Reciprocal Associations between Defeat/Entrapment and Suicidal Ideation During the Transition to University

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The first year of university involves major life transitions that can cause distress (Conley et al., 2014)

- Increased academic demands
- Greater financial independence
- Disruption of social networks
- Separation from family

16% of Canadian undergraduates have experienced suicidal ideation in the past 12 months (ACHA, 2016)
Defeat/Entrapment (DE)

- DE refers to perceptions of failure without a solution or way forward (Griffiths et al., 2015).

- The *cry of pain* model proposes that DE contributes to the perception that suicide is the only way to escape from negative circumstances (Williams & Williams, 1997).

- Suicidal ideation could exacerbate perceptions of DE, creating a vicious cycle of distress.
• Systematic review of 8 studies showed an association between suicidality and defeat \((r = .51)\) and entrapment \((r = .58)\) (Taylor et al., 2011a)
  • No studies were longitudinal

• Taylor et al. (2011b) found that among university students who reported suicidality:
  • DE predicted more suicidal ideation 12 months later
  • Suicidal ideation did not predict DE 12 months later
Limitations & Future Directions

• Long time-frame (i.e., 12 months)

• Did not investigate a developmentally sensitive period (i.e., the transition to university)

• Did not disaggregate between- and within-person associations
Objective & Hypotheses

• **Objective:** To investigate the reciprocal, between- and within-person associations between DE and suicidal ideation during the transition to university

• **Hypothesis 1:** Positive, between-person association between DE and suicidal ideation

• **Hypothesis 2:** Within-person rises in DE would predict rises in suicidal ideation one month later

• The within-person association between suicidal ideation and subsequent DE was exploratory
## Methods

<table>
<thead>
<tr>
<th><strong>Participants</strong></th>
<th>633 first-year university students (73% female, $M_{age} = 18$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedures</strong></td>
<td>Participants completed monthly self-report surveys from September to April of their first year at university</td>
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<tr>
<td><strong>Measures</strong></td>
<td>DE (Short Defeat and Entrapment Scale), frequency of suicidal ideation (&quot;How many times in the past month have you thought about killing yourself&quot; rated from 0-3)</td>
</tr>
<tr>
<td><strong>Data Analytic Strategy</strong></td>
<td>Random-intercept cross-lagged panel modeling (RI-CLPM) in MPlus Version 8.7 disaggregated between- and within-person associations between DE and suicidal ideation</td>
</tr>
</tbody>
</table>
RI-CLPM

Separates observed variance into:

- A stable, trait-like part (captured by the random intercepts)
- Within-person fluctuations from wave to wave around a person’s own expected score (captured by the latent factor at each wave)

No equality constraints were used, allowing examination of how effects differed across the academic year
Results

• The model fit the data well
  • $\chi^2[57] = 76.97, p = .040$
  • RMSEA = .02 [90% CI .01, .04]
  • CFI = .98
  • TLI = .97
  • SRMR = .07

• Positive, between-person association between DE and suicidal ideation ($\beta = .41, SE = .06, p < .001$)

• Within-person increases in DE in March predicted more frequent suicidal ideation in April ($\beta = .343, SE = .08, p < .001$).
<table>
<thead>
<tr>
<th>Path</th>
<th>( \beta )</th>
<th>SE</th>
<th>( p )</th>
<th>Path</th>
<th>( \beta )</th>
<th>SE</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE T1 → Suicidal Ideation T2</td>
<td>.12</td>
<td>.09</td>
<td>.165</td>
<td>Suicidal Ideation T1 → DE T2</td>
<td>.10</td>
<td>.07</td>
<td>.115</td>
</tr>
<tr>
<td>DE T2 → Suicidal Ideation T3</td>
<td>.12</td>
<td>.15</td>
<td>.413</td>
<td>Suicidal Ideation T2 → DE T3</td>
<td>.02</td>
<td>.09</td>
<td>.784</td>
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<tr>
<td>DE T3 → Suicidal Ideation T4</td>
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<td>.13</td>
<td>.228</td>
<td>Suicidal Ideation T3 → DE T4</td>
<td>-.06</td>
<td>.13</td>
<td>.675</td>
</tr>
<tr>
<td>DE T4 → Suicidal Ideation T5</td>
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<td>.12</td>
<td>.223</td>
<td>Suicidal Ideation T4 → DE T5</td>
<td>-.001</td>
<td>.18</td>
<td>.997</td>
</tr>
<tr>
<td>DE T5 → Suicidal Ideation T6</td>
<td>-.11</td>
<td>.15</td>
<td>.477</td>
<td>Suicidal Ideation T5 → DE T6</td>
<td>-.07</td>
<td>.08</td>
<td>.373</td>
</tr>
<tr>
<td>DE T6 → Suicidal Ideation T7</td>
<td>.34</td>
<td>.08</td>
<td>&lt;.001</td>
<td>Suicidal Ideation T6 → DE T7</td>
<td>-.08</td>
<td>.09</td>
<td>.358</td>
</tr>
</tbody>
</table>
• First-year students who felt more DE, relative to their peers, experienced more frequent suicidal ideation on average during the academic year.

• When a given student reported higher DE in March, relative to their own mean, they had more frequent suicidal ideation in April.

• This may be explained by approaching final exams and course grades, which elevate stress for students (Garett et al., 2017).

• Unclear why this pattern did not emerge during the December exam period.
Clinical Implications

- University clinicians should continuously monitor DE in students
- University clinicians want to focus on re-building students’ sense of autonomy and agency via:
  - Re-framing defeating situations
  - Setting attainable goals
  - Directing attention to other more positive dimensions of life
- Such techniques may be particularly beneficial for students as they approach final exams
Limitations

- Sample was predominately White and female. Targeted research is needed among first-years who identify as belonging to minority groups.

- Did not measure constructs in September, when distress is known to be high (Conley et al., 2014).

- One-month lag between assessments may be too long. Microlongitudinal research should examine these associations over days and weeks.
Thank you!

Please reach out to christinarobillard@uvic.ca if you have any questions.


