EXPLORING THE PRESENCE, EXPERIENCE & INFLUENCE OF BACKGROUND MUSIC IN GAMBLING SITUATIONS

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- Music is ubiquitous in everyday life and can support cognitive tasks, emotional work and influence certain behaviours.
- Gambling-operators and gamblers utilise music (Bramley & Gainsbury, 2014; Bramley, 2014) but why does music feature in gambling situations? Which functions does music serve?
- Music tempo influences indices of laboratory gambling behaviour (Bramley, Dibben & Rowe, 2014; Dixon, Trigg & Griffiths, 2007). Is this effect replicable when tempo is strictly controlled? Which psychological mechanisms may underlie music tempo’s effects?

**Study 1: Casino Managers’ Perspective - Music is a constant presence & enhances the gambling experience.**

- Emotional
- Cognitive
- Live Music
- Self-selected music (via iPods)
- Recorded music
- Manipulation of musical parameters (tempo, genre & volume)

**Types of music utilised**

- Positive & Negative
- Atmosphere & Ambience
- Movement
- Promote positive moods or emotions
- Increase or maintain arousal
- Not to influence behaviour

**Reasons why music is played**

- Expenditure = increase or maintain a gambling rate
- Arousal = increase or maintain physiological arousal (heart rate and skin conductance level)
- Psychological control of operators and gamblers consider music as able to support cognitive and emotional aspects of gambling. How? Does music-induced mood influence gambling behaviour?

- **Study 2: Online questionnaire reveals gamblers’ opinions towards music & their motivations for listening to self-selected music.**

144 respondents (85 males, 59 females; Mean Age = 28 yrs) comprising individuals who gamble in traditional gambling environments and/or gamble remotely.

Music and Gambling Experience Scale developed to probe gamblers’ opinions towards music heard in real-life gambling situations.

**Exploratory Factor Analysis revealed the MGES could be reduced to two factors:**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Micro</th>
<th>Macro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes me bet smaller amounts of money.</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Makes me bet larger amounts of money.</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Makes me place bets at a faster rate.</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Affects my ability to judge the amount of time that I have spent gambling.</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Makes me place bets at a slower rate.</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Attracts me to a particular area, game or machine.</td>
<td>.41</td>
<td>.5</td>
</tr>
<tr>
<td>Creates the right atmosphere.</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Aids my concentration.</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>Makes me gamble for a longer period of time.</td>
<td>.56</td>
<td></td>
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</tbody>
</table>

**Variance Explained**

- **37%**
- **22%**

**Study 3: Manipulation of music tempo alone does not influence indices of laboratory virtual roulette gambling behaviour.**

**Method:**
- 187 participants (88 females, 49 males; Mean Age = 21 yrs) played virtual roulette accompanied by either No Music (Control), Fast Tempo (120 bpm) or Slow Tempo (72 bpm) music.
- Dependent Variables: Betting Speed (seconds) and Expenditure (credits).
- Arousal; Subjective and physiological arousal (heart rate and skin conductance level) recorded at baseline and post-gambling.

**Main Findings:**

1. One-way ANOVAs found no main effects of Condition on betting speed ($F(2,134) = .999, p > .05$) or expenditure ($F(2,134) = .57, p > .05$).

<table>
<thead>
<tr>
<th>Condition</th>
<th>No Music (n = 47)</th>
<th>Slow Tempo (n = 45)</th>
<th>Fast Tempo (n = 47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betting Speed</td>
<td>219 (7.3)</td>
<td>212 (6.2)</td>
<td>215 (6.5)</td>
</tr>
<tr>
<td>Expenditure</td>
<td>1.6 (0.4)</td>
<td>1.6 (0.4)</td>
<td>1.6 (0.4)</td>
</tr>
</tbody>
</table>

2. Mixed-design ANOVAs found main effects of Time of Measurement on subjective arousal ($F(1,125) = 33.79, p < .05$) - significantly higher during-gambling compared to baseline.

3. Mixed-design ANOVAs found main effects of Time of Measurement on heart rate ($F(1,125) = 32.31, p < .05$) and skin conductance level ($F(1,125) = 31.84, p < .05$). Both were significantly higher during-gambling compared to baseline.

**Conclusions & Future Research:**

- Music’s is ambiguous and a flexible resource - means that it fulfils the needs of gambling-operators and gamblers.
- Gambling-operators and gamblers consider music as able to support cognitive and emotional aspects of gambling. How? Does music-induced mood influence gambling behaviour?
- Self-selected music perceived to serve a range of functions; Allows gamblers to exert control over their environment Does self-selected music effect behaviour?
- Why is listening to self-selected music particularly appealing to moderate-risk and problem gamblers?
- Previous studies may have misattributed effects of music per se on betting speed in laboratory virtual roulette to tempo Are effects combinatorial (i.e. tempo and genre)?
- Music tempo alone does not influence subjective or physiological arousal when gambling Are other psychological mechanisms (e.g. attention, fit, affect) responsible?
- More precision required when choosing musical stimuli so that any effects of music on indices of laboratory gambling behaviour are attributed to the correct musical parameter.

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