Sex Moderates Associations Between Dimensions of Emotion Dysregulation and Problematic Cannabis Use

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BACKGROUND
- Male cannabis users report greater problematic cannabis use (Cavalli & Cservenka, 2021; Moitra et al., 2020)
- Emotion dysregulation is associated with more problematic cannabis use (Cavalli & Cservenka, 2021) and research suggests that males and females respond differently to emotional experiences (Tamres et al., 2002)
- The current study examined whether there are sex differences in emotion dysregulation (overall and six dimensions of emotion dysregulation) among cannabis users and if sex moderates associations between emotion dysregulation and problematic cannabis use

METHODS
Participants:
- 741 adult past-month cannabis users completed an online anonymous survey
- Participants were excluded if they were not age of majority or fluent in English
- 5 data cleaning rules to exclude random responders
- Age: M = 27.07(5.94), Range: 18-57
- 68% Male
- 64% White
- 65% Middle class ($50K - $100K)
- 33% Some college

Measures:
- Marijuana Problem Scale (MPS; Stephens et al., 2000)
- Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004)

Statistical Analysis:
- Independent samples t-tests were used to examine sex differences on overall and dimensions of emotion dysregulation
- Hierarchical linear regressions were used to examine the moderating role of sex on the associations between emotion dysregulations and problematic cannabis use. Covariates included: age, ethnicity, race, income, education, and past 30-day cannabis use

RESULTS
- Male cannabis users reported significantly higher scores on overall emotion dysregulation and five of six dimensions (not goals)
- Overall, goals, nonacceptance, impulse, and strategies were positively associated with problematic cannabis use, and these relationships were stronger in male cannabis users
- Lack of emotional awareness was negatively associated with problematic cannabis use in male cannabis users and no significant relationship was found for female cannabis users
- Lack of emotional clarity was positively associated with problematic cannabis use for male and female cannabis users, but this relationship did not differ by sex

DISCUSSION
- Overall, these results denote the importance of examining individual differences in emotion dysregulation as they relate to problematic cannabis use
- Interventions and treatments may need to be tailored for male cannabis users with a focus on specific emotion dysregulation dimensions

<table>
<thead>
<tr>
<th>Scores on Primary Variables</th>
<th>Males (N=508)</th>
<th>Females (N=233)</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problematic Cannabis Use</td>
<td>16.56(9.43)</td>
<td>9.42(8.79)</td>
<td>9.76</td>
<td>&lt;.001</td>
<td>0.77</td>
</tr>
<tr>
<td>Overall Emotion Dysregulation</td>
<td>102.98(15.49)</td>
<td>92.12(21.79)</td>
<td>6.86</td>
<td>&lt;.001</td>
<td>0.61</td>
</tr>
<tr>
<td>Difficulty Engaging in Goal-Directed Behavior</td>
<td>14.67(2.77)</td>
<td>14.33(3.97)</td>
<td>1.19</td>
<td>0.23</td>
<td>0.11</td>
</tr>
<tr>
<td>Nonacceptance of Emotional Responses</td>
<td>17.36(4.55)</td>
<td>15.07(5.48)</td>
<td>5.55</td>
<td>&lt;.001</td>
<td>0.79</td>
</tr>
<tr>
<td>Impulse Control Difficulties</td>
<td>17.79(4.20)</td>
<td>14.52(4.50)</td>
<td>8.67</td>
<td>&lt;.001</td>
<td>0.73</td>
</tr>
<tr>
<td>Lack of Emotional Awareness</td>
<td>16.13(3.74)</td>
<td>15.76(4.56)</td>
<td>2.27</td>
<td>0.02</td>
<td>0.10</td>
</tr>
<tr>
<td>Lack of Emotional Clarity</td>
<td>13.64(2.79)</td>
<td>12.37(3.55)</td>
<td>4.82</td>
<td>&lt;.001</td>
<td>0.42</td>
</tr>
<tr>
<td>Limited Access to Emotion Regulation Strategies</td>
<td>23.40(5.30)</td>
<td>20.47(6.76)</td>
<td>5.84</td>
<td>&lt;.001</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Note. Bold p-values indicate significant sex differences

* indicates p < .05 for the interaction. ** indicates p < .001 for the interaction