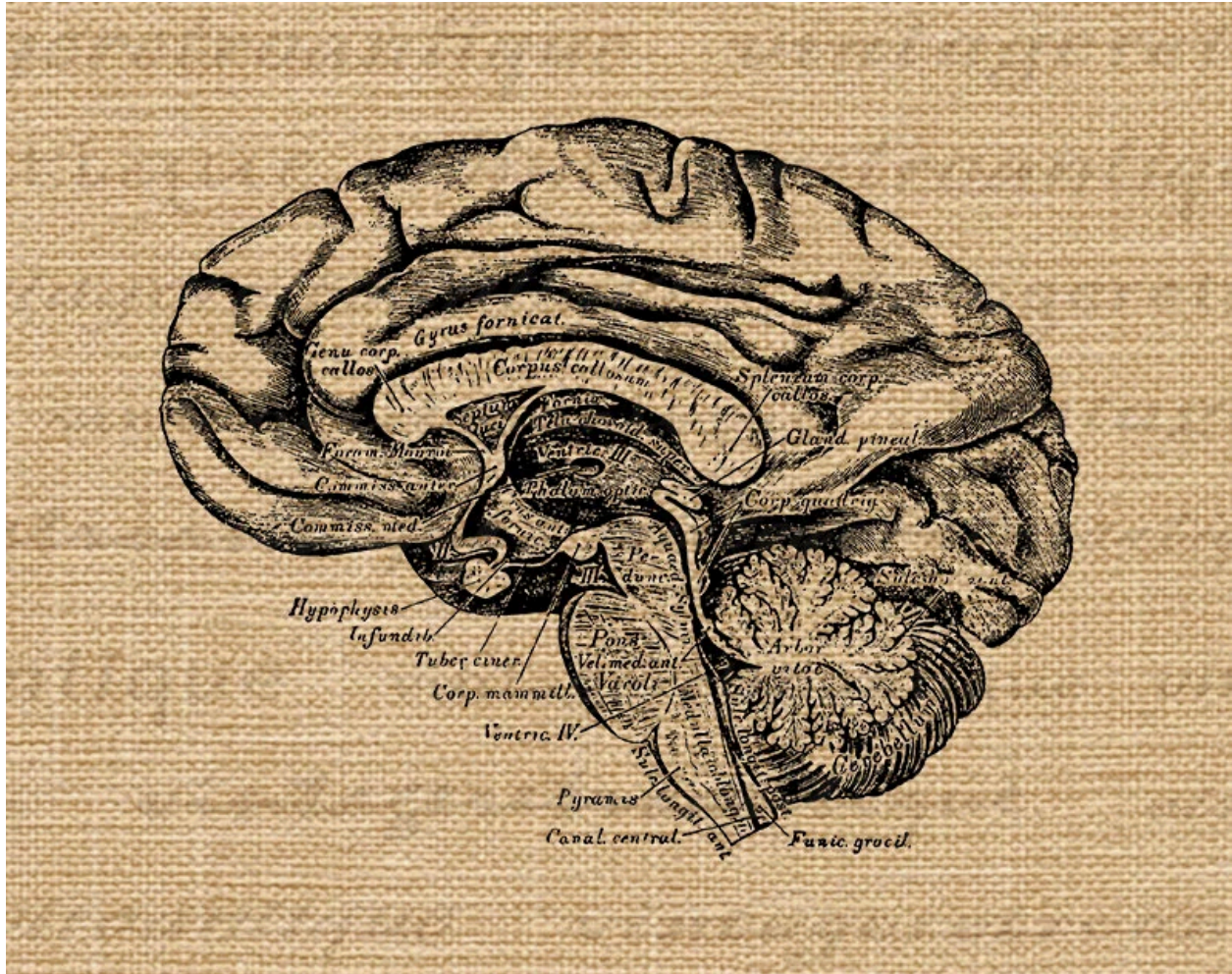


SCIENCE FAIR LOGBOOK

HOW DOES MUSIC HELP PARKINSON'S DISEASE?



DESHNA ANAND

8TH GRADE

Working dates

Dec 19, 2024

Dec 21, 2024

Dec 29, 2024

Dec 31, 2024

Jan 14, 2025

Feb 6, 2025

Feb 18, 2025

Feb 20, 2025

Feb 21, 2025

Feb 22, 2025

Feb 25, 2025

March 2, 2025

March 3, 2025

March 4, 2025

March 9, 2025

March 13, 2025

March 14, 2025

March 19, 2025

March 20, 2025

March 21, 2025

Dec 19

I started filling my Ethics and due care 2A form

Dec 21

I submitted my form and filled out the basic information section.

Dec 29

At 5:47 pm I received an email from the safety committee regarding the ethics and due care 2A and my project was approved and I could begin my project.

Dec 31

I began my project by filling in the problem and method section then I found some reliable sources and started typing my research.

Jan 14

I was stuck and I needed some guidance on what else to add since I added musical therapies for Parkinson's disease and information about PD. I spoke to my teacher who guided me in

my last year science fair Ms. Antulov and she suggested I add information about Parkinson's disease dementia and how music helps this condition as well.

Feb 6

I read about PDD and Lewy Bodies and how this is connected to PD and I have a good idea on what to add.

Feb 18

I added more information about PDD and the symptoms patients experience and my teacher told me and my peers the trifolds are ready to take home.

Feb 20

I added some information on how music helps PWPs (people with Parkinson's) cope with the emotional fact they have been diagnosed with PD.

Feb 21

My mom and I brought the trifold home and I began brainstorming ideas on how to arrange the information and decorate the trifold.

Feb 22

I read the book I Heard There Was A Secret Chord, Music as Medicine. This book explains how music helps different types of

neurological disorders. Chapter 7 is about Parkinson's disease. I got some real life experiences to add to my project. I had an idea of bringing my guitar to present at the fair during my presentation. I will choose a song which is played by therapists for PWPs.

Feb 25

I researched and added information about how music helps movement in PWPs. I completed the section for music and Parkinson's disease which included emotional benefits and movement benefits.

March 2

I added information on other types of musical therapy such as dancing and how it helps mentally and physically.

March 3

I began working on the data portion of my project. I first thought of gathering information by myself and creating a graph but there was not enough information for me to do that so I got graphs on google which had the information I needed for the data.

March 4

I looked for more data and found a great graph from Research gate. It had the comparison of 3 participants with PD and a therapist without PD.

March 9

I went on to Research gate to that graph and I analyzed the data and understood how they conducted this experiment. Then I pasted the graph on the platform

March 13

I went to the research part of my project and I worked on how singing and vocal exercises help PD.

March 14

I presented the information about my project to my dad and he gave me some feedback to make some of the terms more simple and explain the x and y axis of the graph. He also quizzed me on the parts of the neurons and questioned me on the two pictures of the neurons I provided. Otherwise he said I had done good research.

March 19

I added a real life example of how music helps PD. I referenced the book I heard there was a secret chord by Daniel J Levitin.

March 20

I added the section for the challenges of music in Parkinson's disease. I decided to add one more graph for the data section tomorrow and upload my logbook on the platform as well.

March 21

I finished my project by adding the final graph and adding the final touches to the project online. Now I just need to complete my trifold, learn the song on the guitar and write my speech for the science fair.

Citations

- <https://pmc.ncbi.nlm.nih.gov/>
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- I heard there was a secret chord book by Daniel J Levetin