Child Abuse & Neglect 77 (2018) 188–197

Contents lists available at ScienceDirect

Child Abuse & Neglect

journal homepage: www.elsevier.com/locate/chiabuneg

Research article

Children's trauma-related symptoms following complex trauma exposure: Evidence of gender differences

Rachel Wamser-Nanney*, Kathryn E. Cherry

Psychological Sciences, University of Missouri- St. Louis, United States

ARTICLE INFO

Keywords:
Complex trauma
Children
Gender differences
Posttraumatic stress disorder

ABSTRACT

Complex trauma exposure has been operationalized as multiple or chronic interpersonal traumas that begin early in life and is thought to result in widespread self-regulation difficulties across several domains of functioning. Prior research has demonstrated that there are gender differences in trauma exposure as well as trauma-related symptoms; however, gender discrepancies have not previously been examined in the context of child survivors of complex trauma. The aim of the present study was to determine whether there are gender differences in both caregiver and child-reported trauma exposure and symptoms among 167 children who have experienced complex trauma (3–18 years, $M = 9.90$, $SD = 3.92$; 61.67% female). Male children were somewhat more likely to have been exposed to domestic violence, while female children were more likely to have experienced sexual abuse as well as more likely to have been abused by a caregiver. Gender differences were observed for several of the caregiver-reported symptom domains, with female children exhibiting higher levels of depression, dissociation, posttraumatic stress disorder (PTSD) hyperarousal symptoms, and total PTSD symptoms. Female children also self-reported higher levels of sexual concerns, and marginally more re-experiencing and total PTSD symptoms. Secondary analyses utilizing only children who experienced sexual abuse revealed that gender differences largely remained, again with females manifesting higher levels of symptoms. Thus, following complex trauma, female children may be at higher risk for trauma-related difficulties, which has implications for research and clinical interventions.

1. Introduction

Rates of traumatic exposure during childhood are staggering. One national survey observed that nearly 80% of children were exposed to a trauma in their lifetime (Finkelhor, Ormrod, & Turner, 2009). These traumatic events are frequently in the form of physical or sexual abuse/assault, neglect, or domestic violence or community violence, events that are strongly associated with a myriad of adverse psychological and physical health outcomes (Cicchetti & Toth, 1995; De Bellis, 2001 ; De Bellis, Woolley, & Hooper, 2013). Further, a sizable portion of trauma-exposed children experience more than their fair share of trauma, undergoing multiple and/or chronic traumatic events. Finkelhor and colleagues reported that 64.5% of children had undergone more than one type of trauma *within a single year*, with 22% experiencing four or more traumas, and 8% experiencing seven or more (Finkelhor, Ormrod, & Turner, 2007). It is not the case that children become "desensitized" to multiple forms of trauma, instead, the adverse effects of trauma exposure ma become compounded in the context of additional traumas, and the dose-response relationship between cumulative experiences of trauma and increases in the number and severity of symptoms is well-established (e.g., Finkelhor, Ormrod,

* Corresponding author at: Psychological Sciences, University of Missouri- St. Louis, St. Louis, MO 63121, United States.
E-mail address: WamserR@umsl.edu (R. Wamser-Nanney).

https://doi.org/10.1016/j.chiabu.2018.01.009
Received 16 June 2017; Received in revised form 2 January 2018; Accepted 9 January 2018

& Turner, 2007, 2009 ; Hodges et al., 2013). A dose-response relationship has also been found in literature on adverse childhood experiences (ACEs), where outcome risk and comorbidities increase in a graded relationship with the number of ACEs an individual is exposed to during development (Anda et al., 2006). Nonetheless, how the needs of child survivors of multiple and chronic traumas may differ from their more acutely trauma-exposed counterparts have received relatively little attention in the research literature.

The term complex trauma was developed to describe severe and repeated trauma as well as its full aftermath (Cook et al., 2005; Herman, 1992). Complex trauma theorists have posited that exposure to complex trauma may result in widespread impairments in functioning as a result of trauma-related dysregulation (Cook et al., 2005; van der Kolk, 2005). Compared to other forms of trauma, complex trauma exposure is related to higher rates of internalizing problems, generalized behavior problems, trauma-related symptoms, and clinical diagnoses (Anonymous; Anonymous; Cloitre et al., 2009; Greeson et al., 2011). Despite the development of, and proposal to include into the *DSM-5*, two complex trauma focused diagnostic constructs (i.e., Disorders of Extreme Stress Not Otherwise Specified (DESNOS), van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005; Developmental Trauma Disorder (DTD), van der Kolk, 2005), gender differences in exposure and symptom expression have not been explored within the context of complex trauma. As complex trauma is conceptualized to be associated with a unique symptom presentation that is fundamentally different than exposure to more acute trauma, it is important to specifically investigate potential gender discrepancies that may be present after this form of trauma exposure. By enhancing our understanding of gender differences in complex trauma experiences, we can contribute to the field of trauma-informed care that responds directly to the needs of children and adolescents (Cook et al., 2005; Oral et al., 2015). The present study therefore investigated the differences between male and female child survivors of complex trauma, defined as chronic interpersonal trauma that begins early in life (Cook et al., 2005), as used previously in the literature (Anonymous; Anonymous).

1.1. Gender differences in trauma exposure and trauma-related symptoms

To date, potential gender discrepancies in symptom expression following complex trauma experiences have not been investigated. However, a large body of research has examined gender differences in rates of trauma exposure, not specifically complex trauma, as well as the subsequent development of posttraumatic stress disorder (PTSD), particularly in adult samples. Far fewer studies have been specific to pediatric trauma populations. It is important to specifically conduct gender research with child samples as children may be socialized into gender roles as they age and discrepancies may not be consistently present throughout the lifespan (Castle & Abel, 2016). Nonetheless, within the realm of the adult literature, gender differences in rates of exposure and trauma-related symptom profiles have been investigated more in depth. Men and women report experiencing specific trauma types at different rates. For example, women are more frequently exposed to childhood sexual abuse, domestic violence, and sexual assault, whereas men are more likely to have experienced natural disasters, motor vehicle accidents, and other accidents (Tolin & Foa, 2006). Women often exhibit higher rates of PTSD and some other trauma-related symptoms, such as internalizing disorders (i.e., anxiety and depression) and somatic complaints than men who experience more externalizing disorders (i.e., conduct and substance use) (Kimerling, Weitlauf, Iverson, Karpenko, & Jain, 2014; for a review see Tolin & Foa, 2006). Thus, women may be more vulnerable to developing, or more willing to report experiencing, some adverse trauma-related symptoms than men.

Although less is known regarding gender differences in types and symptom expression in younger samples, there is reason to suspect that trauma-related gender discrepancies may fluctuate across the lifespan. For example, one study reported that PTSD gender discrepancies peak in young adulthood (ages 18–25) and appear to decrease with age, but little is known regarding differences among children (Ditlevsen & Elklit, 2010). The relatively few studies utilizing child samples have nonetheless yielded an emerging pattern that is consistent with the adult literature. For example, following exposure to floods, girls may manifest higher levels of symptoms than boys (Bokszczanin, 2007; Green et al., 1991). Additionally, trauma-exposed girls may be more likely to exhibit intrusive thoughts, hyperarousal, sexual anxiety, and perceive that the world is dangerous than boys (Feiring, Taska, & Lewis, 1999), while boys may be more likely to display higher levels of aggression (Fontanella, Harrington, & Zuravin, 2001). Studies have also reported that sexually abused girls may be more likely to experience PTSD and internalizing symptoms, whereas boys may be more likely to manifest externalizing symptoms (Feiring, Taska, & Lewis, 1999; Gauthier-Duchesne, Hébert, & Daspe, 2017). Additionally, Hodges et al. (2013) found that female children demonstrated more symptoms in more clusters than boys according to caregiver reports but not child self-reports. These careigver reports may be more accurate reports of greater symptomology or may be related to gendered socialization of emotional expression (Chaplin, Cole, & Zahn-Waxler, 2005; Chaplin, 2015). Boys may also display externalizing symptoms earlier than girls exhibit internalizing symptoms following early exposure to trauma, and boys have a faster decline in symptomology (Godinet, Li, & Berg, 2014). Thus, there may be gender differences in terms of children's levels and patterns of trauma-related symptoms.

1.2. Explanations for gender differences

It is paramount to contextualize these gender-related findings in terms of differences in types of trauma exposure. As noted above, women and men report discrepancies in terms of types of traumas (Tolin & Foa, 2006), and the forms of traumas more commonly experienced by women are those that have a higher conditional risk for PTSD than the types of trauma that men acknowledge more frequently (Hapke, Schumann, Rumpf, John, & Meyer, 2006; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Differing PTSD rates by gender, however, are not entirely attributable to differences in type of trauma exposure. Controlling for the type of traumatic event only accounts for part of the differential risk for PTSD by gender (Tolin & Foa, 2006). Further analysis has demonstrated that both the chronicity of trauma and the social context in which it occurs (e.g., specific settings of family strutures, available resources,