 Associations Between Complex Trauma Exposure and Psychiatric Diagnoses in Children in Mental Health Treatment in an Urban Setting

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Introduction
We know that psychological trauma has pervasive effects on child health.1-9 There are two main types of studies: single exposure studies; cumulative or aggregate trauma index studies. More recently there has been a shift toward complex trauma exposure studies. Arguably, focusing on single types of maltreatment fails to address the frequent co-occurrence of multiple forms of childhood abuse and household dysfunction. This study intends to highlight the complexity of highly interrelated traumatic experiences, and gain an understanding of the association between specific trauma exposures and psychiatric diagnoses.

Objectives
This study aimed to examine:

(1) The prevalence and comorbidity of both trauma exposure and psychiatric illness in a clinical population;
(2) The association between particular types of traumas and psychiatric illness with, and without, adjustment for age, race, and gender; and
(3) The moderating effects of demographic characteristics on psychiatric illness and trauma exposure.

Methods
Table 1. Demographic Characteristics (Total N=1036)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Race</th>
<th>Trauma Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Pre-school (&lt; 6 years)</td>
<td>African American</td>
<td>No trauma exposure</td>
</tr>
<tr>
<td>Female</td>
<td>School Age (6-12 years)</td>
<td>Unknown</td>
<td>Any trauma exposure (1 or more)</td>
</tr>
<tr>
<td>Unknown</td>
<td>Teen (13-17 years)</td>
<td>African American</td>
<td>No trauma exposure</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>Unknown</td>
<td>Any trauma exposure (1 or more)</td>
</tr>
</tbody>
</table>


Methods:
- Clinician assessed psychiatric illness (DSM-IV)
- Caregiver report on trauma exposure over lifetime (56% moms; 25% dads and 20% Department of Social Services)

Analysis: Multiple Logistic Regression Modeling

Outcomes: Attention Deficit Hyperactivity Disorder (ADHD) (28%), Oppositional Defiant Disorder (ODD) (19%), Depression (17%), Post-Traumatic Stress Disorder (PTSD) (16%), Anxiety (16%)

Exposures: loss (60%), neglect (25%), sexual abuse (23%), physical abuse (20%) and exposure to domestic violence (14%)

Controlling for: age, sex, and race

Introduction

Objective 1: Comorbid Trauma Exposure

Children who were exposed to domestic violence on average experienced 1.79 additional traumas, followed by physical abuse (1.76 additional traumas), neglect (1.67 additional traumas), sexual abuse (1.48 additional traumas), and loss (1.06 additional traumas).

Comorbid Psychiatric Illness

The mean number of additional psychiatric diagnoses was highest for children with anxiety (with an average of 1.52 additional diagnoses), depression (average of 1.29), PTSD (average of 1.28), ODD (average of 1.23) and ODD (average of 1.13).

Objective 2:

Results Overview

- Co-occurring trauma exposure was frequent
- Co-morbidity of diagnosis was high
- Trauma Exposure increased the odds of psychiatric diagnosis:
  - Loss increased the odds of ADHD, depression, and PTSD
  - Neglect increased the odds of ADHD, depression, PTSD, and anxiety, but was associated with decreased odds of ODD
  - Sexual assault increased the odds of ADHD and PTSD, but was associated with decreased odds of ODD
  - Physical abuse increased the odds of ADHD, PTSD, and anxiety.

- Exposure to domestic violence increased the odds of depression, PTSD, and anxiety.

- Age and race were found to substantially moderate association in four of the models

Conclusions

This study was one of the first to examine the prevalence and comorbidity of trauma exposure and psychiatric illness, and the associations between multiple interpersonal, and non-interpersonal, trauma exposures and psychiatric diagnosis in a population of children living in an urban environment.

Major findings were as follows:

(a) Co-occurring trauma exposure was frequent in this young population;

(b) The majority of children had at least one comorbid diagnosis;

(c) Trauma Exposure (loss, neglect, physical abuse, sexual abuse, exposure to domestic violence) in many cases increased the odds of diagnosis of ADHD, depression, PTSD, and anxiety after controlling for age, gender, and race, though the association between exposure and ODD was unclear.

Taken together, the findings of this study demonstrate that different types of trauma exposure are associated with different psychiatric diagnoses. A future study calls for an investigation of additional, non-interpersonal trauma exposures to investigate whether these exposures (in comparison to interpersonal trauma) cluster around particular diagnoses (i.e., externalizing vs. internalizing).

Acknowledgements

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References


Note: *p<0.05, **p<0.01.

Abbreviations - IV: Independent Variable; DV: Dependent Variable; AOR: Adjusted Odds Ratio; M: Moderating Variable

The interaction terms were found to be statistically significant with p-value of <.05.

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