Reappraising the dimensional structure of the PTSD Checklist: lessons from the DSM-IV-based PCL-C

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Objective: The dimensional structure of posttraumatic stress disorder (PTSD) has been extensively debated, but the literature is still inconclusive and contains gaps that require attention. This article sheds light on hitherto unvisited methodological issues, reappraising several key models advanced for the DSM-IV-based civilian version of the PTSD Checklist (PCL-C) as to their configural and metric structures.

Methods: The sample comprised 456 women, interviewed at 6-8 weeks postpartum, who attended a high-complexity facility in Rio de Janeiro, Brazil. Confirmatory factor analysis (CFA) and exploratory structural equation models (ESEM) were used to evaluate the dimensional structure of the PCL-C.

Results: The original three-factor solution was rejected, along with the four-factor structures most widely endorsed in the literature (PTSD-dysphoria and PTSD-numbing models). Further exploration supported a model comprised of two factors (re-experience/avoidance and numbing/hyperarousal).

Conclusion: These findings are at odds with the dimensional structure proposed in both DSM-IV and DSM-5. This also entails a different presumption regarding the latent structure of PTSD and how the PCL should be operationalized.

Keywords: posttraumatic stress disorder; psychometric tests/interviews; diagnosis and classification; epidemiology; women

Introduction

Data from 20 population surveys in the World Mental Health Survey Initiative showed a 12-month prevalence of posttraumatic stress disorder (PTSD) of 1.1%.¹ Research focused on postpartum women has shown overall prevalence rates ranging from 2 to 9%, rising to 15% in at-risk groups such as women reporting a psychiatric background, a history of trauma, or perinatal complications.² Identifying affected individuals is essential, given the adverse impact of PTSD on health and quality of life and the availability of effective treatments.

There are different tools to assess PTSD, some self-report and some interviewer-administered. A leading self-report scale is the Posttraumatic Stress Disorder Checklist (PCL). Developed by the U.S. National Center for PTSD,³ the PCL has gained widespread use due to its ease and speed of administration.⁴⁵ While its original structure was based on the PTSD symptoms and diagnostic criteria defined in the DSM-IV-TR, the instrument has since been updated to match the new fifth edition of the DSM.⁶

The DSM-IV-based PCL comprises 17 items addressing both the occurrence and the severity of symptoms, regardless of their relation to a specific traumatic event (Table 1)³ In all PCL versions – C(ivilian), M(ilitary), and S(pacific), – its items have five levels indicating how much the respondent has been troubled by the symptoms in the past month. The item scoring system holds the PCL to a three-dimensional structure: re-experiencing (criterion B), avoidance and numbing (criterion C), and hyperarousal (criterion D).⁷ In the revised fifth edition of the DSM, three symptoms were added, and the avoidance/numbing factor has been split into two criteria.⁸ The new structure thus proposes four rather than three symptom clusters for PTSD.⁶

Among several motives and rationales, these changes have been driven by longstanding research on the dimensional structure of DSM-IV-based instruments, which has shown different configurations.⁴⁹ The review of factor-analytic studies which used the specific civilian version of the PCL applied in this study illustrates these divergences. Passos et al.¹¹ suggested a two-factor model, separating the symptoms into re-experiencing/avoidance and numbing/hyperarousal, whereas Conybeare et al.¹² endorsed a slightly different two-dimensional structure. Several models covering three,¹³-¹⁵ four,¹⁶¹⁷ and even five factors¹⁸-²² have been also put forth. Notably, of all psychometric studies carried out so far, only two effectively backed the original three-factor structure.²³,²⁴

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Among these different models, two major four-factor models have been most frequently upheld in the literature. One is the PTSD-Dysphoria model proposed by Simms et al., which combined emotional numbing with three hyperarousal symptoms to form a distinct factor named dysphoria. The other three factors were held to involve re-experiencing, avoidance, and the remaining hyperarousal symptoms, respectively. This proposal has been tested in many studies, but was supported in only four instances.

The other four-tiered model was proposed by King et al. Known as the PTSD-Numbing model, this solution split the symptoms of avoidance and numbing into different sets of factors, which were added to the original re-experiencing and hyperarousal factors to form a four-dimensional structure. This model was endorsed by many studies and ultimately shaped the new DSM-5 criteria. However, as with all others in the psychometric literature alluded to thus far, this structure has been favored primarily on account of uncovered adequate model fit indices, and lacks appraisal of other relevant psychometric properties, such as discriminant factor validity and content redundancy of component items.

The study participants consisted of women who gave birth at a high-risk maternity service in Rio de Janeiro, Brazil, which serves as a referral hospital for fetal complications such as hemolytic disease of the newborn, birth defects, prematurity, and intrauterine growth restriction. Interviews took place 6-8 weeks after birth, during routine postpartum visits, from February to July 2011. Contact by agram and telephone was attempted to reschedule postpartum consultation for mothers who missed their appointments. Five hundred and thirty-two women were scheduled, but 16 (3%) had not given birth in the hospital and were thus ineligible. Of the remaining eligible subjects, 456 (88%) were interviewed. Of those, 65% women were approached at the scheduled dates, 18% attended on rescheduled dates, and 5% were contacted by phone.

Table 1 English version of the Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C)

<table>
<thead>
<tr>
<th>Dimension of the PCL-C</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-experiencing</td>
<td>Recurrent, intrusive recollections of traumatic events.</td>
</tr>
<tr>
<td>Avoidance</td>
<td>Efforts to avoid stimuli associated with the trauma.</td>
</tr>
<tr>
<td>Hyperarousal</td>
<td>Muscle tension, sleep difficulties, and panic attacks.</td>
</tr>
<tr>
<td>Dysphoria</td>
<td>Emotional numbing, withdrawal, and blunted affect.</td>
</tr>
</tbody>
</table>

Method

Participants and procedures

The study participants consisted of women who gave birth at a high-risk maternity service in Rio de Janeiro, Brazil, which serves as a referral hospital for fetal complications such as hemolytic disease of the newborn, birth defects, prematurity, and intrauterine growth restriction. Interviews took place 6-8 weeks after birth, during routine postpartum visits, from February to July 2011. Contact by agram and telephone was attempted to reschedule postpartum consultation for mothers who missed their appointments. Five hundred and thirty-two women were scheduled, but 16 (3%) had not given birth in the hospital and were thus ineligible. Of the remaining eligible subjects, 456 (88%) were interviewed. Of those, 65% women were approached at the scheduled dates, 18% attended on rescheduled dates, and 5% were contacted by phone.

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All data were collected in a single sitting by trained female health professionals, using a standardized ques-
tionnaire. Interviews occurred in a reserved area without the
presence of anyone but the interviewer and respondent.
Women interviewed on the phone were also advised to
do so in a secluded area. Participants gave their infor-
med consent after anonymity and confidentiality of infor-
mation were guaranteed. Women who showed high levels
of symptoms of PTSD were referred to a specialized
service. The study was conducted in conformity with the
Declaration of Helsinki, and was approved by the hospital’s
research ethics committee.

The Brazilian Portuguese version of the PCL-C" was
completed along with other instruments comprising a
comprehensive multi-thematic questionnaire. In addition
to exposure to a traumatic event (criterion A1, assessed
through the Trauma History Questionnaire), suspicion of
PTSD requires endorsing at least one clinically significant
symptom (score 3 or higher) for criterion B, three for
criterion C, and two for criterion D (also known as the
symptom-cluster method of scoring). Since the PCL-C
items were not explicitly anchored to any specific trauma,
any endorsement could be related to childbirth or to
previous traumatic events.

Data analysis

Data analysis was carried in Mplus 7.4. Preliminary
analyses were conducted to examine the distributional
properties of each item. The first step consisted of
re-assessing the originally proposed three-factor structure
based on the DSM-IV, as well as the two tiers of the four-
factor models proposed by Simms et al. and King
et al., respectively. For this purpose, a confirmatory
factor analysis (CFA) was implemented. As appropriate to
modeling of categorical items, all analyses employed the
robust weighted least squares mean and variance
adjusted estimator (WLSMV) and used polychoric corre-
lation matrices. Model fit was assessed through three
indices. The root mean square error of approximation
(RMSEA) is a model parsimony-adjusted fit index; values
under 0.06 suggest adequate fit. The comparative fit
index (CFI) and the Tucker-Lewis index (TLI) are incre-
mental fit indices, comparing the specified model to a
more restricted model. Both range from 0 to 1, and values
above 0.95 indicate adequate fit. Factor-based discriminant validity was also evaluated
in this step. The evaluation of this property was based
on the average variance extracted (AVE). The AVE assess-
thes the amount of variance extracted in a factor
compared to the amount of variance due to random
measurement error, and ranges from 0 to 1. In multi-
dimensional models, a factor is regarded as holding
discriminant validity if the square root of the AVE is
greater than its correlations with any other factor:

\[
\sqrt{\rho_{gf(f_i)}} > \Phi_{g(f_i,f_{i+1})}.
\]

Differences between the square root of the AVE and factor correlations were formally tested.
A statistically significant positive sign of this difference
would endorse factor-based discriminant validity (i.e.,
non-violation), whereas a statistically significant negative
sign would favor rejection. A nonsignificant difference, be
it positive or negative, could be either an indication for or
against a discriminant validity violation. Ninety-five-per-
cent confidence intervals (95% CIs) were obtained by the
bootstrap method with 1,000 replications.

As we foresaw possible model misfit or plausible
alternative dimensional structures, the next step con-
sisted of re-evaluating the configural structure through
exploratory analyses. A sequence of exploratory struc-
tural equation models (ESEMs) holding two to five factors
were fitted. ESEMs allow estimation of all loadings as in
traditional exploratory models, but also enable assess-
ment of other relevant features, such as item residual
(error) correlations, \(r_{f_i}^2\). The analyses used geomin
oblique rotation. Potential item residual correlations
were examined through modification indices (MI), which
reflect how much the overall model chi-square decreases
if a constrained parameter is freely estimated. To com-
plement the MIs, expected parameter changes (EPC) were
also explored.

The next step tested the “best” model identified before
with a CFA model. In addition to re-evaluating factor
loadings and item residual correlations in a confirmatory
perspective, factor-based discriminant validity was also
examined.

Results

The mean PCL-C score was 29.7 (standard deviation
11.4; range 17-81; 95% CI 28.6-30.7). By using the original
DSM-IV algorithm outlined in the Methods, the prevalence
of PTSD would be 9.4% (95% CI 7.1-12.5%). Mean
maternal age was 25.5 years (range 13-47 years; 95%
CI 24.8-26.2), and 28.1% (95% CI 24.1-32.4%) of partici-
pants were adolescents (age < 20 years). Most of the
participants had up to 12 years of schooling (87.7%; 95%
CI 84.4-90.4%), about one-sixth were black (15.4%; 95%
CI 12.3-19.0%), and almost half were first-time mothers
(44.3%; 95% CI 39.8-48.9%). There were no missing
values in the analyzed data set.

Table 2 shows the results of the initial CFAs. The
original three-factor model (A) showed a borderline fit,
unlike the four-factor models B and C, which fit ade-
quately. However, some factor correlations exceeded the
values of the square root of AVE, suggesting lack of
factorial discriminant validity. The statistical signficance
of the differences between the square root of AVE per factor
and the related factor correlations are shown in Table 3. In
model A, the statistically significant negative signs concern-
ing the second and the third factors suggest lack of
discriminant validity. There was evidence of discriminant
validity violation in the third and fourth factors of model B.
Model C showed only one nonsignificant negative sign (third
factor), which could be either an indication for or against
a discriminant validity violation. Item 16 showed loadings
< 0.35 in all three models. The loading of item 17 reached
1.0 in model C, which indicates an estimation problem
entailing model misspecification. The MIs suggested resi-
dual correlations between items 6, 7 and 16, 17, projecting
EPC values of 0.46 and 0.31, respectively.

Subsequent one- to five-factor ESEMs were first imple-
mented without specifying any residual correlation.
<table>
<thead>
<tr>
<th></th>
<th>Model A (DSM-IV)</th>
<th>Model B (PTSD-numbing)</th>
<th>Model C (PTSD-dysphoria)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Three-factor CFA</td>
<td>Four-factor CFA</td>
<td>Four-factor CFA</td>
</tr>
<tr>
<td></td>
<td>( \lambda_{41} )</td>
<td>( \lambda_{42} ) ( \lambda_{43} ) ( \delta_1 )</td>
<td>( \lambda_{41} ) ( \lambda_{42} ) ( \lambda_{43} ) ( \lambda_{44} ) ( \delta_1 )</td>
</tr>
<tr>
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<td>-</td>
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<tr>
<td>i3</td>
<td>0.81</td>
<td>0.35</td>
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</tr>
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<td>0.85</td>
<td>0.27</td>
<td>0.85</td>
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<td>0.75</td>
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<tr>
<td>i12</td>
<td>0.72</td>
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<td>i14</td>
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<tr>
<td>i16</td>
<td>0.24</td>
<td>0.94</td>
<td>0.24</td>
</tr>
<tr>
<td>i17</td>
<td>0.67</td>
<td>0.55</td>
<td>0.67</td>
</tr>
</tbody>
</table>

\[ \sqrt{\text{vef}^2} \]

<table>
<thead>
<tr>
<th></th>
<th>( \Phi_{(1/2/3)} )</th>
<th>( \Phi_{(1/1/2)} )</th>
<th>( \Phi_{(2/2/3)} )</th>
<th>( \Phi_{(1/2/2)} )</th>
<th>( \Phi_{(2/3/3)} )</th>
<th>( \Phi_{(3/4/4)} )</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.809 (0.741-0.877)</td>
<td>0.695 (0.584-0.807)</td>
<td>0.916 (0.853-0.978)</td>
<td>0.540 (0.412-0.669)</td>
<td>0.916 (0.845-0.986)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>0.735 (0.650-0.820)</td>
<td>0.727 (0.638-0.816)</td>
<td>0.489 (0.345-0.633)</td>
<td>-</td>
<td>0.540 (0.412-0.669)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>0.916 (0.853-0.978)</td>
<td>0.735 (0.651-0.820)</td>
<td>0.489 (0.345-0.633)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\( \Phi_{(1/1/2)} \)

| RMSEA | 0.059 (0.051-0.068) |
|       | 0.039 (0.029-0.048) |
|       | 0.034 (0.024-0.044) |
| CFI   | 0.947               |
| TLI   | 0.938               |
|       | 0.974               |
|       | 0.979               |
to remove one of the redundant items and assume that its variance are not totally exchangeable. This concern could bebacking. Foa et al.44 mentions the interconnectedness ofPTSD = posttraumatic stress disorder.
† Square root of the average variance extracted.
† Factor correlations.
\( p < 0.001; \)
\( p < 0.05. \)

Again, MIs suggested residual correlations in both pairs, which were then freely estimated. As shown in Table 4, the one-dimensional model (D) showed poor fit. Most ofthe items loaded on the first two factors in the three- (F), four- (G), and five-factor (H) models. The other factors involved cross loadings and, in some cases, were composed ofa single item, lacking theoretical intelligibility. The two-factor model (E), in turn, grouped items 1 to 7 on the first factor and items 8 to 17, except for item 16, in the second. Like the other three more complex solutions, this model also fit well.

Next, this bi-dimensional structure was tested in a confirmatory perspective (Table 5), which showed good fit and no additional residual correlations beyond those detected before. However, the \( \sqrt{\text{var} (f_i)} \) for both factors were lower than their correlation, with statistically significant negative differences, suggesting violation of factor-based discriminant validity.

Discussion

The PCL is an important tool for assessing PTSD and has been widely used in epidemiological studies. However, considering the extensive literature on the PCL-C, several unaddressed issues remain regarding dimensional properties and how to cluster the symptom set of PTSD.5,9,10 To shed light on the debate, this study aimed to revisit the dimensional structure of the DSM-IV-based PCL-C. Reiterating the point made in the Introduction, this is not only important for proper use of the instrument and to understand the PTSD construct per se, but also to raise questions in regards to the currently recommended PCL-5.

Our results, as those of several previous studies,4,5,10 did not support the three-factor model originally proposed in the DSM-IV.7 Even more relevant is that, beyond adequate model fit, no support was found for either of the most tested and hitherto endorsed four-factor models—PTSD-Dysphoria16 and PTSD-Numbing.33 Despite the borderline factor-based discriminant validity found in these models, indications of residual correlations and model misspecification led us to explore alternative solutions.

Exploratory and confirmatory analyses to test for such solutions endorsed the tenability of a model comprised of only two specific factors, with two residual correlations involving items 6, 7 and 16, 17. The first factor encompassed symptoms of re-experiencing and avoidance, while the second clustered symptoms of numbing and hyperarousal. This solution suggested a group of symptoms directly related to the memory of the traumatic event per se (re-experiencing and avoidance), and another sharing several reactions to the trauma threat (numbing and hyperarousal).

This dimensional structure may not be a one-off. Although shown here for the first time in a civilian population, the same configuration was previously identified by Passos et al.11 when assessing the PCL-C applied to a military sample. There is also some theoretical backing. Foa et al.44 mentions the interconnectedness of these two dimensions, discussing how avoidance arises as a defense mechanism to repeated re-experiencing of a traumatic incident, and, similarly, how numbing and desensitizing effects emerge as a response to constant hyperarousal and stimulation. Further research showing that hyperarousal symptoms were the best predictors of numbing provides additional support for the present findings.45 Our results are also in line with the criticisms to the increased number of latent factors and speculations about a more parsimonious latent structure of PTSD pointed out by Armour.46

The issue of residual correlations has been under-explored in the literature on the DSM-IV based PCL-C. The correlations between item pairs 6, 7 and 16, 17 are notable. Item 6 (avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it) and 7 (avoid activities or situations because they remind a stressful experience from the past) refer to very similar situations and are likely conditionally correlated due to content redundancy. From a substantive point of view, it would be inappropriate for any two indicators sharing the same content to be qualified as distinct and independent manifests. In this sense, neither the PTSD-Numbing nor the PTSD-Dysphoria models seem to express a faultless configurural structure, precisely because they allocate these two items in a separate factor regardless of their content overlap. When the residual correlation between these two items was freely estimated as in Model I, both items localized fairly well to the first factor. To address this issue, a potential solution would be to remove one of the redundant items and assume that its informativeness carries over to the other. However, while possibly efficient from an operational stance, this option could lead to substance loss, since both types of avoidance are not totally exchangeable. This concern could be handled by merging the content (information) of both into
Table 4 Analysis of the dimensional structure of the Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C) using exploratory structural equation models

<table>
<thead>
<tr>
<th></th>
<th>Model D One-factor</th>
<th>Model E Two-factor</th>
<th>Model F Three-factor</th>
<th>Model G Four-factor</th>
<th>Model H Five-factor</th>
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<tbody>
<tr>
<td></td>
<td>f1</td>
<td>f1</td>
<td>f2</td>
<td>f1</td>
<td>f2</td>
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<tr>
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</tr>
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<td>-0.09</td>
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<tr>
<td></td>
<td>r_{i(6/7)}</td>
<td>0.445</td>
<td>0.411</td>
<td>0.380</td>
<td>0.383</td>
</tr>
<tr>
<td></td>
<td>r_{i(16/17)}</td>
<td>0.304</td>
<td>0.331</td>
<td>0.370</td>
<td>0.360</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.065</td>
<td>(0.057-0.073)</td>
<td>0.037</td>
<td>(0.026-0.047)</td>
<td>0.029</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.014-0.047)</td>
<td>(0.000-0.038)</td>
<td>(0.025 (0.000-0.038)</td>
</tr>
<tr>
<td>CFI</td>
<td>0.937</td>
<td>0.982</td>
<td>0.991</td>
<td>0.994</td>
<td>0.996</td>
</tr>
<tr>
<td>TLI</td>
<td>0.926</td>
<td>0.976</td>
<td>0.985</td>
<td>0.989</td>
<td>0.991</td>
</tr>
</tbody>
</table>

CFI = comparative fit index; RMSEA = root mean square error of approximation (in brackets, 90% confidence intervals); TLI = Tucker-Lewis index.

* Loadings (standardized).
† Measurement errors (uniqueness).
‡ Residual correlations.

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Table 5 Confirmatory factor analysis of a bi-dimensional structure for the Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C)

<table>
<thead>
<tr>
<th>Model</th>
<th>Factors</th>
<th>f1</th>
<th>f2</th>
<th>(\hat{\lambda}_{ij})</th>
<th>(\hat{\lambda}_{ij2})</th>
<th>(\hat{\rho}_{ij})</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITwo-factor CFA</td>
<td></td>
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</tr>
<tr>
<td>i1</td>
<td>0.77</td>
<td>0.41</td>
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</tr>
<tr>
<td>i2</td>
<td>0.69</td>
<td>0.53</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>i3</td>
<td>0.81</td>
<td>0.35</td>
<td></td>
<td></td>
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<tr>
<td>i4</td>
<td>0.85</td>
<td>0.27</td>
<td></td>
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<tr>
<td>i5</td>
<td>0.74</td>
<td>0.45</td>
<td></td>
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<tr>
<td>i6</td>
<td>0.53</td>
<td>0.72</td>
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</tr>
<tr>
<td>i7</td>
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<td>0.72</td>
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<tr>
<td>i8</td>
<td>0.57</td>
<td>0.68</td>
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<tr>
<td>i12</td>
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<td>0.46</td>
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</tr>
<tr>
<td>i13</td>
<td>0.68</td>
<td>0.55</td>
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<tr>
<td>i14</td>
<td>0.69</td>
<td>0.52</td>
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<td></td>
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</tr>
<tr>
<td>i15</td>
<td>0.71</td>
<td>0.49</td>
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<tr>
<td>i16</td>
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<td>0.96</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>i17</td>
<td>0.65</td>
<td>0.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \hat{\rho}_{ij} = \sqrt{\frac{\text{root of the average variance extracted}}{\text{factor correlation values}}} \]

\[ F(\text{95% confidence intervals}) = 0.675 (0.641-0.709), 0.636 (0.597-0.674) \]

\[ r_{(i6/i1)} = 0.404, r_{(i5/i7)} = 0.300 \]

\[ \Phi_{(i1/i2)} = 0.751 (0.674-0.828), \Phi_{(i2/i1)} = -0.076, \Phi_{(i1/i2)} = -0.115 \]

RMSEA = 0.033 (0.022-0.043), CFI = 0.984, TLI = 0.981

CFA = confirmatory factor analysis; CFI = comparative fit index; RMSEA = root mean square error of approximation (in brackets, 90% confidence intervals); TLI = Tucker-Lewis index.

\( \hat{\lambda}_{ij} \) = Loadings (standardized).

\( \hat{\rho}_{ij} \) = Measurement errors (uniqueness).

\( \sqrt{\text{root of the average variance extracted}} \) = Square root of the average variance extracted; in brackets, 95% confidence intervals.

\( \hat{\rho}_{ij} \) = Residual correlations.

\( \Phi_{ij} \) = Factor correlation; in brackets, 95% confidence interval.

As noted in the Introduction, strong factor correlations have been identified by several studies.

Nevertheless, none of the studies inspected the potential lack of factorial discriminant validity. Comparing the square root of the AVE to factor correlation values allowed us to identify violations in this validity, suggesting factors that might not hold separate dimensions of the construct and implying that a single-dimensional or higher-order structure warranted investigation.

These findings have direct implications for how the PCL measures are operationalized, be it as adjunctive tools for diagnosing PTSD or as instruments for epidemiological research. Based on the evidence that the dimensional structure proposed in the DSM-IV may not hold, by extension, using the respective symptom cluster criteria for PTSD may also be inadequate. Finding an alternative diagnostic proposal based on a bi-dimensional symptom structure could be an interesting development. To strengthen this, however, the present findings need replication in studies using the PCL-5, carried out in different sociolinguistic and cultural contexts and including men and women outside the postpartum period. Furthermore, new research will be necessary to evaluate appropriate cutoff points for classifying individuals into broad yet class-homogenous groups, especially in light of the added set of items proposed for the PCL-5.

The results of this study should be viewed with its limitations in mind. First, generalization of the current findings requires caution. Since this study was restricted to postpartum women attending a high-risk maternity facility and no validation sample was involved, further evidence is still needed to establish whether measurement invariance and stability would hold across other population domains as well, including populations with different estimates of PTSD prevalence. However, it should be noted that the PCL-C items were not anchored to any specific event; thus, the measured symptoms could be related to different traumas. Therefore, the pattern of symptoms presented in this sample should not differ much from that of the base population. Second, although a thorough cross-cultural adaptation process was followed for the Portuguese version used herein, translation issues may have affected response patterns and assessment of the instrument’s dimensional structure. However, as mentioned above, the small loadings of item 16 across the board may be revealing.

Although we assessed an instrument based on DSM-IV-defined symptoms and diagnostic criteria, which precluded any inferences about DSM-5, our findings still point to a very different dimensional structure from that built into this last edition of the Manual. As brought up earlier, the reformulation of the diagnostic criteria in this version, which adopted the PTSD-Numbing model, was partly based on studies that, to the best of our understanding, fell short in evaluating important properties such as factorial discriminant validity and residual correlations. In light of the configural structure uncovered in the current study, it seems prudent not only to examine the updated PCL-5 but also to revisit the dimensional structure of the underlying DSM-5 from this new perspective.
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Disclosure
The authors report no conflicts of interest.

References