Introduction

- Music-evoked emotions are associated with acoustic features such as mode and tempo.  
- Much of this research uses only Western Classical music. 
- Do findings based on Western Classical music extend to American popular music? 
- Can parameters other than mode and tempo better predict music-evoked emotions in popular music?

Hypotheses

- Mode and tempo will not be related to self-reported emotion valence evoked by American popular music. 
- Parameters more relevant in this music (such as energy and danceability) will have better predictive power.

Materials

- Familiar & unfamiliar music chosen based on artist familiarity and Year-End Billboard Top 100 chart entries 
- Unfamiliar & familiar music matched on developmental period: childhood, adolescence, and young adulthood per participant

Music Variables

<table>
<thead>
<tr>
<th>&quot;Classical&quot; Parameters:</th>
<th>&quot;Spotify&quot; Parameters:</th>
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<tbody>
<tr>
<td>Mode (major/minor)</td>
<td>Danceability</td>
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<tr>
<td>Tempo</td>
<td>Energy</td>
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<td></td>
<td>Speechiness</td>
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<td></td>
<td>Acousticness</td>
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<td>Valence</td>
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<td>Sentiment of Lyrics</td>
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- In between each clip, participants asked ‘How did that clip you just heard make you feel?’ (30 clips rated/participant) 
- Response on a 1-7 scale, 1 = ‘extremely negative,’ 7 = ‘extremely positive’

Methods

Session 1: Familiar Music  
Session 2: Unfamiliar Music  
Session 3: Control

At least one week between sessions  
Session order counterbalanced across participants

Example Session

Block 1: Childhood  
Block 2: Adolescence  
Block 3: Early Adulthood

60-90 minutes

Effects of Parameters on Emotion

Emotion Prediction: Cross-Validation

Conclusions

- Effect associated with mode suggests findings based on Western Classical Music extend to American popular music 
- Possibly explained by musical enunciation 
- Low predictive power of models indicates other unmodeled factors in predicting emotion valence 
- Sentiment of lyrics important to emotional experience of American popular music

Future Directions & Limitations

Full Study Follow-Up:
- Larger sample (N=75) 
- Over zoom 
- Change in unfamiliar condition 
- Relationship between these acoustic features & reports of MEAMs

Limitations:
- Age Range: Older participants unable to perceive higher frequencies 
- Lack of liking ratings

References

Contact Info & Acknowledgements