

# The Effect of Music on Dogs

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# Abstract

My name is Jakob Corley, I'm in the 9<sup>th</sup> grade. I attend Navajo Preparatory School in Farmington, New Mexico. The purpose of this experiment was to find out which music genres calmed down my dog the most. I thought that country and classical music would calm her down the most because to me it is the most soothing. I went about testing this by isolating my dog and playing her these songs and testing her heart rate after each song. After I got all of my testing done, I concluded that reggae and country resulted in the lowest heart rate. So if you want to calm your dog down, play them some Bob Marley or some George Strait.

# Variables

- Variables that could affect the results of the experiment:
- Breed of the dog
- If the dog is a pure bred or mix
- The dogs age
- Weight of the dog
- If the dog is hyper or not
- Last time she ate
- When she last slept (if she just woke up or is tired)

# Hypothesis

I believe that if I play my dog 6 different music genres, then out of all of those, the classical music genre will calm her down the most. I think this because for humans, classical music is usually used as background music or study music due to its calming nature.

# Background Research

I found a study done by King Phillip Regional High School in Wrentham, Massachusetts. Their goal was to test the effect of different genres of music on dogs' heart rate. They used 6 different breeds of dogs and played them 5 different genres of music. They concluded that Jazz music resulted in the dogs lowest heart rates. They measured the dogs heart rate with a stethoscope which influenced me to do the same with my experiment as before I was just going to measure her activity or her physical behavior. Doing this background research also made me realize I could improve of my ways of performing my own experiment such as measuring the dog's heart rate.

# Materials Used

- Stethoscope
- Speaker
- Timer
- Music (laptop)
- Camera

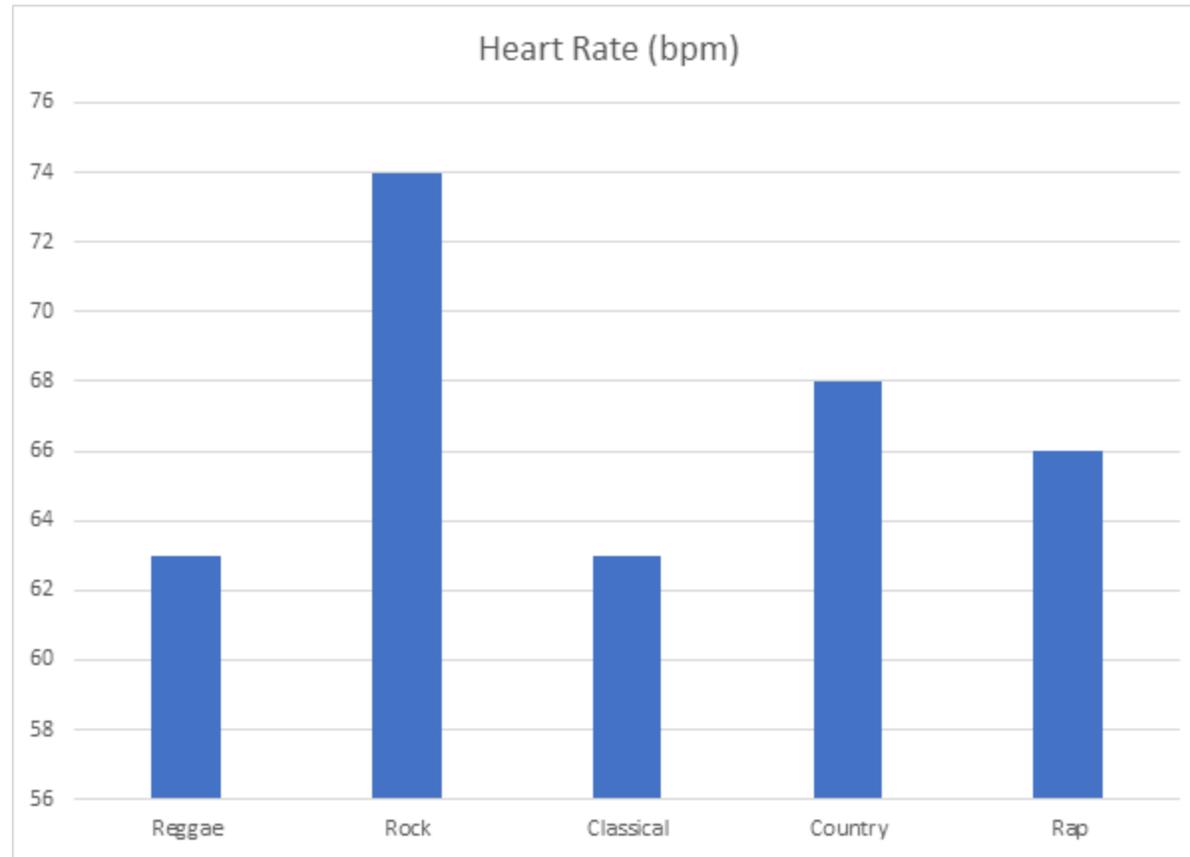
# Experimental Procedure

My first step of the experiment was to gather all my materials that I listed. I recorded her resting heart rate using the stethoscope. After that I played her the first genre which was reggae, and after the song was over, I tested her heart rate again and gave her a 5-minute break. After playing her the first genre I then continued this on for 4 more genres while also continuing to measure her heart rate after each song and giving her a 5-minute break in between the songs. After I was done playing her all the songs, I was finished collecting all my data and gave her a treat for being a good dog and behaving.

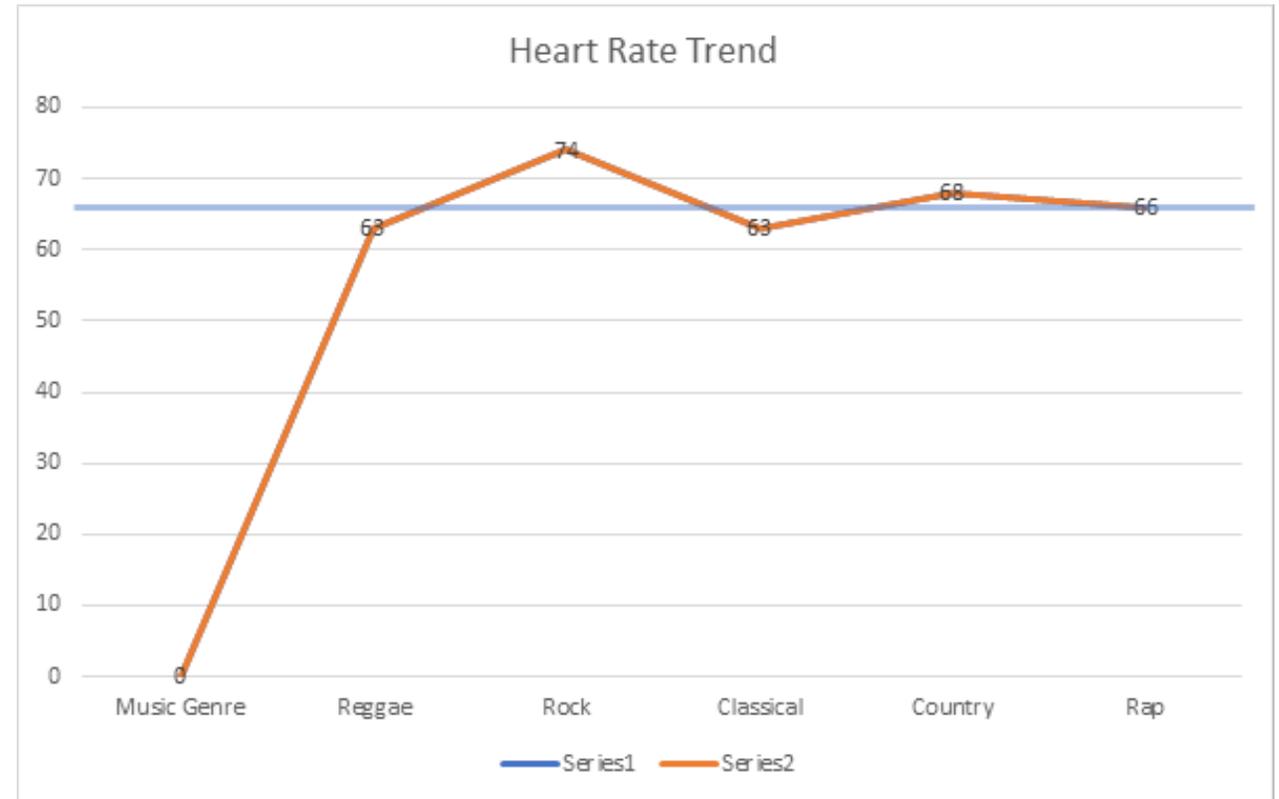
# Data Analysis

Firstly, the dog that I tested for my experiment was my dog, Sandy. Sandy is a pure bred (we think) golden retriever. She is 6 years old, weighs 76lbs, and is only sometimes she gets hyper. Her resting heart rate was 65 bpm and I got that by using a stethoscope and a timer set for 1 minute. I played her a total of 5 genres of music, reggae, rock, classical, country, and rap. For the reggae genre I played her Bob Marley's Three Little Birds which resulted in a heart rate of 63bpm which is surprisingly lower than her resting heart rate. For the rock genre I played her Welcome to the Jungle by Guns'N'Roses which elevated her heart rate to 74bpm. For classical I played her Fur Elise by Beethoven which resulted in another heart rate of 63bpm. For the country genre I played her Amarillo by Morning by George Strait and she had a heart rate of 68bpm. Finally for the last genre which was rap I played her Without Me by Eminem and she had a heart rate of 66bpm.

# Graph



# Graphs



# Conclusions

Overall, reggae and classical music gave the dog the lowest heart rate of 63bpm which made her the calmest. This makes my hypothesis partially correct because I predicted that classical music would clam her down the most. So, if you need your dog to calm down while you're out of the house, play some reggae or classical music.

# Acknowledgements

I would like to thank my parents first for pushing me and inspiring me to do this experiment, and also to my Mom for letting me use her stethoscope. I also want to thank Mr. Keely for giving me the opportunity to do this science fair.

# Bibliography

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- How does music affect dogs - <https://www.entirelypets.com/how-does-music-affect-your-dog.html>