

Review of: "Viewing trauma as a developmental process emerging from chronic repeated experience and reiterated meaning-making mental processes"

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In this article, the authors review the psychological and developmental literature on trauma, with a focus on childhood adversity. They then attempt to outline a theory that rejects (allegedly) current scientific views on trauma. They characterize the normative view as primarily focused on single large events, and they instead prefer a view of trauma as a developmental process primarily driven by repeated adversity.

The article has several strengths. It accurately reviews much of the literature on childhood development, early childhood adversity, and operant fear conditioning. It makes a strong case that long-term fear and emotional conditioning is largely driven by repeated events, rather than single-instance traumas.

Unfortunately, in my opinion, the context and framing of the article primarily tackles a strawman view of trauma and PTSD that is largely irrelevant to current scientific norms or beliefs. While it's possible that the authors' characterizations of the normative view of trauma are accurate regarding some psychologists, I do not believe it is true of most PTSD experts.

It must be understood that PTSD is an *exception* among psychological disorders. Consider the period prior to DSM-III and the PTSD diagnosis. During this time, the majority of the authors' claims would have been accepted at face value by psychologists. Consider the following theses presented by the authors:

- "To overstate the argument, we do not see trauma as the mechanism driving dysfunction or psychopathology"
- "We see development and the quality of lifelong functioning emerging from chronic repeated experiences and processes"
- "The burden of chronic disease that results from high levels of childhood adversity likely results from a combination of these factors acting in concert"

A pre-DSM-III psychologist would have taken these statements as obvious truths about psychopathology. Indeed, these statements are still mostly accepted by psychologists* — except that PTSD has emerged as a notable exception to the rule, in which psychopathology is caused by a traumatic event.

The context of these statements as a criticism of current science or practice is therefore confusing. This likely results from the authors' mischaracterizations about current views held by PTSD experts. For example, consider the following statements from the article:



- "Our diagnostic manuals [reify] that specific events are inescapably traumatic"
- "Or think if a 4-year-old child might experience genital fondling by an older sibling as sexual abuse or perhaps as playful and exciting. Indeed, what would a clinician think? Most likely, that the fondling is [necessarily] a trauma."
- "A typical view of the singularity and power of trauma is that it affects all experiences and is the primary event leading to psychopathology"

Although it's possible that some psychologists hold these beliefs, they were certainly far from typical in my training in either PTSD research or treatment. Indeed, the opposite views are repeatedly found in numerous publications and statements by trauma experts such as Edna Foa, Elizabeth Loftus, Richard McNally, etc.

Therefore, while much of the content of the article is solid, the overall framing as an "alternative view", in my opinion, falls quite flat.

In addition to this major concern, there are a few other issues I'm keen to point out:

- The authors assert that a trauma "is never experienced only once." While I agree that revisiting memories and
 reframing past events is frequently crucial in the etiology of PTSD, they overstate their case. Fear conditioning
 research, for example, can trivially reveal many important differences in learning across single vs. multi-event
 exposures
- In reviewing conditioning research, the authors liken trauma to sensory deprivation or neglect. Though neglect is an important issue related to trauma, trauma and neglect should not be conflated. In a sense, trauma is the *opposite* of neglect and especially of sensory deprivation it is a strong and clear signal about the environment (i.e., a danger signal)
- The authors echo repeatedly-debunked theories about embodied trauma, and also mention scientific topics that are
 dubiously related, such as epigenetic effects due to the maternal environment. Where not thoroughly debunked,
 scientific results in these areas have such small effect sizes that they cannot be credibly listed as important etiological
 factors
- The section on therapy is overall quite disconnected from the central points of the article and contains some dubious claims with little supporting evidence (e.g., effective therapy must be multi-method, current EBTs are similar to snake oil). Treatment need not have parity with etiology. Penicillin (or a lack thereof) is not the cause of sepsis, but nevertheless can treat it quite effectively. Similarly, though the theoretic basis of a therapy is important, and a clear match with etiology can help us understand it, the efficacy of a therapeutic approach must ultimately be proven or disproven by empirical test.
- *The view that psychopathology (other than PTSD) is largely caused by repeated environmental adversity is indeed quite common among psychologists. However, it is worth noting that genetics are increasingly seen as an important factor perhaps the most important factor in psychopathology across varied environments. In addition, repeated "adversity" per se may be the wrong framing for the environmental causes of psychopathology, as vulnerability to psychopathology is sometimes highest where adversity is low (see e.g., Duckers' "vulnerability paradox", high prevalence of depression in first-world nations, rising prevalence of anxiety disorders over time, etc.)

