The Psychometric Properties of a Modified Version of the PTSD Checklist – Civilian Version (PCL-C)

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Introduction

- The fourth edition of the DSM (APA, 1994) classifies Posttraumatic Stress Disorder (PTSD) as an anxiety disorder that develops in response to a perceived traumatic event with three distinct symptom clusters of reexperiencing, avoidance and numbing, and hyperarousal.
- In a recent literature review, Asmundson, Stapleton, and Taylor (2004) identified four lines of evidence that supported the differentiation of avoidance and numbing symptoms and made suggestions for five new avoidance items.
- While the majority of evidence comes from factor analyses, the available data also suggests that:
  - different treatment modalities have differential effects on reducing avoidance but not numbing
  - patients with more severe pre-treatment numbing have poorer treatment outcomes
  - avoidance and numbing have different patterns of correlation with depression
- They have different correlations with physiological indices of attention
- The purpose of this investigation was to assess the new avoidance items proposed by Asmundson et al. (2004) and to determine how these items contribute to a 4-factor conceptualization of PTSD.

Method

- Participants were a healthy sample of 284 university students
  - 216 women (Mean age = 22.9 years; SD = 5.5)
  - 68 men (Mean age = 23.5 years; SD = 4.5)
- Participants were asked to complete a modified version of the PCL-C with the following modifications:
  - Original Items:
    - Avoiding thinking about or talking about a stressful experience from the past or avoiding having feelings related to it?
    - Avoiding activities or situations because they reminded of a stressful experience from the past?
    - Feeling distant or cut off from other people?
  - Revised Items:
    - Avoiding having feelings about a stressful experience from the past?
    - Not wanting to think about a stressful experience from the past?
    - Not wanting to talk about a stressful experience from the past?
    - Avoiding situations because they reminded you of a stressful experience from the past?
    - Avoiding certain people because they reminded you of a stressful experience from the past?
    - Feeling isolated or distant and cut off from others?
- Revised Items:
  - Avoiding having feelings about a stressful experience from the past?
  - Not wanting to think about a stressful experience from the past?
  - Not wanting to talk about a stressful experience from the past?
  - Avoiding situations because they reminded you of a stressful experience from the past?
  - Avoiding certain people because they reminded you of a stressful experience from the past?
  - Feeling isolated or distant and cut off from others?

Results

- The CFA testing a three factor structure (Figure 1) resulted in some acceptable fit indices
  - χ²/df = 2.74
  - CFI = .96
  - RMSEA = .08
  - 90% confidence intervals of .07 and .09
  - SRMR = .06
  - ECVI = 2.55
- However, a CFA testing the proposed 4-factor structure (Figure 2) resulted in improved fit indices
  - χ²/df = 1.85
  - CFI = .96
  - RMSEA = .08
  - 90% confidence intervals of .07 and .09
  - SRMR = .06
  - ECVI = 2.55
  - 90% confidence intervals of 2.30 and 2.83
- The significant χ² difference (p < .01), the RMSEA, and the ECVI indicated that the 4-factor model provided a significantly improved fit for the data.
- Reliability analysis results found that the modified measure had good reliability (Cronbach’s α = 0.94)

Discussion

- Results from the CFA support the argument that a 4-factor conceptualization of PTSD may better define the disorder as suggested by Asmundson et al. (2004).
- The new items added to the PCL-C proved to be psychometrically sound while adding value to this conceptualization.
- Support for a distinction between avoidance and numbing offers possible advances in understanding and treating PTSD, while providing further empirical evidence for revising the current diagnostic criteria.
- Given this new conceptualization, treatment may be better refined (e.g., more targeted techniques) to help those with differential numbing or avoidance symptoms.
- Future research is needed to further validate these newly proposed items by investigating their relationship to know PTSD correlates and administering them to a wider population.

Table 1a. PCL-C Items

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>CITC</th>
<th>α*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?</td>
<td>2.21</td>
<td>1.11</td>
<td>0.74</td>
<td>0.94</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful experience from the past?</td>
<td>1.84</td>
<td>1.04</td>
<td>0.61</td>
<td>0.94</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful experience from the past were happening again (as if you were reliving it)?</td>
<td>1.86</td>
<td>1.03</td>
<td>0.71</td>
<td>0.94</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful experience from the past?</td>
<td>2.25</td>
<td>1.14</td>
<td>0.73</td>
<td>0.94</td>
</tr>
<tr>
<td>5. Having physical reactions when something reminded you of a stressful experience from the past?</td>
<td>1.79</td>
<td>1.02</td>
<td>0.63</td>
<td>0.94</td>
</tr>
<tr>
<td>6. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1.87</td>
<td>1.09</td>
<td>0.85</td>
<td>0.94</td>
</tr>
<tr>
<td>7. Feeling as if your future somehow will be cut short?</td>
<td>1.58</td>
<td>0.91</td>
<td>0.54</td>
<td>0.94</td>
</tr>
<tr>
<td>8. Feeling isolated or distant and cut off from friends?</td>
<td>1.53</td>
<td>1.09</td>
<td>0.61</td>
<td>0.94</td>
</tr>
<tr>
<td>9. Feeling isolated or distant and cut off from family?</td>
<td>1.66</td>
<td>0.91</td>
<td>0.54</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Table 1b. PCL-C Items

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>CITC</th>
<th>α*</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Trouble falling or staying asleep?</td>
<td>2.24</td>
<td>1.17</td>
<td>0.90</td>
<td>0.94</td>
</tr>
<tr>
<td>13. Feeling irritable or having angry outbursts?</td>
<td>2.20</td>
<td>1.06</td>
<td>0.60</td>
<td>0.94</td>
</tr>
<tr>
<td>14. Having difficulty concentrating?</td>
<td>2.23</td>
<td>1.05</td>
<td>0.69</td>
<td>0.94</td>
</tr>
<tr>
<td>15. Being “superalert” or watchful or on guard?</td>
<td>1.91</td>
<td>1.01</td>
<td>0.49</td>
<td>0.94</td>
</tr>
<tr>
<td>16. Feeling jumpy or easily startled?</td>
<td>1.82</td>
<td>0.95</td>
<td>0.53</td>
<td>0.94</td>
</tr>
<tr>
<td>17. Wanting to do things because they reminded you of a stressful experience from the past?</td>
<td>1.88</td>
<td>1.01</td>
<td>0.73</td>
<td>0.94</td>
</tr>
<tr>
<td>18. Avoiding certain activities or places because they reminded you of a stressful experience from the past?</td>
<td>1.83</td>
<td>1.06</td>
<td>0.73</td>
<td>0.94</td>
</tr>
<tr>
<td>19. Wanting to talk about a stressful experience from the past?</td>
<td>1.34</td>
<td>1.05</td>
<td>0.47</td>
<td>0.94</td>
</tr>
<tr>
<td>20. Avoiding having feelings about a stressful experience from the past?</td>
<td>1.88</td>
<td>1.01</td>
<td>0.73</td>
<td>0.94</td>
</tr>
<tr>
<td>21. Avoiding certain people because they reminded you of a stressful experience from the past?</td>
<td>1.98</td>
<td>1.13</td>
<td>0.66</td>
<td>0.94</td>
</tr>
<tr>
<td>22. Not wanting to talk about a stressful experience from the past?</td>
<td>1.81</td>
<td>1.07</td>
<td>0.72</td>
<td>0.94</td>
</tr>
</tbody>
</table>

CITC = Corrected Item Total Correlations
*For a copy of this poster please visit www.uregina.ca/anxietylab