The Effect of Earworms on Affect
Jessica Tingley, Michele Moscicki, Karen Buro, MacEwan University

That song that is stuck in your head may actually have a calming effect in times of stress.

Introduction

- An earworm is defined as hearing music in the "mind's ear". Affect is defined as feelings.
- In prior qualitative research, some participants reported feeling anxious when they had an earworm.
- Prior research found that people higher in neuroticism reported more earworms and found them more bothersome.
- Hypothesis 1: Individuals will report higher levels of anxiety during earworm presence vs. earworm absence.
- Hypothesis 2: People who score higher in neuroticism will rate their anxiety higher during earworm presence vs. earworm absence.

Methods

- Part One:
  - Questionnaires were given to assess demographics, music experience & importance, baseline feelings (e.g. anxiety), and personality traits (e.g. neuroticism).
- Part Two:
  - Longitudinal (Jan-Mar 2019)
  - Participants filled out modified positive and negative affect schedule (PANAS) when experiencing an earworm.
  - Participants were asked about the earworm experience (e.g. what song, earworm duration).
  - At two random points, participants were asked to fill out the PANAS within 24 hours (aka forced PANAS) to establish data about feelings when an earworm was not occurring.

Discussion

- Results provide evidence that suggests the opposite of the hypothesis (i.e. that earworms may have a calming effect).
- The study was limited due to the nature of self-report research and that people likely forgot to fill out the PANAS during some earworm experiences.
- Further research, especially of an experimental nature, is necessary to investigate the possible link between earworms and stress-reduction.
- If earworms do have a calming effect during times of stress, people may be able to decrease negative earworm experiences by re-evaluating their perception of earworms as positive.

Other Results

Histogram of Total Earworms by Gender

References


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