clips of three well known songs?

Methods/Materials
I clipped the three well known songs to make one three minute long song. I played the video in each class. The next day, I had the class fill out a survey asking questions about their experience with those songs and INMI. There were 186 participants.

Materials:
surveys (created to ask questions about INMI)
Speaker or way to play music
male and female students from 11-13 years old

Results
The males had 35.6% did not experience INMI with a song from the video and 64.4% did. Of the male students who did not experience INMI with a song from the video, 29.4% had an outside song in their head. Of females, 16.7% did not experience INMI with a song from the video and 83.3% did. Of the females that did not experience INMI with a song from the video, 37.5% had an outside song in their head. Overall females experienced INMI more than males. There is an 18.9% difference between females and males who had songs stuck in their heads, which is significant. Of those who didn't get a song from the video stuck in their head, more females than males had an outside song stuck in their head, a difference of 8.1%.

Conclusions/Discussion
Between eleven to thirteen-year-olds, females experienced INMI more than males after listening to clips of three well known songs. This research was important because differences in the male and female brain is a fairly new area of study and Involuntary Musical Imagery is shrouded in speculation.

Summary Statement
I concluded that 11-13 year old females will experience INMI (involuntary musical imagrey) more than males.

Help Received
My teacher guided me through the process of making my science fair, but I completed the project and experiments by myself.