Theoretical Background

- Involvement in risky behaviors is linked to impulsivity and anxiety.
- Research suggests that impulsivity, particularly sensation seeking and lack of thinking and planning, is associated with early engagement in risky behaviors in adolescents (Romer, Betancourt, Giannetta, Brodsky, Farah, & Hurt, 2009).
- The link between anxiety and risky behaviors is less clear. Some studies suggest that anxiety is associated with risk avoidance and fewer risky behaviors (Auerbach, Kertz, & Gardiner, 2012); however, other work has linked anxiety with more risky behaviors (van Hamel, Derevensky, Takane, Dickson, & Gupta, 2007).
- A recent study indicated that impulsivity and anxiety may interact when predicting risky behavior involvement.
- Specifically, impulsivity was associated with problematic drinking, but only at low levels of anxiety (Karyadi & King, 2011).
- Thus, the current study aims to further assess risky behavior involvement in college students as a function of levels of anxiety and impulsivity.

Hypotheses

We hypothesized that anxiety would moderate the effect of impulsivity, such that individuals with both high impulsivity and high anxiety would report engagement in fewer risky behaviors compared to those with high impulsivity and low anxiety.

Participants and Methods

- Participants were 156 predominantly White (n = 74) college students from a large midwestern university.
- The sample consisted of 79 males, with a mean age of 19.3 years, who completed a series of self-report measures.

Methods:

- Anxiety was measured by the anxiety subscale of the Depression Anxiety Stress Scales-21 (DASS-21).
- Impulsivity was measured by splitting the (1) Lack of Premeditation (MDn = 1.91), (2) Urgency (MDn = 2.58), and (3) Sensation Seeking (MDn = 3) subscales of the UPPS Impulsive Behavior Scale by their means into high and low groups.
- Risky behaviors were assessed using the (1) Illicit Drug Use, (2) Aggressive and Illegal Behaviors, (3) Risky Sexual Activities, and (4) Heavy Drinking subscales of the Cognitive Appraisal of Risky Events (CARE).
- Anxiety was split into high (severe & extremely severe) and low (normal, mild, & moderate) groups based on Lovibond and Lovibond’s (1995) scoring criteria.

Results

- Two-way MANOVA analyses were performed, with anxiety and impulsivity as between-subjects factors and the four risky behaviors as the dependent variables. Analyses were conducted separately for each of the three impulsivity subscales.
- Results indicated that the interaction of anxiety and urgency, Wilks’ λ = .96, F(4, 137) = 1.29, p > .05, and lack of premeditation, Wilks’ λ = .97, F(4, 137) = 1.11, p > .05, were not significant. The interaction between anxiety and sensation seeking was significant (see Table 1).
- Follow-up univariate analyses were computed. Analyses indicated that the interaction between anxiety and sensation seeking was significant for the Illicit Drug Use, Risky Sexual Activities, and Heavy Drinking subscales.
- Impulsivity significantly predicted higher levels of illicit drug use, p < .001, but only when anxiety was low. Low impulsivity was associated with more risky sexual activities when anxiety was also high, p < .05, but not when anxiety was low, p > .05. Impulsivity significantly predicted higher levels of heavy drinking, p < .001, but only when anxiety was low. When both impulsivity and anxiety were high, impulsivity failed to predict illicit drug use and heavier drinking, p > .05.

Discussion

- These findings suggest a complex association between anxiety and impulsivity and their influence on risky behavior engagement.
- High anxiety and high impulsivity might act as a buffer against risky sexual activity involvement; however, this did not hold true for drug use or heavy drinking.
- Future research might look into the different influences of anxiety and impulsivity on types of risk behavior involvement, in particular, whether there are different underlying mechanisms between alcohol and drug involvement and risky sexual activity involvement.

Table I. Multivariate Analysis of Variance for Risky Behavior Involvement from Anxiety and Sensation Seeking

<table>
<thead>
<tr>
<th>Effects</th>
<th>Wilks’ λ</th>
<th>F</th>
<th>df</th>
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<tbody>
<tr>
<td>Anxiety</td>
<td>.97</td>
<td>1.03</td>
<td>(4, 137)</td>
</tr>
<tr>
<td>Sensation Seeking</td>
<td>.96</td>
<td>1.55</td>
<td>(4, 137)</td>
</tr>
<tr>
<td>Anxiety x Sensation Seeking</td>
<td>.92</td>
<td>3.01</td>
<td>(4, 137)</td>
</tr>
</tbody>
</table>

Note. For interpretation purposes all variables are presented. *p < .05; **p < .01.