Stuck in my head: Musical obsessions & psychological flexibility

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Introduction

- Earworms, also known as musical obsessions or intrusive musical imagery (IMI), refer to tunes that run repeatedly through a person’s mind, as if stuck in “playback mode.”
- Conceptualized as an OCD-like intrusion, IMI is included as a miscellaneous obsession in the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) symptom checklist.
- IMI may respond to cognitive-behavioral and pharmacologic (e.g., clomipramine) treatments for OCD.
- The current study examined IMI in the context of related anxiety and obsessive-compulsive (OC) symptoms.

Method

Participants
- 240 undergraduate volunteers (212 eligible)
  - 74.6% female
  - 74.1% Caucasian
  - M age = 18.8 yrs

Self-Report Measures
- Earworm Questionnaire
  - Developed & pilot-tested for this study
  - Assessed frequency, associated distress, interference, resistance/control, importance, content, and triggers
- Anxiety Sensitivity Index – 3 (ASI-3)
- Acceptance and Action Questionnaire-II (AAQ-II)
- Obsessive-Compulsive Inventory-Revised (OCI-R)
- Not Just Right Experiences (NJRE) Questionnaire
- Obsessive Beliefs Questionnaire (OBQ-44)
- Depression Anxiety and Stress Scale (DASS)

Results

Group mean scores on study measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>M (SD)</th>
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<tbody>
<tr>
<td>Earworm – Distress</td>
<td>1.73 (.77)</td>
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<tr>
<td>Earworm – Interference</td>
<td>1.77 (.84)</td>
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<tr>
<td>Earworm – Resistance</td>
<td>2.72 (1.16)</td>
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<tr>
<td>ASI-3</td>
<td>34.12 (11.24)</td>
</tr>
<tr>
<td>AAQ-II</td>
<td>38.61 (7.10)</td>
</tr>
<tr>
<td>OCI-R</td>
<td>32.75 (10.66)</td>
</tr>
<tr>
<td>NJRE</td>
<td>64.13 (2.60)</td>
</tr>
<tr>
<td>OBQ-44</td>
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Earworm Characteristics
- 97.2% of participants reported experiencing IMI
- 21.7% experienced IMI > once per day

Qualitative data:
- Worst part about experiencing IMI
  - “An earworm can distract me from thinking about other things like school or studying.”
  - “I can’t get rid of it even if I try really hard.”
  - “It is annoying to get out of your head and it is frustrating not to be able to "play" the next line or words of the song in your mind.”
  - “Sometimes I sing the lyrics out loud and I am not a very good singer so this can be embarrassing.”

- Triggers of IMI
  - “Certain catchy songs”
  - “Listening to a song”
  - “Hearing someone else hum the song”
  - “Sometimes they feel completely random”
  - “Something reminds me of a situation in the song”

- Common strategies to get rid of IMI
  - Distraction
  - Listening to another song
  - Talking with someone

Discussion

- Increased distress and interference due to IMI was associated with decreased psychological flexibility.
- Results suggest that interference and distress due to earworms may be related to attempts to suppress them.
- Future research should examine these relationships in clinical samples to better inform theory and possible treatment options.