

# EMOTIONAL RESPONSE TO MUSIC STIMULI

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# Motivation



WHY DOES CERTAIN  
MUSIC MAKE US FEEL THE  
WAY WE DO?



HOW ARE EMOTIONS  
MAPPED IN OUR BRAIN?

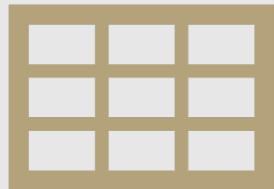


WHAT CHARACTERISTICS  
OF MUSIC LEAD TO  
CERTAIN EMOTIONS?



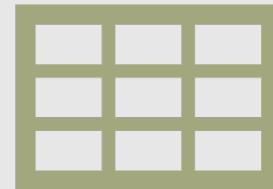
IS IT POSSIBLE TO  
TRIGGER EMOTIONS  
USING CERTAIN MUSIC?

# Data



## **DATASET - 1 (Design Matrix)**

200 music stimuli waves  
4 main categories: Sad, Happy, Scary, Peaceful  
6 various components of the clip are altered



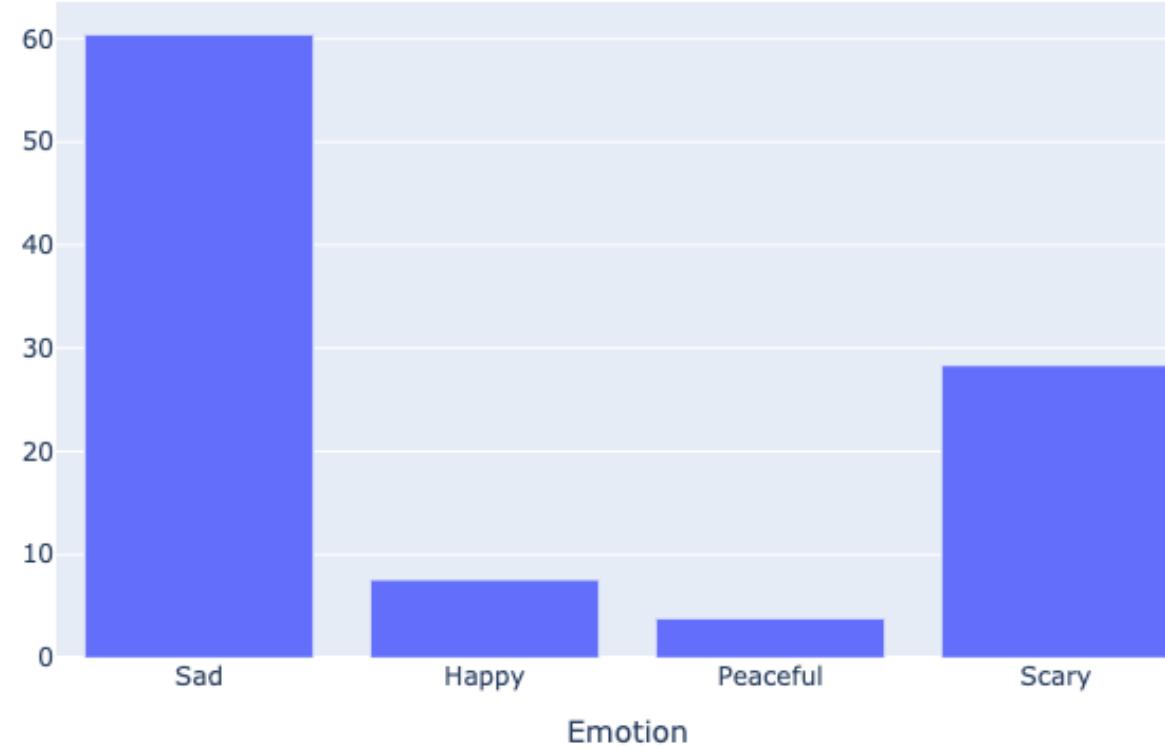
## **DATASET - 2 (Mean emotional Response)**

Each stimuli is rated as Sad, Happy, Scary, and Peaceful on a scale of 1 to 7 (4 ratings per person per stimuli)  
Mean of 42 responses stored in this table for each stimuli

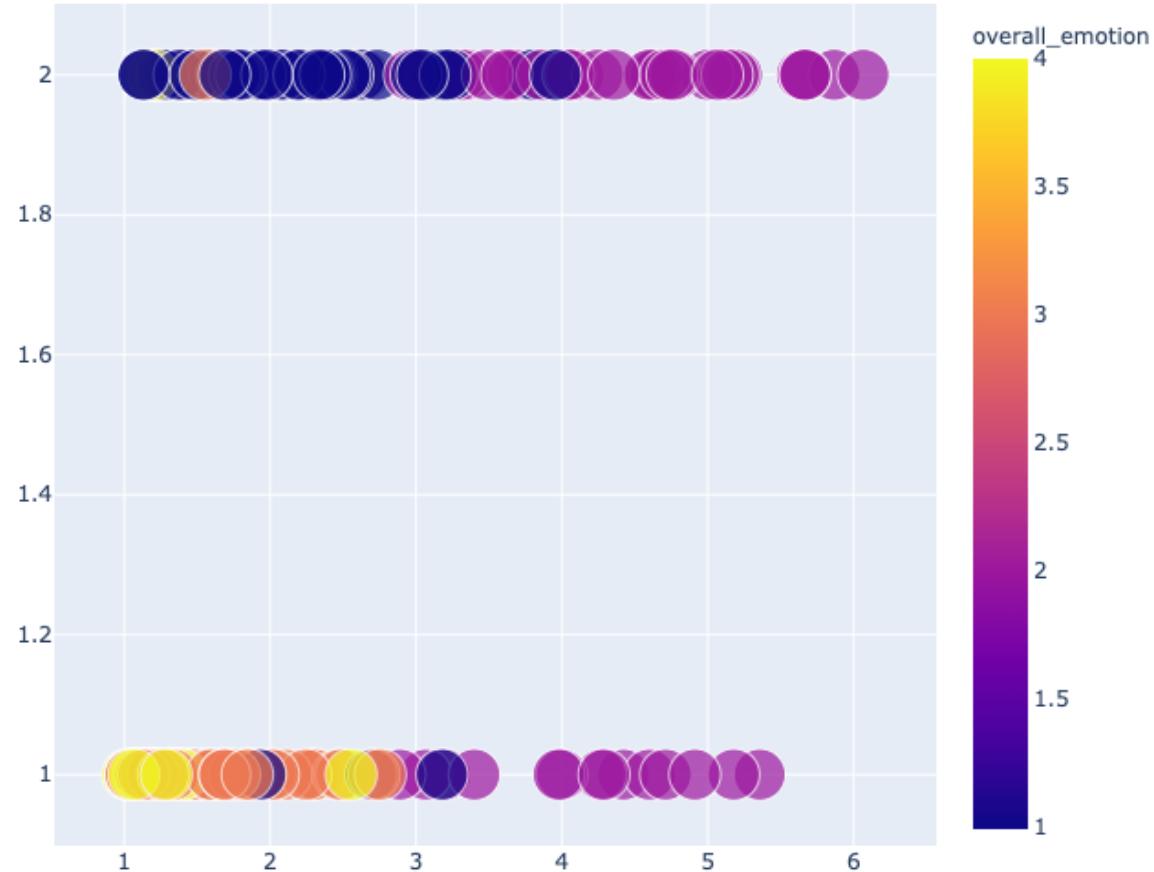
# STIMULI DEMO

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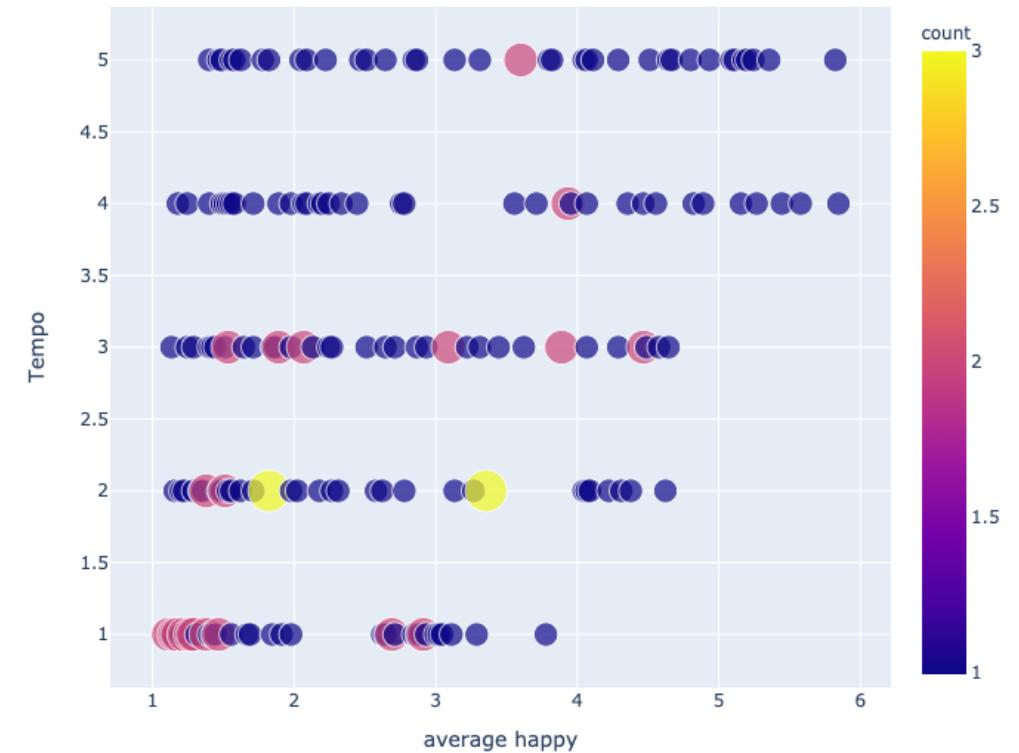
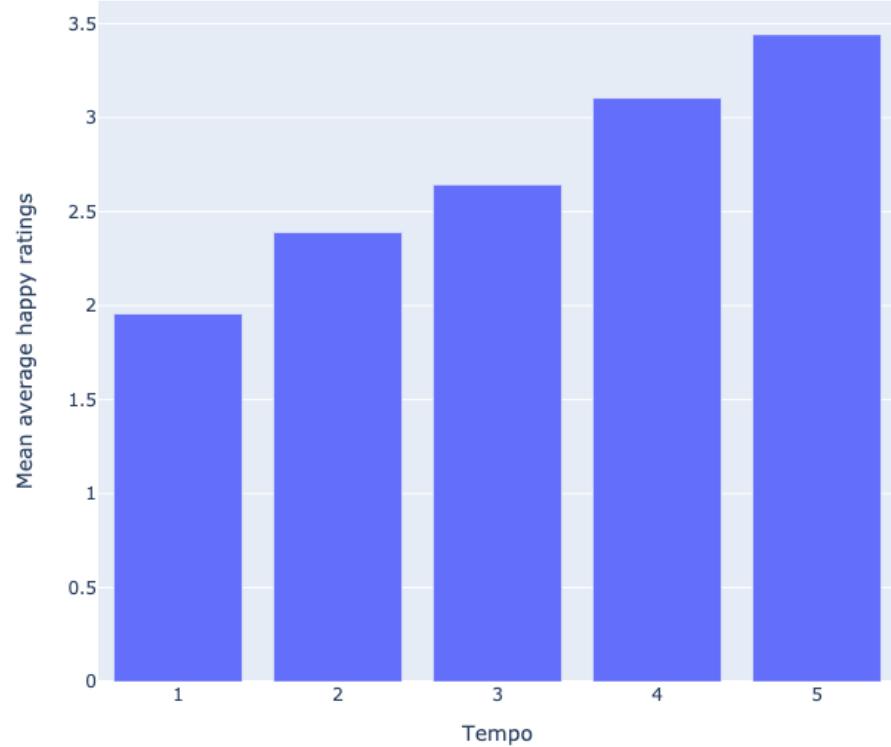
%age of minor key first response

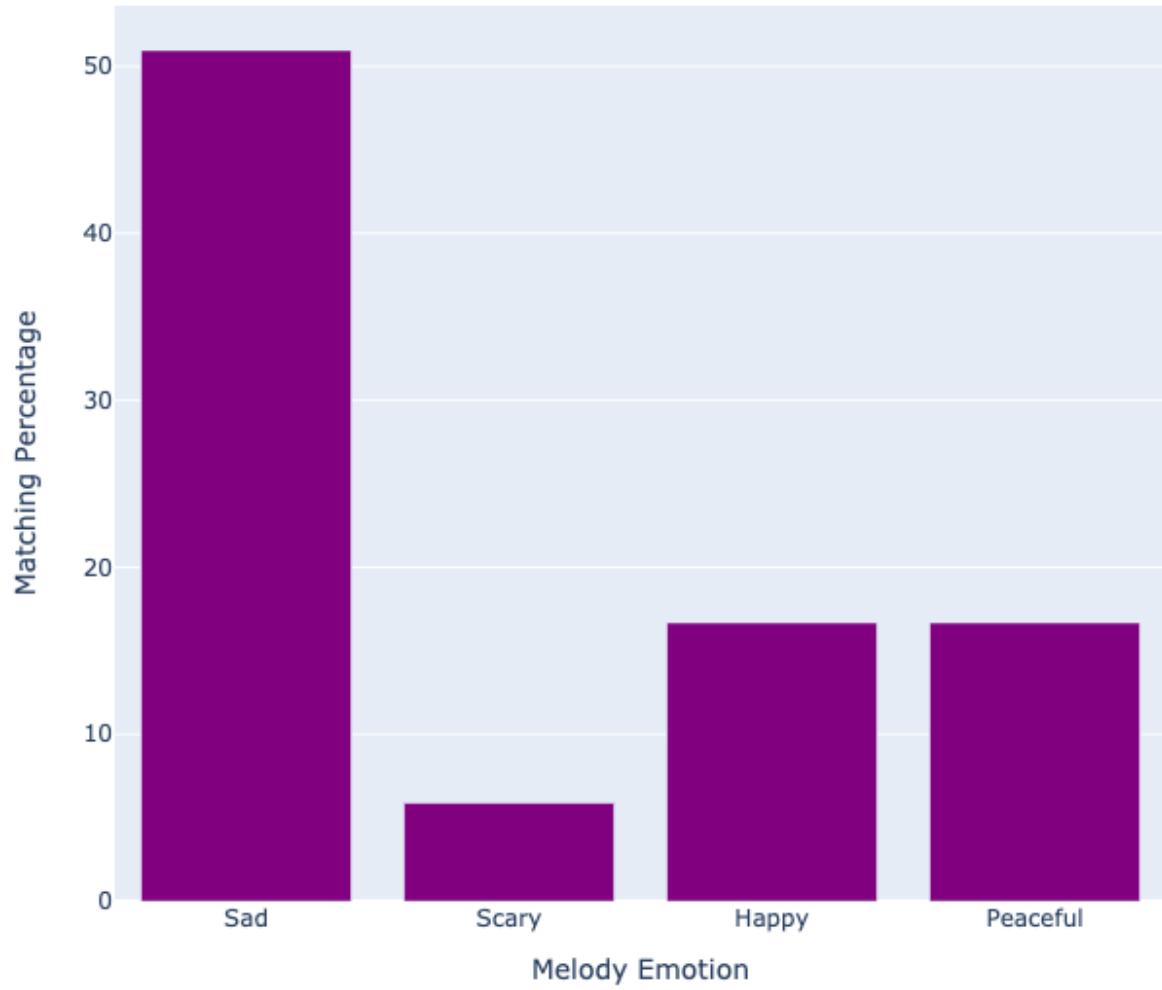


Mode



Q1: DOES A MINOR KEY MELODY ALWAYS INCUR A "SCARY" RESPONSE?





Q3: WHICH MELODY  
DESPITE CHANGING  
VARIOUS FACTORS  
MORE OR LESS  
ILLICITED THE SAME  
EMOTIONAL  
RESPONSE AS THE  
BASE TUNE?

# WHAT DO THESE RESULTS MEAN



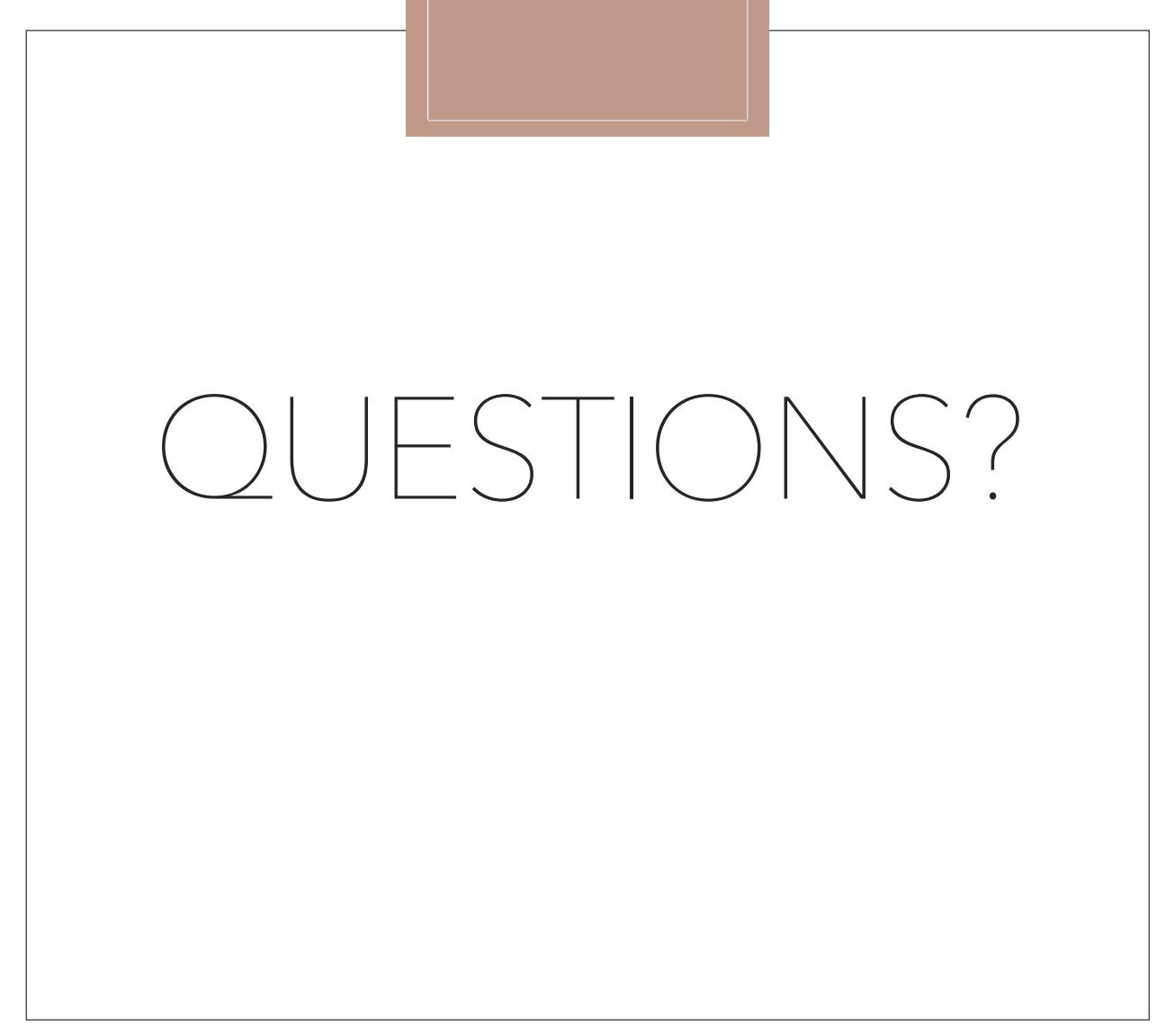
Clearly there is a strong connection between emotional response and various characteristics of music, irrespective of other factors such as lyrics, demographic, background, etc.



A deeper dive into the backgrounds of the subjects, the inherent tastes of the subjects could lead to further understanding of how humans map emotions, and maybe how certain emotions can be tapped



Tempo clearly has a great influence in emotional response, as does key shifts which is intuitive but interesting to map in reality



QUESTIONS?

