

Hot Take

Post Traumatic Stress Disorder vs. Traumatic Brain Injury

This aligns with my grad studies and I think it's fascinating so I deep dove into a comparison/contrast of PTSD and TBI.

Post Traumatic Stress Disorder

- A. Defined in the DSM-III (Diagnostic and Statistical Manual of Mental Disorders) as "events outside the range of normal human experience."
- B. DSM-IV presents criteria for PTSD:

Criterion*	Description	Specific examples	Requirements	Compared with DSM-IV
Criterion A	Exposure to stressor	<ul style="list-style-type: none"> • Direct exposure • Witnessing trauma • Learning of a trauma • Repeat or extreme indirect exposure to aversive details 	DSM-5 recognizes that exposure to trauma can occur either by direct or indirect confrontation with extreme trauma	Specific definition of details of the stressor needed, including repeated experience or extreme exposure to details of events
Criterion B	Intrusion symptoms	<ul style="list-style-type: none"> • Recurrent memories • Traumatic nightmares • Dissociative reactions (flashbacks) • Psychological distress at traumatic reminders • Marked physiological reactivity to reminders 	At least one of these five examples is required	No change, but further clarification of the dissociative quality of flashbacks needed
Criterion C	Persistent avoidance	<ul style="list-style-type: none"> • Trauma-related thoughts or feelings • Trauma-related external reminders such as people, places or activities 	At least one of these two examples is required	DSM-IV did not separate the avoidance criterion
Criterion D	Negative alterations in cognitions and mood	<ul style="list-style-type: none"> • Dissociative amnesia • Persistent negative beliefs and expectations • Persistent distorted blame of self or others for causing trauma • Negative trauma-related emotions: fear, horror, guilt, shame and anger • Diminished interest in activities • Detachment or estrangement from others • Inability to experience positive emotions 	At least two of these seven examples are required	DSM-IV noted social estrangement and restricted the range of affect; numbing redefined to positive rather than all affects
Criterion E	Alterations in arousal and reactivity	<ul style="list-style-type: none"> • Irritable and aggressive behaviour • Self-destructive and reckless behaviour • Hypervigilance • Exaggerated startle • Problems concentrating • Sleep disturbance 	At least two of these six examples are required	Self-destructive and risk-taking behaviours were not defined in DSM-IV
Criterion F	Duration	Must experience criteria B, C, D and E for >1 month	Acute stress disorder is diagnosed for symptoms occurring for <1 month post trauma	No change
Criterion G	Functional significance	Impairment in social, occupational or other domains	Disability in at least one of these domains is required	No change
Criterion H	Exclusion	Not attributable to medication, substance use or other illness	Symptoms must not be secondary to other causes	Not stated in DSM-IV
Subtypes	<ul style="list-style-type: none"> • Dissociative subtype: used when depersonalization and derealization occur in tandem with other symptoms described above. • Delayed subtype: used to describe the emergence of symptoms following a period post trauma in which symptoms were not present or were present at a subthreshold level. 			

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(Yehuda, et al., 2015)

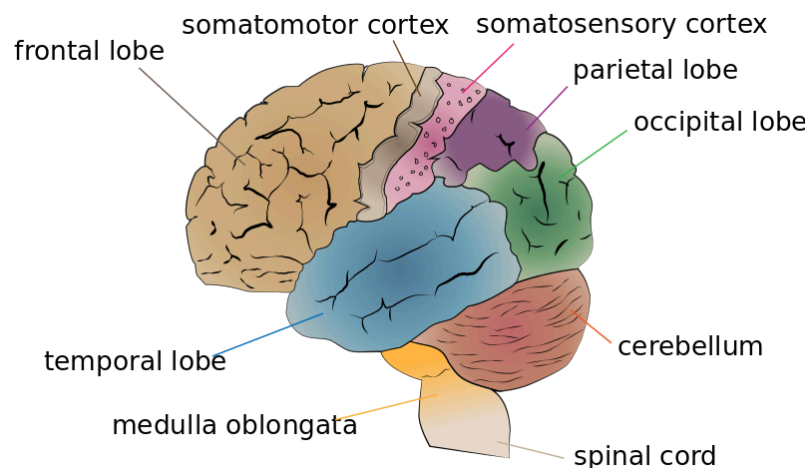
El presents with...(*I only included the obvious symptoms that related to the criteria which we actually see in the show.)

- a. Criterion A: exposure to stressor
 - i. Direct exposure (blood on the lapel of his jacket as if he held Kathy in the immediate aftermath)
 - ii. Witnessing trauma
- b. Criterion B: intrusion symptoms
 - i. Recurrent memories
 - ii. Traumatic memories

- iii. Physiological distress at traumatic reminders
- iv. Marked physiological reactivity to reminders (driving esp)
- c. Criterion C: persistent avoidance
 - i. Trauma-related thoughts or feelings
 - ii. Trauma related external reminders such as people, places, or activities
- d. Criterion D: negative alterations in cognitions and mood
 - i. Persistent distorted **blame** of self or others for causing trauma
 - ii. Negative trauma-related emotions: fear, guilt, horror, shame, anger
 - iii. Detachment or estrangement from others
- e. Criterion E: alterations in arousal and reactivity
 - i. Irritable and aggressive behavior (the punch to the wall)
 - ii. Hypervigilance
 - iii. Exaggerated startle
 - iv. Problems concentrating
 - v. Sleep disturbance
- f. Criterion F: duration
 - i. Diagnosis of post traumatic stress disorder must experience criteria B, C, D, and F, for >1 month (acute stress disorder is diagnosed for symptoms occurring for < 1 month post trauma) (Yehuda, et al., 2015).

B. Interesting segue into my next point:

- a. Individuals with mild TBI appear more susceptible to PTSD than people who have suffered trauma without TBI.
- b. Let's talk neuro...
 - i. Lobes of the brain (anterior to posterior)
 - 1. Frontal
 - 2. Temporal
 - 3. Parietal
 - 4. occipital



(Bhatnagar, S.C., 2018).

- C. Episode 1.02 Izak Bekher & Associates (™) Attack
 - a. El sustains three different blows to the head in this scene
 - b. Sucker punch (head on)
 - c. Hard blow to right side of his head (fist)
 - d. Pistol whip to the left side of this head (gun)
 - e. All injuries are primarily clustered around the forehead and temple region
 - i. Frontal lobe of the brain (more on this below)
- D. El sustained a closed head injury (mTBI)
 - a. Alteration of consciousness with post-traumatic amnesia (up to 24 hours)
 - i. Scene with El, Bell, and Moennig in the aftermath of attack trying to discern what he remembers. (Ep 1.03)
 - b. Most people do not seek treatment
 - c. Neurophysiological deficits related to phonemic fluency, mental flexibility - both are associated with frontal network dysfunction
 - d. signs /symptoms of CHI/mTBI may not appear for days or weeks
 - i. Difficulty thinking clearly, irritability, dizziness, sleeplessness and trouble falling asleep, difficulty concentrating, nervousness/anxiety
 - ii. All vary depending upon the type, severity, location, age, health, and pre-trauma status of the individual (Bhatnagar, S.C., 2018).
 - 1. Pre-trauma status: El was already experiencing acute stress disorder (on its way to PTSD) before the attack, thus compounding the effect.

Symptoms usually fall into four categories:

Thinking/ Remembering	Physical	Emotional/ Mood	Sleep
Difficulty thinking clearly	Headache Fuzzy or blurry vision	Irritability	Sleeping more than usual
Feeling slowed down	Nausea or vomiting (early on) Dizziness	Sadness	Sleep less than usual
Difficulty concentrating	Sensitivity to noise or light Balance problems	More emotional	Trouble falling asleep
Difficulty remembering new information	Feeling tired, having no energy	Nervousness or anxiety	

(CDC)

- E. Frontal lobe controls an individuals' executive functioning
 - a. Executive functioning

- i. Working memory - ability to hold and manipulate information over short periods of time (like memorizing someone's phone number as they say it to you)
 - ii. Mental flexibility - ability to switch attention to various stimuli in the environment
 - iii. Self-control - ability to set priorities and resist impulsive actions
- F. A blow to the frontal lobe could result in an impairment of executive functioning
 - a. Impaired cognition (reasoning, self-monitoring, attention, abstraction, and problem solving, impaired judgment, reduced comprehension, uninhibited social behavior)
 - b. Inconsistency, impulsivity, attention deficits, impaired memory, improved language, disorientation to time and place, poor organization, impaired reasoning, restlessness, irritability, distractibility, high frustration and anxiety, aggressive behavior, inconsistent responses, poor judgment, poor control of emotions, poor self-care (Seladi-Schulman, J., 2020).
 - c. El's mild speech disturbances could be attributed to:
 - i. Psychogenic stuttering: acquired articulation disturbances following traumatic event
 - 1. Due to a psychological response to trauma experienced experienced by the individual without a neurological basis
 - 2. Transient and situation specific (Duffy, 2013).
 - d. Psychogenic movement disorders
 - i. Characterized by unwanted movements, such as spasms, shaking or jerks involving any part of the face, neck, trunk, or limbs.
 - ii. Manifestation in response to stress
 - 1. Onset of movement is sudden/abrupt
 - 2. Movement are triggered by emotional trauma
 - 3. Episodic or intermittent
 - 4. Spontaneous remission (Baylor Medicine)

My take:

All of this is to say that while Elliot obviously has a diagnosis of PTSD, he could possibly also have a mild traumatic brain injury due to the blunt force of the blows sustained in Bekher's attack. His symptoms did not appear immediately after the attack. His disorientation to time and place is very telling. When he calls Moennig early on the first morning of the episode, he makes that clear. El has no idea what time it is, nor does he realize he has just walked right into the middle of a busy street. We can also speculate about his distraction right before the car accident with Eli. I want to talk about impulsivity and uninhibited social behavior.

In my mind, we see this twice in episode 1.04

When Elliot confronts Lieutenant Moennig about going to look for the selfie couple. Moennig forcefully tells El... "We don't know that!" (Whether Wheatley's case and Kathy's case are connected...)

"*We do know.*" El half growls, half rasps. It's a strange, jarring moment because it just *slips* out. It's what he **wanted** to say, but on a regular day at work talking to his superior, he never would have said it.

The second time ***DUN DUN*** is, of course, the *I love you*. In my eyes, it's the same case. Olivia is his port in the storm. He has been telling her in so many words since he came back and even when he was gone... "*You woulda loved it...*" but in this moment when he feels so much spinning out of his control. He feels ganged up on, he feels ashamed, embarrassed, inadequate that he can't pull himself together. He hates that his children are all here and are all past the point of being concerned about it.

She offers him the gentlest words possible... "*Tell us what you need.*"

Not *pushing* anything on him, **asking** him what he needs. For me it circles back to the car conversation and "*I am worried about you*" and "*It felt good to hear that. I just think I needed to hear you say that.*"

It's reminding him in the gentlest way possible that she is *here* and she *cares*.

"*Tell us what you need*"...

His automatic, unfiltered, impulsive, and uninhibited response is *I love you*. It's the most natural response to everything that she is offering him, that life-line, that unique tenderness only they share.

It circles back to "*You mean the world to me.*" It's what he has **wanted** to say all along. After he says it, he once again (just like in the scene with Moennig) can't believe he spoke aloud. Only this time, his reaction is amplified because of the presence of his grieving and anxious children. He can't HELP himself, it just pours out. This man who is all about control suddenly has lost all of it. He recognizes what he has said and he almost can't understand why he said it, but he meant it. The way he repeatedly looks to Olivia, locking eyes over and over. It's a silent apology for something he can't control. He has always wanted to tell her, but not in this way.

"*I'm drowning,*" he says, "*how's that for recognition. It's like a weight that is dragging me down.*" He recognizes there is something *wrong*, but he can't see it, find it, fix it...etc.

Stress, anxiety, exhaustion, trauma (physical, emotional, psychological) are a dangerous cocktail. The man has EVERYTHING going on. He needs a hug and a good therapist. Just my **hypothetical** take. Thanks for reading xx

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