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Dissociation and Post-traumatic Symptoms in Maltreated Preschool Children

Cholankeril, A.[1], Freyd, J.J.[1], Pears, K.C.[2], Becker-Blease, K.A.[3], Kim, H.K.[2], and Fisher, P.A.[2]

[1]University of Oregon, [2] Oregon Social Learning Center, [3]Washington State University -Vancouver

UNIVERSITY OF OREGON

Abstract

This study examines dissociation and post-traumatic arousal/intrusion symptomatology in a population of preschool-age foster children with documented cases of maltreatment. Analyses compared Child Behavior Checklist (CBCL) subscale scores for the foster care sample and a community sample with no known maltreatment history. We also examined differences between maltreatment subtypes. The results suggest that exposure to any type of maltreatment is associated with greater dissociation and post-traumatic symptomatology. There also appears to be a distinct difference between the experiences of sexual abuse versus physical abuse. Preschool-age children who had been sexually abused displayed high levels of post-traumatic symptoms, while children who had been physically abused tended to use dissociation as a primary coping mechanism.

Introduction

- Prior research has consistently found a relationship between childhood abuse and dissociation. Children who experience dissociative behaviors as a result of maltreatment may be at risk for academic, social, and psychological problems (Putnam, 1997). Thus, it may be especially important to study this age group so as to prevent cascading developmental problems.
- There are few studies of preschool children and dissociative disorders, despite reports of early onset and diagnoses at this age.
- Researchers have been recently been interested in assessing dissociation using the Child Behavior Checklist (CBCL), as it is a widely used behavior rating scale.
- The current study examines dissociation in preschool-age foster children with a history of abuse and neglect, as well as dissociation in nonmaltreated children. We were also interested in whether there were differences in dissociation levels between maltreatment subtypes.

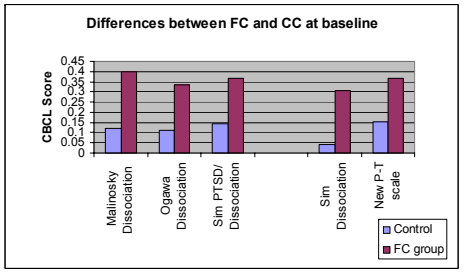
Method

Participants

- 170 preschool children (age 3-5) and their caregivers, of which 111 were in the foster care group (FC group). Fifty-nine children with no history of maltreatment were in the community comparison group (CC group).
- FC participants were also categorized by maltreatment subtype. These subtypes were based on a latent class analysis which allowed us to incorporate severity information and better distinguish between ecologically valid maltreatment groups.
  1. high severity sexual abuse/high severity physical abuse (high PA/high SA), n=11
  2. high severity physical abuse (high PA), n=19
  3. high severity sexual abuse (high SA), n=13
  4. neglect (with some cases of low severity physical abuse or sexual abuse), n=68

Measures

- Child Behavior Checklist (CBCL) - 113-item behavior rating scale for children aged 4-18 (Achenbach, 1991). Caregivers rate their child's behavior over the prior six-month period on a 3-point scale. In FC group, CBCL was filled out by foster parent. In CC group, CBCL was filled out by primary caregiver.
- We used three previously published CBCL subscales of dissociation, and one CBCL subscale assessing both dissociation and PTSD symptomatology (see Table 1).
- A scale analysis was also performed on items from all subscales, which supported the use of the Sim et al. Dissociation scale as well as a new scale of Post-traumatic arousal/intrusion symptomatology (see Table 2).
- A confirmatory factor analysis confirmed good model fit.
  $\chi 2$ (62)= 75.687, p = 0.11, RMSEA =0.0.45, CFI = 0.95, TLI = 0.94



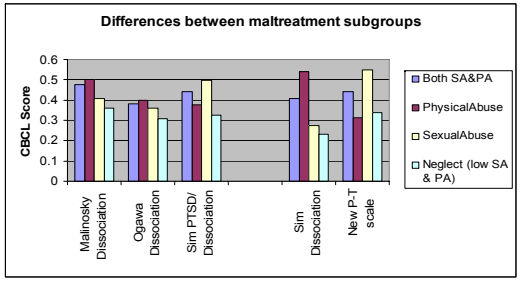


Table 1. ***Items from previously published subscales.***

Malinosky-Rummel and Hoier (1992)
1. Acts too young for his/her age
5. Behaves like opposite sex
8. Can't concentrate, can't pay attention for long
13. Confused/Seems to be in a fog
17. Daydreams or gets lost in thoughts
80. Stares blankly
87. Sudden changes in mood or feelings

Ogawa, Sroufe, Weinfeld, Carlson, & Egeland (1997)
1. Acts too young for his/her age
8. Can't concentrate, can't pay attention for long
13. Confused/Seems to be in a fog
17. Daydreams or gets lost in thoughts
18. Deliberately harms self or attempts suicide
36. Gets hurt a lot, accident prone.
40. Hears sounds/voices that aren't there
80. Stares blankly
87. Sudden changes in mood or feelings
91. Talks about killing self

Sim, Friedrich, Davies, Trentham, Lengua, & Pithers (2005)

Dissociation
13. Confused/Seems to be in a fog
17. Daydreams or gets lost in thoughts
80. Stares blankly

PTSD
9. Can't get mind off certain thoughts
29. Fears certain animals, situations, places
45. Nervous/highstrung/tense
47. Nightmares
50. Too fearful or anxious
76. Sleeps less than than other children
100. Trouble sleeping

PTSD/Dissociation
8. Can't concentrate, can't pay attention for long
9. Can't get mind off certain thoughts
13. Confused/Seems to be in a fog
17. Daydreams or gets lost in thoughts
29. Fears certain animals, situations, places
40. Hears sounds/voices that aren't there
45. Nervous/highstrung/tense
47. Nightmares
50. Too fearful or anxious
66. Repeats certain acts over and over
76. Sleeps less than than other children
80. Stares blankly
84. Strange behavior
87. Sudden changes in mood or feelings
92. Talks or walks in sleep
100. Trouble sleeping

Table 2. ***New scale of post-traumatic symptomatology***

Cholankeril, Freyd, Pears, Becker-Blease, Kim & Fisher (2007)
9. Can't get mind off certain thoughts
18. Deliberately harms self or attempts suicide
29. Fears certain animals, situations, places
45. Nervous/highstrung/tense
47. Nightmares
50. Too fearful or anxious
66. Repeats certain acts over and over
84. Strange behavior
87. Sudden changes in mood or feelings
100. Trouble sleeping

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Please address correspondence to:
Annmarie Cholankeril Hulette, M.S.
Department of Psychology
1227 University of Oregon
Eugene OR 97403-1227
acholank@uoregon.edu

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Results

ANOVAs were conducted to compare the maltreated foster care group against the community comparison group.** All of the subscales showed that the FC group had significantly higher levels of dissociation (and dissociation/PTSD) than the CC group.

Maltreatment subtypes were also compared using ANOVA with Welch approximation and Tukey's HSD.** Of the four previously published subscales, only the two Sim et al. scales distinguished between maltreatment subgroups:

- Sim et al. Dissociation subscale: The high PA group (M=0.83, SD=0.66) had a significantly higher mean dissociation level than the neglect group (M=0.34, SD=0.49), p=0.0026.
- Sim et al. Combined PTSD/Dissociation subscale: The high SA group (M=0.70, SD=0.45) had a significantly higher mean dissociation level than the neglect group (M=0.48, SD=0.34), p=0.0354.

New post-traumatic subscale created from scale analysis:

- The high SA group (M=0.44, SD=0.2) had a significantly higher mean arousal/intrusion level than the neglect group (M=0.34, SD=0.22), p=0.02. Additionally, the high SA group had a significantly higher mean arousal level than the high PA group (M=0.31, SD=0.23), p=0.03.

**Note that a log transformation was performed on the data to correct for skew, however, analyses on the untransformed set indicated similar findings.

Discussion

The results suggest that exposure to any type of maltreatment is associated with greater dissociation and post-traumatic arousal/intrusion symptomatology. There also appears to be a distinct difference between the experience of sexual abuse versus physical abuse. Preschool-age children who had been sexually abused displayed high levels of post-traumatic symptoms, while children who had been physically abused tended to use dissociation as a primary coping mechanism.

The current study provides evidence that the experience of trauma is related to the development of dissociation as well as PTSD symptomatology at an early age. In addition, it replicates the findings by Macfie, Cicchetti, and Toth (2001) of high dissociation among physically abused preschool-age children. This points to the importance of acknowledging that dissociation may be present in physically abused children, particularly during this developmental period. While these symptoms initially develop to help the child cope with maltreatment, they may have lasting detrimental consequences.

Because the children in the current study were subsequently involved in an intervention program, future research will be important to determine what aspects were clinically important. Understanding dissociative mechanisms and their impact on maltreated children can provide important information on how to minimize resulting academic, social, and psychological problems.

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