The Effects Of Music On the Testing Effect

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Introduction
- Testing effect
- Retrieving information on a quiz or activity improves long-term memory compared to simply just restudying the same material.
- First documented empirical studies on the testing effect were published in 1909 by Edwina E. Abbott.

Hypotheses
- There will be a testing effect between retrieval and restudy.
- There will be a main effect between music and no music signifying that attention was hindered in both restudy and retrieval causing for lower scores in restudy.

Methods
- Phase 1: Participants studied 60 unrelated word pairs
- Phase 2: Four blocks with 15 word pair in each block randomly dispersed
- Phase 3: Final exam with all 60 word pairs

Participants
- Recruited 75 participants using Amazon Mechanical Turk
- 6 were excluded due to incompletion
- 75 participants, age range 18-30

Measures
- Used PCIBEX farm to create study
- Manipulation within phase 2 is within subject
- Distractor: Classical music in phase 2

Results & Discussion

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Mean</th>
<th>Significant Value</th>
<th>Partial Eta Squared</th>
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</thead>
<tbody>
<tr>
<td>Retest-NoMusic</td>
<td>12.09</td>
<td>.042</td>
<td>.206</td>
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<tr>
<td>Retest-Music</td>
<td>10.51</td>
<td>.000</td>
<td>.729</td>
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</tbody>
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Conclusion
- Overall, participants from both retrieval blocks in phase 2 did significantly better than the restudy blocks.
- Interaction between music and retest was marginally significant indicating DA, music, did not have a significant impact on the size of the testing effect.
- Even under both FA and DA, retrieval practice showed the most benefit to learning and recalling the word pairs as is evident in the results of phase 3.

References