## Theoretical Background

- Distress intolerance (DI) is the perceived inability to withstand distressing states and may maintain multiple psychological disorders (McHugh et al., 2010).
- DI motivates individuals to engage in avoidance behaviors in order to escape distress. Individuals high in DI will likely make attempts to avoid their own internal experience.
- Similarly, cognitive models conceptualize worry as an avoidant response to situations that are unknown or ambiguous (e.g., Dugas et al., 2004).
- Several cognitive vulnerabilities influence worry: intolerance of uncertainty, negative problem orientation, metacognitions, and cognitive avoidance (Dugas et al., 2007).
- Studies have yet to examine how cognitive vulnerabilities associated with worry are linked to DI.

## Hypotheses

The goal of the current study was to expand the understanding of DI as it relates to worry and associated cognitive vulnerabilities. The current study hypothesized that cognitive vulnerabilities, even after controlling for worry and anxiety, would predict DI.

## Participants and Methods

**Participants:**
- 157 undergraduate students from a large midwestern university.
- Demographically the average age is 19 years, and most patients were male (50.8%) and Caucasian (46%).

**Procedure:**
- Participants completed the session in a computer lab in groups of up to 5 participants.
- Participants completed an attention task (details elsewhere) and a battery of self-report measures.
- The anxiety subscale of the Depression Anxiety Stress Scale-21 (DASS-21) was used to control for anxiety.
- The Penn State Worry Questionnaire (PSWQ) was used to assess positive beliefs about worry in block 1, and cognitive variables in block 2 predicting DI (see Table 1).
- Several cognitive vulnerabilities influence worry: intolerance of uncertainty, negative problem orientation, metacognitions, and cognitive avoidance (Dugas et al., 2007).
- Studies have yet to examine how cognitive vulnerabilities associated with worry are linked to DI.

## Results

- A hierarchical linear regression was performed, with anxiety and worry in block 1, and cognitive variables in block 2 predicting DI (see Table 1).
- Results indicated that worry in block 1 explained a significant portion of the variance in DI, R² = .30, F(2,154) = 34.82, p < .01. The cognitive variables entered in block 2 explained additional variance, R² change = .25, F(7,149) = 27.45, p < .01. Refer to Table 1 for a summary of each model.

## Discussion

- Overall, the results indicated that the cognitive vulnerabilities predicted DI beyond the effects of anxiety and worry symptoms.
- These findings suggest that treatments targeting cognitions (e.g., cognitive restructuring around metacognitions and problem orientation) might decrease DI.
- This might be an effective target for treatment across psychopathology as DI has been shown to contribute to a number of disorders (Lejoyeux et al., 2010).

## References


## Table I. Summary of Hierarchical Regression Analysis for Variables Predicting Distress Intolerance

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASS-Anxiety</td>
<td>.34***</td>
<td>4.66***</td>
<td>&lt; .01</td>
<td>.01</td>
<td>0.19</td>
<td></td>
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<tr>
<td>PSWQ</td>
<td>.34***</td>
<td>4.71***</td>
<td>&lt; .01</td>
<td>.06</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>MCQ-Positive</td>
<td>-.13</td>
<td>-2.05*</td>
<td>&lt; .05</td>
<td>-0.48</td>
<td>5.27***</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>MCQ-Negative</td>
<td>.13</td>
<td>1.98*</td>
<td>&lt; .05</td>
<td>.07</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>CAQ</td>
<td>.13</td>
<td>1.98*</td>
<td>&lt; .05</td>
<td>.07</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>IUS-12</td>
<td>.20</td>
<td>2.63**</td>
<td>&lt; .01</td>
<td>.20</td>
<td>2.63**</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>NPOQ</td>
<td>.20</td>
<td>2.63**</td>
<td>&lt; .01</td>
<td>.20</td>
<td>2.63**</td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>

Note: For interpretation purposes all variables are presented. *p < .05; ** p < .01, *** p < .001.

## Diagrams

**Model 1: Anxiety and Worry Predicting DI**
- DASS-Anxiety 0.34***
- PSWQ 0.34***

**Model 2: Anxiety, Worry, and Cognitive Vulnerabilities Predicting DI**
- DASS-Anxiety
- PSWQ
- Negative Beliefs about Worry 0.48***
- Positive Beliefs about Worry -0.13*
- Cognitive Avoidance 0.13*
- Intolerance of Uncertainty 0.20***
- Negative Problem Orientation

Note: For interpretation purposes all variables are presented. *p < .05; ** p < .01, *** p < .001.