Attentional Bias Predicts Music Preferences
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Background
- Attentional bias: Tendency to focus on one type of stimulus or sensory cue, overlooking others.
- Associated with development and maintenance of depressive symptoms.
- Musical preference may reflect some degree of cognitive attentional bias.
- Depression could lead to negative bias in music preferences.
- Listening to sad/negative music could further exacerbate negative attentional bias.
- Lack of research linking negative attentional bias and music preferences.

Hypothesis
- Non-depressed participants with negative attentional biases will prefer sad music with depressing lyrics.

Design & Methods
- Participants: Non-depressed males and female participants, ages 18 to 23 years old (n = 29), use iTunes as primary access to music.
- Materials and Measures:
  - Beck Depression Inventory-Short Form (BDI-SF)
  - Positive and Negative Affect Scale (PANAS)
  - Music Preference Analysis:
    - 10 most frequently played songs in the past month from each participant’s iTunes library
    - Music valence of each song scored by 11 judges from a scale of 0 (very negative) to 3 (very positive)

Visual Dot-Probe Task
- Procedure:
  - Procedure
  - List of Songs
  - Visual Dot-Probe Task

Results
- Frequency Distribution of Music valence across songs
- Attentional Bias Score: $\frac{1}{2}((RT(RpLe) - RT(RpRe)) + (RT(LpRe) - RT(LpLe)))$
- where R = right position, L = left position, p = probe, and e = emotional word stimulus

Summary & Conclusions
- Participants with negative attentional biases listened to more sad songs
- Participants with positive and neutral/no attentional biases listened to happier songs
- Participants who liked sadder songs tended to have greater negative attentional bias

Future Directions
- Replicate the experiment to compare healthy population and depressed population
- Increase sample size
- Explore the effect of music valence on attentional bias in a week-long study
- Explore attentional training using music preferences to help alleviate depressive symptoms
- Compare gender differences

References

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