Gambling Interacts with Trauma to Predict Alexithymia Scores among College Students

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Introduction

Gambling and trauma are common among college age students, with estimates ranging from 15–25% (Kerber, 2005) to 42% (Larrad, Shaffer, LaBrie, & Ouellet-Morin, 2008). Furthermore, gambling among college students is associated with a variety of negative consequences, particularly for men (Skogstad, Thune, & Stenmo, 2006). Despite this, little is known about psychological factors linking gambling among college age students.

Alexithymia is characterized by difficulty identifying and describing feelings, externally oriented thinking and limited imaginal capacity. Alexithymia has been linked with behavioral problems such as pathological gambling (Parker et al., 2005). Trauma (Freedman, Pariante, & Lanius, 2008) and the onset and maintenance of several psychiatric disorders (Lumley, Neely, & Burger, 2007). Despite this, little is known on how alexithymia scores among gamblers might be influenced by psychological factors associated with alexithymia (e.g., trauma).

The relationship between trauma and alexithymia is well pronounced. For instance, among individuals with post-traumatic stress disorder (PTSD), a subscale identified as alexithymia (Fonagy et al., 2004). Furthermore, a history of trauma may also affect the severity of alexithymia presence (Fonagy, Lanius, Damas, & Perugi, 2008). Lastly, gender differences between trauma and alexithymia have been observed, including among male combat with PTSD (Fonagy, Lanius, Damas, & Perugi, 2008).

This study examined the relationship between gambling, alexithymia, trauma and gender, the purpose of this exploratory study was to examine the interactive effects of gambling (high/low) and trauma (high/low) on alexithymia scores for male and female college students.

Method

Participants

N = 160 participants (86.8% Caucasian, 2.5% Hispanic, 3.8% African American, 3.1% Asian American, 2.5% Other). Age: M = 19.79 (SD = 2.33), Range: 18 – 37 (95% confidence interval). Ethnicity: Caucasian = 138 (86.8%), African American = 6 (3.8%), Hispanic = 4 (2.5%), Asian American = 5 (3.1%).

Measures

Early Trauma Inventory Self Report - Short Form (ETI-SR; Bromet, Vermetten, & Mazure, 2000), is a 29-item questionnaire that incorporates four scales examining general traumas, physical punishment, emotional abuse, and sexual abuse. Factor scores were obtained for the 49 items and median split was conducted on the gambling total score to identify high and low gambling groups. A total of 11 were classified as Low in gambling.

Gambling habits questionnaire, a 20-item questionnaire that examines gambling habits of participants and their partners. Participants were asked to rate their own gambling behavior on the following scales: "never," "seldom," "sometimes," and "frequent." Cumulative scores were obtained for the 20 questions and median split was conducted on the gambling total score to identify high and low gambling groups. A total of 11 were classified as Low in gambling.

Procedures

The current study recruited college students interested in participating in research to earn extra credit in various undergraduate psychology classes. Participants were in groups of 8–20. After receiving informed consent from each participant, research assistants distributed a battery of questionnaires examining items such as risky behaviors, family characteristics and affect. Participants completed one survey each. Each session took approximately 90 minutes.

Results

To examine how trauma, gambling and gender relate to alexithymia among college-aged students (ANOVA) was utilized. Pearson correlations were conducted using a least significant difference (LSD). Univariate statistics are presented in Table 1.

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Table 1. Summary of Factorial ANOVA Analyses (N = 211, df = 203, Mse = 139.25)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexithymia</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Trauma</td>
<td>1</td>
<td>5.510</td>
<td>.020</td>
</tr>
<tr>
<td>Trauma*Gambling</td>
<td>1</td>
<td>16.272</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Trauma*Gender</td>
<td>1</td>
<td>1.010</td>
<td>.315</td>
</tr>
<tr>
<td>Trauma<em>Gambling</em>Gender</td>
<td>1</td>
<td>2.155</td>
<td>.137</td>
</tr>
<tr>
<td>Gambling</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Trauma<em>Gambling</em>Gender</td>
<td>1</td>
<td>2.155</td>
<td>.137</td>
</tr>
</tbody>
</table>

Summary of Factorial ANOVA Analyses

There was a significant three-way interaction between trauma, gambling and gender as they relate to alexithymia (F(1,203) = 5.510, F(1,203) = 16.272, F(1,203) = 1.010, F(1,203) = 2.155). Follow-up analyses (LSD = 6.435) revealed that for males with high gambling, those with high trauma had higher alexithymia levels than those with low trauma. For males with low gambling, there was no significant difference in alexithymia levels between trauma. For males with high trauma and males with low trauma, there was no significant difference in alexithymia levels between levels of gambling. For females with high gambling and females with low gambling, alexithymia was statistically equivalent regardless of trauma or gender. There was no significant two-way interaction between trauma and gambling as they relate to alexithymia (F(1,203) = 5.510, F(1,203) = 16.272, F(1,203) = 1.010). However, there was potentially meaningful, as there seems to be an interaction for trauma and gambling for males. Among males with high gambling, participants with high trauma had higher alexithymia levels than males with low trauma. For males with low gambling, alexithymia levels were statistically equivalent regardless of trauma.

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There was no significant two-way interaction between gender and gambling as they relate to alexithymia (F(1,203) = 5.510, F(1,203) = 16.272, F(1,203) = 1.010). However, this is potentially meaningful, as there seems to be an interaction for trauma and gender for those with high trauma. Among participants with high trauma, males with high gambling had higher alexithymia levels than females with high gambling. For participants with high trauma and low gambling, males and females had statistically equivalent levels of alexithymia.

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Discussion

The purpose of the present study was to examine how trauma, gambling and gender relate to alexithymia among college-aged students. The results show males with high gambling groups have higher levels of alexithymia if they have a history of trauma. For females, alexithymia was the same, regardless of trauma. Additionally, the data shows that among college students with high trauma who gamble often, display punctuated levels of alexithymia. For college students with low trauma, alexithymia was the same, regardless of gender. After this, follow-up analyses (LSD = 6.435) are significant for gender differences exist among college students who have experienced trauma and who gamble often, as it relates to alexithymia.

Despite interesting findings, several limitations of the study should be noted. First, although there was ample sample size for the study, sample case for the conditions might raise concern related to statistical power. Second, although small effect sizes were found in the interactions between high and low levels of gambling and trauma might not reflect clinical cutoff scores. Lastly, concerns are raised in our measure of gambling because of its limited utility and dearth of evidence on its construct validity. As such, future research should address the aforementioned limitations.

Overall, this study adds to the existent literature that reports alexithymia is linked with gambling among college-aged students. This suggests among males who gamble often, trauma is a good predictor of alexithymia. For females with high gambling and low trauma, alexithymia was statistically equivalent regardless of trauma. Additionally, the data shows that among college students with high trauma who gamble often, display punctuated levels of alexithymia. For college students with low trauma, alexithymia was statistically equivalent, regardless of gender. After this, follow-up analyses (LSD = 6.435) are significant for gender differences exist among college students who have experienced trauma and who gamble often, as it relates to alexithymia.

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