The Automatic Thoughts Questionnaire – Believability Scale as a Measure of Cognitive Fusion

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Introduction

- Acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and traditional cognitive therapy for depression (CT; Beck, Rush, Shaw, & Emory, 1979) target believability of cognitions, but in purportedly different ways.
- The Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980) is one of the most widely-used self-report cognitive measures of depression.
- The ATQ-B has been shown to mediate differences in outcomes between ACT and CT (e.g., Zettle, Rains, & Hayes, 2011).
- To date, however, the psychometric properties of the ATQ-B have not been evaluated or reported.

Results

Studies 1 and 2

- Good internal consistency, concurrent validity, and convergent validity demonstrated in both samples.

<table>
<thead>
<tr>
<th>Studies 1 and 2</th>
<th>College Sample (Study 1)</th>
<th>Clinical Sample (Study 2)</th>
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</thead>
<tbody>
<tr>
<td>Internal Consistency</td>
<td>α = .97</td>
<td>SH = .95</td>
</tr>
<tr>
<td>Correlation with Depression</td>
<td>r = .57, p &lt; .001</td>
<td>r = .53, p &lt; .001</td>
</tr>
<tr>
<td>Factor Analysis</td>
<td>1. Self-Debasement</td>
<td>1. Demoralization</td>
</tr>
<tr>
<td>2. Life Dissatisfaction</td>
<td>2. Self-Disparagement</td>
<td></td>
</tr>
<tr>
<td>3. Hopelessness</td>
<td>3. Ruminiation</td>
<td></td>
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<tr>
<td>5. Ruminative Shame</td>
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</tbody>
</table>

- Multiple regression model predicting depression (BDI) from ATQ-B factor scores was significant for both samples.

<table>
<thead>
<tr>
<th>Study 3</th>
<th>Both instruments displayed acceptable and comparable levels of temporal consistency based upon test-retest reliabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATQ-B: r = .81</td>
<td></td>
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<tr>
<td>BDI-II: r = .76</td>
<td></td>
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</table>

- Positive correlation between levels of cognitive fusion and depression establish further support for concurrent validity of ATQ-B

Discussion

- Psychometric support for past, present, and future use of ATQ-B as process measure of cognitive fusion.
- Adequate internal consistency, and concurrent and convergent validity.
- Discriminates between college students and clinically depressed clients.
- Unique factor structure for each sample
- Factor scores differentially related to levels of depression.
- Sufficient temporal stability to support use of ATQ-B as a mediating variable.
- Sufficient data to evaluate clinically significant changes in cognitive fusion utilizing Jacobson & Truax's (1991) criteria.

References


Purpose

The major purpose of these studies was to examine the reliability, discriminant validity, and factor structure of the ATQ-B within both clinical and non-clinical samples.

Method

Participants

- College Student Sample (Studies 1, 3)
  - N = 316, 65% female, M_age = 20.38 (Study 1)
  - N = 51, 74% female, M_age = 23.65 (Study 3)
  - Completed online administration of the ATQ and the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996)

- Clinical Sample (Study 2)
  - N = 178, 83% female, M_age = 40.48
  - Had self-presented for treatment of depression in prior clinical research or through departmental clinic.
  - Significantly more depressed than college sample t(492) = 25.60, p < .001, d = 2.43

Measures

- Automatic Thoughts Questionnaire: Participants were asked to separately indicate according to a 5-point scale (1 = “not at all”, 5 = “all the time”) “how strongly, if at all, you tend to believe” 30 depressive thoughts “over the last week.”
- Beck Depression Inventory: The BDI-II is a widely used, 21-item, self-report measure of depression. Total scores range from 0-63, with higher scores indicative of greater levels of depression.

- Differing dimensions of cognitive fusion differentially account for variability in levels of depression.
  - Subclinical levels of depression appear to be associated with fused negative evaluations of life and of one’s abilities.
  - Fusion with a broader array of self-deprecatign thoughts and believing further engagement in life to be pointless appear to be more predictive of clinical ranges of depression.

- Multiple regression model predicting depression (BDI) from ATQ-B factor scores was significant for both samples.

<table>
<thead>
<tr>
<th>Factors</th>
<th>College Sample (Study 1) R² = .43, p &lt; .001</th>
<th>Clinical Sample (Study 2) R² = .29, p &lt; .001</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-Debasement</td>
<td>β = -.17</td>
<td>t = -2.07</td>
</tr>
<tr>
<td>2. Life Satisfaction</td>
<td>β = .60</td>
<td>t = 8.29</td>
</tr>
<tr>
<td>3. Hopelessness</td>
<td>β = -.10</td>
<td>t = -1.14</td>
</tr>
<tr>
<td>4. Self-Inefficacy</td>
<td>β = .29</td>
<td>t = 3.97</td>
</tr>
<tr>
<td>5. Ruminative Shame</td>
<td>β = .04</td>
<td>t = .56</td>
</tr>
</tbody>
</table>

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- Factor scores differentially related to levels of depression.
- Sufficient temporal stability to support use of ATQ-B as a mediating variable.
- Sufficient data to evaluate clinically significant changes in cognitive fusion utilizing Jacobson & Truax's (1991) criteria.