

# Lyrics and Emotion in Songs: A Conceptual Replication Study (#19280)

 Author(s)
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 Yiqing Ma (Louisiana State University) - yma22@lsu.edu
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Yiqing Ma (Louisiana State University) - yma22@lsu.edu
Emily Elliott (Louisiana State University) - eelliott@lsu.edu
Connor Davis (Louisiana State University) - cdav224@lsu.edu
Katie Vukovics (Louisiana State University) - kmvukovics@gmail.com

#### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

# 2) What's the main question being asked or hypothesis being tested in this study?

(i) a. Will lyrics affect people's emotional judgments of the music (Will their subjective emotion rating increase when lyrics presented?) b. Will the effect remain across 4 different types (happy, calm, sad, angry) of emotions? (ii) a. Will people with more musical training respond differently than those with less musical training? b. Is there a relationship between scores on the emotion subscale of the Gold-MSI, and the intensity of emotional judgment? (iii) Will the prior relationship between emotion and lyrics replicate from Experiment 1 of Ali and Peynircloglu (2006)? That is, will lyrics detract from the emotional ratings in the presence of positive music, and enhance in negative emotions?

# 3) Describe the key dependent variable(s) specifying how they will be measured.

Participants' rating of emotion (range of 1-9). Goldsmiths Musical Sophistication Index: General score, as well as the emotional subscale.

#### 4) How many and which conditions will participants be assigned to?

1. Within-subjects: 8 conditions within the Lyrics Task (4 emotion x 2 lyrics present or absent)- happy music with lyrics presented, happy music without lyrics presented, calm music with lyrics presented, sad music with lyrics presented, sad music with lyrics presented, sad music with lyrics presented, angry music without lyrics presented. 2. Between-subjects: emotional judgment task, Goldsmiths Musical Sophistication Index.

# 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

A 4 x 2 mixed-model ANOVA will be performed to examine the main effects and two-way interaction:

1. Determine the levels of performance in each lyric condition of the emotional judgment task. i. music with lyrics (original version). ii. music without lyrics ("karaoke" version). Examine the main effect of the presence or absence of lyrics. 2. Determine the levels of performance in each emotion condition of the emotional judgement task: a. happy; b. calm; c. sad; d. Angry. Examine the main effect of emotion condition. 3. hypothesis in Examine the interaction between lyrics condition and emotion condition. 4. Planned Contrast test to determine if lyrics detract from the emotional ratings in the presence of positive music, and enhance in negative emotions. hypothesis iii 5. hypothesis iii Examine the correlations between General scores from GMSI and emotional judgments measures, to determine if people with more musical training respond differently than those with less musical training, and if there is a relationship between scores on the emotion subscale of the Gold-MSI5, and the intensity of emotional judgment.

# 6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude any data that is outside of 1.5 times the Interquartile range. We will exclude participants with reported hearing loss.

# 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

The data will be collected among students at LSU. The minimum sample size will be 50 people with no self-reported hearing loss. Ideally, we will recruit a minimum of 25 participants from the School of Music, and 25 participants from the Department of Psychology. The original study had 32-36 participants in Experiment 1-4.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

This is a conceptual replication study of S. Omar Ali and Zehra F.

Peynirciog

lu, 2006. "Songs and emotions: are lyrics and melodies equal partners?" Psychology of Music. 34 (4): 511-534. (Covariate) Participants' rating of song familiarity (range of 1-9).

