THE STRESSOR CRITERION IN POSTTRAUMATIC STRESS DISORDER:

SOME BACKGROUND, ISSUES, EVIDENCE AND IMPLICATIONS

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Supported in part by grant MH R01-059309 and grants from the Spunk Fund, Inc.

October 24. 2008
DSM-I and DSM-II

During World War II, a view developed that psychological symptoms related to combat experiences were:

- normal responses to abnormal situations
- transient unless treated in ways that increased secondary gain
DSM-I (1952)

“Gross Stress Reaction”
under “Transient Situational Personality Disturbance”

“The symptoms are the immediate means used by the individual in his struggle to adjust to an overwhelming situation.

In the presence of good adaptive capacity, recession of symptoms generally occurs when the situational stress diminishes.

Persistent failure to resolve will indicate a more severe underlying disturbance. . . .”
The Vietnam War and Post Traumatic Stress Disorder (PTSD) in DSM-III (1980), III-R (1987), and IV (1994)

New diagnosis of PTSD based very different assumption:

• exposure to “traumatic” stressors is primary

• not only in the onset of symptoms but also in their persistence

• regardless of prior adaptive capacity
Primacy according to DSM-IV (1994)

“The severity, duration, and proximity of an individual’s exposure to the traumatic event are the most important factors affecting the likelihood of developing this disorder.

This disorder can develop in individuals without any predisposing conditions, particularly if the stressor is especially extreme.”
“Primacy” of the Stressor

For both onset and adverse course:

• Strongest = stressors that are necessary and sufficient for the occurrence of the PTSD symptom syndrome

• Less strong = stressors that are paramount in a set of risk factors that are sufficient
  (e.g., stressors that are more strongly related to the symptom syndrome than relevant personal vulnerability factors)

Validity of the claim of “primacy” increases if:

• stressors are part of a dose/response continuum in which their importance in comparison with other risk factors (e.g., personal vulnerability factors) increases with the severity of the stressors
WHAT ARE THESE “TRAUMATIC” STRESSORS IN DSM III, III-R, AND IV?

• DSM-III -- those “that would evoke significant symptoms in almost everyone”

• DSM-III-R -- events that are markedly distressing and “outside the range of usual human experience”
  especially events that threaten the life or physical integrity of the individual or someone close to him or her

  includes witnessing death or serious injury to others

• DSM-IV -- actual or threatened death or serious injury, or a threat to the physical integrity of self or others
  and
  an immediate response of fear, helplessness, or horror,
  (but it need not be as unusual as the DSM-III-R definition requires)
Additional requirement of reported fear, helplessness or horror

Grounds for critics’ questioning:

Requirement has not substantially improved prediction of the PTSD symptom syndrome (Adler et al., 2008)

Report may be affected by recall bias or indicate vulnerable predispositions rather than severity of the stressor (Breslau & Kessler, 2001)
The PTSD symptom syndrome

Distinctive symptoms classified into three groups:

- Re-experiencing
- Avoidance and numbing
- Hyper-arousal
DSM-III-R

1st cluster: Re-experiencing symptoms

At least one of the following:

- recurrent and intrusive distressing recollections of the event
- recurrent distressing dreams of the event
- sudden acting or feeling as if the traumatic event were recurring
- intense psychological distress at exposure to events that symbolize or resemble an aspect of the traumatic event
DSM-III-R
2nd cluster: Avoidance/numbing symptoms

At least three of the following:

• efforts to avoid thoughts or feelings associated with the trauma

• efforts to avoid activities or situations that arouse recollections of the trauma

• inability to recall an important aspect of the trauma (psychogenic amnesia)

• markedly diminished interest in significant activities

• feeling of detachment or estrangement from others

• restricted range of affect

• sense of a foreshortened future
3rd cluster: Arousal symptoms

At least two of the following:

- difficulty falling or staying asleep
- irritability or outbursts of anger
- difficulty concentrating
- hyper-vigilance
- exaggerated startle response
- physiologic reactivity upon exposure to events that symbolize an aspect of the traumatic event
Identification of Criterion Stressors

• DSMs do not provide clear inclusion and exclusion guidelines

• DSMs cannot do this on the basis of existing evidence

• As a result, there is controversy about the matter
Controversy about Criterion Stressor

• Narrow definition focused on objectively very severe events (e.g., McNally, 2003; 2007; Weathers & Keane, 2007)

• Very broad definition that expands well beyond the central focus on objective life threat or other threats to the physical integrity of the individual (e.g., DSM-IV; Maier, 2007)
State of the Evidence

Consider two sets of evidence:

• for broad definition

• for narrow definition
PTSD symptoms and more usual stressful events (well outside DSM Criterion stressors)

Events that do not correspond to traumatic events as described in DSM-III, DSM-III-R, or DSM-IV

- E.g., loss of a job; divorce (Bodkin, Pope, Deke, and Hudson, 2007; Erwin, , Heimberg, Marx, and Franklin, 2006; Kilpatrick, Resnick, Freedy, Pelcovitz, Resick, Roth, S. et al. 1998); Mol, Arntz, Metsemakers, Dinant, Vilter-Van Montfort, & Knottnerus, 2005; Scott and Stradling, 1994)

- Repeated viewing on television of the terrorist attacks on the World Trade Center (both NYC and nationwide samples) (e.g., Schlenger et al., 2002)

Accepted at face value, presence of a Criterion stressor, as currently described, is not a necessary condition for the occurrence of PTSD symptoms
Weathers and Keane (2007):

“The fact that some individuals with low magnitude stressors endorse symptoms of PTSD does not mean they have the disorder. . . .

[W]e would conjecture that a syndrome of PTSD-like symptoms precipitated by a low-magnitude stressor is a different clinical entity than PTSD.”

“Adjustment Reactions” are the appropriate category for such phenomena.
Questioning the primacy of the stressor

Even for more narrowly defined Criterion stressors that focus on life threat and threat to physical integrity:

• Almost axiomatic in many circles to point to “obvious” evidence that most people exposed to such “traumatic” events do not develop PTSD (e.g., Breslau, 2002, Yehuda and McFarlane, 1995; Friedman, Resick, and Keane, 2007, Chapter 1)

• Accepted at face value, this evidence would suggest:

    Criterion stressors are not sufficient for the development of PTSD

    Vulnerability factors may be more important than exposure
The Evidence:

Large scale epidemiological studies that included checklists of “traumatic events”
(Breslau, Davis, Andreski, and Peterson, 1991; Kessler, Sonnega, Bromet, and Nelson, 1995)

The Findings:

Majorities report at least one “traumatic event”

Only small minorities of those reporting such events have developed PTSD
Checklist of Traumatic Events
(Kessler et al., page 1051)

“Did Any of These Events Ever Happen to You?

• You had direct combat experience during a war
• You were involved in a life-threatening accident
• You were involved in a fire, flood, or natural disaster
• You witnessed someone being badly injured or killed
• You were raped (someone had sexual intercourse with you when you did not want to by threatening you or using some degree of force
• You were sexually molested (someone touched or felt your genitals when you did not want them to)
• You were seriously physically attacked or assaulted
• You were physically abused as a child
• You were seriously neglected as a child
• You were threatened with a weapon, held captive, or kidnapped
• Other (‘any other terrible experience that most people never go through’)
• You suffered a great shock because one of the events on this list happened to someone else close to you”
Problems with the Checklist Evidence

- Tremendous variability in severity of actual events reported (Dohrenwend, 2006)

- Checklist categories mask consistent findings of dose/response relationships between differences in severity of exposure and rates of PTSD (e.g., Dohrenwend et al., 2006; Friedman, Resick, and Keane, 2007)
National Vietnam Veterans Readjustment Study (NVVRS)

- 1200 member NVVRS sample of the Theater veterans drawn on a full probability basis from veteran records

- Subsample of 260 male Theater veterans selected on a full probability basis from respondents in 28 Standard Metropolitan Regions (SMRs)

  Received clinical diagnostic examinations by experienced doctoral level clinicians with the Structured Clinical Interview for Diagnosis (SCID)
Probable Severity of Exposure to War-Zone Stressors (four components)

1. Veteran’s military occupational speciality
2. Monthly casualty rate (KIA) during veteran’s service in Vietnam
3. Casualty rate (KIA) in veteran’s larger military unit
4. Level of casualties (KIA) in veteran’s company or other smaller unit during veteran’s service in Vietnam

Composite:
The four components are combined into an overall measure of probable severity of exposure to war-zone stressors.

Resulting four-category variable of exposure probabilities: Very high, high, moderate, and low.
Weighted Percents with Diagnoses of War-related PTSD by Probable Severity of Exposure (MHMs) in Subsample (n=253)

Figure I: Dose/response

Weighted Percents with Diagnoses of War-related PTSD by Probable Severity of Exposure (MHMs) in Subsample (n=253)
Importance of Dose/Response

- If of sufficient magnitude, dose/response relationships may be more consistent with the proposition that the stressor is primary in the development of PTSD.

- Where on the various continua of severity (e.g., duration of exposure to life-threatening situations) the stressor becomes primary is far from clear.
Examples of Exposures that Approach Being Sufficient for PTSD

Study (about 45 to 50 years after their release) of U.S. male prisoners (POWs) of the Japanese (n = 56) and of the Germans (n = 262) during World War II (Engdahl, Dikel, Eberly, and Blank, 1997):

Former POWs of the Japanese:
  lifetime PTSD prevalence rate of 84% and current rate of 59%
Less harshly treated POWs of the Germans:
  Lifetime PTSD prevalence rate of 44% and current rate of 19%

Study (about 20 years after their settlement in refugee community in Long Beach, CA) of adult refugees from the Cambodian civil war and the prolonged terror of the Pol Pot regime of 1975-1979 (n=490) (Marshall, Schell, Elliott, Berthold, and Chi-Ah Chun, 2005)

One year PTSD prevalence rate of 62%
Unanswered questions

1. What particular combinations of exposures in hazardous situations define the extreme end of the dose continuum that qualifies as both necessary and sufficient to lead to the development of PTSD in previously normal persons with “good adaptive capacity”?

2. What types and durations of exposures in hazardous situations lead to more or less adverse course of the disorder once it develops?

3. Do these events in hazardous situations have counterparts in more usual situations in which stressors might be more important than vulnerability factors in PTSD?
Situations in which stressful events occur

- Regular activities involved in domestic relationships, education, work and play that are, by and large, satisfying for most people in most communities in times of peace.

- Hazardous situations of persistent threat to life and physical integrity, including:
  - war-zones
  - human-made disasters
  - natural disasters
What is needed

A typology of major negative events and situations in which they occur that can be investigated for differences in any or all of the following:

- Biological correlates
- Profiles of intrusive, avoidance, and arousal symptoms
- Course of disorder
- Types and severities of impairment of functioning
- Types of co-morbid psychiatric disorders
- Family history of psychiatric disorders
- Types of treatment and treatment outcomes
Answers to basic questions:

• Should PTSD be classified as a stress-induced fear circuitry disorder?

• What is the relation of the PTSD symptom syndrome to the symptom syndromes of other disorders in which environmental stressors that do not involve fear-inducing life threat or threat to physical integrity play a strong role?

• What stressors and situations are necessary for the development of the PTSD symptom syndrome?

• What stressors and situations are sufficient for the development of the PTSD symptom syndrome?
How to think about PTSD

PTSD should be considered an “open scientific construct” to be further tested, revised if necessary, or even discarded.

What differentiates PTSD from most other psychiatric disorders is its bold and highly controversial assumption that the stressor is primary in the development of the disorder in its persistence as well as its onset.