

Saving PTSD from itself in DSM-V

Robert L. Spitzer^{a,*}, Michael B. First^a, Jerome C. Wakefield^b

^a *Columbia University, United States*

^b *New York University, United States*

Abstract

Papers in this special issue of the Journal of Anxiety Disorders concern critical issues and core assumptions that underlie the diagnostic construct of posttraumatic stress disorder. Rather than addressing specific points raised in these papers, we consider the issues and their implications for redefining PTSD and associated disorders in the DSM-V. Specific proposals are advanced to tighten definitional criteria for traumatic events and posttraumatic symptoms. We believe the more stringent criteria express the intent of the PTSD category and will promote more effective research on whether that intent was legitimate or based on misconceptions.

© 2006 Elsevier Ltd. All rights reserved.

Keywords: Posttraumatic stress disorder; DSM-V; Trauma; Acute stress disorder

As investigators outside the field of PTSD and what is more generally referred to as “traumatology,” we appreciate this opportunity to provide a commentary for this special issue on PTSD. The senior author (Spitzer) recalls how, about 30 years ago, he helped introduce PTSD into DSM-III (American Psychiatric Association [APA], 1980) and helped modify the criteria several years later for DSM-III-R (APA, 1987). Since its introduction into DSM-III in 1980, no other DSM diagnosis, with the exception of Dissociative Identity Disorder (a related disorder), has generated so much controversy in the field as to the boundaries of the disorder, diagnostic criteria, central assumptions, clinical utility, and prevalence in various populations. In this regard, it is useful to contrast PTSD with such established diagnoses as major depression, obsessive compulsive disorder and dementia. Only trivial changes in the original DSM-III diagnostic criteria for these disorders appeared in the DSM-III-R and DSM-IV (APA, 1994) and there never has been controversy in the field as to their validity and clinical utility. In contrast, the DSM-III-R and DSM-IV PTSD committees made major changes in original DSM-III diagnostic criteria for PTSD, and some have questioned the existence of the disorder beyond its being a social

* Corresponding author at: 1051 Riverside Drive, New York, NY 10032, United States.

construction (e.g., Scott, 1990; Summerfield, 2001; Young, 1995, 2004). Another indication of lack of consensus regarding the criteria for PTSD is the marked difference between the DSM-IV and ICD-10 diagnostic criteria. Whereas numbing of general responsiveness has been an important component of PTSD throughout DSM-III, DSM-III-R and DSM-IV, ICD-10 does not include numbing as a PTSD symptom in any form.

Although one may quibble with some of the points made by the six papers in this special issue on PTSD, it is clear – at least to us – that they have identified serious problems with the diagnosis. The problems are both conceptual and practical and there are no easy fixes. Bodkin, Pope, Detke, & Hudson (2007) provide data that questions a core assumption of the diagnosis, namely that there is a specific syndrome that is associated with major stress as defined in the A1 and A2 criteria. McNally (2007) attempts to explain the incredibly high prevalence rates of PTSD in the NIVRS study, and suggests that it may have in part resulted from making the diagnosis in many individuals who were not functionally impaired but were merely exhibiting normal human reactions to adversity. Bryant (2007) discusses findings on dissociation and concludes that the assumptions leading to the diagnosis of Acute Stress Disorder (ASD) are flawed. How the diagnosis can be abused in real life settings, both forensic and clinical, is discussed in the Rosen and Taylor paper (2007). Jones and Wessely (2007) note how PTSD has obscured the role of secondary gain in explaining failure to recover from trauma. Finally, McHugh and Treisman (2007) argue that the diagnosis has moved the mental health field from, rather than towards, an understanding of natural psychological responses to trauma.

The most salient unifying theme across these contributions is the questionable validity of the DSM-IV PTSD diagnostic criteria as they now stand, especially in relation to apparent false positives. While making many legitimate points, the papers refrain from attempting to solve the problems they raise, and they do not propose a new set of criteria for DSM-V's PTSD and related categories. In this commentary – at the risk perhaps of being presumptuous – rather than simply replying point-by-point to the authors (because we agree with most of their points), we take this opportunity to make our own suggestions as to what might be done to improve the situation. Table 1 shows suggested changes in the diagnostic criteria for PTSD.

1. Tightening the definition of trauma in PTSD

We believe that a large part of the problem with PTSD concerns the expansion of the PTSD construct of trauma. DSM-I included a category, “gross stress reaction,” which required that the “individual has been exposed to severe physical demands or extreme emotional stress such as in combat or in civilian catastrophe (fire, earthquake, explosion, etc).” Gross stress reaction was eliminated from DSM-II for reasons that are unclear, leaving no category for pathological reactions to trauma. DSM-III, in reinstating a category for responses to extreme stress, eschewed including a listing of specific types of qualifying traumas and chose instead to require “existence of a recognizable stressor that would evoke significant symptoms of distress in almost everyone.” In retrospect, this way of defining trauma is problematic because: (1) it inadequately specifies the intended class of stressors given that many stressors besides traumatic ones might cause distress in almost everyone (e.g., divorce, unwanted sexual overtures); (2) it is not in fact clear that even severe stressors need evoke symptoms in almost everyone due to differences in individual temperament and resilience, and (3) the fact that almost everyone would be distressed does not distinguish normality (as in bereavement) from disorder.

The DSM-III-R addressed the first of these problems (but not the other two) by providing a conceptual definition of severe trauma as “an event that is outside the range of normal human

Table 1
Suggested diagnostic criteria for DSM-V posttraumatic stress disorder

-
- A. The person has been exposed to a traumatic event in which both of the following were present:
1. The person *directly* experienced or witnessed an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
 2. The person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganized or agitated behavior
- B. The traumatic event is persistently reexperienced in one (or more) of the following ways:
1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed
 2. Recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content
 3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific reenactment may occur
 4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
 5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
- C. *Four* (or more) of the following:
1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 2. Efforts to avoid activities, places, or people that arouse recollections of the trauma
 3. Feeling of detachment or estrangement from others
 4. Restricted range of affect (e.g., unable to have loving feelings)
 5. Sense of a foreshortened future (e.g., *unrealistic fears of not having a career, marriage, children, or a normal life span because of one's future being cut short*)
 6. Hypervigilance
 7. Exaggerated startle response
- D. Duration of the disturbance (symptoms in Criteria B and C) is more than 1 month
- E. Either (1) or (2);
- (1) The symptoms develop within a week of the event
 - (2) If delayed onset, the onset of symptoms is associated with an event that is thematically related to the trauma itself (e.g., onset of symptoms in a rape survivor when initiating a sexual relationship)
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning
- G. Not due to an exacerbation of a pre-existing mood, anxiety, or personality disorder or to malingering
-

experience and that would be markedly distressing to almost anyone.” It attempted to illustrate typical events by providing a long list of examples which include a “serious threat or harm to one’s children, spouse, or other close relatives and friends, sudden destruction of one’s home or community; or seeing another person who has recently been or is being seriously injured or killed as the result of an accident or physical violence.” Yet, it is clear that many potential traumatic stressors (e.g., being a crime victim or being involved in an automobile accident) are not outside the range of normal human experience. Moreover, the DSM-III-R construct has been judged by some researchers to be “vague, inaccurate, and unreliable” (First, Frances, & Pincus, 2002, p. 253).

In response, the DSM-IV eschewed both the “would cause distress in almost everyone” and “outside the range of normal human experience” descriptors as characterizations of traumatic stressors. Instead, the DSM-IV explicitly defined the types of events that qualify for a PTSD-trauma as follows: “The person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others.” By clarifying that the event involved actual or threatened death or serious injury,

DSM-IV attempted to bring the definition of traumatic events back into conformity with the DSM-I concept of gross stress (which involved exposure to stressors of comparable severity to combat or catastrophe). However, as the subsequent evolution of the application of the diagnosis has revealed, this improvement was tempered by the fact that words used to specify “mode” of exposure (i.e., experienced, witnessed, or confronted) opened the door to potential over application of the construct. In particular, while directly experiencing or witnessing a terrifying event is in keeping with the original intent, the term “confronted with” is vague enough to have been interpreted to include merely “hearing of the news of a loved one being hurt” (First, Frances, and Pincus, p. 253), an example of what McNally has referred to as “conceptual bracket creep” (McNally, 2003).

We therefore propose that the term “confronted with” be eliminated from Criterion A. To the extent that it refers to direct experiencing, “confronted with” is redundant. To the extent that it means that one hears or otherwise has communicated an indirect report of something horrible, it does not seem to fit the core intent of the category. Also, “experienced” is a vague term, and it would be easy to interpret “the person experienced an event” as referring to an indirect experience (e.g., being in NY at the time of 9/11 and watching the events unfold on TV could be said to be “experiencing the 9/11 attack,” or hearing about the death of a loved one might be described as “I experienced the death of my...”), thus allowing for similar criterion creep via another route. To clarify this point, we propose adding to Criterion A the qualifier “directly,” to yield “directly experienced.”

By attempting to tighten the definition of traumatic stressor in the PTSD criteria, we are not claiming that these are the only stressors that can lead to a PTSD-like syndrome and disorder. The question is an empirical one whether this specified class of stressors is categorically different in its disorder-inducing potential (as was assumed by many when the PTSD diagnosis was formulated) or alternatively whether these stressors are in fact just the prototypical or extreme examples on a dimension that includes many other stressors with perhaps lower but possibly equal syndrome-causing potential. Rather, we are simply attempting to more clearly formulate the originally intended distinction so that research on the criteria can proceed in a non-question-begging way.

2. Non-specificity of PTSD syndrome

Bodkin et al. (2007) raise serious questions about the specificity of the PTSD syndrome as a reaction to severe stress. In particular, they showed that Criteria B–F for PTSD (symptom clusters B–D, duration of at least 1 month, and impairment of functioning) were reported commonly in a psychiatric outpatient population seeking treatment for depression, regardless of whether or not there was exposure to a severe trauma. Indeed, in their sample, the prevalence of the PTSD syndrome was just as great in subjects who had experienced severe trauma as it was in those who had not. This finding suggests that the PTSD syndrome, as embodied in the DSM-IV criteria, may represent a non-specific syndrome of psychiatric distress rather than a distinct syndrome linked to severe trauma exposure. However, the source of the subjects’ responses remains ambiguous and is not clarified by the report. Responses to non-Criterion A stressors in this sample could conceivably have been normal responses that somehow met PTSD symptom criteria due to ambiguities or vagueness in those criteria when applied to “worrisome or troubling” life events. This possibility is supported by the finding in another study that subjects endorsed many posttraumatic reactions when indicating how they responded to the worst movie they had ever seen (Lees-Haley, Price, Williams, & Betz, 2001). Alternatively, the reported symptoms could

represent true PTSD-like symptoms that reflect true disorder following non-Criterion A stressors. A quick examination of the PTSD criteria set suggests a third possibility to explain why so many individuals in the Bodkin et al. study, who presented for treatment for depression, might have fallen under PTSD criteria. Many of the PTSD symptoms (e.g., difficulty concentrating, difficulty sleeping, diminished interest in activities) are likely common in psychiatric outpatient presentations of depression in particular and mental disorders in general. Further, several PTSD symptoms are part of the criteria for other mental disorders as well (e.g., difficulty concentrating is in the diagnostic criteria for both Major Depressive Disorder and Generalized Anxiety Disorder).

To address this problem, and consistent with the suggestions of [McHugh and Treisman \(2007\)](#), we propose that the B, C, and D symptoms of PTSD be evaluated in terms of their diagnostic specificity for differentiating PTSD from other mood and anxiety disorders and that only symptoms related to exposure to a severe trauma be retained. Even though the definitive list of such symptoms needs to be derived from the results of empirical study, from a face validity perspective, the criteria sets should, wherever possible, not include items that are part of the diagnostic criteria for other mood and anxiety disorders. Thus, irritability, insomnia, difficulty concentrating, and markedly diminished interest would be eliminated from the PTSD criteria, allowing for the remaining symptoms in Criterion C and D to be combined into a single symptom list. Although the diagnostic threshold for this combined list would need to be empirically determined, it seems likely it would fall in the range of three to four items.

The Bodkin et al. article also points to a broader problem that has been extensively documented in other research studies ([Gold, Marx, Soler-Baillo, & Sloan, 2005](#); [Mol et al., 2005](#)). Even those who are not seeking treatment, who do not report Criterion A stressors, and who are by and large presumably not disordered (e.g., undergraduates in a course, or random adults in a survey) appear to report PTSD-qualifying symptoms at equal or sometimes higher rates than those reporting Criterion A stressors when asked about PTSD symptoms in relation to whatever life event they consider most worrisome or troubling in their lives. Clearly, PTSD symptom descriptors either (a) include too many general symptoms of negative affect or general responses to negative events, (b) the descriptions are so broadly interpretable that they can be construed to encompass normal responses, or, (c) the core PTSD construct may in fact lack validity.

Even if we leave aside the last possibility of invalidity of the core construct the criteria are aimed to capture, the problem remains that even symptoms most distinctive of PTSD may have normal analogs and must be as specific as possible to pathology versus normal stress responses. Otherwise, the possibility exists that even criteria-satisfying responses to truly traumatic stressors (in the Criterion-A sense) may be false positive normal responses. One of the authors ([Wakefield](#)) argues that one solution to the non-specificity for disorder of the symptom descriptions is for these symptom descriptions to be tightened up with higher thresholds that make them more indicative of pathology rather than normal reactions to highly negative life events. While we refrain in the current proposal from tinkering this much with current symptom criteria, we do consider examples of what [Wakefield](#) suggests. For example, any extremely negative or worrisome event may be recalled unbidden, reviewed, and worked through repeatedly in the memory of a nondisordered individual. Similarly, many nondisordered people generally try to avoid thinking about a highly stressful event and to minimize exposure to reminders of the event, and may find themselves physiologically aroused when memories of the event trigger negative emotions. Thus, [Wakefield](#) argues, such current B-criteria symptoms as “recurrent and intrusive distressing recollections of the event,” “intense psychological distress at exposure to internal or

external cues that symbolize or resemble an aspect of the traumatic event,” and “physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event,” are not sufficiently specific to disordered responses. While threshold qualifiers pose formidable challenges for operationalizing criteria, one might conceptually aim to set the symptom descriptor thresholds higher, requiring recurrent and intrusive distressing recollections of the event “of an intensity, frequency, and/or duration beyond that associated with the expectable emotional pain and lengthy working through of intensely negative life events.” One might require “excessively intense, frequent, or enduring” psychological distress at reminders of the event “beyond the negative emotions expectably associated with recalling such negative life events.” Similar threshold changes might be made for physiological reactivity to distinguish it from arousal due to normal negative emotions upon recalling the event.

Similarly, for current C-criteria symptoms, the descriptors might be aimed at capturing the higher threshold of *excessive* arousal or *excessive* avoidance associated with pathology, taking into account the fact that occasional arousal and avoidance at substantial levels over a long period of time, and estrangement from certain other people associated with the event, can be part of a normal response to intensely negative experiences. Thus, the criteria might aim at some conceptual equivalent of: “*excessively intense, frequent, or enduring* efforts to avoid thoughts, feelings, or conversations associated with the trauma”; “*excessively intense, frequent, or enduring* efforts to avoid activities, places, or people that arouse recollections of the trauma”; and “*generalized (or otherwise unexplained)* feelings of detachment or estrangement from others.” Those most familiar with clinical diagnosis of PTSD might be in the best position to operationalize such thresholds and to consider how best to make the “cut” between likely disorder and likely normality.

3. Ruling out malingering and an exacerbation of a pre-existing mood, anxiety, or personality disorder

Malingering – the intentional production of false or grossly exaggerated physical or psychological symptoms motivated by external incentives – is a potential explanation for any psychiatric presentation, but is of particular concern with PTSD since the diagnosis often results in findings of disability or entitlement to financial compensation. Although malingering is included in the differential diagnosis section of the DSM-IV text for PTSD, we think that it would be useful to specifically remind clinicians that malingering needs to be considered and ruled out. This goal can be accomplished by explicitly including this consideration within the diagnostic criteria.

On a separate matter, [McHugh and Treisman \(2007\)](#) suggest that the symptoms of many individuals given the diagnosis of PTSD are actually due to an exacerbation of a pre-existing mood, anxiety, or personality disorders. This differential diagnosis consideration is included in the criterion that also notes the need to rule out malingering.

4. Deleting acute stress disorder and adding a new V code for acute non-pathological reactions to stress

Acute Stress Disorder was added to DSM-IV in order to identify early responses to severe trauma that were likely to evolve into PTSD. Bryant in this issue, and in other papers (e.g., [Harvey & Bryant, 2002](#)) has questioned this assumption by pointing out the ambiguity of dissociative symptom descriptors on which the diagnosis of ASD heavily depends, and

Table 2

Possible text for Acute Stress Reaction

This category should be used when the focus of clinical attention is on the acute reaction to a major mental or physical stressor, such as assault, accident, natural disaster, or death of a loved one. Exposure to the stressor is followed by an immediate onset of symptoms and generally lasts for only hours or days and gradually abates. Although the reaction may involve serious symptoms, such as transient emotional numbness, narrowing of attention, depersonalization, despair, or marked symptoms of anxiety, the reaction is judged to be within the range of normal human variability in response to extreme stress. If the severity or duration of the reaction is not within the range of normal human variability, Adjustment Disorder should be considered.

weaknesses in the hypothesized association of ASD with later PTSD. Bryant notes that, although the literature indicates that three quarters of individuals qualifying for ASD (at 2–4 weeks) go on to qualify for PTSD (at 1 month or more), only a small minority of PTSD cases start with ASD. Overall, Bryant's review raises questions about the utility of having a separate category for early pathological responses to severe trauma. Prior to DSM-IV, ASD cases were classified as an Adjustment Disorder; we see no reason why use of this category should not be returned to in the DSM-V. We thus propose the deletion of the category of Acute Stress Disorder.

Furthermore, in recognition of the fact that individuals with normal but severe and transiently impairing reactions to trauma may seek the help of a mental health professional (as well as be the subjects of trauma research), we propose that a new condition that may be a focus of clinical attention (also known as a V code) be added to the non-mental-disorder section of DSM-V. While DSM-IV includes a V code for normal bereavement because such individuals sometimes seek professional help, there is no corresponding category for normal stress reactions, despite the same situation holding true. Table 2 shows possible text for this new condition, "Acute Stress Reaction." An additional benefit to including a category for normal stress reactions is that it will emphasize to clinicians that, like bereavement, potentially impairing reactions to stress are not necessarily evidence of disorder. This recognition can address, in part, McHugh and Treisman's (2007) trenchant critique that PTSD pathologizes natural psychological reactions to traumatic events.

By tightening up the criteria for PTSD and by eliminating Acute Stress Disorder, there will undoubtedly be some cases of disordered reactions to stressful events that formerly met criteria in the DSM-IV for one of these disorders but that now in the DSM-V would not. We propose that the category Adjustment Disorder be used to classify such cases since Adjustment Disorder is already intended for disordered reactions to an "identifiable stressor." This broad statement would of course include stressors of a traumatic nature.

5. Delayed onset

Although cases of delayed onset of PTSD have been described (e.g., Gray, Bolton, & Litz, 2004), the phenomenon is considered rare (Burstein, 1985), and presentations have been explained in terms of delayed help-seeking rather than onset (e.g., Solomon, Kotler, Shalev, & Lin, 1989) and/or other clinical issues (McHugh, 1999; Young, 1995). A new more restrictive Criterion E attempts to address some of these concerns.

6. Closing thoughts

We have tried to address a lacuna in the impressively argued articles appearing in this special section: namely, that despite all the criticisms of the PTSD diagnosis, the authors do not suggest,

even as a tentative prod for discussion, what should be done to improve the situation in the DSM-V, short of eliminating PTSD altogether. We believe (and it appears that the authors also believe) that there are genuine stress-related disorders of the type that the PTSD diagnosis was intended to capture. Unfortunately, “conceptual bracket creep” as well as many other issues have called into question the way the DSM-IV approaches these disorders. We have assumed that a first step in dispelling some of the confusion in this area is to formulate more stringent criteria that express the intent of the category and allow for more effective research on whether that intent was legitimate or based on misconceptions. We believe that our suggested changes, based as they are on face validity considerations rather than empirical findings, and subject to disagreements among observers, still succeed in clarifying the DSM-IV criteria so that the construct at least captures more closely what it was intended to capture.

We believe that adoption of current suggestions for changes in the PTSD criteria will at least partially solve some of the problems noted in the papers of this special issue for the *Journal of Anxiety Disorders*. Given the complexity of the issues raised in these papers and concerns for the construct validity of PTSD, one can only hope that the DSM-V committee will acknowledge the problems and face them directly.

References

- Bodkin, A., Pope, H. G., Detke, M. J., & Hudson, J. I. (2007). *Is PTSD caused by traumatic stress?* *Journal of Anxiety Disorders*, 21, 176–182.
- Bryant, R. A. (2007). Does dissociation further our understanding of PTSD. *Journal of Anxiety Disorder*, 21, 183–191.
- Burstein, A. (1985). How common is delayed posttraumatic stress disorder? *American Journal of Psychiatry*, 142, 887.
- First, M. B., Frances, A., & Pincus, H. A. (2002). *DSM-IV-TR guidebook*. Washington, DC: American Psychiatric Publishing Inc.
- Gold, S. D., Marx, B. P., Soler-Baillo, J. M., & Sloan, D. M. (2005). Is life stress more traumatic than traumatic stress? *Journal of Anxiety Disorders*, 19, 687–698.
- Gray, M. J., Bolton, E. E., & Litz, B. T. (2004). A longitudinal analysis of PTSD symptom course: Delayed-onset PTSD in Somalia peacekeepers. *Journal of Consulting and Clinical Psychology*, 72, 909–913.
- Harvey, A. G., & Bryant, R. A. (2002). Acute stress disorder: A synthesis and critique. *Psychological Bulletin*, 128, 892–906.
- Jones, E., & Wessely, S. (2007). A paradigm shift in the conceptualization of psychological trauma in the Twentieth Century. *Journal of Anxiety Disorders*, 21, 164–175.
- Lees-Haley, P. R., Price, J. R., Williams, C. W., & Betz, B. P. (2001). Use of the impact of event scale in the assessment of emotional distress and PTSD may produce misleading results. *Journal of Forensic Neuropsychology*, 2, 45–52.
- McHugh, P. R. (1999). How psychiatry lost its way. *Commentary*, 108, 32–38.
- McHugh, P. R., & Treisman, G. (2007). PTSD: A problematic diagnostic construct. *Journal of Anxiety Disorders*, 21, 211–222.
- McNally, R. J. (2003). Progress and controversy in the study of posttraumatic stress disorder. *Annual Review of Psychology*, 54, 229–252.
- McNally, R. J. (2007). Can we solve the mysteries of the National Vietnam Readjustment Study? *Journal of Anxiety Disorders*, 21, 192–200.
- Mol, S. S. L., Arntz, A., Metzmakers, J. F. M., Dinant, G.-J., Bilters-Van Montfort, P. A. P., & Knottnerus, J. A. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *British Journal of Psychiatry*, 186, 494–499.
- Rosen, G. M., & Taylor, S. (2007). Pseudo-PTSD. *Journal of Anxiety Disorders*, 21, 201–210.
- Scott, W. (1990). PTSD in DSM-III: A case in the politics of diagnosis and disease. *Social Problems*, 37, 294–310.
- Solomon, Z., Kotler, M., Shalev, A., & Lin, R. (1989). Delayed onset PTSD among Israeli veterans of the 1982 Lebanon War. *Psychiatry*, 52, 428–436.

- Summerfield, D. (2001). The invention of post-traumatic stress disorder and the social usefulness of a psychiatric category. *British Medical Journal*, 322, 95–98.
- Young, A. (1995). *The harmony of illusions: Inventing post-traumatic stress disorder*. Princeton, New Jersey: Princeton University Press.
- Young, A. (2004). When traumatic memory was a problem: On the historical antecedents of PTSD. In: G. M. Rosen (Ed.), *Posttraumatic stress disorder: Issues and controversies* (pp. 127–146). Chichester, England: John Wiley & Sons.