

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

	Project Number
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	34018
Project Title	O N
To Music, or Not to Music? An Exploration in Seeing I	How Music
Affects Concentration	
Abstract (C)	
Objectives/Goals I've always listened to music when completing schoolwork, so I wanted to know	Hor does music
actually affect my ability to work? This project 'To Music, or Not To Music' lob	ks at how music with
different intensities and music in different genres affects one's ability to perform multiplication) and tasks that require a large amount of concentration (memorize	Tote tasks (simple
multiplication) and tasks that require a large amount of concentration (memoriza	tion of letters).
My hypothesis was that soothing songs would help people perform both sote and	concentration oriented
My hypothesis was that soothing songs would help people perform both rote and tasks more efficiently, and as the songs increase in intensity peoples ability to pe would progressively cripple. I also hypothesized that songs in the classical genre	erform the given tasks
would progressively cripple. I also hypothesized that songs in the classical genre	would be easier to work
with than songs in the pop/electronic genre, which would be easier to work with	than listening to hip
hop/rap. Methods/Materials	
METHOD	
I had my test subjects help me classify which songs could be deemed intense, or	soothing. Then, I had
another group of people listen to those songs while performing the given simple to memorize. I collected that data, and processed it	multiplication and letters
to memorize. I conected that data, and processed it	
MATERIALS	
Computer, Libre office spreadsheets, Libre office documents, iMovie, iTunes, Pr 9 Pencils, White binder (storage), 15 Classical songs, 15 Pop songs, 15 Hip hop/s	rinter, Paper, Paper clips,
9 Pencils, White binder (storage), 15 Classical songs, 15 Pop songs, 15 Hip hop/s subjects for part A	rap songs, 10 Test
9 Test subjects for part B, Poster board	
Results	
For memorization tasks, the results did not show a clear pattern of music intensit	y, across genres,
impacting one's ability to memorize more or less. The same was true for rote ma	unematical tasks.
My experimental results neither proved or refuted my hypothesis because my res	sults proved inconclusive.
However, anecdotal evidence through interviewing test subjects supported my hy	ypothesis. Consequently,
my understanding is that to create conclusive results in my experiment, I would it songs to my experiment, allow for many more people to do the experiment and c	have to add many more
variables I stumbled upon when analyzing my data and speaking to my test subjections.	ects.
Summary Statement	
This experiment explores the impact of music on concentration and cognition wh	nen performing tasks.
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Help Received	