

International Society for Traumatic Stress Studie

Finalizing PTSD in DSM-5: Getting Here From There and Where to Go Next

Matthew J. Friedman

National Center for PTSD, White River Junction, Vermont, USA, and Geisel School of Medicine at Dartmouth, Hanover, New Hampshire, USA

The process that resulted in the diagnostic criteria for posttraumatic stress disorder (PTSD) in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association; 2013) was empirically based and rigorous. There was a high threshold for any changes in any *DSM-IV* diagnostic criterion. The process is described in this article. The rationale is presented that led to the creation of the new chapter, "Trauma- and Stressor-Related Disorders," within the *DSM-5* metastructure. Specific issues discussed about the *DSM-5* PTSD criteria themselves include a broad versus narrow PTSD construct, the decisions regarding Criterion A, the evidence supporting other PTSD symptom clusters and specifiers, the addition of the dissociative and preschool subtypes, research on the new criteria from both Internet surveys and the *DSM-5* field trials, the addition of PTSD subtypes, the noninclusion of complex PTSD, and comparisons between *DSM-5* versus the World Health Association's forthcoming International Classification of Diseases (*ICD-11*) criteria for PTSD. The PTSD construct continues to evolve. In *DSM-5*, it has moved beyond a narrow fear-based anxiety disorder to include dysphoric/anhedonic and externalizing PTSD phenotypes. The dissociative subtype may open the way to a fresh approach to complex PTSD. The preschool subtype incorporates important developmental factors affecting the expression of PTSD in young children. Finally, the very different approaches taken by *DSM-5* and *ICD-11* should have a profound effect on future research and practice.

Now that the fifth edition of the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual (DSM-5)* has been published (APA, 2013), a number of people have asked about the 5-year process that led to the development of the posttraumatic stress disorder (PTSD) diagnostic criteria. As past chair of the APA sub-work group that developed these criteria, I will describe how this came about.

Setting the Context: The DSM-5 Process

The first meeting of the *DSM*-5 Anxiety and Dissociative Disorders Work Group, was held October 6–7, 2008. There were

15 of us, including our chair, Katherine Phillips. Our job was to investigate the evidence base and eventually propose criteria for 32 diagnoses that appear in *DSM-5*. Although the total group remained intact throughout the 5-year process, most of the work was done by three sub-work groups whose charge was to focus on anxiety disorders, obsessive–compulsive spectrum disorders, and trauma/stress-related and dissociative disorders, respectively. As things turned out, what began as an efficient way to divide up the work on the very large *DSM-IV* (APA, 2000) anxiety disorders chapter resulted in four separate diagnostic chapters in *DSM-5*, including the new chapter, "Trauma and Stress-Related Disorders" (see below).

The DSM-5 adopted a very conservative approach. Recognizing that any change to any diagnostic criterion had important clinical and scientific consequences, the evidence had to be very strong to modify, delete, or add a new symptom to any psychiatric disorder. Therefore, the first order of business was to generate a series of scientific reviews of all the evidence for or against any diagnostic criterion for any DSM-IV disorder. Based on these reviews, work groups proposed criteria sets for all DSM-5 disorders. Public comment was sought three times during this process, when the latest proposed criteria sets were posted on the APA's website for 6–8 weeks each time.

Proposed criteria were reviewed by several independent committees, including the Scientific Review Committee, which

I would like to acknowledge the remarkable contributions of all members and advisors of the Trauma/Stressor-Related and Dissociative Disorders Sub-Work Group of the Anxiety Disorder Work Group of *DSM-5*. I also thank the American Psychiatric Association (APA) for all its support and single out Seung-Hee Hong, in this regard. Finally, the opinions and observations in this article are entirely my own and do not represent those of the APA, the Department of Veterans Affairs (VA), or the VA's National Center for PTSD.

Correspondence concerning this article should be addressed to Matthew J. Friedman, National Center for PTSD, VA Medical Center, 215 North Main Street, White River Junction, VT 05009. E-mail: Matthew.Friedman@Dartmouth.edu

Published 2013. This article is a US Government work and is in the public domain in the USA. View this article online at wileyonlinelibrary.com DOI: 10.1002/jts.21840

rigorously examined the quality of evidence presented to support any alteration in *DSM-IV* criteria; the Clinical and Public Health Committee, which reviewed proposed changes based on compelling clinical or public health rationales; the Forensic Committee; the *DSM-5* Task Force; and a Summit Committee under the aegis of the APA Board of Trustees. In other words, there was a great burden of proof for any proposed change in any *DSM-IV* diagnostic criterion. Given such a conservative approach, there was a great likelihood that many *DSM-IV* symptoms would be carried over into the *DSM-5*.

Finally, it is important to recognize that the *DSM-5* is a living document that will be modified as new research findings are published. Indeed, the *DSM-"V"* was changed to the *DSM-"5"* to make way for more timely revisions of the classification scheme. We will not have to wait 10–15 years for the *DSM-6* to see changes in diagnostic criteria. Some of the issues discussed below may be resolved in the *DSM-5.2* or *5.4*, which may appear within the next few years. More information on the *DSM-5* process can be found elsewhere (Kupfer, Regier, & Kuhl, 2008; Regier, Narrow, Kuhl, & Kupfer, 2009).

The Trauma/Stress-Related and Dissociative Disorders Sub-Work Group consisted of Roberto Lewis-Fernandez, David Spiegel, Robert Ursano, Robert Pynoos, and myself. A separate Child and Adolescent Disorders Work Group chaired by Daniel Pine and including Charles Zeanah (who was the expert on child trauma) worked with us on developmental diagnostic issues. Also, Katherine Phillips participated fully in the activities of all three anxiety disorders' sub-work groups.

Unlike the DSM-III-R (APA, 1987) where a separate subcommittee on PTSD included more than 30 national experts, only five of us had been tapped by the APA to address diagnostic criteria for trauma/stressor-related and dissociative disorders. As a result, we reached out to the professional trauma community in two ways. First, we developed and surveyed well-known PTSD experts regarding opinions on specific diagnostic criteria as well as proposals for new PTSD subtypes or related diagnoses. We recruited a remarkable group of advisors who joined the sub-work group for a 2-hour conference call every other Friday afternoon for 4 years. They included Chris Brewin, Richard Bryant, Dean Kilpatrick, Patricia Resick, Paula Schnurr, and Jim Strain (to advise us on adjustment disorders). The APA's Darrel Regier, cochair of the DSM-5 process, was a frequent participant in these Friday calls. Many other experts made important contributions (whose names are listed on page 898 of the DSM-5), but I have named the core group who participated in the bimonthly conference calls, who carried out research on questions that emerged during our deliberations, who did additional data analyses, and who helped write review articles, position papers, and applications to the various review committees. The International Society for Traumatic Stress Studies (ISTSS) was well represented. Indeed, my selection of advisors was greatly influenced by people whom the ISTSS had selected to present position papers at the day-long series of symposia on the DSM-5 at the 2009 annual meeting in Atlanta, Georgia.

PTSD Within the DSM-5 Metastructure

Based on extensive research reviewed elsewhere (Friedman, Resick, Bryant, Strain, et al., 2011), PTSD did not fit neatly into the anxiety disorder niche to which it had been assigned since DSM-III, nor was it best categorized as either a stress-induced fear-circuitry disorder or as an internalizing disorder. As a result, a new chapter in the DSM-5 metastructure was created and named "Trauma and Stress-Related Disorders." All diagnoses within this chapter stipulate that onset or worsening of symptoms was preceded by exposure to an aversive event. In the case of PTSD or acute stress disorder (ASD), such events must have been traumatic; they need not have been traumatic in the case of adjustment disorders. In the case of two disorders of infancy and childhood, reactive attachment disorder and disinhibited social engagement disorder, such events are characterized as caregiver neglect, social neglect, or disrupted/inconsistent care. A final diagnosis, persistent bereavement-related disorder was placed in Section III, the DSM-5 Appendix, as a condition for further study with the expectation that with more research a bereavement-related diagnosis will find its way into the DSM as an approved diagnosis, in its own right.

The order in which various chapters appear in the DSM-5 is relevant. Neighboring chapters have much in common with one another. Therefore, the relevant sequence in the DSM-5 is mood, anxiety, obsessive-compulsive spectrum, trauma and stress-related, and dissociative disorders, followed by other diagnoses. It was originally proposed that dissociative disorders should occupy the same DSM-5 chapter with PTSD, ASD, and related disorders. However, because none of the dissociative disorders stipulate that symptom onset must be preceded by exposure to a traumatic or aversive event, and because evidence is mixed regarding the relationship between traumatic exposure and onset of dissociative disorders (Friedman, Resick, Bryant, Strain, et al., 2011), it was decided to provide separate chapters for trauma/stress-related and dissociative disorders, respectively, but to put them next to one another in the DSM-5 metastructure with the expectation that future research will clarify the relationship between trauma exposure and onset of dissociative disorders.

Defining PTSD in the DSM-5

A Broad Versus a Narrow PTSD Construct

A key decision, after much discussion, was whether PTSD should be defined narrowly or broadly. A narrow definition would greatly reduce the number of symptoms to be assessed. It would simplify the diagnosis by directing clinician attention to "core elements" (Maerker et al., 2013, p. 1683) so that features "most salient to the individual with PTSD are the primary focus of psychological treatment and that make PTSD distinct from other anxiety disorders and from depression" (Brewin, Lanius, Novac, Schnyder, & Galea, 2009, p. 370). Brewin and colleagues proposed that symptoms overlapping with other

disorders (such as insomnia, irritability, cognitive impairment, dysphoria, alienation, and detachment) should be eliminated from PTSD. In my opinion, if one extended this logic to medical diagnosis, one would eliminate symptoms such as fever, pain, and edema from the diagnostic criteria of a specific disease because they are found in so many other diseases. A broad definition would provide clinicians with a menu of symptoms and symptom clusters that would adequately cover the most typical clinical presentations. In other words, a broad definition would retain symptoms found in other disorders because they were also considered an important part of PTSD.

Narrow definition advocates argue that the relatively large number of symptoms in PTSD (17 in the *DSM-IV* and 20 in the *DSM-5*) is much too complicated, has too many permutations that meet the PTSD diagnostic threshold, and is therefore too confusing for clinicians. The *DSM-5* Sub-Work Group decided otherwise, having concluded that the broad definition had much greater clinical utility and proposed the 20-symptom criterion set that now appears in the *DSM-5*. Evidence from the *DSM-5* field trials (see below) suggests that this decision may have been a good one because PTSD was one of very few diagnoses that had very good test-retest reliability, and was much better than major depressive disorder. Indeed, the *DSM-5* field trials indicate that clinicians are not confused by PTSD's 20-symptom menu (Regier et al., 2013).

Criterion A Decisions

Refining the *DSM-IV* **Criterion** A_1 . The Stressor A_1 criterion has always been one of the most challenging aspects of the PTSD diagnosis. Although it has always been easy to get agreement that events such as rape, torture, combat, and brutal assault are traumatic, such consensus is harder to sustain when the sudden death of a loved one is also considered traumatic, as in the *DSM-IV*. Furthermore, it has always been understood that whereas exposure to an A_1 event is a necessary condition for the development of PTSD, it is clearly not a sufficient condition since most A_1 -exposed individuals do not develop the disorder. Furthermore, research on risk factors for PTSD as well as findings regarding Gene × Environment interactions, clearly indicate that there are individual differences with regard to vulnerability versus resilience among trauma-exposed individuals (see Friedman, Resick, Bryant, & Brewin, 2011).

Because traumatic exposure is a diagnostic criterion for PTSD, and because it is controversial where to draw the line between designated traumatic and nontraumatic events, it has been suggested that the best solution would be to eliminate the A_1 criterion altogether (Brewin et al., 2009). By doing so, individuals would meet PTSD criteria if they exceeded diagnostic thresholds for all other symptom clusters. In many respects, it is an appealing solution because it would eliminate all future controversies about whether a specific event was traumatic or nontraumatic. The sub-work group considered this possibility very seriously. At the end of the day, however, it was decided that exposure to a traumatic event is a crucial part of the PTSD

construct. For affected individuals, this event is a watershed in their lives. Things are never the same afterwards. There is a major discontinuity between their pre- and posttraumatic sense of themselves, their world, and their future. The memory of the trauma is at the heart of the diagnosis and the organizing core around which all of the other symptoms can be understood (Friedman, Resick, Bryant, & Brewin, 2011; McNally, 2009). Therefore, it was decided to retain Criterion A_1 for PTSD (and ASD).

Another important controversy regarding Criterion A₁ involves indirect exposure. There has been little disagreement that directly experiencing or witnessing a traumatic event meets the A₁ criterion. The question concerns indirect exposure learning about traumatic experiences of loved ones. Indeed, the most frequently endorsed DSM-IV event is learning about the sudden death of a loved one (Breslau & Kessler, 2001). Again, the sub-work group recognized that restricting Criterion A_1 to directly experiencing or witnessing a traumatic event would eliminate this controversy. However, there was convincing evidence that PTSD occurs in a significant proportion of individuals who were never in danger themselves, but who learned that a loved one was exposed to a traumatic event (see Friedman, Resick, Bryant, & Brewin, 2011). Therefore, the sub-work group tightened up this criterion by requiring that if a loved one died, such a death must have been violent or accidental. A sudden death due to medical causes no longer qualified as a traumatic event, as it had in the DSM-IV, unless this death occurred under traumatic circumstances. Indeed, our research (described below) has shown that one of the major reasons why individuals who met the DSM-IV, but not the DSM-5 criteria for PTSD is because of the elimination of (nonviolent/nonaccidental) death of a loved one as an A₁ event (Kilpatrick et al., 2013; Miller et al., 2012). Thus, learning about the exposure of a loved one to a traumatic event has been retained in the DSM-5 as Criterion A3 (which, in addition to violent/accidental death, includes exposure to sexual violence and other nonlethal traumatic exposures).

The other indirect exposure, which we added to the DSM-5 as Criterion A₄, concerns professionals who have never been in direct danger, but who learn about the consequences of a traumatic event day-in and day-out as part of their professional responsibilities. Such individuals include military mortuary workers (who collect body parts after a battle), rescue workers, emergency medical personnel, journalists, and mental-health-trauma clinicians. Finally, the sub-work group explicitly excluded witnessing traumatic events through electronic media, television, video games, or pictures as a traumatic event.

Eliminating the *DSM-IV* **Criterion** A_2 . In the *DSM-IV*, it was not enough to have met the A_1 criterion. In addition, an individual must have reacted with an intense emotional response ("fear, helplessness, or horror", APA, 2000, p. 467) to meet the criterion. We have since learned that many people exposed to *DSM-IV* A_1 events deny having experienced such an intense emotional reaction. This is especially true

of military, police, or firefighter personnel who often report that they felt nothing, but that their professional training "kicked in" (Friedman, Resick, Bryant, & Brewin, 2011). Otherwise, there is considerable evidence that the presence or absence of the *DSM-IV's* A_2 Criterion neither predicts people at risk to develop PTSD nor does it reduce the number of A₁-exposed individuals who subsequently develop PTSD (see Friedman, Resick, Bryant, & Brewin, 2011). For all these reasons, the sub-work group decided to eliminate the A₂ Criterion from the *DSM-5*. Our research indicates that the second reason for differences in PTSD prevalence between the *DSM-IV* and the *DSM-5* criteria is due to individuals who failed to meet Criterion A in the *DSM-IV* because they did not endorse the A₂ Criterion, but will do so in the *DSM-5* (Kilpatrick et al., 2013; Miller et al., 2012).

Other Diagnostic Criteria: Symptoms and Specifiers

Almost all studies that have used confirmatory factor analysis to investigate the latent structure of PTSD have failed to confirm the DSM-IV 3-factor structure. Although intrusion (B) and arousal (D) symptoms have usually emerged as two distinct symptom clusters, the avoidance/numbing (C) cluster has usually emerged as distinct avoidance $(C_1 \text{ and } C_2)$ and numbing (C_3-C_7) clusters, respectively (Friedman, Resick, Bryant, & Brewin, 2011). Given such conclusive evidence, the sub-work group proposed a 4-, rather than 3-factor solution retaining the intrusion (B) and arousal (now E and renamed "arousal and reactivity") clusters and separating the DSM-IV avoidance/numbing into avoidance (C) and negative cognitions and mood (D) clusters. This decision will probably be responsible for the third major discrepancy in prevalence according to the DSM-IV and the DSM-5. Whereas an individual could meet the DSM-IV Criterion C without a single avoidance symptom (as long as he or she had three numbing symptoms), she or he must have at least one avoidance symptom according to the DSM-5. This appears to account for the slightly lower PTSD prevalence in the DSM-5 found in our Internet survey (Kilpatrick et al., 2013; Miller et al., 2012; see below).

Given the APA's conservative approach, it is not surprising that there is great overlap between the *DSM-IV* and the *DSM*-5. Indeed, all 17 *DSM-IV* PTSD (B–D) symptoms have been retained (although sometimes clarified or revised) in the *DSM*-5. The only exception is the elimination of the *DSM-IV* Criterion A_2 , as discussed above. In addition, three new symptoms have been added, making the total diagnostic menu 20, rather than 17 symptoms (as shown in Table 1).

Second, diagnostic thresholds have not changed. In the *DSM-IV*, a minimum of six symptoms were needed to meet full PTSD criteria (i.e., 1 B + 3 C + 2 D symptoms). In the *DSM-5*, six symptoms are also needed (i.e., 1 B + 1 C + 2 D + 2 E). However, as noted, the requirement for one C (avoidance) symptom may have an important impact on prevalence.

Third, in *DSM-IV*, only seven symptoms (all five intrusion, B symptoms, and the two avoidance, C_1 and C_2 symptoms) were tied explicitly to the traumatic event. The other 10 symptoms (C_{3-7} and D_{1-5}) were not explicitly anchored to traumatic exposure. In the *DSM-5*, it is stated clearly that all 20 symptoms must have had their onset or significantly worsened after the traumatic event. The sub-work group decided that this stipulation would reduce ambiguity, thereby improving diagnostic precision and reliability. It is possible that this may also reduce PTSD prevalence according to the *DSM-5* as compared to the *DSM-IV*.

Intrusion symptoms. There are relatively few changes in the Intrusion B symptom cluster. Symptom B₃, flashbacks are defined as dissociative reactions in which episodes may occur on a continuum from total to partial loss of awareness. More important, the B_1 symptom, intrusive recollections, has been clarified as only applying to distressing intrusive sensory (e.g., visual, olfactory, tactile, etc.), emotional, physiological, or behavioral memories and not to abstract thoughts and appraisals of the traumatic event. Such here-and-now images and sensory memories in PTSD are quite distinct from the longer lasting ruminative and evaluative thought process seen in depression (see Friedman, Resick, Bryant, & Brewin, 2011, for references). The sub-work group endorsed this more restrictive Criterion B_1 to rule out depressive symptoms. Finally, the Criterion B₂, traumatic nightmares, has been expanded to include trauma-related dream content as well as an instant replay of the traumatic event. As with the DSM-IV, only one intrusion symptom is needed to meet Criterion B.

Avoidance symptoms. There is essentially no change in the DSM-5's C₁ and C₂ symptoms from the DSM-IV's, except for the precise wording. As discussed above, unlike the DSM-IV, individuals with PTSD must have at least one avoidance symptom.

Negative alterations in cognition and mood. This cluster is the DSM-5 reformulation of the DSM-IV's numbing symptoms. Two symptoms are required for the diagnosis. The emphasis is now on changes in self or other appraisals and mood that began or worsened since the traumatic event. As epitomized by the new Criterion D₄, individuals with PTSD persistently experience negative-mood states. The so-called numbing abnormality (Criterion D_7) is actually the inability to experience positive emotions such as love, joy, pleasure, or satisfaction. Alterations in cognition are captured in two symptoms, D_2 and D_3 . Criterion D₂ (which is a reformulation of the DSM-IV's foreshortened future) is the persistent belief that one's self, one's world, and one's future has been irrevocably altered because of the traumatic experience. Criterion D_3 is a new symptom reflecting distorted beliefs regarding blame of self or others about the causes or consequences of the traumatic event. Such erroneous cognitions are grist for the mill in most traumafocused therapies and predict chronicity, severity, and

Table 1

Comparing PTSD Criteria for DSM-5 (and DSM-IV) for Adults, Adolescents, and Children Older than 6

Criterion	Symptom category	# Symptoms required	Specific symptoms
A	Exposure to a traumatic event (A ₁)		 Directly experiencing the event(s) Witnessing the event(s) Learning that the event(s) occurred to a close relative or close friend^a Experiencing repeated or extreme exposure to aversive details of the event(s)
A_2			Eliminated in DSM-5 (i.e., fear, helplessness, or horror)
\mathbf{B}^{b}	Intrusion symptoms	1	 Intrusive distressing memories of the traumatic event(s) (<i>DSM-IV</i> B₁) Recurrent distressing trauma-related dreams (<i>DSM-IV</i> B₂) Dissociative reactions (e.g., flashbacks) (<i>DSM-IV</i> B₃) Intense psychological distress when exposed to traumatic reminders (<i>DSM-IV</i> B₄) Marked physiological reactions to reminders of the traumatic event(s) (<i>DSM-IV</i> B₅)
C^{b}	Avoidance symptoms	1	 Persistent avoidance of thoughts and memories (<i>DSM-IV</i> C₁) Persistent avoidance of external reminders (<i>DSM-IV</i> C₂)
D^{b}	Negative alterations in cognitions and mood	2	 Dissociative amnesia of the traumatic event(s) (<i>DSM-IV</i> C₃) Persistent negative expectations (<i>DSM-IV</i> C₇) Persistent distorted blame of self or others about the traumatic event(s) (new) Persistent negative emotional state (new) Diminished interest or participation in significant activities (<i>DSM-IV</i> C₄) Feeling of detachment or estrangement from others (<i>DSM-IV</i> C₅) Persistent inability to experience positive emotions (<i>DSM-IV</i> C₆)
Eª	Alterations in arousal and reactivity	2	 Irritable behavior or angry outbursts (<i>DSM-IV</i> D₂) Reckless or self-destructive behavior (new) Hypervigilance (<i>DSM-IV</i> D₄) Exaggerated startle response (<i>DSM-IV</i> D₅) Problems with concentration (<i>DSM-IV</i> D₃) Sleep disturbance (<i>DSM-IV</i> D₁)
F G	Duration of symptoms is > 1 month Symptoms cause significant distress or functional impairment		
Н	Symptoms cause sign Symptoms are not due to alcohol, drugs, or medication	incant distress of	 Specify if: dissociative subtype (full PTSD + derealization or depersonalization Specify if: preschool subtype (1 B and 2 E, but only 1 C or D symptoms are needed)^c Specify if: with delayed expression of symptoms

Note. PTSD = posttraumatic stress disorder; *DSM* = *Diagnostic and Statistical Manual of Mental Disorders.*

^aDoes not include traumatic exposure through electronic media. ^bAll B, C, D, and E symptoms began or worsened after exposure to the traumatic event(s). ^cOnly four D symptoms are included (D_{4-7}); reckless behavior (E_2) is not included.

functional impairment (Dunmore, Clark, & Ehlers, 2001; Ehring, Ehlers, & Glucksman, 2008; Meiser-Stedman, Dagleish, Glucksman, Yule, & Smith, 2009; Moser, Hajcak, Simons, & Foa, 2007). The other symptoms in the *DSM-5* D cluster are essentially unchanged from the *DSM-IV*, although D₁, inability to recall important aspects of the traumatic event, is now considered dissociative amnesia. A final word is in order about the Criterion D_4 's inclusion of anger as one of the listed negative emotional states. In the *DSM-IV*, Criterion D_3 is "irritability or outbursts of anger" (APA, 2000, p. 468)." The sub-work group concluded that this was ambiguous and confusing because it conflated an emotional state, "irritability" with a behavioral action, "irritability or outbursts of anger." Therefore, in the *DSM-5*, angry feelings are included alongside other negative emotions in Criterion D_4 , whereas the behavioral symptom, "irritable behavior or outbursts of anger" (APA, 2000, p. 468) that may result in aggressive behavior is addressed in Criterion E_1 . The sub-work group decided that this distinction would have clinical utility so that both patients and clinicians could easily distinguish between angry mood and angry behavior.

Alterations in arousal and reactivity that began or worsened after the traumatic event. The E cluster now encompasses behavioral reactivity as well as heightened arousal because individuals with PTSD often exhibit externalizing symptoms such as aggression, reckless behavior, and suicidality (Cavanaugh, Hansen, & Sullivan, 2010; Cisler et al., 2012; Friedman, Resick, Bryant, & Brewin, 2011; Miller, Kaloupek, Dillon, & Keane, 2004; Nock, Hwang, Sampson, & Kessler, 2010). The new symptom, E_2 , characterizes reckless and selfdestructive behavior such as risk-taking, reckless driving, risky sexual behavior, and suicidal behavior. The other E symptoms are essentially unchanged from the D cluster in the *DSM-IV*. Two E symptoms are needed for the diagnosis.

Specifiers. The delayed-onset specifier has been retained from the *DSM-IV*, although it has been slightly altered to "delayed expression" (APA, 2013, p. 274) because most people, with this trajectory exhibit immediate onset of some symptoms throughout much of the delay interval, but do not progress to full PTSD until some later time, often after new exposure to a traumatic reminder (Friedman, Resick, Bryant, & Brewin, 2011).

Adding PTSD Subtypes

Two PTSD subtypes were introduced in DSM-5, both having met the high threshold for evidence supporting their inclusion. Work on the dissociative subtype was done by the Trauma Sub-Work Group, whereas that supporting the preschool subtype was done primarily by the Child and Adolescent Work Group. Regarding the dissociative subtype, findings with functional magnetic resonance imaging (fMRI) among individuals with PTSD and dissociative symptoms, showed a reversal of the usual fMRI pattern, marked by excessive prefrontal cortical activity associated with reduced activity in the amygdala (Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012). A second line of recent research indicated that symptom severity, chronicity, functional impairment, and suicidality were worse among individuals with PTSD who also had dissociative symptoms (Stein et al., 2013). Third, findings on the latent structure of PTSD, replicated in three independent, large veteran cohorts, showed that individuals with PTSD who also exhibited depersonalization or derealization constituted a distinct subtype. Finally, the treatment literature indicated that optimal PTSD treatment differed if individuals had dissociative symptoms (see Lanius et al., 2012). Based on these four independent lines of evidence, the sub-work group proposed addition of a PTSD subtype.

Similarly, recent research prompted inclusion of a preschool subtype for children 6 years and younger. Scheeringa, Zeanah, and Cohen (2011) suggested that the *DSM-IV* PTSD diagnostic criteria needed to be more behaviorally anchored and developmentally sensitive to detect PTSD in preschool children (i.e., children 6 years old and younger). This concern reflects data documenting an implausibly low rate of PTSD in young traumatized children who frequently exhibit all three *DSM-IV* symptom clusters of PTSD, but not to the extent to exceed the diagnostic threshold for PTSD. When an alternative algorithm was used in these very same samples (1 B/1 C/2 D in the *DSM-IV*), the rates of PTSD looked more similar to rates in older children and adults. Extrapolating to the *DSM-5* PTSD criteria, the algorithm becomes 1 B/1 C or D/2 E. This is the basis for the new preschool subtype of PTSD.

Because preschool children lack the verbal and abstract cognitive capacities to report on their internal experiences, it is very difficult to assess introspective *DSM-5* symptoms such as "foreshortened future" (D_2) or self-blame (D_3 ; Scheeringa et al., 2011). Therefore, the preschool subtype focuses on observable symptoms. Because elimination of introspective symptoms reduces the total number of symptoms to assess in young children, the diagnostic threshold for Criterion D has been lowered from two to one symptom for preschool children.

Research on the New Criteria

Unlike the *DSM-IV*, for which extensive field trials were conducted to test the validity and reliability of proposed diagnostic criteria, the *DSM-5* field trials focused primarily on test-retest reliability among diagnosticians. The sub-work group was very eager to put its new criteria to the test and to compare them with the *DSM-IV* criteria. Therefore, two Internet surveys were designed (partially funded by the APA), to test the proposed *DSM-5* criteria. The National Stressful Events Web Survey surveyed a cohort of almost 3,000 nonveterans and the veterans web survey surveyed 323 veterans (Kilpatrick et al., 2013; Miller et al., 2012).

There were three major findings from these surveys. First, the DSM-5 prevalence was comparable to corresponding prevalence according the DSM-IV. Second, confirmatory factor analyses (CFA) indicated that the proposed 4-factor DSM-5 symptom structure provided better fit to the data than the DSM-IV 3-factor model. Third, results from symptom-itemresponse theory and CFA analyses indicated that symptoms within each diagnostic cluster (e.g., intrusion, avoidance, etc.) loaded well together. This was true of the two new D symptoms (D_3 and D_4), which both showed strong loadings with the latent variable, Criterion D, negative alterations in cognitions and mood. The only two exceptions were D_1 (amnesia) and E_2 (reckless behavior), which were mostly endorsed by people at the higher end of the PTSD symptom severity range (Kilpatrick et al., 2013; Miller et al., 2004). Results from the two studies had a major impact on setting diagnostic thresholds at one B, one C, two D, and two E symptoms.

Test-retest reliability for PTSD diagnostic criteria was tested at two sites, the Dallas VA Medical Center and the Houston VA/Meninger outpatient department. At both sites, the kappa for a stratified sample for PTSD was good (.63 at Dallas and .69 at Houston/Meninger). These results were considerably better than the estimated kappas for most other *DSM-5* disorders, including major depressive disorder (Regier et al., 2013).

In short, the proposed diagnostic criteria for PTSD had good clinical utility. Despite often voiced concerns that PTSD encompasses too many symptoms and that the diagnostic decision rules are much too complicated for most clinicians, the field trials suggested otherwise.

Complex PTSD

Trauma experts remain divided regarding whether complex PTSD (or DSM-IV's disorders of extreme stress not otherwise specified, DESNOS) is a distinct diagnosis that should be recognized as such in the DSM. A recent issue of the Journal of Traumatic Stress (JTS; "Complex PTSD," 2012) devoted a special section to this controversy. Reviewing those position papers through the lens of the DSM-5 criteria, it is important to state at the outset that there are some important changes in DSM-5 PTSD criteria that have a direct bearing on areas of disagreement explicated in the special section of JTS. Indeed, I believe that the new criteria provide a way forward that may lead to an eventual resolution that will preserve the clinical utility of this construct while satisfying the need for scientific rigor in the process. I recall overhearing a comment after my ISTSS presentation in 2011 on DSM-5, that the PTSD criteria were becoming more "DESNOS-ish."

The concept of complex PTSD/DESNOS was originally proposed by Judith Herman (1992) to provide a parsimonious diagnostic niche for individuals exposed to protracted traumatic exposure whose most debilitating problems differ from PTSD according to the DSM-III and DSM-IV. Their major symptoms include externalizing behavioral difficulties (e.g., impulsivity, aggression, sexual acting out, alcohol/drug misuse, and selfdestructive actions), emotional dysregulation (such as affective lability, rage, depression, and panic), cognitive difficulties (such as dissociation and dissociative identity disorder), interpersonal difficulties and somatization. Following field trials, DESNOS was not included in the DSM-IV because nearly everyone who met the DESNOS criteria also met criteria for PTSD and was therefore viewed as a more severe form of PTSD. Unfortunately, there has been very little research since DSM-IV, much of it of uneven quality, designed to establish the construct validity of DESNOS (Friedman, Resick, Bryant, & Brewin, 2011; Resick et al., 2012). Given the DSM-5's high threshold for any changes in DSM-IV criteria, with the stipulation that such changes must have solid empirical support, it became clear that DESNOS would not be included in the DSM-5.

I believe that the *DSM-5* has already moved the field further along than was apparent when articles were written for the JTS special section ("Complex PTSD," 2012). Previously discussed changes in PTSD criteria as well as the addition of the new dissociative subtype, provide a new opportunity for considering complex PTSD that was not available in DSM-IV. First, consider that a number of key DESNOS symptoms are now included in the DSM-5 criteria, especially the D cluster (negative cognitions and mood) symptoms such as persistent erroneous blame of self or others, negative expectations about the future, and persistent negative mood. In addition, externalizing behaviors, such as irritable, aggressive, impulsive, self-destructive, and suicidal behavior, now included in the E (hyperarousal and reactivity) cluster, are much closer to DESNOS than was the case with the DSM-IV criteria. Finally, inclusion of the dissociative subtype provides a specific diagnostic niche for individuals who have PTSD as well as some additional dissociative symptoms that are clinically significant. A recent report on the World Mental Health Study indicates that individuals with PTSD who also endorse dissociative symptoms are more likely to report childhood adversity, earlier traumatic events, and more previous traumatic exposure (Stein et al., 2013). Such a trauma exposure profile is consistent with what has often been reported for individuals with complex PTSD (Cloitre, Courtois, Charuvastra, Carapezza, Stolbach, & Green, 2011). In addition, as mentioned previously, the presence of dissociative symptoms indicates that such individuals are more likely to benefit from treatments shown more likely to benefit individuals with complex PTSD (Lanius et al., 2012).

The cliché "more research is needed" is a typical way to conclude such a discussion. What has changed, however, is that we now have a much better idea regarding what research is needed. The big question is whether individuals with the dissociative subtype will also exhibit the emotional dysregulation that is such a fundamental part of the complex PTSD construct (Bryant, 2012). If that proves to be the case, we may be able to address this important question in a way that will advance our conceptual understanding, achieve scientific rigor, and preserve the clinical utility that many claim for complex PTSD.

Comparing the DSM-5 With the ICD-11

The 11th edition of the World Health Organization's International Classification of Diseases (ICD-11) is due for publication in 2015. Because the various working groups have already begun their deliberations, we have an outline of what to expect, although nothing has been finalized at this time. With respect to PTSD, it appears that the ICD-11 criteria will differ greatly from that of the DSM-5 (Maerker et al., 2013). In short, the two classification systems represent two different approaches to nosology. As in the DSM-5, PTSD will be in a separate ICD-11 category rather than be included with anxiety disorders as in the past. Following the lead of Brewin and colleagues (2009), however, the ICD-11 has chosen to simplify the diagnosis by restricting the symptoms of PTSD to three core elements and removing "non-specific symptoms that are also part of other disorders" (Maercker et al., 2013, p. 1). At this time, it is not clear precisely which *DSM-IV* symptoms will be retained in the *ICD-11*, although they will probably include traumatic nightmares, flashbacks, avoidance symptoms, hypervigilance, and startle. Symptoms to be removed from the diagnostic criteria and listed as associated symptoms will probably include dysphoria and other negative-mood states, insomnia, irritability, and cognitive impairment. It is argued that eliminating symptoms found in other mood and anxiety disorders will simplify diagnostic assessment for clinicians and direct their attention to PTSD's core elements.

In contrast to this narrow and very specific approach that restricts PTSD to a fear-based disorder, DSM-5 developed criteria that would characterize the full scope of clinically significant chronic posttraumatic phenotypes. We have reviewed the abundant evidence that dysphoric/anhedonic and externalizing PTSD phenotypes are relevant posttraumatic clinical presentations that need to be included in the diagnosis. Clearly, more people will meet the DSM-5 than the ICD-11 criteria. Thus, the stage has been set for investigating two very different conceptual approaches to PTSD. There is already evidence that some Criterion D symptoms that the *ICD-11* has eliminated (and designated "non-specific symptoms that are also part of other disorders" (Maerker et al, 2013, p. 1683)) predict severity, chronicity, functional impairment, and suicidal behavior among people who have been exposed to traumatic events (Friedman, Resick, Bryant, & Brewin, 2011).

Another major difference between the two diagnostic schemes is that the ICD-11 will include complex PTSD. People who receive this diagnosis will meet criteria for PTSD and also exhibit "enduring disturbances in the domains of affect, self, and interpersonal relationships" (Maercker et al., 2013, p. 1684), although it is not clear what specific symptoms will be included in these domains. It does appear, however, that complex PTSD will also include some symptoms currently found in the DSM-5's Criteria D and E. Although the DSM-5 subwork group considered the evidence inadequate to support the validity of a complex PTSD diagnosis, it is possible that future research regarding DSM-5's dissociative subtype may go a long way to resolving major questions about the validity of complex PTSD. Looking ahead, it will be of great interest to compare the ICD-11's complex PTSD with the DSM-5's dissociative subtype. Because there are a number of overlapping symptoms, it will be very important to determine which diagnostic construct has the best clinical utility and which has the best predictive validity regarding clinical trajectories and treatment response.

Conclusions

Given the APA's conservative approach in which thresholds for change were very high and required solid empirical support, it is not surprising that, except for Criterion A_2 , all 17 PTSD criteria were retained, albeit sometimes with important modifications. I believe that the most important revision in the *DSM-5* may have been creation of the new trauma and stressor-related disorders chapter in the *DSM-5* metastructure. Another major change is recognition that there are anhedonic/dysphoric and externalizing phenotypes of PTSD in addition to the fear-based anxiety disorder that first appeared in the *DSM-III*. Inclusion of the preschool subtype should encourage more rigorous research on how different developmental stages influence posttraumatic clinical expressions. Addition of the dissociative subtype provides an excellent opportunity for a fresh approach to questions concerning the validity and utility of complex PTSD. Finally, the broad versus narrow definitions of PTSD exemplified by the *DSM-5* and the *ICD-11*, respectively, offer a unique opportunity to investigate the relative heuristic and clinical value of these very different approaches to understanding PTSD.

It is important to remember that because the *DSM-5* is a living document, any relevant scientific findings will result in timely revisions of PTSD diagnostic criteria. We continue to make progress. As we begin the *DSM-5* era, we do so with a much better grasp both of what we do not know and of what we need to learn to advance our understanding of PTSD and related disorders. We can all look forward to an exciting future in this field.

References

- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual* of mental disorders (5th ed.). Arlington, VA: Author.
- Breslau, N., & Kessler, R. C. (2001). The stressor criterion in DSM-IV posttraumatic stress disorder: An empirical investigation. Biological Psychiatry, 50, 699–704. doi:10.1016/S0006-3223(01)01167-2
- Brewin, C. R., Lanius, R. A., Novac, A., Schnyder, U., & Galea, S. (2009). Reformulating PTSD for DSM-V: Life after Criterion A. Journal of Traumatic Stress, 22, 366–373. doi:10.1002/jts.20443
- Bryant, R. A. (2012). Simplifying complex PTSD: Comment on Resick et al. (2012). Journal of Traumatic Stress, 25, 252–253. doi:10.1002/jts.21696
- Cavanaugh, C. E., Hansen, N. B., & Sullivan, T. P. (2010). HIV sexual risk behavior among low-income women experiencing intimate partner violence: The role of posttraumatic stress disorder. *AIDS and Behavior*, 14, 318–327. doi:10.1007/s10461-009-9623-1
- Cisler, J. M., Begle, A. M., Amstadter, A. B., Resnick, H. S., Danielson, C. K., Saunders, B. E., & Kilpatrick, D. G. (2012). Exposure to interpersonal violence and risk for PTSD, depression, delinquency, and binge drinking among adolescents: Data from the NSA-R. *Journal of Traumatic Stress*, 25, 33–40. doi:10.1002/jts.21672
- Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, 24, 615–627. doi:10.1002/jts.20697
- Complex PTSD. (2012). [Special section]. *Journal of Traumatic Stress*, 25, 239–263.

Friedman

- Dunmore, E., Clark, D. M., & Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 39, 1063–1084. doi:10.1016/S0005-7967(00) 00088-7
- Ehring, T., Ehlers, A., & Glucksman, E. (2008). Do cognitive models help in predicting the severity of posttraumatic stress disorder, phobia, and depression after motor vehicle accidents?: A prospective longitudinal study. *Journal of Consulting and Clinical Psychology*, 76, 219–230. doi:10.1037/0022-006X.76.2.219
- Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. Depression and Anxiety, 28, 750–769. doi:10.1002/da.20767
- Friedman, M. J., Resick, P. A., Bryant, R. A., Strain, J. J., Horowitz, M. J., & Spiegel, D. (2011). Classification of trauma and stressor-related disorders in DSM-5. Depression and Anxiety, 28, 737–749. doi:10.1002/ da.20845
- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5, 377–391. doi:10.1007/BF00977235
- Kilpatrick, D., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using *DSM-IV* and proposed *DSM-5* criteria. *Journal* of *Traumatic Stress*, 26, 537–547. doi:10.1002/jts.21848
- Kupfer, D. J., Regier, D. A., & Kuhl, E. A. (2008). On the road to DSM-V and ICD-11. European Archives of Psychiatry and Clinical Neuroscience, 258 (Suppl 5), 2–6. doi:10.1007/s00406-008-5002-6
- Lanius, R. A., Brand, B. L., Vermetten, E., Frewen, P. A., & Spiegel, D. (2012). The dissociative subtype of posttraumatic stress disorder: Rationale, clinical and neurobiological evidence, and implications. *Depression and Anxiety*, 29, 701–708. doi:10.1002/da.21889
- Maercker, A., Brewin, C. R., Bryant, R. A., Cloitre, M., Reed, G. M., van Ommeren, M., ... Saxena, S. (2013). Proposals for mental disorders specifically associated with stress in the *International Classification of Diseases-11*. The *Lancet*, 381, 1683–1685. doi:10.1016/s0140-6736(12)62191-6
- McNally, R. J. (2009). Can we fix PTSD in *DSM-V? Depression and Anxiety*, 26, 597–600. doi:10.1002/da.20586
- Meiser-Stedman, R. A., Dalgleish, T., Glucksman, E., Yule, W., & Smith, P. A. (2009). Maladaptive cognitive appraisals mediate the evolution of posttrau-

matic stress reactions: A 6-month follow-up of child and adolescent assault and motor vehicle accident survivors. *Journal of Abnormal Psychology*, *118*, 778–787. doi:10.1037/a0016945

- Miller, M. W., Kaloupek, D. G., Dillon, A. L., & Keane, T. M. (2004). Externalizing and internalizing subtypes of combat-related PTSD: A replication and extension using the PSY-5 scales. *Journal of Abnormal Psychology*, 113, 636–645. doi:10.1037/0021-843X.113.4.636
- Miller, M. W., Wolf, E. J., Kilpatrick, D. G., Resnick, H. S., Marx, B. P., Holowka, D. W., . . . Friedman, M. J. (2012). The prevalence and latent structure of proposed *DSM-5* posttraumatic stress disorder symptoms in U.S. national and veteran samples. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. doi:10.1037/ a0029730
- Moser, J. S., Hajcak, G., Simons, R. F., & Foa, E. B. (2007). Posttraumatic stress disorder symptoms in trauma-exposed college students: The role of trauma-related cognitions, gender, and negative affect. *Journal of Anxiety Disorders*, 21, 1039–1049. doi:10.1016/j.janxdis.2006.10.009
- Nock, M. K., Hwang, I., Sampson, N. A., & Kessler, R. C. (2010). Mental disorders, comorbidity and suicidal behavior: Results from the National Comorbidity Survey Replication. *Molecular Psychiatry*, 15, 868–876. doi:10.1038/mp.2009.29
- Regier, D. A., Narrow, W. E., Clarke, D. E., Kraemer, H. C., Kuramoto, S. J., Kuhl, E. A., & Kupfer, D. J. (2013). DSM-5 field trials in the United States and Canada, Part II: Test-retest reliability of selected categorical diagnoses. American Journal of Psychiatry, 170, 59–70. doi:10.1176/appi.ajp.2012.12070999
- Regier, D. A., Narrow, W. E., Kuhl, E. A., & Kupfer, D. J. (2009). The conceptual development of DSM-V. American Journal of Psychiatry, 166, 645–650. doi:10.1176/appi.ajp.2009.09020279
- Resick, P. A., Bovin, M. J., Calloway, A. L., Dick, A. M., King, M. W., Mitchell, K. S., . . . Wolf, E. J. (2012). A critical evaluation of the complex PTSD literature: Implications for DSM-5. Journal of Traumatic Stress, 25, 241–251. doi:10.1002/jts.21699
- Scheeringa, M. S., Zeanah, C. H., & Cohen, J. A. (2011). PTSD in children and adolescents: Toward an empirically based algorithm. *Depression and Anxiety*, 28, 770–782. doi:10.1002/da.20736
- Stein, D. J., Koenen, K. C., Friedman, M. J., Hill, E., McLaughlin, K. A., Petukhova, M., . . . Kessler, R. C. (2013). Dissociation in posttraumatic stress disorder: Evidence from the World Mental Health Surveys. *Biological Psychiatry*, 73, 302–312. doi:10.1016/j.biopsych.2012.08.022