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The Structure of *DSM-5* Posttraumatic Stress Disorder Symptoms in War Veterans

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Abstract

The objective of the present research was to examine the underlying factor structure of posttraumatic stress disorder (PTSD) as conceptualized in the recently published fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* (APA, 2013). A self-report measure of PTSD symptoms was administered to 258 trauma-exposed Iraq/Afghanistan war veterans. Confirmatory factor analysis was used to compare several different models of PTSD. Confirmatory factor analysis revealed that the best-fitting model was a six-factor model in which symptoms loaded onto the factors of intrusion, avoidance, negative affect, anhedonia, dysphoric arousal, and anxious arousal. These findings have important implications for ongoing conceptualization of PTSD and suggest that additional modifications to the diagnostic criteria for PTSD may still be warranted to more accurately reflect the underlying structure of PTSD symptoms.

Keywords

Confirmatory factor analysis; *DSM-5*; post-traumatic stress disorder; PTSD; trauma; veterans; military

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Introduction

The factor structure of posttraumatic stress disorder (PTSD) symptoms based on the *Diagnostic and Statistical Manual of Mental Disorders-IV* (*DSM-IV*; American Psychiatric Association, APA, 1994) has been thoroughly investigated (e.g., Yufik, & Simms, 2010). Two four-factor models, the emotional-numbing model (King, Leskin, King, & Weathers, 1998) and the dysphoria-model (Simms, Watson, & Doebbeling, 2002), consistently provide better model fit than the three-cluster model proposed by *DSM-IV* (Yufik & Simms, 2010; Elhai & Palmieri, 2011). These four-factor models differ only in the placement of three items (i.e., sleep, concentration, anger/irritability), and differences between them are negligible (Yufik & Simms, 2010). Elhai et al. (2011) separated these three symptoms into a fifth factor, termed dysphoric-arousal, and found significant enhancement to model fit over the two four-factor models. This finding was then replicated in numerous subsequent studies (Armour et al., 2012; Contractor et al., 2013; Pietrzak, Tsai, Harpaz-Rotem, Whealin, & Southwick, 2012; Reddy, Anderson, Liebschutze, & Steind 2013; Wang et al., 2011). Therefore, although *DSM-IV* proposed a three-cluster model, and *DSM-5* four factors, a five-factor model was eventually found to exhibit superior model fit.

The recently released *DSM-5* (APA, 2013) utilizes a four-cluster structure for PTSD symptoms (i.e., re-experiencing, avoidance, negative alterations in cognition/mood, alterations in arousal and reactivity). This was based on extensive factor analytic work (Yufik & Simms, 2010) published prior to the five-factor dysphoric arousal model (Elhai et al., 2011). The *DSM-5* arousal cluster combines the three dysphoric-arousal symptoms, the two anxious-arousal symptoms (i.e., hypervigilance, startle; Elhai et al., 2011), and the newly added symptom of reckless or self-destructive behavior. Although still an emerging literature, a number of studies have examined the factor structure of *DSM-5* PTSD including its newly proposed symptoms. In both a nationally-representative, trauma-exposed sample of U.S. adults and a clinical convenience sample of U.S. Veterans, the four-cluster *DSM-5* model provided adequate, albeit not close, fit to the data (Miller et al., 2012). In that study, a version of the dysphoria model, in which the *DSM-5* negative alterations in cognition/mood and alterations in arousal/reativity clusters were combined while parsing out hypervigilance and exaggerated startle into a separate factor, provided modest improvement in fit compared to the *DSM-5* model. A five-factor model was not examined in that study. Elhai and colleagues (2012) compared several models of *DSM-5* symptom structure in trauma-exposed college students, including a five-factor model in which the negative alterations in cognition/mood cluster was divided into one factor comprised of the emotional numbing symptoms from *DSM-IV* and another factor comprised of the new or re-conceptualized items (i.e., negative beliefs or expectations, distorted cognitions, negative emotional state). All models examined in this study provided adequate fit, with the *DSM-5* four-cluster model having the best fit based on BIC values. Neither of these studies examined the five-factor dysphoric arousal model found to exhibit the best fit to *DSM-IV* symptoms (Elhai et al., 2011; Wang et al., 2012; Pietrzak et al., 2012).

More recently, in a large epidemiological sample of earthquake survivors, Liu et al. (2014) found that a six-factor model comprised of intrusion, avoidance, negative affect, anhedonia, dysphoric arousal, and anxious arousal provided superior fit when compared to five different

alternate models of *DSM-5* PTSD symptom structure. The PTSD Checklist for *DSM-5* (PCL-5, Blevins, Weathers, Witte, & Davis, 2012; Weathers et al., 2013) was utilized to compare the six-factor model to three four-factor models (i.e., the *DSM-5* model, a *DSM-5* dysphoria model, a *DSM-5* dysphoric arousal model) and two five-factor models (i.e., a five-factor revision of the *DSM-5* model, a five-factor revision of a *DSM-5* dysphoria model). This six-factor anhedonia model was a revision of a *DSM-5* version of the five-factor dysphoric arousal model that had previously exhibited good fit with *DSM-IV* symptoms (Elhai et al., 2011; Wang et al., 2012; Pietrzak et al., 2012). As described by Liu et al. (2014), this modification, which separated the negative alterations in cognitions and mood cluster into two separate factors, was based on theory and research indicating that negative and positive affect are distinct constructs (e.g., Watson, Clark, & Stasik, 2011). As such, negative and positive affect have been specified as separate domains (i.e., negative and positive valence systems) in the Research Domain Criteria (RDoC) project (e.g., Cuthbert & Insel, 2010; Cuthbert & Kozak, 2013) of the National Institute of Mental Health.

Another six-factor model by Tsai et al. (2015) also emerged from the dysphoric arousal model. This six-factor variant isolated an externalizing behaviors factor (i.e., irritable/aggressive behavior, self-destructive/reckless behavior) from the remaining two items of the dysphoric arousal factor (i.e., difficulty concentrating, sleep problems). This left the anxious arousal factor (i.e., hypervigilance, exaggerated startle) along with the other three unchanged factors from the *DSM-5* (i.e., re-experiencing, avoidance, negative alterations in cognition/mood). This six-factor externalizing behaviors model provided significantly better fit to data (across three samples) than a five-factor dysphoria model and the *DSM-5* four-factor model.

Both six-factor models and a seven-factor model which consolidates the six-factor models were recently investigated using CFA in two large, independent samples of U.S. veterans and university undergraduate students (Armour et al., 2015). Compared with the *DSM-5* model, both the five-factor *DSM-5* dysphoria model and the five-factor *DSM-5* dysphoric arousal model provided significantly better fit to the data across samples. Additionally, BIC values indicated that the six-factor anhedonia model provided a better fit than the six-factor externalizing behavior model, both of which provided better fit than the 5-factor models. The seven-factor hybrid model comprised of re-experiencing, avoidance, negative affect, anhedonia, externalizing behaviors, anxious arousal, and dysphoric arousal symptoms clusters was found to provide superior fit to all other models.

Objective of the Present Research

The current study investigated the factor structure of *DSM-5* PTSD symptoms using confirmatory factor analysis (CFA) in a sample of Iraq/Afghanistan war veterans. To our knowledge, this is the first study that examined a sample comprised entirely of veterans of the most recent conflicts in Iraq/Afghanistan. We compared the fit of the *DSM-5* four-cluster model, the four-factor dysphoria model¹ (Simms et al., 2002) adapted to incorporate the new *DSM-5* symptoms, a *DSM-5* five-factor dysphoric arousal model based on dividing the

¹The four-factor numbing model (King et al., 1998) adapted to incorporate the new *DSM-5* symptoms model was also compared to the Simms et al., model (2002). We found that the Kings' model also resulted in fairly "moderate" fit and did not lead to improved model fit. Given these findings, we decided to not include the Kings' model in the main analyses.

arousal cluster into dysphoric and anxious arousal (Elhai et al., 2011), the six-factor anhedonia model (Liu et al., 2014), the six-factor externalizing behaviors model (Tsai et al., 2015), and the seven-factor model that is a hybrid of the two six-factor models (Armour et al., 2015). We hypothesized that the seven-factor model would provide the best overall fit to the data based on empirical work within the PTSD literature (Armour et al., 2015).

Methods

Participants

The sample included 258 veterans who were exposed to potentially traumatic events during their warzone service to Iraq and Afghanistan. To be eligible for the current analyses, participants had to have completed a version of the PTSD Checklist-Military version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993), which was modified to assess *DSM-5* PTSD symptoms. Participants were drawn from two related studies examining predictors of functional impairment, both conducted at the Central Texas Veterans Health Care System (CTVHCS). Recruitment was targeted toward oversampling females and veterans with mental health diagnoses. Exclusion criteria included: a) diagnosis of schizophrenia, another psychotic disorder, or bipolar disorder; b) current suicidal or homicidal risk warranting crisis intervention; or c) recently initiated or stopped psychosocial or psychopharmacological treatment in order to limit symptom fluctuations related to recently starting or stopping treatment. Veterans with other current or lifetime psychiatric diagnoses were eligible to participate.

Measures

The modified version of the PCL-M utilized in this study was created before *DSM-5* criteria were finalized and reflects the newly released PCL-5 (Blevins, et al., 2012; Weathers et al., 2013) with a few caveats. First, several items differ in the ordering of words (e.g., “acting or feeling” vs. “feeling or acting”) or had discrepancies between clarifying words (e.g., “disturbing memories” vs. “disturbing unwanted memories”). Second, the two avoidance items were worded somewhat differently: “avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it” vs. “avoiding memories, thoughts, or feelings related to the stressful experience”; and “avoiding activities or situations because they reminded you of a stressful military experience” vs. “avoiding external reminders of the stressful experience (for example, people places, conversations, activities, objects, or situations).” Lastly, one item was worded as presented in *DSM-IV* and differed more substantially from the wording in *DSM-5* (i.e., “feeling irritable or having angry outbursts” vs. “irritable behavior, angry outbursts, or acting aggressively”). This modified PCL-M representative of *DSM-5* symptoms exhibited excellent internal consistency ($\alpha = .97$).

The Clinician Administered PTSD Scale for *DSM-IV* (CAPS-IV; Blake et al., 1995) was used to determine PTSD diagnosis based on *DSM-IV* criteria. In addition, the CAPS-IV three-event form was used in conjunction with checklists of combat experiences and military sexual trauma to assess exposure to a traumatic event. Participants were included in the current analyses if they met *DSM-IV* Criterion A1 (i.e., exposure to life threat, actual serious

injury, or threat to physical injury of self or other). There was no requirement to meet *DSM-IV* Criterion A2 (i.e., response of intense fear, helplessness, or horror). Therefore, this inclusion procedure was consistent with *DSM-5* Criterion A assessment.

Procedures

Procedures were reviewed and approved by the CVHCS Institutional Review Board prior to any data being collected. Direct mailings, presentations to clinical staff members, and advertisements at enrollment sites were utilized for participant recruitment. Structured clinical interviews and self-report measures were administered in private offices within the VA medical center following the informed consent process. Following completion of intensive diagnostic assessment training, masters level psychology technicians or licensed or license-eligible psychologists conducted the interviews. Diagnostic review groups were utilized to reach diagnostic consensus and were overseen by doctoral-level clinical psychologists with expertise in the assessment of PTSD.

Data Analyses

Confirmatory factor analysis was conducted using *Mplus* statistical software version 5.21 (Muthén & Muthén, 2009). Consistent with prior research (Elhai et al., 2011), PCL-M items were treated as ordinal, and robust weighted least squares estimation (WLSMV) with mean and variance adjusted chi square was used. WLSMV was chosen based on previous research indicating that utilization of estimation procedures which assume continuous observed variables (e.g., maximum likelihood) when data are ordinal can lead to violations of requirements (i.e., linear association), biased parameter estimates that can be impossible to interpret accurately, misspecification of models, and a failure to demonstrate true model fit (Flora & Curran, 2004; Wirth & Edwards, 2007). WLSMV utilizes polychoric correlations and probit regression, making it a proper choice for ordinal data. It has also been shown to perform well across a variety of different conditions including relatively smaller samples (Brown, 2006; Elhai et al., 2011; Flora & Curran, 2004; Wirth & Edwards, 2007). The modified PCL-M contained minimal missing data points (< .2%). Participants with missing data were included in the analyses and missing data points were directly modeled with WLSMV. Multiple fit indices were utilized to evaluate model fit, including Root Mean Square Error of Approximation (RMSEA), Tucker Lewis index (TLI), and comparative-fit index (CFI). Cut-off guidelines suggested by Hu and Bentler (1999), Kline (2011), and Yu (2002) were utilized to evaluate model fit. Specifically, RMSEA values .08 and .06, and CFI and TLI .90 and .95 were considered indications of adequate and close fit, respectively. Robust chi-square difference tests with a correction factor were utilized to compare nested models. Additional analyses were run utilizing MLR estimation in order to compare non-nested models via Bayesian information criterion (BIC; Schwarz, 1978) and Akaike information criterion (AIC, Akaike, 1987). A BIC difference of 6–10 is considered to indicate strong support and a difference of greater than 10 very strong support in favor of the model with the lower value (Raftery, 1995). Lower relative values for AIC are generally considered supportive of a better-fitting model (Akaike, 1987). The *Mplus* DIFFTEST function was used to perform robust chi-square difference tests.

Results

Participant Characteristics

Participants ($N = 258$) were predominantly male (68.6%) and had an average age of 39.7 years ($SD = 9.8$). Approximately 58% of the sample self-identified as White, 34% as African American, and 18% as Hispanic. Nearly half (48.8%) met *DSM-IV* criteria for lifetime PTSD based on the CAPS for *DSM-IV*, and 31% met criteria for current (i.e., past month) PTSD.

Confirmatory Factor Analysis—Initially, we attempted to fit all six of the proposed models to the data; however, examination of the parameter estimates for the seven-factor hybrid and six-factor externalizing behavior models revealed the presence of Heywood cases (i.e., impossible values) for these models. Specifically, we found correlations between factors that were greater than 1.0. We suspect that the presence of Heywood cases in the present study in the seven-factor hybrid and the six-factor externalizing behavior models was most likely due to the combination of our relatively small sample size and the presence of multiple 2-item indicators in these models (Kimbrel et al., 2011; Kline, 2005).

The remaining four models investigated are shown in Table 1, and fit statistics for these models are shown in Table 2. The Mplus DIFFTEST function indicated that model 4 (six-factor) was significantly better than model 3 (five-factor dysphoric arousal) $\chi^2 \text{ Diff}(4) = 49.491, p < .001$, model 2 (four-factor dysphoria) $\chi^2 \text{ Diff}(7) = 82.082, p < .001$, and model 1 (*DSM-5* four-factor), $\chi^2 \text{ Diff}(7) = 101.09, p < .001$. AIC and BIC values provided further support model 4, as this model also exhibited the lowest AIC and BIC values. Accordingly, model 4 was selected as the best-fitting model. The CFI (.98), and TLI (.99) values for model 4 suggested close fit to the data, whereas the RMSEA value (.09) only approached adequate fit. As can be seen in Figure 1, all symptoms loaded strongly (i.e., .67 or greater) onto their respective factors in model 4. Factor correlations ranged from .75 to .94. Due to the high factor correlations, an alternative model was tested with a higher-order factor representing PTSD. Overall, this model demonstrated slightly worse model fit, robust $\chi^2(43) = 148.62, p < .001$, RMSEA = .10, CFI = .98, TLI = .99, AIC = 12,784, and BIC = 13,019, relative to model 4. Thus, the original lower-order 6-factor model was retained as the final, best-fitting model.

Discussion

Conceptualizations of PTSD change over time as empirical findings continually emerge regarding the underlying structure of PTSD symptoms. Such findings influence the evolving diagnostic criteria for PTSD. In the present study of Iraq/Afghanistan war veterans, a six-factor anhedonia model provided better fit to the *DSM-5* PTSD symptoms than a five-factor and two four-factor models, including the *DSM-5* model, which replicates recent findings in both civilian and heterogeneous veteran samples (Armour et al., 2015; Liu et al., 2014; Tsai et al., 2014). These convergent findings are important, particularly given that few other studies have looked at PTSD models in samples limited to Iraq/Afghanistan war veterans. Additionally, both the current study and that of Liu et al. (2014) found that the six-factor

model was superior to a higher-order model. Highlighting that these findings may not be unique to this sample.

These early examinations of PTSD symptom structure in *DSM-5* provides evidence that while the recent conceptualization of PTSD in *DSM-5* improves upon *DSM-IV* in terms of including a fourth symptom cluster, further refinement of this construct may be warranted, as a six-factor model may be superior and there appear to be several sub-factors of PTSD that are not included in the *DSM-5* definition. To date, one study suggests that a seven-factor model may more precisely represent the underlying structure of PTSD symptoms (Armour et al., 2015); however we were not able to replicate this finding in the current sample due to the presence of Heywood cases. Thus, additional research on the potential utility of the seven-factor model is needed in larger samples of Iraq/Afghanistan Veterans.

Overall, the six-factor model was superior to all other models that we were able to identify in the current sample. In this model, *DSM-5* Cluster-D (negative alterations in mood and cognition) is separated into negative affect and anhedonia, and Cluster-E (alterations in arousal and reactivity) is separated into dysphoric arousal and anxious arousal. In this manner, the six-factor model may provide a better representation of PTSD symptoms by separating symptoms representing different constructs into unique clusters (i.e., positive/negative affect; anxious/dysphoric arousal), which Liu and colleagues (2014) aptly describe as important in that it add to the phenomenological knowledge regarding PTSD symptoms. This conceptualization of PTSD can be utilized to guide future research and clinical care. For example, findings regarding the factor structure of PTSD may aid in efforts to delineate which aspects of PTSD are unique and which represent non-specific points of overlap with related constructs such as depression, anxiety, and internalizing and externalizing psychopathology (Durham et al., 2015; Tsai et al., 2015). Comparative effectiveness studies that help identify which treatments are more effective in addressing certain facets of PTSD are warranted. Moreover, the current findings may prove beneficial to clinical work by more precisely delineating targets for assessment and treatment, particularly symptom clusters that are unique to PTSD.

Replication of our findings in other samples will be particularly important, given the limited number of studies investigating the factor structure of *DSM-5* PTSD symptoms, particularly among veterans, and the somewhat mixed findings regarding the best fitting model. As data continue to accumulate regarding the structure of PTSD symptoms in *DSM-5*, an issue that may influence findings is the factor loadings of the amnesia and reckless/self-destructive behavior symptoms, which have tended to be lower than for other symptoms. The factor loadings in this study of Iraq/Afghanistan veterans for both the amnesia (.67) and reckless/self-destructive behavior (.79) items were the lowest of any symptoms, although they were substantially higher than in previous studies of both veterans and civilians (.41–.54; Liu et al., 2014; Miller et al., 2012). Possible explanations for the relatively lower factor loadings for these items include worse fit with the construct of PTSD and/or low item endorsement rates, which was the case with the amnesia item in the current sample (i.e., only 16.3% endorsed this symptom as being at least moderately distressing). It is also possible that the amnesia item may have stronger fit for people with PTSD who also meet criteria for the dissociative symptoms specifier.

Although high factor correlations can be concerning in structural models, the findings in this study are consistent with extant research in this area which have commonly had factor loadings greater than .94 and at times as high as .97 (Liu et al., 2014; Elhai et al., 2012; Miller et al., 2012; Hall et al., 2012). Both the current study and Liu et al (2014) had high factor correlations and thus examined a higher-order model and found that the six-factor model fit better. Research aimed at understanding the underlying factor structure of PTSD helps to organize the myriad possible symptom permutations that patients can exhibit into discrete, underlying factors that can be targeted in treatment. Subsequently, both clinicians and clinical scientists can focus treatment and research on core areas of the disorder.

Limitations and Future Directions

The findings from the present study should be interpreted in the context of several limitations. First, questionnaire data were utilized to assess *DSM-5* PTSD symptoms. Future research using symptom-level data derived from clinical interviews is needed to replicate these findings. Second, although our sample size was adequate and the utilization of WLSMV is shown to handle smaller samples, larger numbers of participants are optimal for research using CFA. The limited sample size likely contributed to the presence of Heywood cases when we attempted to examine the seven-factor model in the present study. Third, our sample was limited to Iraq/Afghanistan veterans residing in the Southwestern United States. Thus, the degree to which these findings might generalize to other trauma-exposed populations is unclear. Fourth, in capturing the symptoms of anger and irritability, the current study utilized the *DSM-IV* item “feeling irritable or having angry outbursts” instead of the *DSM-5* item, which assesses irritable behavior/angry outbursts. As described by Friedman and colleagues (2013), the *DSM-IV* item was problematic in that it conflated an emotional state with a behavior, which would be better assessed as distinct domains.

There is a clear trend in this literature toward findings indicating that models with more factors are associated with better model fit. Thus, it is important to examine this trend in light of several methodological considerations. First, as noted by Marshall, Schell, and Miles (2013), investigations into PTSD factor structure may be biased by item presentation order in which items within each factor are generally administered sequentially, which may artificially inflate correlations, particularly with two-item factors. However, Witte, Domino, and Weathers (2015) recently followed-up on Marshall et al.’s finding/assertion with different results. Witte and colleague’s data (2015) suggested that order effects were not likely to be responsible for improvements in fit between competing models of PTSD in *DSM-IV*. It is currently unknown to what extent the order of item presentation may influence factor analytic findings in relation to *DSM-5* PTSD symptom structure and more research is needed in this area. Relatedly, according to Kline (2005), latent variables should be comprised of three or more indicators. Thus, it may be problematic that the best fitting six-factor model in the current study contains two factors containing only two items, although other prominent models of PTSD symptom structure, including the *DSM-5* model, contain at least one two-item factor. Indeed, one recent study found that a seven-factor model that includes four two-item factors provided superior fit to the best fitting six-factor model examined in the current study (Armour et al., 2015). Thus, additional research on the factor structure of the *DSM-5* PTSD symptoms is warranted to inform further refinement of

the PTSD construct, including directly addressing these methodological concerns. Future research should also examine additional measures of psychopathology (e.g., depression) and functional impairment in relation to competing models of PTSD symptom structure. Finally, although the best fitting model in this study demonstrated improved factor loadings for the amnesia and reckless behavior symptoms compared to prior research, more research on these items is warranted (e.g., placement, loadings, utility).

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Figure 1. Confirmatory factor analysis of the *DSM-5* symptoms, based on Liu and colleagues (2014) six-factor model. This figure lists standardized factor loadings for each item, and factor correlations. See Table 1. for item identification.

Table 1

Model Structure.

PTSD symptoms	Model 1	Model 2	Model 3	Model 4
B1: Intrusions	In	In	In	In
B2: Nightmares	In	In	In	In
B3: Flashbacks	In	In	In	In
B4: Emotional reactivity	In	In	In	In
B5: Physical reactivity	In	In	In	In
C1: Avoid thoughts	Av	Av	Av	Av
C2: Avoid places/activity	Av	Av	Av	Av
D1: Amnesia	NAMC	Dy	NAMC	NA
D2: Negative beliefs	NAMC	Dy	NAMC	NA
D3: Blaming self or others	NAMC	Dy	NAMC	NA
D4: Negative emotions	NAMC	Dy	NAMC	NA
D5: Loss of interest	NAMC	Dy	NAMC	An
D6: Distant and cut off	NAMC	Dy	NAMC	An
D7: Low positive emotions	NAMC	Dy	NAMC	An
E1: Irritable/Angry	Hy	Dy	DA	DA
E2: Reckless/self-destructive	Hy	Dy	DA	DA
E3: Hypervigilance	Hy	Hy	AA	AA
E4: Startle	Hy	Hy	AA	AA
E5: Concentrating	Hy	Dy	DA	DA
E6: Sleep problems	Hy	Dy	DA	DA

Note: PTSD, posttraumatic stress disorder; Model 1, the *DSM-5* model; Model 2, the *DSM-5* four-factor dysphoria model; Model 3, the *DSM-5* five-factor dysphoric arousal model; Model 4, the six-factor revision of the dysphoric arousal model. In, intrusion; Av, avoidance, NAMC, negative alterations in mood and cognitions; Hy, hyperarousal; Dy, dysphoria; DA, dysphoric arousal; AA, anxious arousal; NA, negative affect; An, anhedonia

Table 2

Summary of Fit Statistics.

Model	Robust χ^2 (df)	RMSEA	CFI	TLI	AIC	BIC
4: six-factor-dysphoric arousal	125.74 [*] (42)	.09	.98	.99	12,747	13,013
4 ^a : higher order	148.62 [*] (43)	.10	.98	.99	12,784	13,019
3: five-factor-dysphoric arousal	160.19 [*] (42)	.10	.97	.99	12,865	13,114
2: four-factor-dysphoria	174.30 [*] (42)	.11	.97	.99	12,901	13,135
1: <i>DSM-5</i>	197.04 [*] (42)	.12	.97	.99	12,934	13,168

Note: Model 1, the *DSM-5* model; Model 2, the *DSM-5* four-factor dysphoria model; Model 3, the *DSM-5* five-factor dysphoric arousal model; Model 4^a the higher order model of the six-factor revision of the dysphoric arousal model; Model 4, the six-factor revision of the dysphoric arousal model. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; AIC = Akaike Information Criterion; BIC = Bayesian information criterion; degrees of freedom for WLSMV are estimated according to a formula given in the Mplus Technical Appendices at statmodel.com.

^{*} $p < .001$