

Should Posttraumatic Stress Be a Disorder or a Specifier? Towards Improved Nosology Within the DSM Categorical Classification System

Jeffrey Guina^{1,2} · Matthew Baker^{1,2} · Kelly Stinson³ · Jon Maust⁴ · Joseph Coles^{1,2} · Pamela Broderick⁵

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Abstract

Purpose of Review Since 1980, posttraumatic stress (PTS) disorder has been controversial because of its origin as a social construct, its discriminating trauma definition, and the Procrustean array of symptoms/clusters chosen for inclusion/exclusion. This review summarizes the history of trauma-related nosology and proposed changes, within current categorical models (trauma definitions, symptoms/clusters, subtypes/specifiers, disorders) and new models.

Recent Findings Considering that trauma is a risk factor for virtually all mental disorders (particularly depressive, anxiety, dissociative, personality), the multi-finality of trauma (some survivors are resilient, and some develop PTS and/or non-PTS symptoms), and the various symptoms that trauma survivors express (mood, cognitive, perceptual, somatic), it is difficult to classify PTS.

Summary Because the human mind best comprehends categories, reliable classification generally necessitates using a

categorical nosology but PTS defies categories (internalizing and/or externalizing, fear-based and/or numbing symptoms), the authors conclude that PTS—like *DSM-5*'s panic attacks specifier—is currently best conceptualized as a specifier for other mental disorders.

Keywords Trauma · PTSD · Stress disorder · DSM · Nosology · Classification

Introduction

While psychological trauma has existed throughout human history, recent scientific advancements have allowed for an expanded understanding of trauma's impact. Since its inception in 1980, posttraumatic stress disorder (PTSD) has been a controversial diagnosis. Though critics rightly argue that PTSD is a social construct [1•], it is undeniable that trauma can have enduring effects on neurobiology [2], endocrinology [3], attachment [4], and epigenetics [5], and therefore posttraumatic stress (PTS) must be recognized in medical diagnostics. Exactly how to classify trauma-related psychopathology has been an ongoing debate [6–8]. We explore this debate, including how to define trauma, symptomatology and subtypes, and proposals for new disorders and new models of trauma-related nosology.

History of Trauma-Related Nosology

Natural disasters, injuries, illnesses, and interpersonal violence have been a perpetual part of human existence. A myriad of historical and fictional manuscripts describe trauma reactions, from an ancient Mesopotamian tablet depicting war-related traumatic reactions to Shakespeare's *The Rape of*

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✉ Jeffrey Guina
jeffguina@yahoo.com

- ¹ Wright-Patterson Medical Center, 88th Mental Health Flight, 4881 Sugar Maple Dr, Wright-Patterson Air Force Base, Dayton, OH 45433, USA
- ² Boonshoft School of Medicine, Department of Psychiatry, Wright State University, 627 S. Edwin C. Moses, Dayton, OH 45417, USA
- ³ 31st Medical Group, Mental Health Flight, Aviano Air Base, Aviano, Italy
- ⁴ Wilford Hall, 59th Mental Health Squadron, 2200 Bergquist Dr, Lackland Air Force Base, Bexar, TX 78236, USA
- ⁵ 52nd Medical Group, Mental Health Flight, Spangdahlem Air Base, Spangdahlem, Germany

Lucrece, both describing insomnia and nightmares as core reactions to psychological trauma [9]. Despite the ubiquity of trauma and written accounts acknowledging significant sequelae it can render, little clinical attention was afforded the topic until modern times. Military physicians would name the mood and sleep disturbances they observed in combat veterans: “nostalgia” in the seventh century; and “shell shock,” “combat fatigue,” “war neurosis,” or “exhaustion” in the twentieth century [10•]. Neurologists Jean-Martin Charcot, Pierre Janet, and Sigmund Freud demonstrated that physical symptoms could be caused by psychological factors (“hysteria”), often in women who survived sexual traumas [11•]. During the world wars, physicians recognized similar phenomena in male veterans, sometimes described as “physioneuroses” to encapsulate trauma-related somatic and affective symptoms [10•, 12].

Since 1952, the Diagnostic and Statistical Manual of Mental Disorders (*DSM*)—which was created in part because of “an increasing psychiatric caseload” following World War II—has become the primary classification system for mental disorders for much of the world. “Gross stress reaction” appeared in the first edition, to be replaced by “adjustment reaction of adult life” in *DSM-II* [10•]. After lobbying by Vietnam veteran groups [11•], PTSD criteria was first formalized in *DSM-III* [13]. PTSD’s trauma definition and symptomatic criteria have changed somewhat in subsequent editions—most recently in *DSM-5* (2013) [14]—but the diagnosis still follows the same basic framework laid out by *DSM-III*.

Proposals for Future Trauma-Related Nosology

New Trauma Definitions

Trauma- and stressor-related disorders are the only *DSM* diagnoses describing etiology and requiring an antecedent event [1•]. *DSM-III* specifically defined trauma as one “outside the range of usual human experience and that would be markedly distressing to almost anyone” [13]. International Classification of Diseases (*ICD-11*) maintains a similar definition: “exposure to a stressful event or situation of exceptionally threatening or horrific nature likely to cause pervasive distress in almost anyone” [15]. These definitions highlight that unusually severe stressors can overwhelm individuals’ abilities to adapt/cope, but perhaps also fail to recognize how common trauma is considering an upwards of 90% lifetime prevalence in the USA [16]. Subsequent *DSM* editions both expanded (e.g., *DSM-5* removed a requirement for peri-traumatic fear/helplessness/horror, and allowed for work-related exposure by pictures/video if repeated or extreme) and narrowed the trauma definition (e.g., *DSM-5* excluded learning about loved ones’ traumas unless violent or accidental, excluded non-immediate and non-catastrophic medical

events related to natural causes, and replaced *DSM-IV*’s “threat to the physical integrity of self or others” with “sexual violence”) [14].

DSM-IV’s peri-traumatic fear requirement was deemed to not add predictive value of PTSD development, and the requirement of this subjective response excluded individuals that otherwise met diagnostic criteria, especially many military personal [17]. Some research supports expanding trauma further to include severe emotional loss [18] and secondary traumatization such as exposure to details of another’s trauma by clinicians or family members [19, 20]. Some argue that criterion A should be abolished all together, with PTSD focusing exclusively on core symptoms and dysfunction [21].

What events constitute a trauma and how they are experienced varies between individuals. Trauma is commonly called “a normal reaction to an abnormal situation.” PTS is a “forgetting disorder” [22] since “significance facilitates remembrance” [23] and trauma leads to a memory imprint in which the past intrudes upon the present [24•]. We argue trauma is an aversive experience so severe that it negatively changes how one thinks and feels about one’s self and/or the world. This definition emphasizes the impact of trauma rather than the particulars of an event, recognizing that trauma exposes a disparity between expectations and reality. It corresponds with clinical symptoms and neuroscience (e.g., the amygdala and prefrontal cortex are implicated in trauma-related mood and cognitive alterations) [25]. However, this definition is also less objective which may complicate occupational/forensic issues with diagnosing. Nevertheless, we argue the focus of the diagnosis should be on the resultant dysfunction/distress—the key to all psychiatric diagnoses—rather than on the minutia of which trauma/stressor types are definitionally included or excluded.

New Symptoms/Clusters

DSM-5 removed *DSM-IV*’s avoidance/numbing cluster (≥ 3 : internal avoidance, external avoidance, amnesia, anhedonia, detachment, numbness, foreshortened future), and added avoidance (≥ 1 : internal avoidance, external avoidance) and mood/cognitive clusters (≥ 2 : amnesia, negative beliefs, blame, negative emotions, anhedonia, detachment, emotional numbness). It is misleading to call this “splitting” avoidance/numbing because one could have *DSM-IV* PTSD with mood/cognitive symptoms alone but *DSM-5* requires a minimum of one avoidance symptom—an important “rate-limiting step” (i.e., one could have 18 of 20 severe PTSD symptoms but not qualify for *DSM-5* PTSD) which is the most common reason for the high discordance between *DSM-IV/5* PTSD membership [8, 10•]. Furthermore, this change overemphasizes conscious over unconscious avoidance (e.g., amnesia, anhedonia, detachment, emotional numbness, dissociation)

which is significant because the latter is highly predictive of PTSD chronicity/severity [8, 26, 27].

While *DSM-5*'s four-cluster model replaced *DSM-IV*'s three-cluster model, some have called for an upwards of seven clusters with various distinctions or combinations of proposed clusters: avoidance, numbing, anhedonia, dysphoric arousal, anxious arousal, and externalizing behaviors [28–31, 32, 33•]. Some have argued that more clusters allow greater specificity in understanding associations with comorbidity, suicidality, and functionality, and allows for more targeted treatment of specific PTSD phenotypes [30]. While factor/latent analyses may be helpful to predict groupings of symptoms, it is unclear that requiring symptoms across more clusters is more valid or too restrictive. The conflicting results commonly found among PTSD factor/latent analyses may be explained by many symptoms overlapping across clusters (e.g., amnesia is both a cognitive and avoidance symptom, irritability is a mood and arousal symptom) which only becomes more complicated with more clusters. They may also be explained by different individuals manifesting some symptom clusters more than others (i.e., the differences may represent subtypes rather than requisite clusters), as indicated by research linking some genotypes to certain clusters [34]. Furthermore, few other mental disorders require a certain amount of symptoms in a certain amount of clusters.

DSM-5 added distorted blame, negative emotions, recklessness, and dissociation to PTSD's symptomatic criteria, and expanded a sense of fore-shortened future which was subsumed by negative beliefs. However, the criteria still excludes symptoms which are widely recognized trauma-related sequelae such as somatization, self- and relational dysregulation, and repetition compulsions [7, 11•]. *ICD-11* developed different symptomatic criteria—indicating the lack of consensus in PTSD nosology—requiring reexperiencing (flashbacks or nightmares), avoidance (internal or external), and sense of threat (hypervigilance or excessive startle) [15]. While many have compared who is included/excluded in the various iterations of PTSD [35], there is no definitive diagnostic methods to measure against. If consistently reliable neuroimaging or biomarkers never develop, or until they do, nosology must better account for and overtly address trauma-related psychopathology.

Every choice regarding symptom inclusion/exclusion or the number of required clusters changes who is captured and who is missed by diagnostic criteria. When psychiatric nosology focuses on number of symptoms rather than resultant dysfunction/distress and underlying biological factors, it risks perpetuating futile debates. We argue for moving away from all-required clusters so that PTSD is more in-line with other diagnoses—like major depressive disorder (MDD) which groups all symptoms together—because clusters create unnecessary diagnostic complication and exclusion.

New Subtypes

Many factors influence the development and presentation of PTSD. *DSM-5* acknowledged that PTSD has “a heterogenous picture.... In some individuals, fear-based reexperiencing, emotional, and behavioral symptoms predominate. In others, anhedonic or dysphoric mood states and negative cognitions may be most distressing. In some other individuals, arousal and reactive-externalizing symptoms are prominent, while in others, dissociative symptoms predominate. Finally, some individuals exhibit combinations of these symptom patterns” [14]. One avenue of research to better understand this heterogeneity, and target therapeutic interventions, is the identification of subtypes. We use Dalenberg et al.'s criteria for analyzing potential PTSD subtypes: clear definition, distinct structures/mechanisms, and clinical meaningfulness [36].

DSM-5 added multiple PTSD specifiers: “for children 6 years and younger,” “with panic attacks,” and “with dissociative symptoms,” the latter being the first officially recognized PTSD subtype. Based on several studies [37–40], the dissociative subtype is defined as PTSD with derealization and/or depersonalization, unrelated to severity [14]. Those with prominent dissociation (emotional overmodulation) have hyperactive prefrontal and hypoactive limbic areas, which is neurobiologically distinct from and the opposite corticolimbic findings found in those with prominent hyperarousal (emotional undermodulation) [41, 42]. Dissociative PTSD is clinically significant, responding better to affective/interpersonal regulation skills training [43] and cognitive processing therapy with written trauma narratives [44].

Complex PTSD (CPTSD) was the first subtype proposed, defined as personality disturbance, affective dysregulation, negative beliefs, somatization, and dissociation as the result of prolonged interpersonal trauma [11•, 45]. Though some have argued that CPTSD represents classic PTSD symptoms with additional comorbid symptoms (which would make it similar to *DSM-5*'s dissociative subtype)—such as borderline personality disorder (BPD) traits—rather than a distinct subtype with distinct mechanisms [46, 47], research supports CPTSD being distinct from PTSD in both clinical presentation and etiology [48–53]. While *DSM-IV* and 5 rejected calls to include CPTSD, *DSM-5* did add key features of CPTSD to PTSD criteria (i.e., dissociation, mood/cognitive alterations, recklessness/self-destructive behavior), and *ICD-11* included CPTSD (requiring self, interpersonal, and affective disturbances in addition to core PTSD symptoms).

Several studies have supported internalizing and externalizing PTSD subtypes, both with high negative emotionality, but the former defined by low positive emotionality and high constraint, and the latter by low constraint and high alienation. Clinically, those with prominent internalization have higher rates of comorbid depression, panic, avoidance, and suicidality, while those with prominent externalization have

more substance use, aggression, impulsivity, delinquency, and hypomania [54–59]. However, more research is needed to demonstrate distinct structures/mechanisms. It is important to note that *DSM-5* specifically “[clustered] disorders according to what has been termed internalizing and externalizing factors [representing] an empirically supported framework” [14], but PTSD defies this framework by cutting across both factors.

Still, other subtypes have been proposed: dysphoric/numbing, anxious/reexperiencing, avoidant, self-harming/reckless, somatic, and trauma type-based [1•, 10•, 60–64]. Future studies of this heterogeneous syndrome may discover new subtypes that recognize various presentations of similar underlying psychopathology (e.g., “predominantly avoidant presentation” and “predominantly numbing presentation” a la attention-deficit hyperactive disorder subtypes) or new disorders with distinct biomarkers/circuits (e.g., “posttraumatic avoidance disorder,” “posttraumatic mood disorder,” “posttraumatic dissociative disorder”). Although most PTSD subtype research is preliminary, it is clear that there are a variety of trauma-related presentations. Do PTSD subtypes represent multiple manifestations of the same syndrome, or multiple different syndromes?

New Disorders

DSM-5 grouped adjustment, attachment, and stress disorders together in “trauma- and stressor-related disorders,” recognizing the “variable responses” to traumas/stressors [14]. However, some research indicates other disorders are needed. Seemingly acknowledging this, *DSM-5* mentioned several possible “other specified” disorders such as “adjustment-like disorder with delayed onset of symptoms,” “adjustment-like disorder with prolonged duration,” and “persistent complex bereavement disorder” [14], the latter which was essentially included in *ICD-11* as “prolonged grief disorder” [65].

Considering 16% of Americans have trauma-related dysfunction/distress without meeting full PTSD criteria [10•], many have argued for recognition of “subthreshold PTSD” [66] or “partial PTSD” [67, 68]. Mitchell et al. [67] argues for a new diagnostic paradigm focusing on trauma exposure, duration of symptoms, and level of dysfunction/distress.

Although *DSM-5* included a PTSD subtype for young children, it did not fully account for the pervasive impact that prolonged trauma can have on development, including disrupting neurobiology, attachment, and creating persistently altered attributions and negative expectancies of the self and others [69]. “Developmental trauma disorder” involves prolonged childhood trauma causing affective, physiological, attentional, behavioral, self and relational dysregulation [24].

ICD-10 added “enduring personality change after catastrophic experience” (EPCACE). Stress of an extreme nature

(e.g., torture, concentration camps) can cause enduring symptoms of pervasive hostility, mistrust, social withdrawal, feelings of emptiness/hopelessness, being on-edge, and estrangement from others. While trauma experts support the concept of personality changes resulting from trauma, there is no consensus about the criteria [70], and *ICD-11* subsequently removed EPCACE in favor of CPTSD [65].

Other possible trauma-related disorders that could be considered include “anaclitic depression” [71], “Stockholm syndrome” [11•], “secondary traumatic stress” (including “vicarious traumatization,” “compassion fatigue,” “burnout”) [72], “posttraumatic embitterment disorder” [73], and several culture-bound syndromes (e.g., ataques de nervios, *trung gio*, *khyal cap*) [14].

With the wide variety of durations, severities, combinations, and types of traumas that can be experienced; genetic, personality, and social factors in trauma survivors; and the variety of presentations that result (i.e., some are resilient, some develop classic PTS symptoms, and some develop other psychiatric symptoms), it is conceivable that a virtually endless array of trauma-related subtypes or disorders could be proposed. Is there a better way to capture all of those with trauma-related distress/dysfunction?

New Models

Since 1980, the model for diagnosing PTSD has remained relatively stable, requiring a certain number of symptoms in a certain number of clusters to distinguish it from other categorical diagnoses. PTSD was originally a social construct in which advocates started with a diagnosis and experts decided which symptoms to include/exclude, rather than starting with clinical presentations, determining underlying psychopathology and “reverse-engineering” disorders. The benefit of categorical models (such as in *DSM-5* and *ICD-11*) is high reliability (i.e., everyone defines/diagnoses similarly), but the downside is low validity. Researchers and clinicians have long realized that categorical classification leads to a loss of information about cross-category phenomena, fails to identify heterogeneity within disorders, and fails to recognize those with significant distress/dysfunction outside identified categories [74•]. Even *DSM-5* acknowledged:

We recognize that mental disorders do not always fit completely within the boundaries of a single disorder... too-rigid categorical system does not capture clinical experience or important scientific observations... [*DSM*] should accommodate ways to introduce dimensional approaches to mental disorders, including dimensions that cut across current categories... The once plausible goal of identifying homogenous populations for treatment and research resulted in narrow diagnostic categories that did not capture clinical reality, symptom

heterogeneity within disorders, and significant sharing of symptoms across multiple disorders [14].

Recognizing the need for empirically based nosology, many have proposed alternate non-categorical, dimensional and/or hierarchical models. Though some researchers have identified clusters—both established and proposed—as dimensions [31, 32, 33•], we have already addressed clusters above and instead focus here on proposed classification systems.

While *DSM* has been the primary classification system for clinicians, in 2013 the National Institute of Mental Health proposed the Research Domain Criteria (RDoC) as an alternative biological-based model for researchers [75, 76]. RDoC uses a biological basis to evaluate and conceptualize disease process and pathways, with a focus on dimensions that intentionally cut across all psychiatric diagnostic categories [77]. While no specific nomenclature for modeling PTSD has been developed, the language of researchers is altering the abstraction of the taxonomy [78]. Trauma-related symptomatology spans all of RDoC (Table 1), which will hopefully improve understanding of the neurobiological underpinnings of various manifestations of trauma-related psychopathology.

The Hierarchical Taxonomy of Psychopathology (HiTOP) is an empirically-based dimensional model with a hierarchy of spectra (i.e., internalizing, externalizing, detachment, somatoform, and thought disorders), subfactors (e.g., the internalizing spectrum includes distress, fear, mania, eating, and sexual disorders), syndromes/disorders (e.g., the distress subfactor includes PTSD, BPD, MDD, dysthymia, and generalized anxiety disorder [GAD]), components, and symptoms [74]. Several studies determined that distress disorders all have high anxious-misery in factor analyses and similar underlying genetics/neurobiology [79]. However, regarding the components/subtypes and symptoms of PTSD, HiTOP researchers acknowledge problems with the poorly supported cluster system (about which research continues to conflict) and “the marked heterogeneity of its symptom criteria” which complicates structural analyses and classification systems [79]. In other words, PTSD defies classification, whether categorical or dimensional.

DSM-5 introduced an alternative dimensional model for personality disorders (PDs) to address deficiencies in the standard *DSM-IV/5* categorical model in which those with one PD often met criteria for others, and those who had personality-related dysfunction/distress but fell short on PD symptomatic criteria and “other specified”/“unspecified” PD was not particularly useful/informative [14]. This model is relevant to PTS nosology because PDs are commonly trauma-related [80], most trauma-related symptoms overlap with personality domains/traits (e.g., detachment, negative affectivity, antagonism, disinhibition, cognitive/perceptual dysregulation, and even psychoticism), and it could serve as a template for how

to improve PTS nosology or even be expanded to include trauma-related pathology.

Other possible models include the Chinese Classification of Mental Disorders which classifies PTSD as a “neurosis” [81]; the Russian model which does not recognize a specific trauma-related disorder but rather interprets trauma-related symptoms as part of a long-term depressive, cognitive, personality, and/or psychosomatic disorder [82]; and the metacognitive model which considers PTSD to be secondary to dysfunctional beliefs [83].

All of these models are promising but in the early stages of validation and determination of clinical utility. Until/if a valid and useful dimensional system is developed, categorical systems are still the best researchers, clinicians, and educators have. The latter group is particularly important for consideration since, while most agree that dimensional models better conceptualize patients than Procrustean categories, dimensions are much more complex for the human mind to comprehend and more difficult for learners to grasp early in training.

A New Conceptualization

The authors find that current nosology overemphasizes number of symptoms/clusters over level of dysfunction/distress, overemphasizes a traumatic event’s details over its impact, and fails to capture the full spectrum of trauma-related psychopathology in a way that specifically identifies traumatic etiology. For these reasons and because no dimensional model is ready for widespread usage yet, we argue that PTS would be more accurate and useful if used as a specifier rather than a disorder.

Just as *DSM-5* created “with panic attacks” as a “specifier that is applicable to all *DSM-5* disorders” to serve as “a marker and prognostic factor for severity of diagnosis, course, and comorbidity” [14], we believe “with PTS” and/or “with a history of trauma” would be useful/descriptive specifiers for all mental disorders. “With panic attacks” recognized that panic attacks are not only confined to panic disorder (which was often diagnosed incorrectly as it was meant for those with non-cue-related panic), and that panic attacks are different in different disorders, such as in panic disorder and PTSD which have different underlying neurobiology, triggers, and treatment responses [84, 85]. As PTSD subtype/dimensional studies have demonstrated, there are also distinct neurobiological mechanisms, symptomatic presentations, and clinical responses among those with trauma-related psychopathology. Rather than identifying subtypes of PTSD, perhaps these studies have actually identified trauma-related subtypes of other disorders.

We believe this concept warrants further research to operationalize definitions. For example, there may be validity to having both “PTSD” and “with PTS” (a la “panic disorder”

Table 1 Trauma-related symptoms classified using Research Domain Criteria (RDoC): Version 3 [76]

RDoC		Corresponding trauma-related symptoms
Domains	Constructs	
Negative valence systems	Acute threat (fear)	Hypervigilance
	Potential threat (anxiety)	Trauma-related cue reactivity
	Sustained threat	Excessive startle
	Loss	Panic
	Frustrative nonreward	Dissociation Avoidance Anhedonia Emotional numbness Negative beliefs (e.g., unrealistic risk assessment) Negative emotions Distorted blame Irritability/aggression
Positive valence systems	Approach motivation	Anhedonia
	Initial responsiveness to reward attainment	Emotional numbness Detachment
	Sustained responsiveness to reward attainment	Recklessness Avoidance
	Reward learning	Negative beliefs (e.g., unrealistic beliefs about self or others)
	Habit	Hypervigilance (e.g., ritualized checking) Substance use Repetition compulsions
Cognitive systems	Attention	Inattention
	Perception	Flashbacks
	Declarative memory	Dissociation
	Language	Negative beliefs (e.g., unrealistic beliefs about the trauma, unrealistic risk assessment)
	Cognitive control	Amnesia
	Working memory	Intrusive memories Distorted blame Recklessness Irritability/aggression
Social processes	Affiliation and attachment	Detachment
	Social communication	Negative beliefs (e.g., unrealistic beliefs about self or others, unrealistic risk assessment)
	Perception and understanding of self Perception and understanding of others	Distorted blame Self/relational dysregulation
Arousal/regulatory systems	Arousal	Physiologic reactivity
	Circadian rhythms	Excessive startle
	Sleep-wakefulness	Hypervigilance Panic Inattention Insomnia Nightmares Irritability/aggression Recklessness Flashbacks Mood dysregulation

and “with panic attacks”) and/or having multiple specifiers (e.g., “with PTS” requiring subthreshold PTSD symptoms along with full criteria for another disorder, while “with a history of trauma” would only acknowledge traumatic etiology/contribution). It is likely that any PTS specifier would include reexperiencing since, unlike the other clusters, it has consistently been a factor component in best-fit models and is linked to distinct biomarkers [1•]. Future studies may best determine how to define these specifiers, identify underlying mechanisms (many of which are already known) and, most importantly, determine treatment needs (e.g., differentiating who responds best to cognitive processing therapy vs. prolonged exposure vs. eye movement sensitization and reprocessing, and who requires other therapies like dialectical behavioral therapy, psychodynamic psychotherapy, biofeedback, and/or psychopharmacology instead of or before transitioning to a trauma-focused psychotherapy).

Trauma Defies Categories

DSM-5 has a bizarrely inconsistent categorical system. Many chapters are divided by predominant symptom (e.g., depressive, anxiety), and others by time of onset (i.e., neurodevelopmental, neurocognitive) or etiology (i.e., trauma/stressor). However, anxiety is pervasive across almost all psychiatry, all mental disorders are neurodevelopmental and neurocognitive in nature (i.e., have typical brain-related developmental courses and cognitions), and trauma/stress is a risk factor for causing or exacerbating virtually all disorders. This inconsistency leaves many gaps and raises questions about what to call those that do not fit in the latest *DSM* Procrustean beds but have distress/dysfunction.

If someone has depressed mood, generalized excessive worry, insomnia, and resultant dysfunction for over 6 months with onset following a trauma, what is the *DSM-5* diagnosis? The duration is too long for adjustment disorder, and there are too few symptoms for PTSD, MDD, or GAD. According to *DSM-5*, it must be an “other specified” disorder, but of which category? Depressive? Anxiety? Trauma/stressor-related? Why are these distinctions so important that they have been codified? Considering that depressive and anxiety disorders are substantially related—e.g., MDD and GAD are “genetically indistinguishable” [79]—this appears to be a distinction without a difference. PTSD overlaps with other disorders (Table 2) and is often difficult to distinguish, but we think it is unnecessary to always draw lines and instead argue for a trauma-related specifier that cuts across all diagnoses.

Some may worry a specifier will hurt research on “PTSD.” However, PTSD was never a homogenous disorder. Rather, specifiers should enhance research by looking at the similarities and differences of PTS across mental disorders.

Accounting/adjusting for trauma may become typical practice. It is also consistent with researchers who have lamented how the heterogeneity of PTSD defies classification systems (e.g., mood/cognitive symptoms share depressive disorder characteristics while arousal share anxiety disorder characteristics) [79].

Trauma Is an Ubiquitous Risk Factor

DSM-5 went farther than any previous edition in recognizing the importance of trauma, creating a trauma-related chapter, citing it as a risk factor for multiple disorders, and listing 78 different trauma-related codes in “other conditions that may be a focus of clinical attention” (e.g., “abuse and neglect,” “victim of terrorism or torture,” “exposure to disaster, war, or other hostilities”) [14].

Trauma is a risk factor for virtually all mental disorders, including personality, dissociative, somatic [10•], eating [86], psychotic [87], bipolar [88], neurodevelopmental [61, 89], substance use, and obsessive-compulsive disorders (OCD) [14, 90]. Acute stress disorder (*DSM-5*’s better than *DSM-IV*’s) predicts development of not only PTSD, but depressive, anxiety, and OCDs [91]. Childhood maltreatment has been repeatedly linked to a variety of adult psychopathology, particularly personality, depressive, anxiety, and somatic disorders [80, 92, 93•]. Longitudinal studies have demonstrated that PTS symptom changes correlate with changes across various PDs, indicating the strength of the link [94]. Trauma is to mental disorders what HIV is to infectious diseases; trauma and HIV are neither necessary nor sufficient for having other disorders/infections, but they definitely change the occurrence, course, and treatment of other disorders/infections.

While trauma can cause, exacerbate, or influence most mental disorders, they do not universally share common trauma/stress-related etiologies. Trauma-related specifiers would help recognize that trauma-related disorders share characteristics of other disorders, and that disorders not in the “trauma- and stressor-related” category often involve trauma. One could imagine “MDD with PTS” (e.g., a major depressive episode with overlapping mood symptoms as well as nightmares and hypervigilance after an assault), “BPD with PTS” (e.g., enduring personality disturbance with overlapping mood/cognitive and arousal symptoms following prolonged child abuse), “derealization disorder with a history of trauma” (e.g., distorted perceptions of reality following rape), “conversion disorder with a history of trauma” (e.g., psychogenic blindness following combat), and “alcohol use disorder with a history of trauma” (e.g., alcohol-related problems with use to cope with domestic violence). These would recognize the wide variety of trauma-related manifestations without

Table 2 PTSD overlap with other disorders

PTSD		Depression	Anxiety	Mania	Psychosis
Intrusions	Intrusive memories			Racing thoughts	Disorganized
	Nightmares				
	Flashbacks		Dissociation		Hallucinations
	Psychological reactivity		Worry		
Avoidance	Physical reactivity	Psychomotor	Tension		Catatonia
	Avoidance		Avoidance		Negative symptoms
Mood/Cognitive	Amnesia				
	Negative beliefs	Hopelessness	Worry		Delusions
	Distorted blame	Guilt			Delusions
	Negative emotions	Low mood	Fear	Lability	Paranoia
	Anhedonia	Anhedonia			Negative symptoms
	Detachment		Withdrawal		Negative symptoms
	Emotional numbness				Negative symptoms
Arousal	Irritability	Irritability	Irritability	Irritability	
	Recklessness	Suicidality		Impulsivity	Disorganized
	Hypervigilance		Restlessness		Paranoia
	Excessive startle		Panic		
	Inattention	Inattention	Inattention	Distractibility	Disorganized
	Insomnia	Insomnia	Insomnia	Decreased sleep	

neglecting the importance of trauma in diagnosis/treatment.

Needs Over Names

Rather than which category an individual falls in, the focus should be on functional impairment. The most important yet arguably most overlooked criterion in virtually every mental disorder is the requirement for dysfunction/distress. The question is not “what chapter should we put PTS in?” but “when does stress become a disorder?” As opposed to “eustress” which facilitates functioning [95], “distress” (e.g., excessive anxiety, agitation, self-destructiveness) impairs functioning (e.g., vocational/academic, social/interpersonal/recreational, self-care/safety). When individuals suffer distress and/or dysfunction as the result of a trauma, they should be recognized as having a trauma-related disorder. Unfortunately, clinicians and courtrooms have too often failed to recognize the importance of trauma’s impact and the need for trauma-focused treatment (even if not the first treatment indicated) when PTSD criteria is not met or other conditions—like BPD [96], addiction [97], or psychosis [98]—are present, resulting in worse outcomes, more dropouts [99], and lawyers pressuring experts to provide the PTSD label [100]. A trauma-related specifier takes away the inappropriately placed power of the PTSD label in occupational and forensic settings, which tend to inappropriately focus

on PTS as a binary issue (i.e., one either has it or not) rather than heterogeneous spectra of dysfunctional trauma-related manifestations. Some may worry that disabled veterans, litigants, and defendants will miss out on just compensation or legal protection without the label of PTSD, but PTS would remain and the focus would shift from a certain number of symptoms in a certain number of clusters to level of dysfunction (where the focus should have always been when it came to disability, civil litigation, and criminal justice). Dysfunction matters more than definitions. Needs matter more than names.

Conclusions

Regardless of whether new symptoms, subtypes, and/or disorders are identified, clinicians/researchers must recognize the various manifestations of trauma, so that simply managing symptoms does not distract from treating underlying causes. Trauma is a risk factor for virtually all psychiatric diagnoses, and trauma-related psychopathology cuts across current categorical models. *DSM-5* acknowledges that “the boundaries between disorders are more porous than originally perceived” [14], and trauma permeates throughout these pores. The current model for trauma-related nosology results in slight changes to different combinations of symptoms/clusters every few years. Until empirical, biological, and dimensional models

can be validated, we propose that the best way to classify PTS is as a specifier for other disorders. This could serve to maximize accuracy of diagnosis in lieu of biomarkers, avoid debates about symptom inclusion/exclusion and discriminatory trauma definitions, and simultaneously making trauma important enough to overtly identify, study, and treat. As the *DSM-5* states, “the science of mental disorders continues to evolve” [14], and we all should help with this evolutionary process.

Compliance with Ethical Standards

Conflict of Interest Jeffrey Guina, Matthew Baker, Kelly Stinson, Jon Maust, Joseph Coles, and Pamela Broderick each declare no potential conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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