Background
Outcome expectancies refer to perceived positive or negative effects when engaging in a behaviour. In literature surrounding alcohol, outcome expectancies have played an important role in the relation between exposure to alcohol-related cues and drinking behaviour.

Research suggests that exposure to a five-minute video of gambling scenes led to an activation of implicit and explicit positive outcome expectancies among regular gamblers. However, shorter durations, such as brief exposure to gambling advertisements have not been explored. Gambling advertisements often highlight monetary gains without disclosing the risks associated with problem gambling. They may make it more difficult for problem gamblers to reduce or abstain from gambling, and may also influence the perceived outcomes individuals believe will occur from gambling.

Research Purpose
This study examined whether brief exposure to gambling advertisements facilitates the activation of gambling outcome expectancies using both implicit (i.e., reaction time) and explicit (i.e., self-report) assessment modes.

Methods
• Ninety-six adult gamblers (66 males and 30 females) were recruited from the communities of Guelph and Halifax. Participants consisted of 11 non-problem gamblers, 27 low-risk gamblers, 39 moderate-risk gamblers, and 19 high risk/problem gamblers.
• Participants were exposed to their randomly assigned cue condition.
  • Gambling advertisement cue condition (n = 51): participants viewed 10 gambling advertisements and 10 restaurant advertisements, each displayed for 3 seconds
  • Control advertisement cue condition (n = 45): participants viewed 10 fitness advertisements and 10 restaurant advertisements, each displayed for 3 seconds
• Participants were informed that after viewing each advertisement, they must indicate whether the advertisement was portrait or landscape in orientation. The purpose of this orientation identification task was to increase participants’ cognitive load while viewing the advertisements
• Participants were then asked to categorize positive or negative words as quickly as possible.

Hypotheses
Brief exposure to gambling advertisements would facilitate the activation of positive but not negative gambling outcome expectancies, and such a facilitation of positive gambling outcome expectancies would be observed implicitly but not explicitly.

- Implicit Positive Gambling Outcome Expectancies (H1a):
  Compared to the control advertisement cue condition, participants in the gambling advertisement cue condition would be significantly faster in responding to positive gambling expectancy targets when preceded by gambling related to non-gambling picture primes.

- Explicit Positive Gambling Outcome Expectancies (H1b):
  Participants in the gambling and control advertisement cue condition would not significantly differ in their self-reported positive gambling outcome expectancies following cue exposure.

- Implicit & Explicit Negative Gambling Outcome Expectancies (H1c):
  Drawing upon findings from the alcohol (Jones et al., 2001) and gambling literature (Stewart et al., in press), exposure to gambling advertisements would not activate implicit or explicit negative gambling outcome expectancies.

Conclusions
Brief exposure to gambling advertisements activates implicit positive gambling outcome expectancies but does not appear to allow individuals the time or attentional resources to engage in the conscious, deliberative processing that is captured by explicit, self-report modes of assessment.

- Implicit positive gambling outcome expectancies are likely to influence subsequent behaviour given an opportunity to gamble (not tested here).
- Activation of implicit gambling outcome expectancies does not require full attention to gambling cues.

The research findings provide an argument for stricter guidelines placed on the content of gambling advertisements. A pledge to “advertise responsibly” may not be enough.

- Reduction of “ubiquitous” gambling ads. Restriction on when and where gambling ads can be displayed.

Results point to the importance of focusing on altering implicit associations as a potential intervention for problem gambling.

- Cognitive retraining methods have been successful in altering implicit associations in the alcohol area and may also be effective in the treatment of gambling problems.

Results have implications for relapse prevention. Need to find ways to helping gamblers avoid exposure to gambling advertisements and cues.

Research Findings
Cue Condition Differences in Gambling Outcome Expectancies
- Significant differences in implicit positive gambling outcome expectancies between the gambling advertisement and control advertisement cue condition after exposure to cue manipulation.
  • Providing support for H1a.
- No significant differences in self-reported positive gambling outcome expectancies between the gambling advertisement and control advertisement cue condition after exposure to cue manipulation.
  • Providing support for H1b.
- No significant differences in self-reported negative outcome expectancies between gambling advertisement and control advertisement cue condition after exposure to the cue manipulation.
  • Providing support for H1c.

Table 1. Affective Outcome Expectancy RT Task Performance
(Implicit Measure of Gambling Outcome Expectancies)

<table>
<thead>
<tr>
<th></th>
<th>Gambling Primes</th>
<th>Non-Gambling Primes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Control Ad Cue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive targets</td>
<td>790.55</td>
<td>157.41</td>
</tr>
<tr>
<td>Negative targets</td>
<td>764.11</td>
<td>173.42</td>
</tr>
<tr>
<td>Gambling Ad Cue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive targets</td>
<td>778.47*</td>
<td>180.64</td>
</tr>
<tr>
<td>Negative targets</td>
<td>812.36</td>
<td>235.31</td>
</tr>
</tbody>
</table>

*Indicates a significant difference between means (p < .05)

Effect of Gambling Advertisement Duration
- Longer duration advertisements facilitate the activation of positive but not negative gambling outcome expectancies, and such a facilitation of positive gambling outcome expectancies would be observed implicitly but not explicitly.

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