Differential Effects of Child Maltreatment Type and Chronicity Variables on PTSD Symptoms

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RONALD E. MCNAIR POST-BACCALAUREATE ACHIEVEMENT PROGRAM

ABSTRACT

Our interests: The current investigation studied the effect of maltreatment type and chronicity of trauma on posttraumatic stress disorder (PTSD) in a sample of school-aged children aged 6-18 years old.

Why we're interested: PTSD has been associated with serious developmental deficits in children that can lead to struggles with mental health and other adverse outcomes in adulthood (Dunn et al., 2017; Milot et al., 2010; Giaconia R. M. et al., 1995; Gwadz, Nish, Leonard, & Strauss, 2007).

The current literature:

- Children with exposure to child maltreatment traumas are at a significantly higher risk of developing PTSD than those with other trauma experiences (APA, 2013; Dvir, Ford, Hill, & Frazier, 2014; Milot, Thier, St-Laurent, & Provost, 2010).
- Due to the interpersonal and chronic nature of maltreatment traumas, these children are also more likely to present with a significantly higher number of PTSD symptoms (Graham et al., 2010).

Gaps in the literature:

- The literature does not fully address either the effects of frequency of abuse nor maltreatment type with regard to PTSD in children. Chronicity of traumas on a broad spectrum has found greater PTSD symptoms in children, but the literature fails to adequately address maltreatment – a subset of traumas that significantly effects PTSD symptoms in children and their developmental outcomes.
- Child maltreatment as a whole has been recognized to significantly effect PTSD outcomes; however, maltreatment type is relatively understudied.

Aim of current investigation: The present study attempted to bridge these gaps in the literature by evaluating the effects of frequency and trauma type on PTSD symptoms among a sample of maltreated children in order to better identify the factors that create worse PTSD outcomes in maltreated children.

HYPOTHESES

1. ***Frequency of trauma*** will be positively correlated with number of PTSD symptoms
2. Children who experience ***sexual abuse*** will display a greater number of PTSD symptoms than children who experience other trauma or multiple traumas
3. Children who experience ***multiple traumas*** will display a greater number of PTSD symptoms than those who have only experienced one trauma type

Greater number of PTSD symptoms

METHODS

Participants:

- A total of 400 children (236 female) from Department of Family Services (DFS) sites in Las Vegas, Nevada
- 59% of children were female and 41% were male
- Races reported were: Hispanic (12.3%), Black or African American (24.8%), Caucasian (24.5%), Native American (2%), Asian American (1.8 %), multiracial (25.8%), other (1.8%) and unavailable (7.2%)
- PTSD diagnosis were as follows: PTSD (54.25%), subthreshold PTSD (17%), delayed onset PTSD (.25%), PTSD negative (27.25%), or no diagnosis (1.25%)

Measures:

- The Children's PTSD Inventory (CPTSD-I) was used to collect data regarding PTSD diagnosis and presenting PTSD symptoms. CPTSD-I additionally measures duration of distress for each symptom (CPTSD-I; Saigh et al., 2000).
- Participants completed a demographic sheet that was used to collect data regarding gender, age, race/ ethnicity, country of origin, biological parent marital status, and religion.

RESULTS

- A significant positive correlation between frequency of trauma and number of PTSD symptoms (r= .24, p < .001)
- Two-tailed, independent samples t-tests were used to test the effects of sexual maltreatment and multiple trauma exposure on number of PTSD symptoms:
- Children who experienced sexual abuse reported a significantly greater number of PTSD symptoms (M = 15, SD = 5.88) than children who experienced other trauma or multiple traumas not including abuse (M = 11.61, SD = 5.79, t(363) = 5.458, p < .001)
- Children who experienced multiple trauma types did not report a significantly different number of PTSD symptoms (M = 13.77, SD = 6.06) than children who experienced only one category of trauma (M = 12.52, SD = 6.01, t(370) = -1.926, p = .05)

Table 1. *Bivariate Correlation Between Number of Instances of Trauma and Total PTSD Symptoms*

	Number of Trauma Events	*Total PTSD Symptoms*
Number of Trauma Events	-	*.235***
Total PTSD Symptoms	*.235***	-

*** Correlation is significant at the .01 level (2-tailed)*

Table 2. *Difference in the Number of PTSD Symptoms Based on Sexual Maltreatment Exposure*

	N	M	SD	*t*	*df*	*p*
Sexual Maltreatment	149	15	5.88	-	-	-
Other Trauma	216	11.61	5.79	-	-	-
Total	365	13	6	5.458	363	< .01

Table 3. *Difference in Number of PTSD Symptoms Based on Number of Trauma Types*

	N	M	SD	*t*	*df*	*p*
Multiple Maltreatment Exposure	135	13.77	6.06	-	-	-
One Maltreatment Experience	237	12.52	6.01	-	-	-
Total	372	13.00	6.00	-1.926	370	.055

DISCUSSION

Hypothesis 1:

- First, frequency of trauma events was positively correlated with number of PTSD symptoms in participants.
- These results emphasize the significant effect of interpersonal trauma experiences on PTSD in child populations.
- Maltreatment traumas are most often perpetrated by individuals charged with the care of a child (USDHHS, 2017). The violation of trust and love by a caregiver may be one of the greatest factors that leads to the increased distress in children following a trauma event, and thus creating worse outcomes for PTSD

Hypothesis 2:

- Second, children with exposure to sexual maltreatment experienced significantly more PTSD symptoms than children with exposure to any other trauma.
- This finding suggests that even among other highly interpersonal traumas (such as physical abuse or neglect), exposure to sexual maltreatment is expected to have a worse impact on PTSD symptoms.
- Once again, in instances of sexual abuse, children experience a violation of their worldview or expectations of familiar relationships that could be the result of worse PTSD outcomes.

Hypothesis 3:

- Third, our results did not indicate that children with exposure to multiple trauma types experience a significantly different number of PTSD symptoms than children with exposure to just one trauma type.
- Our results suggest that consideration of trauma type and frequency of trauma are important factors in understanding childhood PTSD symptoms rather than number of trauma types experienced alone.

STUDY IMPLICATIONS

Limitations:

- Placement in DFS custody required all participants to have experienced trauma significant enough to have been removed from their homes. Therefore, the results from this data may not be generalizable to children who have experienced maltreatment at lesser severity
- Furthermore, the effects of DFS removal as a possible traumatic experience have not been evaluated in this investigation and should be considered when evaluating these results.
- Finally, all data were collected via child interviews and self-report measures of traumatized children. These children may be more likely to report answers that they think the researcher, or other adult, may find more favorable.
- Another consideration should be that children may feel as though they are obligated to protect the offender by lying about their experiences or are simply afraid to report the truth for fear of retaliation or getting their abuser in further trouble.

Future Directions:

- The present investigation addressed how overall PTSD outcomes are effected by variables such as trauma type and chronicity of trauma - further investigation is needed in order to determine which PTSD symptoms are more highly associated with each trauma.
- Determining the effect of trauma type on developmental deficits might be beneficial to clinicians, caregivers and teachers who are responsible for mediating and/or treating the effects of PTSD and maltreatment.
- Future investigations should also include analysis of distinctive symptoms associated with each trauma in order to gain insight on which symptoms might be expected to be associated with particular maltreatment traumas.
- Additionally, the effect of age at time of first exposure to maltreatment should be included order to understand the way PTSD symptoms present at the time of trauma as opposed to later in life.

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