# Trauma and its contribution to violent behaviour

**Daniel J Neller** and **John Matthew Fabian** review research-based theories into how traumatic experience is linked to violence.

In its attempts to explain horrific acts that humans inflict on one another, the media devote a substantial amount of time to the backgrounds of notorious rapists, murderers, and other violent offenders. With few exceptions, the media depict the family backgrounds of such offenders as unstable and dysfunctional, often replete with stories of severe childhood physical or sexual abuse. The notion that early traumatic experiences are linked to future acts of violence is appealing on a number of grounds. It is intuitive. It is logical. But the question remains: Is it factual?

Criminologists and forensic mental health professionals have researched the topics of trauma and violence for decades. During the past 30 years, researchers have conducted increasingly sophisticated studies regarding traumatic events and violent behavior. Consequently, a significant body of literature has accumulated, contributing to our understanding of these phenomena.

In the present article, we summarize findings pertaining to the apparent link between traumatic experiences and future perpetration of violence. First, we review some of the potential effects of trauma. Next, we review several factors associated with violence, paying particular attention to those variables also associated with trauma. Finally, we offer possible explanations for the relationship that emerges between traumatic experiences and violent acts.

### **Trauma effects**

During the 1970s, mental health professionals witnessed a resurgence in the study of traumatic experiences. Within the next decade, trauma-related mental disorders had become more widely accepted and diagnosed. For example, Post Traumatic Stress Disorder was added to the *Diagnostic and Statistical Manual of Mental Disorders*; and, Multiple Personality Disorder – the result of severely traumatic events according to some theorists – was diagnosed at astonishingly increased rates. During the same time period, large scale studies had begun to document in detail the deleterious effects of traumatic experiences.

Although the resultant body of research produced mixed results, some general trends emerged. Perhaps as expected, the duration, severity, and frequency of traumatic acts generally were found to be positively associated with severity of trauma sequelae; in other words, the more severe the traumatic experiences, the more severe the traumatic effects were likely to be. A second trend was just as predictable: the age at which the traumatic events were experienced was found to be negatively associated with traumatic events; in other words, the younger an individual was at the time of the event, the more severe the effects were likely to be.

A final trend that emerged in the literature was perhaps less predictable but equally as significant: Different traumatic events often contributed to similar maladaptive outcomes. Additionally, traumatic events were found to affect multiple areas of functioning, including emotion, cognition, social interaction, and behavior. As will become evident, many of these effects also are associated with heightened violence risk.

With respect to emotion, people who experience trauma are at increased risk for affective flattening and callousness. They are at increased risk for hostility, anger moderation difficulties, and other emotional regulation problems. They also are at increased risk for emotion-related disorders associated with anxiety and depression.

Cognitively, people with trauma histories are at increased risk for encountering difficulties in describing their affective states. They are at heightened risk for developing pessimistic outlooks and maladaptive coping strategies. They also are at heightened risk for exhibiting attention and concentration problems, verbal skills deficits, and dysfunctional thought patterns.

The potential effect of traumatic experiences on social interaction appears even more significant than the potential for trauma's emotional and cognitive effects. People with trauma histories are at increased risk for incorrectly perceiving the emotions of others and for misperceiving others' intentions as malevolent. They are at increased risk for distrust, detachment, social rejection, and social incompetence. They also are at increased risk for employment problems.

Finally, people with histories of trauma – particularly males – are at heightened risk for engaging in high risk behaviors, such as alcohol use. They are at heightened risk for impulse control difficulties and hypervigilance. Last, they are at increased risk for developing a personality disorder and engaging in antisocial conduct, including violent acts.

### **Violence risk factors**

Early studies on violence risk assessment suggested that mental health professionals were usually inaccurate when they offered violence predictions. Since then, however, researchers have identified several reasons for clinicians' apparent inability to accurately predict violence. One of the most salient reasons was that clinicians based their assessments on factors that were unrelated to violence.

Our understanding of violence has improved dramatically over the past 30 years. Researchers have identified several correlates of violent behavior. Based on empirical studies, scientists have constructed instruments designed to assess risk for future violence. Assisted by such scientific advances, clinicians have enjoyed increased success in their abilities to accurately assess violence risk.

Violence risk factors commonly are divided into two broad categories: static variables and dynamic variables. Although the following description is admittedly simplistic, static variables generally refer to historical, fixed factors. Dynamic variables generally refer to present, changeable factors. As should become evident, traumatic experiences and associated sequelae pervade both dimensions.

People who commit violent offenses often have histories characterized by family instability and family violence. Several other historical factors increase risk for violence, including delinquency adjudications, adult criminality, and diagnoses of major mental illness, personality disorder, and substance use disorder. As previously noted, available literature indicates trauma is associated with each of these violence risk factors.

Present research generally supports the superiority of static factors over dynamic factors. Nevertheless, many mental health professionals argue for an approach to risk assessment that incorporates potentially changeable factors. Dynamic factors associated with increased violence risk include anger, emotional dysregulation, poor coping skills, cognitive distortions, lack of insight, antisocial or negative attitudes, and impulsivity. Available literature indicates trauma is associated with each of these violence risk factors.

## Potential explanations for trauma's link to violence

Most people who experience traumatic events do not commit future acts of violence. Research strongly suggests, however, that for some people traumatic experiences are directly related to future perpetration of violence. As should be evident by the preceding discussion, traumatic experiences also might contribute to the development of several risk factors associated with violence (e.g., substance use, personality disorder, emotional dysregulation). Based on available research, therefore, it is reasonable to conclude that trauma might directly and indirectly contribute to violent acts.

Several theorists propose explanations for the

apparent relationship between trauma and violence. Among the theories currently available, social learning theory has obvious merit. Popularized and empirically supported by the widely recognized 'Bobo doll' experiments in the early 1960s, social learning theory proposes that violence and aggression are learned by observing abusive models. By observing abusive parents, for example, children might learn that violence towards others is justifiable, permissible, and rewarding.

Increasingly, biological evidence is surfacing to explain the contribution of traumatic experiences to violent behavior. Research indicates that highly stressful, potentially traumatic events can alter brain structures and chemicals. For example, during periods of prolonged stress, the body reduces its production of serotonin, a neurotransmitter associated with inhibition of behavior. Low amounts of serotonin repeatedly have been associated with aggression and impulsivity. Other brain chemicals and structures potentially affected by traumatic experiences and implicated in the etiology of aggressive behavior include adrenaline, the catecholamines, the hypothalamus, the amygdala, and the orbitofrontal cortex.

### **Concluding remarks**

Research on trauma and violence has grown immensely over the past 30 years. Although research findings strongly suggest traumatic experiences are related to future perpetration of violence, the precise nature of the relationship remains equivocal. Moreover, the correlational nature of most of the research in these areas prevents us from making any cause-and-effect statements. Based on our review of the literature, however, we believe trauma likely contributes to violence via direct avenues (e.g., social learning, physiological abnormalities), as well as indirect avenues (e.g., increased likelihood of substance use, personality disorder, etc.). Therefore, the most reasonable conclusion that can be drawn at this time is that trauma's link to violence is multi-faceted.

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