

CONSCIOUSNESS AND OTHER CORRELATES IN THE ASSESSMENT AND TREATMENT OF POSTTRAUMATIC STRESS DISORDER

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Psychotherapy begins with diagnosis, the process of identifying or determining the nature and cause of a disease or injury through a critical analysis of a patient's history, examination, and the evaluation of observed and/or measured data. One of the most vexing diagnostic issues to be encountered in psychology is the clinical and forensic identification of Posttraumatic Stress Disorder (PTSD). The *Diagnostic and Statistical Manual of Mental Disorders IV* (DSM IV, 1994) lists PTSD (309.81) under anxiety disorders, stating that it may result from direct or indirect exposure to trauma. Generally, its essential syndromal features include *intrusive* (invasive) and *avoidance symptoms*, and *hyperarousal* for greater than 1 month, causing clinically significant distress or impairment in important life areas. Indirect traumata may include observing the serious injury or death of another person through violence, accident, war, or disaster or the chance encountering of a corpse or body parts. Although Adjustment Disorder and PTSD both require psychosocial stressors, PTSD is elicited by extreme stressors and specific symptoms, while Adjustment Disorder may be triggered by a stressor of any severity and can involve a wide range of symptoms.

Forensic mental health experts are occasionally required to assess emotional damages--including PTSD--claimed by a victim or family within the context of life histories. These include preexisting mental conditions and prior experiences that dispose the victim toward greater vulnerability to trauma. It is assumed that, in their assessment, they would also consider the possibility of feigning, dissimulating, malingering, or exaggerating symptoms. Assessments of this type are valuable in establishing treatment plans/goals and in helping juries evaluate the victim's credibility and degree of existent damage.

Although an ever-growing body of literature and research information on PTSD is extant, the goal of this writing is to provide a brief overview of this complex syndrome, its antecedents and precipitants, components of the experience and treatment implications, adding the need to consider PTSD from a systems of consciousness model. Subsequent writings will examine these aspects in greater depth.

FACTORS ASSOCIATED WITH THE PTSD SYNDROME: THE MANDATE FOR COMPREHENSIVE ASSESSMENT

Experimental (e.g., Moradi, A. R., Taghavi, M. R., Neshat Doost, H. T., Yule, W., & Dalgleish, T., 1999) and clinical research has shown that at least 7 factors are associated with PTSD as antecedents, precipitants, or collateral events and/or features of PTSD.

1. Pre-existing traumas.

These have a cumulative or sensitizing effect upon the ease of acquisition of later trauma (Blanchard & Hickling, 1997; Brewin, Dalgleish & Joseph, 1996; McKenzie & Wright, 1996; Resnick, Yehuda & Foy, 1995).

2. The pretraumatic state, the immediate social environment, the nature of the trauma, the dynamics of the traumatic episode, and the nature of the posttraumatic state.

These contribute to the stability of the disorder (Woolston, 1988).

3. Recent life events, chronic strains, and social supports

Risk of increased posttraumatic stress (PTS) symptoms following a traumatic event is associated with other life events, sexual assault, and household strain. The level of PTS varies according to the trauma after adjusting for demographics. Women and younger adults reported more PTS than other subjects (Ullman & Siegel, 1994).

4. Negative life events during the year before the trauma, health problems during the previous ten years, and a personality trait characterized by high emotional reactivity (Tjemsland, Soreide, & Malt, 1998).

5. Personality disorders.

These may occur in 5 to 15 percent of the population. Victims with personality disorder not only have a maladaptive response to stress, but elicit dysfunctional responses in a pervasive pattern of interpersonal stress (Adams, 1997).

6. Worldview:

After trauma, one's worldview (in German, *Weltanschauung*) may alter. This is the general, overall perspective used to perceive and interpret reality, a compilation of beliefs about life and the universe held by an individual, or existential beliefs supporting one's existence. The altered worldview of PTSD victims includes perceptions of heightened vulnerability, with similar results across different types of trauma (Gluhoski & Wortman, 1996).

7. The degree of trauma and its comorbidities

There is a correlation between the severity of PTSD and the presence of other disorders, including depression, substance abuse disorders, adjustment disorders, psychosomatic disorders, and antisocial behavior (Rundell, Ursano, Holloway, & Silberman, 1989).

The sum of the above factors, including implications of an alteration in philosophy and worldview, introduces a novel concept into our understanding of PTSD: the need to apply information from studies of human consciousness and the application of systems of consciousness to appraise and treat the syndrome.

DEFINING CONSCIOUSNESS

Typically, consciousness has been defined as "the state of being aware, or perceiving physical facts or mental concepts; a state of general wakefulness and responsiveness to environment; a functioning sensorium" (Stedman's Medical Dictionary, 1996). In a broader sense, however, it means a sense of one's personal or collective identity, especially as a complex of attitudes, beliefs, and sensitivities held by or considered characteristic of an individual (The American Heritage Dictionary of the English Language, 1996). Reflecting on the evolution of psychology, Webb (1997) says "Throughout the development of clinical and industrial psychology, the conscious states of persons in terms of their current feelings and thoughts were of obvious importance. The role of consciousness, however, was often de-emphasized in favor of unconscious needs and motivations. Trends can be seen, however, toward a new emphasis on the nature of states of consciousness." In agreement, Melvyn Hammarberg, psychologist and anthropologist at the University of Pennsylvania and author of Penn Inventory for Posttraumatic Stress Disorder Test (1992) agrees that the issue of consciousness and the impact of trauma has been seriously overlooked in addressing PTSD and requires more research attention (Personal communication, March 3, 1999).

ORDINARY AND NONORDINARY CONSCIOUSNESS

A leader and pioneer in consciousness research, psychologist Charles T. Tart (1975) refers to ordinary consciousness as *a patterned construct resulting from the interaction of attention/awareness with cognitive structures shaped by physical, personal (e.g., genetic), and*

interpersonal (social, cultural) factors that reinforce certain potentials while suppressing others in the formation of an individual's world view. He (Tart, 1977) describes "ordinary" consciousness as a culturally-defined *discrete state of consciousness* delineated by a *high level of ratiocinative processing* (executive functioning) and a *lower level of imaging* (nonrational) *ability*. Following a review of research Cooperstein (1990) offered the following observations on consciousness: "Ordinary" consciousness is a culturally-relative construct that refers to a relatively stabilized set of cognitive processes applied to everyday subsistence, or survival, operations.

In Western culture *ordinary consciousness* is distinguished from *nonordinary consciousness* by the following features:

- Dominant verbal-analytical thought processes incorporating object-based logical operations.
- Attention/awareness directed primarily towards the environment, although a background awareness of emotion, imagery and body sensations exists.
- Intact, operational external reality-testing.
- A personalized (egoic) awareness of self-as-object (i.e., the shape, size, discreteness and boundaries of one's physical and psychological self are experienced as *familiar* and *continuous over time, place and situations*).
- Emotional responses are regulated and restricted to a socially-sanctioned range.
- There is a preconscious awareness of one's orientation relative to the coordinates of space and time.
- External, object reality is perceived as congruent with the cultural consensus.
- There is correspondence between one's sense of time and external activities within the sociocultural environment that is experienced as a "flow", or movement.
- There is a sense of personal (egoic) control (or "will") over thoughts, emotions, and actions.
- Cognitive contents (e.g., memories, discursive thoughts) are recognized as identical with the self with which one is familiar.
- Language is an effective medium for the communication of experiences.
- Meanings may be attached to external and internal (subjective) events/experiences, but with greater emphasis placed upon the former.

In contrast, nonordinary consciousness (defined by Ludwig, 1972) includes:

- Deviations from normal cognitive operations that include disturbances of attention, concentration, memory, and reality-testing.
- Alterations in time sense.
- Perceived loss of personal control.
- Decreased control over emotions, effecting extremes of emotional responsiveness/expression.
- Body image changes involving a decreased sense of the boundaries between self and others, depersonalization, and mind-body dissociation.
- Perceptual distortions experienced as increased visual and other forms of

imagery, hyperacuteness of perception and perceptual aberrations.

- Increased meaning or significance attached to subjective experiences, ideas, or perceptions.
- Increased nonrational, primary process thinking.
- Language fails to adequately communicate an experience to someone who has not undergone a similar experience.
- Susceptibility is increased towards accepting and/or automatically responding to specific suggestions involving alterations of personal experience. (e.g., Wickramasekera, 1998 demonstrated that PTSD victims show significantly higher hypnotizability scores).

As a result of the combined effects of the above, the individual's ordinary configuration of consciousness is altered.

As we look at consciousness closely, we see that it can be analyzed into many parts. **Yet these parts function together in a pattern: they form a system While the components of consciousness can be studied in isolation, they exist as parts of a complex system, consciousness, and can be fully understood only when we see this function in the overall system.** Similarly, understanding the complexity of consciousness requires seeing it as a system and understanding the parts (p.3, italics added).

MODELS OF CONSCIOUSNESS AND PTSD: THE NEURAL NETWORK MODEL AND DISCONTINUOUS EXISTENTIAL ALTERATIONS

Li & Spiegel (1992) evaluated PTSD in relation to consciousness, applying a model of consciousness based on the behavior of certain neural networks during and after trauma as instrumental in promoting dissociative dysfunctions of consciousness. They present them within a conceptual framework as seen in 2 dissociative disorders: (formerly) Multiple Personality Disorder (MPD) and PTSD.

In terms of the neural network model, ordinary consciousness is approximated by the succession of more or less continuous, stable states through which a net alters in response to changing environmental demands and constraints. In contrast, *dissociation is a relatively discontinuous leap* (Author's note: We should also add involuntary) *from one state to another, each with its own dimensions of reality and self.* Persistent traumatic schemata and their easy reactivation along with dissociative features found in PTSD can be modeled via parallel distributed processing.

Li and Spiegel's data suggest that the fundamental processes involved in the PTSD experience consist of (1) an initial *subconscious* activation of a preparatory set triggered by situational and/or internal cues (2) intensified by the victim's attention, physiology, and cognitive processes and (3) shaped by their personal attitudes and system of beliefs. This results in (4) an ascendance of ordinarily subconscious primary processes, producing nonordinary modifications in time and space orientation, meanings, emotional responsiveness, and motor activity that contribute towards (5) *a global alteration in one's perception of the environment and sense of self as part of an ontological change marked by an increased, uncritical acceptance of past realities.* The latter may be interpreted as an "existential shift" (Ehrenwald, 1978), an alteration in the *Generalized Reality Orientation* or "the structured frame of reference in the background

of attention which supports, interprets, and gives meaning to all experiences" (Shor, 1972, p. 242).

ASSESSING PTSD: PTSD BEHAVIORS AND REACTIONS

Based upon existing research, the PTSD victim would be expected to manifest overt signs such as avoidance activities and a clinically significant level of impairment in an occupational or educational setting. Particularly dramatic are episodes in which "flashbacks" occur: victims may demonstrate visible signs of physiological arousal, fear, and hypervigilance. During these periods, reality markers of time, space and self no longer define the immediate situation and the victim is thrust into an earlier, traumatic episode with many (if not all) of the concomitant emotional and psychophysiological signs.

Cognition

A century ago, Pierre Janet, the French psychologist and early investigator into hypnosis, proposed that events or information integrated into existing mental systems and would lose their separateness, becoming distorted by prior experience and one's emotional state at the time of encoding and recall (van der Kolk & van der Hart, 1991). PTSD victims are reactive to exposure to events or people resembling or symbolizing aspect(s) of the traumatic event(s). Symbols represent something else by association or resemblance and are associated with subconscious operations. A symbol is "essentially an unconscious content that is altered by becoming conscious and being perceived, and...takes its colour from the individual consciousness in which it happens to appear" (Jung, 1980, p.5).

By definition, PTSD is accompanied by memory disturbances, consisting of hypermnesias (exceptionally vivid and accurate memories) and amnesias. PTSD often leads to recurrent and intrusive recollections of events triggering painful memories. In attempting to guard against these intrusions, the individual deliberately attempts to avoid activating thoughts or reminders in the form of conversations, places, or symbols. This appears to establish a state of inter and intrapersonal tension in which surfacing memories or associations cause emotional reactions which, in turn, impact negatively upon attention, concentration and the completion of tasks.

Emotions

Typically, the PTSD victim has experienced one or more situations in which s/he felt intensely painful emotions of fear in combination with helplessness, horror and, at times, repugnance. The association between memories of the event(s) and the affective reactions they trigger set the stage for either avoidance of emotions by distracting thinking away from triggering memories and/or a form of self-anesthesia in which they attempt to numb themselves to the painful emotional reactions.

Easily irritated, particularly when memories near surfacing, angry outbursts are not uncommon. Some PTSD victims, in hardening themselves, lose touch with "softer" sentiments, demonstrating a reduced capacity for intimacy and affection, which are associated with making themselves emotionally vulnerable.

Physiology

Beyond the conscious control or mediation of the PTSD victim, the *hypervigilance*, the *exaggerated startle response*, *difficulty with sleep onset and maintenance*, recurrent *distressing dreams* and *reduced ability to feel sexuality*, all lead to the inference that

considerable subconscious (or non-conscious) involvement is linked with physiological manifestations. Intense stress results in the release of stress-responsive neurohormones, such as cortisol, epinephrine, norepinephrine, etc. These help the individual muster the necessary energy to deal with the stress. *Chronic and persistent stress, however, reduces the effectiveness of the stress response and induces desensitization* (Axelrod, 1984).

Among PTSD cases I have diagnosed and treated, a middle-aged female motor vehicle accident victim concealed her clinical signs from medical practitioners, often denying or minimizing them. However, I discovered that she was prone to severe cramping of the forearm musculature while driving and, at times, while sleeping. Questioning revealed that she, unconsciously, anticipated being hit by a vehicle again, gripping the steering wheel with such anticipatory force that she actually caused the muscular sprains herself.

Blanchard, Kolb, Pallmeyer, and Gerardi (1982) found that psychophysiological comparisons between male Vietnam veterans suffering from PTSD and nonveteran controls showed that the two groups responded differently to combat reminders in measures of heart rate (HR), systolic blood pressure, and forehead electromyography (EMG). HR responses led to correct classification of 95.5 percent of the combined sample. Similarly, in a replication study of physiological measures of injured motor vehicle accident victims and non-injured controls, Blanchard, Hickling, Buckley, Taylor, Vollmer, and Loos (1996) found HR useful in distinguishing MVA victims with PTSD from those with subsyndromal PTSD and non-PTSD. The initial psychophysiological assessment results predicted 1-year follow-up clinical status for the majority of individuals who initially met criteria for PTSD.

Wickramasekera (1998) defines 3 risk factors associated with PTSD symptom intensity. These are *high hypnotic ability (high dissociation)*, *low hypnotic ability (low dissociation)*, and a *high Marlowe-Crowne Social Desirability Scale score* (see Crowne & Marlowe, 1960). The latter measures individual differences in social-desirability responses, but does not measure a subject's willingness or unwillingness to admit maladjusted symptoms but will quantify whether subjects do admit to such symptoms. It consists of culturally acceptable statements that are probably untrue of most people and undesirable statements. *These measures may produce incongruent responses between psychological measures (e.g. no perception or memory of negative emotions) and physiological (e.g. sympathetic activation, high skin conductance, high heart rate, high blood pressure) measures of threat perception.* These risk factors reduce or block negative emotions from conscious awareness, but not from behavior (e.g. violence, avoidance, substance abuse) or physiology (e.g. migraines, autonomic nervous system dysregulation, musculoskeletal pain).

Sleep

As yet another example (in a non-forensic case), a 38 year old man presented with insomnia and sleep maintenance difficulties at a sleep laboratory where I am associated. History elicited nothing remarkable. However, a few weeks after initiating contact, he revealed that he served a tour of duty during the early years of Vietnam involvement, almost 23 years before. During that time, he was under orders not to return enemy fire even if fired upon, causing a sense of *fear, helplessness and vulnerability*. His base camp was attacked suddenly while he was digging a trench. He jumped into it for cover, thinking that this trench might become his grave. Upon returning home, he realized that he would be on active reserve and could be called back to duty at any time. Using a

guided imagery approach, a forgotten memory appeared: he recalled making a commitment to himself not to not relax his vigilance as he could be returned to the war zone. By doing so, he affirmed a need to remain alert or hyperalert, a light-sleeping condition he developed while in Vietnam. This persevered subconsciously long after his active reserve status ended and was reactivated by what was perceived as minor stresses in his present existence.

Social Interaction and Social Reality

There may be a diminished responsiveness to social reality. Individuals who arouse recollections of traumatic situations may be avoided. If avoidance is not possible, dissociative feelings of detachment or estrangement are possible, apparently a fear conservation reaction.

Altered Environmental Awareness, Altered Sense of Self & Dissociation

Dissociation is described as “a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment. The disturbance may be sudden or gradual, transient or chronic” (DSM IV, 1994). Posttraumatic Stress Disorder (PTSD) may be conceptualized as part of a dissociative spectrum in which recall/re-experiencing of the trauma (flashbacks) alternates with numbing (detachment or dissociation), and avoidance (Turkus, 1992; also see Briere, Evan, Runtz, & Wall, 1988; Carlson & Rosser-Hogan, 1991; Goodwin & Reynolds, 1987; Jaschke & Spiegel, 1992; Kuch & Cox, 1992; Mellman, Randolph, Brawman-Mintzer, Flores, & Milanes, 1992; Roszell, McFall, & Malas, 1991; Shalev, Schreiber, & Galai, 1993; Southwick, Yehuda, & Giller, 1993).

In the PTSD victim’s response to the external environment, similar to the social changes, there are “flashbacks,” or dissociative revivifications of intense experiential and psychological distress during which aspects of the event are relived. These are varying periods of dissociations or displacement in time and space, the fundamental indices of consciousness in our relationship to the physical world. Simultaneously, there is a diminished responsiveness to physical reality, an obvious, altered worldview, or reality (derealization) and hypervigilance towards threat in spite of the safety of the actual situation.

Relating to one’s person, identity, or sense of self, there are dissociative disruptions that may be quite brief or last for several hours or days in the normally integrated functions of consciousness, memory, identity, or perception of the environment. With this may be a sense of a foreshortened future. The altered sense of personal self (depersonalization) may be associated with feeling detached from others and appear as diminished responsiveness to the social world.

Under ordinary conditions, many traumatized people (and animals) have a fairly good psychosocial adjustment (Green, A., 1980; Hilberman, & Munson, 1978; Kilpatrick, Veronen, & Best, 1985). When exposed to stress, however, they react differently and may feel or behave as if the trauma was recurring. Apparently, high arousal states promote retrieval of traumatic memories and/or behaviors associated with earlier traumatic experiences. Traumatized individuals regress to emergency behaviors in response to minor stresses that are not relevant to their immediate situation (e.g., a patient having lunch at his country club prior to a round of golf heard a helicopter flying low overhead and darted under the table for protection).

Spiegel, Hunt, and Dondershine (1988) examined hypnotizability in veterans with PTSD contrasted with a normal control group and four patient samples. The results demonstrated that *PTSD victims show significantly higher hypnotizability scores* than patients with schizophrenia, major depression, bipolar disorder-depressed, dysthymic disorder, generalized anxiety disorder, and the controls. This supports the hypothesis that dissociation effects may be used as defenses during and after traumatic experiences.

Bremner and Brett (1997) examined dissociation in premilitary, combat-related and postmilitary traumas and the presence of long-term psychopathology in Vietnam combat veterans with and without PTSD. Most interesting was the finding that PTSD victims reported *higher levels of dissociation at the time of combat-related traumatic events* than non-PTSD patients. These higher levels of dissociative states persisted in PTSD victims as higher levels of dissociation in response to postmilitary traumatic events. The dissociative responses to combat trauma were linked with higher, long-term dissociative symptoms as measured by the Dissociative Experience Scale and an increased number of "flashbacks" since the time of the war. The findings are congruent with earlier concepts that traumatic dissociation may be a sign of long-term psychopathology.

The impact of cognition, emotions, physiology, sleep, social interaction and social reality all blend to influence altered environmental awareness and an altered sense of self culminating in an altered state of consciousness (ASC) that is pathological and discrete from the victim's ordinary consciousness characteristics. In combination with the victim's personal history, personality, and other factors cited earlier in this writing, these features intermingle as is illustrated below.

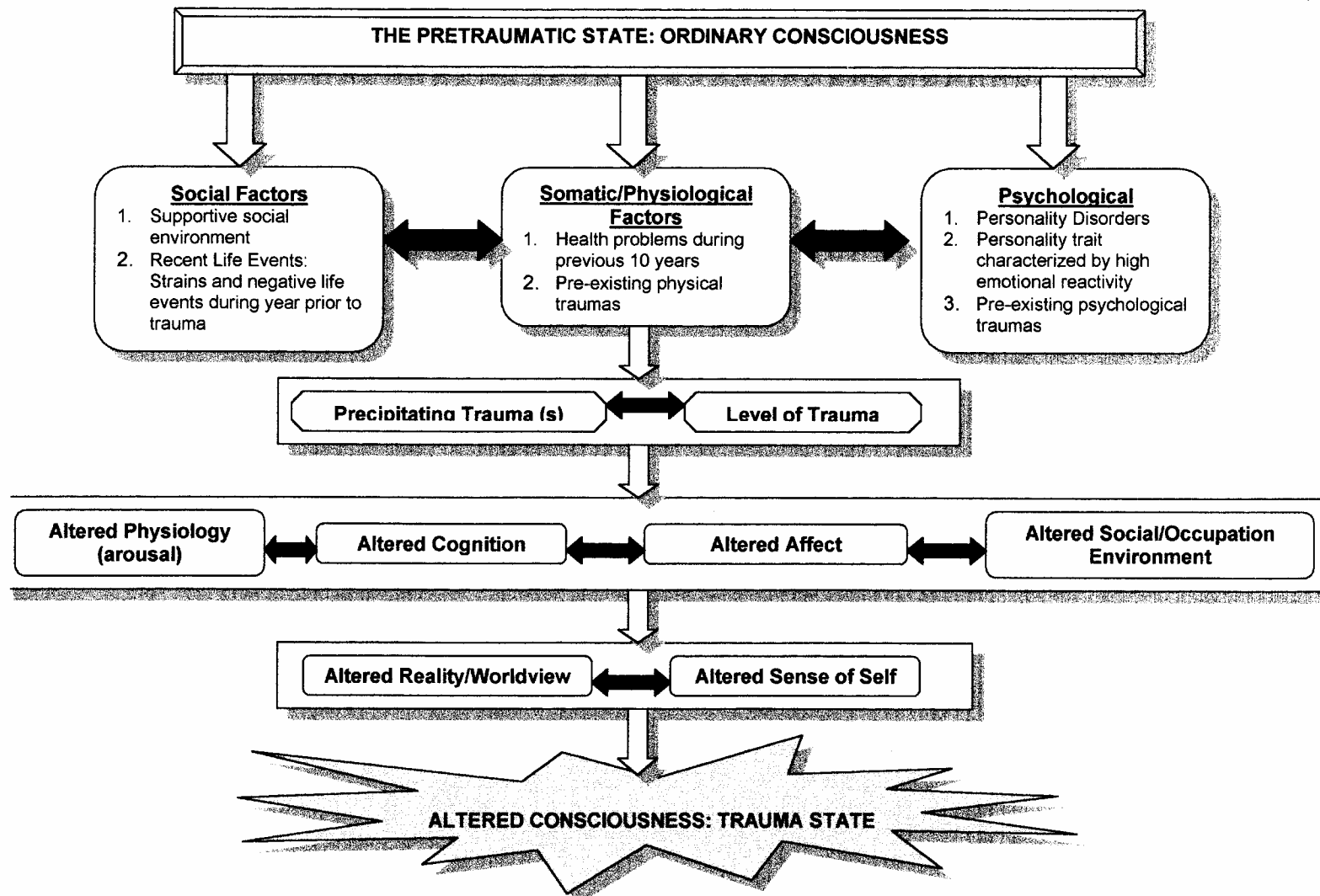


Fig. 1 Precursors & correlates of Posttraumatic Stress Disorder: Applying a systems of consciousness approach

SUMMARY & TREATMENT CONSIDERATIONS

PTSD is a diagnostically complex phenomenon requiring a multidimensional evaluation including clinical interviewing, extensive background history, adequate psychological testing, test interpretation, and psychophysiological assessment. These are imperative for diagnosis, treatment and competent testimony (Levit, 1986). In my practice, interviewing, objective psychological testing, malingering/exaggerating/dissimulating measures (e.g., MMPI-2 validity and PTSD scales, Structured Interview of Reported Symptoms [SIRS; Rogers, Bagby, & Dickens, 1992]) and physiological responses to positive, negative and neutral stimuli are merged, attempting to sample the biopsychosocial model of PTSD as reported by Scrignar (1988) in assessing Environment, Encephalic Events, and Endogenous Events.

Consequently, to appropriately and comprehensively assess PTSD we must examine

- (a) the nature and degree of trauma
- (b) the trauma history
- (c) the pretraumatic state (including chronic strains, negative life experiences in the year before the trauma)
- (d) health problems over the preceding ten years
- (e) recent life events
- (f) personality traits and disorders
- (g) the immediate social surround
- (h) dynamics of the traumatic episode(s)
- (i) the posttraumatic state
- (j) social supports
- (k) the existence of a temporarily or permanently altered worldview and belief system resulting from traumatization.

Responses to traumata are of such consistency across experiences that these reactions appear to be normative reactions to overwhelming and uncontrollable experiences; this is supported by vast, growing literature on combat trauma, crime, natural disaster, and accidents.

The trauma response typically involves hypermnesia, hyper-reactivity to stimuli and traumatic reexperiencing that coexist with psychic numbing, avoidance, amnesia and anhedonia. In many victims, the PTSD response diminishes with the passage of time: in others it persists. Considerable research remains to identify which victims are most flexibility and which are most liable.

Contrary to the symptom-specific expectations of insurance reviewers, current research demands flexibility and comprehensiveness in treating PTSD. In some instances (see Foa, Hearst-Ikeda, & Perry, 1995), brief cognitive-behavioral treatment undertaken shortly after assault reduces the reexperiencing of severe arousal symptoms as well as depression. However, a history of physical abuse in childhood has been strongly correlated with dissociative symptoms later in life as well as combat experiences in veterans (Spiegel, & Cardena, 1990). As dissociative symptoms during and soon after traumatic experience predict later PTSD, brief, symptom-focused treatment may not always be applicable.

Hypnotic procedures may be helpful because the population has been shown to be highly hypnotizable. Hypnosis provides regulated access to painful memories that may otherwise be denied access to conscious awareness. In treating PTSD victims, dissociated traumatic memories are connected with a positive restructuring of involved memories, a cognitive reorientation. Accordingly, victims are helped to confront and manage traumatic experiences by inserting them into a new context meaning or "worldview." Feelings of helplessness are

endorsed while experiences are interlaced with restructured memories, emphasizing positive efforts at self-protection, affection with the living and those who may have died, or the capacity to control events and the environment at other times.

Although the use of medication use a modest, clinically meaningful effect on PTSD, in their literature review on the effectiveness of PTSD treatments, Solomon, Gerrity, and Muff (1992) found more robust effects for behavioral techniques involving direct psychotherapeutic intervention in reducing PTSD intrusive symptoms. There is a caveat, however, in that complications were reported from the use of these techniques in victims with collateral psychiatric disorders. Cognitive therapy, psychodynamic therapy, and hypnosis are also promising, but further research is needed.

Psychodynamic psychotherapy focuses on helping the victim examine their reactions to the physical or emotional personal violations of the traumatic event(s). The goal is to increase awareness of intrapersonal conflicts and their resolution. The victim is guided towards developing increased self-esteem, self-control, and a regenerated sense of personal integrity and self-confidence.

Group therapy may help PTSD victims develop a reference group and a sense of community, reacquiring the capacity to relate to others in a controlled, health-inducing manner and setting.

Most PTSD treatment is outpatient. When symptoms make it impossible to function or lead to other symptoms (e.g., alcohol or drug problems) inpatient treatment may become necessary

Effective psychological and pharmacological treatments are available for PTSD. Medications may be used as a complement to psychotherapy to help sleeplessness and hyperarousal. Psychotherapy restores the victim's necessary sense of control while decreasing the impact of past events over present experience. The sooner a victim is diagnosed and treated, the more likely s/he is to recover from trauma. A sense of safety and control in the victims' lives must be re-established to help them feel effective and secure enough to embrace the feared reality of the events that transpired.

Social and familial support may be critical. Time must be permitted for grief and mourning, while communicating about events and receiving support for feelings of guilt, anger, self-blame, and depression. A treatment plan must be developed with the victim to help establish what is needed to restore a sense of confidence, control and predictability to life.

Finally, forensic proof of the existence of PTSD requires meeting many of the needs and conditions cited here. However, even when presented with solid, empirical evidence of PTSD, adversaries often attempt to deny its existence or, as I have seen lately, attempt to displace responsibility for current distresses onto earlier events or injuries. As objective forensic specialists, our primary professional responsibility is to the justice system. However, in serving the court, we may also aid bona fide victims through responsible, detailed, and thorough documentation of diagnosis and research-supported treatment.

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