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Patterns of Trauma Exposure in Childhood and Adolescence and Their Associations With Behavioral Well-Being

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Abstract

The majority of youth living in the United States experience a potentially traumatic event (PTE) by 18 years of age, with many experiencing multiple PTEs. Variation in the nature and range of PTE exposure differentially impacts youth functioning, although this association is poorly understood. We used latent class analysis (LCA) to identify patterns of PTE exposure from caregiver and youth report in a treatment-seeking sample of children and adolescents ($N = 701$) and examined how these patterns predict youths' behavioral health outcomes. We identified four classes based on both caregiver and youth reports of PTE exposure, with the best-fitting model representing a constrained measurement model across reporters; these included high polyvictimization, moderate polyvictimization (general), moderate polyvictimization (interpersonal), and low polyvictimization classes. Prevalence of classes varied across reporters, and agreement in classification based on caregiver and youth report was mixed. Despite these differences, we observed similar patterns of association between caregiver- and youth-reported classes and their respective ratings of posttraumatic stress disorder and depressive symptoms, as well as both caregiver and therapist ratings of problem behavior, with Cohen's d effect size estimates of significant differences ranging from $d = 0.25$ to $d = 0.51$. The PTE exposure classes did not differ with respect to ratings of child functioning. Findings highlight the importance of gathering information from multiple informants.

Prior to reaching adulthood, a significant number of youth experience a range of potentially traumatic events (PTEs; e.g., physical assault, sexual assault, and witnessing violence) that affect their behavioral health and well-being. Large-scale surveys, such as the National Survey of Adolescents (Kilpatrick, Saunders, & Smith, 2003) and the Developmental Victimization Survey (Finkelhor, Ormrod, & Turner, 2007a), have shown that most youth

living in the United States are exposed to at least one PTE by the time they are 18 years old. Further, youth with exposure histories are more likely to have experienced two or more types of PTEs than single events (Finkelhor, Turner, Ormrod, & Hamby, 2009). Youth experiencing PTEs are at increased risk of negative psychosocial outcomes, and variation in the nature and range of PTE exposure may differentially impact child and adolescent functioning (Copeland, Keeler, Angold, & Costello, 2007; Luthra et al., 2009; Suliman et al., 2009; Sullivan, Fehon, Andres-Hyman, Lipschitz, & Grilo, 2006). Investigators have begun to explain the complicated association between PTE exposure and psychosocial functioning using advanced statistical modeling, such as latent class analysis (LCA), although most have included only youth report and none have examined how report of trauma exposure and subsequent psychopathology differ across informants (i.e., caregiver and youth).

Children exposed to trauma are significantly more likely to develop a psychiatric disorder compared to their nonexposed peers (Green et al., 2010). Psychopathology stemming from PTE exposure has been shown to differ depending on the types of events experienced (Briggs-Gowan et al., 2010; Copeland et al., 2007; Luthra et al., 2009; Suliman et al., 2009; Sullivan et al., 2006). Further, cumulative trauma exposures predict poorer behavioral health and academic functioning (Green et al., 2010; Holt, Finkelhor, & Kantor, 2007; Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006). Finkelhor and colleagues (2007a) have termed the cumulative experience of multiple PTE's "polyvictimization" and assert that it occurs so frequently that "it is the norm for victimized children" (p. 149). Examining multiple, concurrent victimizations is an important area for clinical intervention, as polyvictims tend to exhibit higher levels of psychiatric symptoms and functional impairment compared to youth who have experienced only one traumatic event (Copeland et al., 2007) or those with repeated or chronic victimization experiences of a single PTE type (Finkelhor, Ormrod, & Turner, 2007b).

Despite evidence that functional outcomes vary depending on the type and quantity of exposures, measurement of PTE exposure in the research literature has only recently begun to consider these complexities, primarily through the use of LCA. By using either self- or caregiver report of PTE exposure or by examining child welfare records, prior studies employing LCA have explored trauma profiles in youth, which has resulted in heterogeneous class structures (Ford, Elhai, Connor, & Freuh, 2010; Hagan, Sulik, & Lieberman, 2016; Karsberg, Armour, & Elklit, 2014; Reid & Sullivan, 2009). For example, some studies have shown distinct patterns of exposure types (e.g., Ford et al., 2010; Karsberg et al., 2014) whereas others have shown a mix of classes based on degree of exposure (i.e., moderate and high) and type of PTE or other adverse experience, such as bullying (Reid & Sullivan, 2009), witness to violence (Hagan et al., 2016), and pregnancy (Shevlin & Elklit, 2008).

Authors of a number of studies have examined the effects of class membership on psychosocial outcomes and found that greater PTE exposure generally results in greater impairment (Adams et al., 2016; Ford, et al., 2010; Grasso, Dierkhising, Branson, Ford, & Lee, 2016; Hagan et al., 2015; McChesney, Adamson, & Shevlin, 2015). Among children aged 3–6 years, Hagan and colleagues (2016) found that those in the authors' "severe exposure" class, which included a combination of family violence and other forms of

victimization, exhibited more severe behavior problems compared to children who had witnessed family violence only or experienced comparatively fewer PTEs in the absence of family violence. In the most inclusive age range of youths to date (ages 10–17 years), Reid and Sullivan (2009) found that traumatic stress and delinquency were more prevalent in their “universally victimized” class compared to two other classes with lower victimization probabilities. Using self-report of a sample of youths aged 12–17 years, Ford and colleagues (2010) identified four polyvictimization classes (sexual abuse, physical abuse, community violence, and assault) plus two classes marked by witnessing assault or experiencing accidents and/or disasters. Youth in all polyvictimization classes had higher rates of major depressive disorder, posttraumatic stress disorder (PTSD), and alcohol or drug abuse disorders (Ford et al., 2010). Two studies that used the National Child Traumatic Stress Network’s Core Data Set have taken a developmental approach to PTE exposure profiles (Adams et al., 2016; Grasso, Dierkhising et al., 2016), examining the retrospective report of victimization history for adolescents aged 13–18 years. The authors of both studies reported a general trend for behavioral problems, trauma symptoms, and risk behaviors to increase with PTE exposure, and Grasso, Dierkhising, and colleagues (2016) reported increasing complexity of trauma history as youths aged.

The extant literature examining PTE exposure profiles and subsequent youth functioning has either used a single informant to describe youth experiences or has aggregated reports of PTE exposure across informants. This is problematic given evidence that youth and caregiver report of traumatic exposure is often discrepant. Specifically, studies involving youth and caregiver dyads have shown that caregivers underreport youths’ exposure to maltreatment and violence (Lindstrom Johnson, Reichenberg, Bradshaw, Haynie, & Cheng, 2014; Lewis et al., 2012; Stover, Hahn, Im, & Berkowitz, 2010). This underreporting of PTE exposure is associated with poorer behavioral outcomes (Goodman, 2013), potentially due to limited family support following trauma (Zimmerman & Pogarsky, 2011). Therefore, assessing PTE exposure should involve multiple informants to (a) obtain as accurate a report of experiences as possible and (b) identify detriments to child functioning following PTE exposure.

The present study contributed to this body of literature by examining PTE exposure as reported by both youths and caregivers in a large sample of clinic-referred children and adolescents. Our first aim was to identify distinct patterns of PTE exposure, through separate LCA models, based separately on caregiver and child report and examine concordance between these resulting models. Our second aim was to compare the level of PTSD, internalizing symptoms, externalizing symptoms, and functional impairment across the resulting PTE exposure classes.

Method

Participants

The sample included 701 youths aged 7–17 years ($M = 12.39$, $SD = 3.04$) who presented to children’s outpatient behavioral health clinics that were participating in a statewide evidence-based treatment dissemination project (described later in this article); participants comprised 434 girls (61.9%) and 265 boys (37.8%). Youths identified as European

American ($N = 273$; 38.9%), African American ($N = 89$; 12.7%), Hispanic ($N = 223$; 31.8%), and other ($N = 100$; 14.3%). Youths primarily resided with one or more biological parents (10.4% both parents, 43.2% birth mother, 8.8% birth father); fewer youths resided in foster care (12.4%), adoptive households (7.4%), or other settings (e.g., in a group home, with relatives, etc.; 17.7%). The sample reflected a low-income population; among those for whom income was reported (only 76% of participants), nearly half (44.5%) of households had an annual income of less than \$20,000 (USD), and only 13.5% of dyads reported an annual household income over \$60,000 (USD).

Procedure

Study sites were 13 children's outpatient behavioral health clinics participating in one of two learning collaborative cohorts, conducted between 2012 and 2014, which trained providers to implement trauma-focused cognitive behavioral therapy (TF-CBT; Cohen, Mannarino, & Deblinger, 2006). Clinicians administered measures separately to youth and their caregivers, either as face-to-face interviews or self-report instruments, following a referral to trauma-focused services. Measures were completed by the primary caregiver and by youths who were 7 years of age and older. Data were entered by sites into a web-based system developed to support quality assurance and program evaluation activities related to TF-CBT implementation. The evaluation procedures were approved by the institutional review boards of Yale University School of Medicine and the Connecticut Department of Children and Families.

Measures

Lifetime trauma exposure.—The Trauma History Screen (THS; Lang & Franks, 2007) measures the lifetime frequency of exposure to 19 different PTEs (see Table 1 for items) and the subjective level of distress related to each. It was adapted from the Traumatic Events Screening Inventory (Ghosh-Ippen et al., 2002) and the Trauma History Questionnaire (Berkowitz & Stover, 2005). The THS asks the rater to indicate exposure frequency on a 5-point scale from 0 (*never*) to 4 (*10 or more times*). Items with an affirmative response are then rated for the level of effect on the child at the time of occurrence and at present. For purposes of this study, the THS was administered to both caregivers and youths, and both were asked to respond relative to the youths' experiences; items were dichotomized to reflect any lifetime history of exposure. One of the items, "being kidnapped," was omitted from analyses due to an affirmative response of fewer than 5% of participants.

PTSD symptom severity.—The Child PTSD Symptom Scale (CPSS; Foa et al., 2001) is a 17-item measure that assesses PTSD symptom severity, using criteria from the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, among children aged 6–17 years. In the present study, we used both caregiver- and child-report versions. On the CPSS, items are rated on a 4-point scale to indicate frequency of symptoms over a 2-week period. Internal consistency of the total PTSD scale was good (Cronbach's $\alpha = .89$) in the present sample. The CPSS has been positively correlated with PTSD diagnosis based on structured clinical interview ($r = .51$), and scores of 16 or greater are associated with clinical levels posttraumatic stress symptoms (Nixon et al., 2013).

Depression symptoms.—The Short Mood and Feelings Questionnaire (SMFQ; Angold, Costello, Messer, Pickles, Winder, & Silver, 1995) is a 13-item measure of children's depression symptoms that has demonstrated good reliability (Cronbach's $\alpha = .85$; Angold et al., 1995). Items are rated on a 3-point Likert scale and summed to produce a total score. Both caregiver and child report versions are available and were used for this study (current sample Cronbach's α s = .89 and .65, respectively). Scores of 8 or higher on the child version have been suggested to be indicative of potential depressive symptoms although official cut points have not been set for the caregiver and child versions (Angold et al., 1995).

Problem severity and daily functioning.—Caregiver and therapist ratings of problem severity and functioning were assessed using the Problem Severity and Functioning subscales of the Ohio Scales (Ogles, Melendez, Davis, & Lunnen, 2001). The Problem Severity subscale consists of 20 items that reflect a range of problem behaviors; they are rated for frequency on a 6-point scale ranging from 0 (*not at all*) to 5 (*all the time*). Total scores range from 0 to 100, with scores greater than 20 indicating clinical levels of impairment. The Functioning subscale consists of 20 items that reflect an individual's level of functioning in various areas of daily activity (e.g., interpersonal relationships, recreation, self-direction, and motivation) and are rated on a 5-point scale ranging from 0 (*extreme troubles*) to 4 (*doing very well*). Total scores range from 0 to 80, with scores lower than 50 indicating clinical levels of child impairment. The Ohio Scales have demonstrated good to excellent reliability in validation samples (Cronbach's α s = .65-.97) and correlate with other established measures of child behavioral problems (Ogles et al., 2001)

Data Analysis

We used LCA (Collins & Lanza, 2010) to identify discrete caregiver and youth classes based on the youth's history of PTE exposure. Using LCA provides estimates of class membership probabilities as well as item response probability estimates conditioned on class (Lanza, Flaherty, & Collins, 2003). A manual three-step approach (Asparouhov & Muthén, 2014; Nylund-Gibson, Grimm, Quirk, & Furlong, 2014) was used to assess how different caregiver and youth latent classes were associated with one another and to incorporate demographic covariates and youth behavioral health outcomes. First, separate LCA models were conducted for caregiver and youth PTE reports to determine the optimal number of classes based on model fit. Demographic covariates (i.e., youth age, gender, race/ethnicity) were excluded from this stage, as were youth behavioral health outcomes. We used a number of indicators to determine the optimal number of classes for both caregiver and youth models, including lower values on the Akaike Information Criteria (AIC) index, Bayesian Information Criteria (BIC) index, and sample-size adjusted BIC; significant effects on the Lo-Mendell-Rubin likelihood ratio test (LMR-LRT) and bootstrapped likelihood ratio test (BLRT) to assess the effects of an additional class on improved model fit; and estimates of entropy to assess overall classification quality (Nylund, Asparouhov, & Muthén, 2007).

Next, we assessed fit of joint caregiver-youth LCA models, including caregiver two-class and youth three-class models as well as a series of models based on joint two-, three-, and four-class solutions. Measurement invariant models (i.e., those in which class-specific item-response probabilities were held equivalent across caregiver and youth classes) were

compared to measurement variant models. We used AIC, BIC, and adjusted BIC estimates to determine optimal class structure. Then, we created a new data set based on the results of the preceding analyses using the three-step model specification (Asparouhov & Muthén, 2014). This data set was used to assess how different caregiver and youth latent classes were associated with (a) one another and (b) behavioral health outcomes. In exploring behavioral health outcomes, we ran separate models for caregiver and youth classes and for each outcome in an effort to reduce model complexity and facilitate these comparisons. These models controlled for the effects of demographic covariates on both class membership and youth outcomes.

Missing data on clinical measures were generally low (e.g., THS: caregiver, 6.2% and youth, 2.0%; CPSS: caregiver, 8.8% and youth, 4.0%; SMFQ: caregiver, 6.4% and youth, 3.3%). Ohio Scales data were missing at a higher rate as these data were maintained in a separate data system (caregiver, 24.4% and therapist, 24.6%). Full-information maximum likelihood estimation with a robust maximum likelihood estimator was used to adjust estimates for missing data. All analyses were conducted using Mplus (Version 7.4; Muthén & Muthén, 2015).

Results

Descriptive Statistics

Table 1 displays descriptive information for demographic indicators, PTE exposure, and youth outcome measures. The most frequently endorsed PTEs by both caregivers and youths included knowing someone who died, witnessing a physical fight, and being separated from a caregiver. Most participants in the sample reported exposure to multiple trauma types; on average, caregivers endorsed more than six PTE types ($M = 6.23$, $SD = 2.79$) and youths endorsed more than seven PTE types ($M = 7.28$, $SD = 3.18$). Youths reported slightly elevated CPSS scores compared to caregivers, although both were in the clinically elevated range. Caregivers and youths reported similar levels of depressive symptoms on the SMFQ, and caregivers and therapists reported similar behavioral problems and levels of functioning on the Ohio Scales.

Caregiver and Youth LCA Model Identification

Table 2 summarizes fit indices of the caregiver and youth independent LCA models as well as the preliminary joint caregiver-youth models described earlier. For caregiver models, fit indices provided somewhat equivocal results. The AIC and entropy favored a five-class solution whereas the BIC favored a two-class solution (although the BIC for the three-class model was comparable and did not increase markedly until the addition of a fourth class). The adjusted BIC supported a four-class model. Finally, the LMR-LRT favored a two-class solution but also reached trend-level significance for a four-class model, and the BLRT failed to differentiate across classes.

For the youth model, the AIC again favored a five-class solution, the BIC and LMR-LRT favored a three-class solution (although the LMR-LRT continued to show trend-level benefits of a four-class solution), and the adjusted BIC favored a four-class solution. Entropy

was also strongest for a three-class solution, and the BLRT failed to distinguish across models.

Given these results, we tested multiple joint caregiver-youth models, including a two-class (caregiver) and three-class (youth) model as well as three sets of joint caregiver-youth models to assess for measurement invariance corresponding to two-, three- and four-class solutions. Comparisons of the AIC, BIC, and adjusted BIC for these models supported selection of a four-class, measurement invariant solution for caregiver and youth PTE report.

Item response probabilities for the four-class solution with invariant measurement models are summarized in Figure 1. Class 1 (high polyvictimization) accounted for 6.6% of caregiver reports and 16.4% of youth reports. This class was composed of youths who experienced consistently high rates of exposure to a wide range of PTEs and who experienced generally higher rates of exposure to other PTEs than youths in the other classes. Class 2 (moderate polyvictimization [general]) accounted for 18.3% of caregiver reports and 43.5% of youth reports. This class was composed of youths who experienced a broad range of PTEs, although they generally experienced them at lower rates than members of Class 1. Class 3 (moderate poly victimization [interpersonal]) accounted for 33.5% of caregiver reports and 13.7% of youth reports. This class comprised youths who experienced a moderate level of exposure, with elevated rates of negative interpersonal experiences (e.g., poor care or neglect, separation from caregivers). Finally, Class 4 (low polyvictimization) accounted for 41.5% of caregiver reports and 26.4% of youth reports. This class was composed of youths who experienced the lowest probabilities of exposure to most PTEs, most frequently reflected by caregiver separation, knowing someone who died, and witnessing people fighting.

Controlling for demographic characteristics, significant differences in the number of traumatic experiences reported for youths were observed among each of the classes based on caregiver report, $\chi^2(3, N = 642) = 1351.0, p < .001$ (high polyvictimization, $M = 12.0, SE = 0.27$; moderate polyvictimization [general], $M = 7.5, SE = 0.23$; moderate polyvictimization [interpersonal], $M = 7.5, SE = 0.17$; low polyvictimization: $M = 3.8, SE = 0.13$). Similarly, for youth classes, we observed statistically significant differences in levels of PTE exposure across classes based on youth report, $\chi^2(3, N = 642) = 1521.7, p < .001$ (high polyvictimization, $M = 12.0, SE = 0.22$; moderate polyvictimization [general], $M = 7.6, SE = 0.16$; moderate polyvictimization [interpersonal], $M = 8.0, SE = 0.31$; low poly victimization, $M = 3.8, SE = 0.16$). For both caregiver- and youth-reported classes, the moderate polyvictimization classes (general and interpersonal types) were the only groups that did not differ statistically with respect to PTE exposure rates.

Covariate Effects on Class Membership

Covariate effects of youth age, gender, and race/ethnicity on class membership were estimated using the three-step modeling approach; low polyvictimization served as the reference condition for both caregiver and youth models. Older age was associated with increased likelihood of identification with caregiver-reported high polyvictimization with an odds ratio (OR), $OR = 1.25, p = .019$. For youth-reported classes, age was positively associated with likelihood of being in the high polyvictimization class, $OR = 1.49, p < .001$,

and moderate polyvictimization (general) class, $OR = 1.23$, $p < .001$ relative to the low polyvictimization class.

Combined Caregiver-Youth Model

Parameter estimates from the independent LCA models were used to fit a combined caregiver-youth model to assess correspondence of PTE exposure classification based on caregiver and youth reports. Table 3 summarizes the youth-level class probabilities given caregiver-level class assignment. Agreement of class assignment by reporters was relatively low across all classes, and overall entropy, representing classification quality or agreement across reporters, was 0.54.

Youth Outcomes

The final set of analyses compared ratings of youth behavioral outcomes for multiple reporters (caregiver, youth, and therapist), based on caregiver- and youth-reported PTE classes, using the manual three-step methodology previously described. We ran separate models for caregiver- and youth-reported PTE classes for each outcome domain (see Tables 4 and 5, respectively), and all models controlled for demographic covariate effects on class membership and behavioral outcomes.

Caregiver-reported trauma exposure.—With respect to caregiver-rated classes, significant effects were observed for caregiver ratings of PTSD symptoms, $\chi^2(3, N = 642) = 17.38$, $p = .001$; caregiver ratings of depressive symptoms, $\chi^2(3, N = 642) = 7.80$, $p = .050$; and both caregiver, $\chi^2(3, N = 642) = 33.34$, $p < .001$, and therapist ratings of problem severity, $\chi^2(3, N = 642) = 10.68$, $p = .014$. No significant overall effects were observed for youth ratings of PTSD symptoms, youth ratings of depressive symptoms, or caregiver or therapist ratings of child functioning based on caregiver-reported PTE classes. Caregivers reported that youths in the high and moderate (general) polyvictimization classes had a significantly higher level of PTSD symptoms than youths in the other classes. The moderate (interpersonal) and low polyvictimization classes also differed, with the low polyvictimization class falling below the clinical cutoff for PTSD symptoms. With respect to both caregiver and therapist scores on the Problem Severity subscale, youths in the high and moderate (general) polyvictimization classes were rated significantly higher than youths in the moderate (interpersonal) and low polyvictimization classes, which did not differ from each other.

Youth-reported trauma exposure.—With respect to youth-rated classes, we observed significant effects for youth ratings of PTSD symptoms, $\chi^2(3, N = 642) = 23.12$, $p < .001$; youth ratings of depressive symptoms, $\chi^2(3, N = 642) = 13.59$, $p = .004$; and both caregiver and therapist ratings of problem severity, $\chi^2(3, N = 642) = 26.76$, $p < .001$ and $\chi^2(3, N = 642) = 22.79$, $p < .001$, respectively. No significant overall effects were observed for caregiver ratings of PTSD symptoms or depressive symptoms or for caregiver or therapist ratings of child functioning based on youth-reported PTE classes. With respect to PTSD symptoms, youths in the high, moderate (interpersonal), and moderate (general) polyvictimization classes rated themselves as having a significantly higher level of PTSD symptoms than youths in the low polyvictimization class. Only youths in the low

polyvictimization class fell below the clinical cutoff for PTSD symptoms. We observed a similar pattern for youth ratings of depressive symptoms, with youths in the high and moderate (interpersonal) polyvictimization classes having significantly higher scores than youths in other classes and youths in the low polyvictimization class having the lowest scores (and falling below suggested clinical thresholds). Ratings on the Ohio Problem Severity subscale posed a more complex pattern. Youths in the moderate (general) polyvictimization class were rated by caregivers as having elevated rates of problem behavior relative to youths in other classes. Similarly, therapists rated youths in both the high and moderate (general) polyvictimization classes as having elevated rates of problem behavior relative to youths in the low polyvictimization class; however, again, no other class differences were observed. Only therapist ratings of problem severity for the moderate (interpersonal) polyvictimization class were below the clinical threshold, although this class had substantial variability with respect to the outcome indicator.

Discussion

Consistent with results reported in prior literature examining both clinical and nonclinical samples, youths in the present treatment-seeking sample experienced multiple PTE exposures and exhibited poorer behavioral health as exposure increased, based on both youth and caregiver report. Our analyses identified a four-class solution for both caregiver and youth reports of PTE exposure, with the best-fitting model suggesting an invariant measurement model across reporters. Classes included a high polyvictimization class, two moderate polyvictimization classes—one reflecting more general exposure patterns (general) and the other reflecting exposures associated with interpersonal relationships (interpersonal)—and a low polyvictimization class. Notably, class prevalence varied across caregiver and youth report, with caregivers reporting lower rates of the high and moderate (general) polyvictimization classes and youths reporting lower rates of the moderate (interpersonal) and low polyvictimization classes. Further, these classes are consistent with those observed in other studies that used child and adolescent samples, including a nationally representative sample (Reid & Sullivan, 2009), clinic- or pediatric-care setting samples (Hagan et al., 2016; Grasso, Petittclerc et al., 2016), and a sample of youth involved in juvenile justice settings (Kretschmar, Tossone, Butcher, & Flannery, 2016).

Also using a clinic-based sample (albeit one younger than the sample in the present study), Hagan et al. (2016) identified three classes, including a small but significant number of children who experienced multiple forms of PTE exposure, a moderate exposure group, and a group primarily marked by a lower rate of PTE exposure (in which children tended to report witnessing violence against others as their primary exposure type). Consistent with our findings, Hagan et al. (2016) reported that discrete classes varied in a stepwise fashion in terms of the total number of PTEs experienced. This pattern suggests that class composition is, in part, associated with quantitative differences in rates of exposure, ranging from low rates of exposure to moderate and high rates of exposure. In addition, we observed differences in PTE exposure patterns, particularly with respect to the two moderate classes, which were marked by differing patterns of exposure despite similar levels of PTEs experienced. Age was associated with both caregiver and youth classes, differentiating among high and moderate classes (for caregivers) and among all classes (for youth),

suggesting the need for research that examines changes in PTE class using longitudinal data to understand the developmental processes at play with respect to PTE exposure. It may be, for example, that with greater independence, older youth are subject to increased risk of PTE exposure across a range of contexts. Alternatively, it may be that earlier exposures, or those that occur in a family context, increase the likelihood of poorer supervision or engagement in behaviors that further escalate risk of exposure to complex trauma conditions.

The inclusion of both caregiver and youth reports of PTE exposure was a significant contribution of the present study, allowing us to contrast class assignment based on reporter. Both the caregiver and youth models supported four-class solutions that represented similar constellations of PTE exposure; however, rates of class membership varied by reporter and we observed substantial cross-classification between caregiver and youth report. Stover et al. (2010) have previously highlighted poor caregiver-youth agreement on specific PTE indicators, and these results suggest similar issues with concordance when applied to classes of PTE exposure. Post hoc analyses for item-level concordance confirmed lack of agreement similar to that observed by Stover et al. (2010), with an average item-level kappa of 0.35 that ranged from a low of 0.14 (having been sick or injured) to a high of 0.70 (having been sexually abused). Poor agreement may result from caregivers underestimating exposure to certain types of events, differential knowledge about particular PTE experiences across reporters (e.g., youth nondisclosure of PTE exposure), differences in consideration as to whether an event was potentially traumatic in nature, or a reluctance to report particular types of incidents in the context of an outpatient intake with a mandated reporter. Goodman, De Los Reyes, and Bradshaw (2010) hypothesized that the caregiver-youth relationship quality may influence PTE exposure agreement, specifically when youth disclosure is necessary for caregiver knowledge of exposure. The relationship may also serve as a protective factor for youths as they process traumatic experiences; thus, caregiver-youth discrepancies in report of PTE pose concern for youth adjustment and should be addressed in the context of treatment.

The final set of analyses contrasted caregiver and youth or therapist ratings of youth behavioral health outcomes based on both caregiver and youth reports of PTE exposure classification. Looking first at classification based on caregiver reports, our results revealed that high and moderate (general) polyvictimization classes were associated with elevated ratings by caregivers of trauma-related stress, with moderate (interpersonal) polyvictimization falling somewhat lower and the low polyvictimization class having the lowest levels of posttraumatic distress. A similar pattern was also observed with respect to both caregiver and therapist ratings of problem behavior, with high and moderate (general) polyvictimization classes exceeding ratings for the moderate (interpersonal) and low polyvictimization classes. No class effects were observed with respect to depressive symptoms or child functioning, nor were they detected for youth ratings of posttraumatic distress based on caregiver classes. Conversely, youth-reported classes were associated with youth ratings of posttraumatic stress and depression (although higher ratings were observed for the moderate [interpersonal] class) and for both caregiver and therapist ratings of problem severity.

Thus, the general pattern of findings was consistent with those reported in prior research that has indicated elevated rates of adverse behavioral health outcomes for youths with a history of poly victimization (e.g., Finkelhor et al., 2007a; Hagan et al., 2016). However, these differences were largely observed within reporter groups (i.e., caregiver classes were associated with caregiver ratings of youth posttraumatic distress, youth classes were associated with youth ratings of posttraumatic distress and depressive symptoms), although we saw some crossover with respect to problem behavior ratings. Our findings are consistent with those reported by Stover et al. (2010), who found a lack of concordance in caregiver and youth ratings of trauma-related stress and depressive symptoms.

This present study had several limitations. First, the present sample was treatment-seeking, which may not be representative of the broader population of traumatized youth. Thus, readers should use caution when generalizing these results to nonclinical populations. It may be, for example, that problem behavior served as a precipitating factor in seeking treatment, helping to account for the elevated levels observed even among youths in the moderate and low polyvictimization classes. Second, although analyses accounted for demographic covariates that may influence behavioral health, we did not measure or account for other sources of child psychopathology, such as caregiving behaviors or caregiver psychopathology. Additionally, the clinical intake process was not able establish whether PTE exposure (a historical event) preceded youth symptomatology or functioning (a point-in-time assessment). Further, the specific instrumentation we used may be subject to respondent bias. As stated earlier, it is suspected that caregivers may have been reluctant to endorse PTEs as a result of their own actions or inaction. Finally, we did not account for the age at first occurrence, severity, or chronicity of PTEs, all of which may impact psychosocial functioning following exposure.

Despite these limitations, the present study contributes to the literature by using person-centered analyses to examine patterns of PTE exposure and their association to behavioral health outcomes based on multiple informants. Additionally, we employed a large sample of clinic-referred youths who were diverse in traumatic experiences, age, socioeconomic status, and ethnicity. Our results highlight the importance of collecting information about a youth's history of traumatic experiences from both the caregiver and the youth, when appropriate and available, to obtain a more complete picture. Further, many trauma-focused treatment models, such as TF-CBT (Cohen et al., 2006), child-parent psychotherapy (Lieberman, Ippen, & Van Horn, 2006), and cognitive behavior therapy in schools (Stein et al., 2003), emphasize the importance of caregiver involvement in the treatment process. Our results support the need for clinicians to address communication regarding both exposure and trauma-related symptoms to better facilitate this involvement.

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References

- Adams ZW, Moreland A, Cohen JR, Lee RC, Hanson RF, Danielson CK, ... Briggs EC (2016). Poly victimization: Latent profiles and mental health outcomes in a clinical sample of adolescents. *Psychology of Violence*, 6, 145–155. 10.1037/a0039713 [PubMed: 26958417]
- Angold A, Costello EJ, Messer SC, Pickles A, Winder F, & Silver D (1995). Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International journal of methods in psychiatric research*, 5, 237–249.
- Asparouhov T, & Muthén B (2014). Auxiliary variables in mixture modeling: Three-step approaches using Mplus. *Structural Equation Modeling*, 21, 329–341. 10.1080/10705511.2014.915181
- Berkowitz S, & Stover CS (2005). Trauma History Questionnaire -Parent and Child Version. New Haven, CT: Unpublished questionnaire, Yale Child Study Center, Trauma Section.
- Briggs-Gowan MJ, Carter AS, Clark R, Augustyn M, McCarthy KJ, & Ford JD (2010). Exposure to potentially traumatic events in early childhood: Differential links to emergent psychopathology. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 51, 1132–1140. 10.1111/j.1469-7610.2010.02256.x
- Cohen JA, Mannarino AP, & Deblinger E (2006). Treating trauma and traumatic grief in children and adolescents. New York, NY: Guilford Press.
- Collins LM, & Lanza ST (2010). Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences. New York, NY: Wiley.
- Copeland WE, Keeler G, Angold A, & Costello J (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, 64, 577–584. 10.1016/S0084-3970(08)79296-X [PubMed: 17485609]
- Finkelhor D, Ormrod RK, & Turner HA (2007a). Polyvictimization: A neglected component in child victimization. *Child Abuse & Neglect*, 31, 7–26. 10.1016/j.xhiabu.2006.06.008 [PubMed: 17224181]
- Finkelhor D, Ormrod RK, & Turner HA (2007b). Re-victimization patterns in a national longitudinal sample of children and youth. *Child Abuse & Neglect*, 31, 479–502. 10.1016/j.xhiabu.2006.03.012 [PubMed: 17537508]
- Finkelhor D, Turner H, Ormrod R, & Hamby SL (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124, 1411–1423. 10.1542/peds.2009-0467 [PubMed: 19805459]
- Foa EB, Johnson KM, Feeny NC, & Treadwell KR (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. *Journal of Clinical Child Psychology*, 30, 376–384. 10.1207/S15374424JCCP3003_9 [PubMed: 11501254]
- Ford JD, Elhai JD, Connor DF, & Frueh BC (2010). Polyvictimization and risk of posttraumatic, depressive, and substance use disorders and involvement in delinquency in a national sample of adolescents. *Journal of Adolescent Health*, 46, 545–552. 10.1016/j.jadohealth.2009.11.212 [PubMed: 20472211]
- Goodman K (2013). Parent-youth discrepancies in ratings of youth victimization: Associations with psychological adjustment. *American Journal of Orthopsychiatry*, 83, 37–46. 10.1111/ajop.12010 [PubMed: 23330621]
- Goodman KL, De Los Reyes A, & Bradshaw CP (2010). Understanding and using informants' reporting discrepancies of youth victimization: A conceptual model and recommendations for research. *Clinical Child and Family Psychology Review*, 13, 366–383. 10.1007/s10567-010-0076-x [PubMed: 20799062]
- Ghosh-Ippen CG, Ford J, Racusin R, Acker M, Bosquet M, Rogers K, ... , & Edwards J (2002). Traumatic Events Screening Inventory—Parent Report Revised. San Francisco: The Child Trauma Research Project of the Early Trauma Network and The National Center for PTSD Dartmouth Child Trauma Research Group.

- Grasso DJ, Dierkhising CB, Branson CE, Ford JD, & Lee R (2016). Developmental patterns of adverse childhood experiences and current symptoms and impairment in youth referred for trauma-specific services. *Journal of Abnormal Child Psychology*, 44, 871–886. 10.1007/s10802-015-0086-8 [PubMed: 26438634]
- Grasso DJ, Petittlerc A, Henry DB, McCarthy KJ, Wakschlag LS, & Briggs-Gowan MJ (2016). Examining patterns of exposure to family violence in preschool children: A latent class approach. *Journal of Traumatic Stress*, 29, 491–499. 10.1002/jts.22147
- Green JG, McLaughlin KA, Berglund PA, Gruber MJ, Sampson NA, Zaslavsky AM, & Kessler RC (2016). Childhood adversities and adult psychiatric disorders in the National Comorbidity Survey Replication I. *Archives of General Psychiatry*, 67, 113–123. 10.1001/archgenpsychiatry.2009.186.
- Hagan MJ, Sulik MJ, & Lieberman AF (2016). Traumatic life events and psychopathology in a high risk, ethnically diverse sample of young children: A person-centered approach. *Journal of Abnormal Child Psychology*, 44, 833–844. 10.1007/s10802-015-0078-8 [PubMed: 26354023]
- Holt MK, Finkelhor D, & Kantor GK (2007). Multiple victimization experiences of urban elementary school students: Associations with psychosocial functioning and academic performance. *Child Abuse & Neglect*, 31, 503–515. 10.1016/j.xhiabu.2006.12.006 [PubMed: 17537507]
- Karsberg S, Armour C, & Elklit A (2014). Patterns of victimization, suicide attempt, and posttraumatic stress disorder in Greenlandic adolescents: A latent class analysis. *Social Psychiatry and Psychiatric Epidemiology*, 49, 1389–1399. 10.1007/s00127-014-0890-4 [PubMed: 24806949]
- Kilpatrick DJ, Saunders BE, & Smith DW (2003). Youth victimization: Prevalence and implications. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Kretschmar JM, Tossone K, Butcher F, & Flannery DJ (2016). Patterns of polyvictimization in a sample of at-risk youth. *Journal of Child & Adolescent Trauma*, 10, 363–375. 10.1007/s40653-016-0109-9
- Lang JM, & Franks RP (2007). *The Trauma History Screen*. Unpublished measure. Hartford, CT: Connecticut Center for Effective Practice.
- Lanza ST, Flaherty BP, & Collins LM (2003). Latent class and latent transition analysis In Schinka JA & Velicer WF (Eds.), *Handbook of psychology: Vol. 2. Research methods in psychology* (pp. 663–685). Hoboken, NJ: Wiley.
- Lewis T, Thompson R, Kotch JB, Proctor LJ, Litrownik AJ, English DJ, ... Dubowitz H (2012). Parent-youth discordance about youth-witnessed violence: Associations with trauma symptoms and service use in an at-risk sample. *Child Abuse & Neglect*, 36, 790–797. 10.1016/j.xhiabu.2012.09.009 [PubMed: 23153569]
- Lieberman AF, Ippen CG, & Van Horn P (2006). Child-parent psychotherapy: 6-month follow-up of a randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45, 913–918. 10.1097/01.chi.0000222784.03735.92 [PubMed: 16865033]
- Lindstrom Johnson S, Reichenberg R, Bradshaw CP, Haynie DL, & Cheng TL (2016). Caregiver and adolescent discrepancies in perceptions of violence and their associations with early Adolescent aggression. *Journal of Youth and Adolescence*, 45, 2125–2137. 10.1007/s10964-016-0505-3 [PubMed: 27230117]
- Luthra R, Abramovitz R, Greenberg R, Schoor A, Newcorn J, Schmeidler J, ... Chemtob CM (2009). Relationship between type of trauma exposure and posttraumatic stress disorder among urban children and adolescents. *Journal of Interpersonal Violence*, 24, 1919–1927. 10.1177/0886260508325494 [PubMed: 18945918]
- McChesney GC, Adamson G, & Shevlin M (2015). A latent class analysis of trauma based on a nationally representative sample of U.S. adolescents. *Social Psychiatry and Psychiatric Epidemiology*, 50, 1207–1217. 10.1007/s00127-015-1075-5 [PubMed: 26032181]
- Muthén LK, & Muthén BO (2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén
- Nixon RD, Meiser-Stedman R, Dalgleish T, Yule W, Clark DM, Perrin S, & Smith P (2013). The Child PTSD Symptom Scale: An update and replication of its psychometric properties. *Psychological assessment*, 25, 1025–1031. 10.1037/a0033324 [PubMed: 23815109]
- Nylund KL, Asparouhov T, & Muthén BO (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*, 14, 535–569. 10.1080/10705510701575396

- Nylund-Gibson K, Grimm R, Quirk M, & Furlong M (2014). A latent transition mixture model using the three-step specification. *Structural Equation Modeling*, 21, 439–454. 10.1080/10705510701575396
- Ogles BM, Melendez G, Davis DC, & Lunnen KM (2001). The Ohio Scales: Practical outcome assessment. *Journal of Child and Family Studies*, 10, 199–212. 10.1023/A:1016651508801
- Reid JA, & Sullivan CJ (2009). A latent class typology of juvenile victims and exploration of risk factors and outcomes of victimization. *Criminal Justice and Behavior*, 36, 1001–1024. 10.1177/0093854809340621
- Shevlin M, & Elklit A (2008). A latent class analysis of adolescent adverse life events based on a Danish national youth probability sample. *Nordic Journal of Psychiatry*, 62, 218–224. 10.1080/08039480801983992 [PubMed: 18609032]
- Stein BD, Jaycox LH, Kataoka SH, Wong M, Tu W, Elliott MN, & Fink A (2003). A mental health intervention for school children exposed to violence: A randomized controlled trial. *Journal of the American Medical Association*, 290, 603–611. 10.1001/jama.290.5.603 [PubMed: 12902363]
- Sternberg KJ, Baradaran LP, Abbott CB, Lamb ME, & Guterman E (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A mega-analysis. *Developmental Review*, 26, 89–112. <https://doi.org/10.1016Zj.dr.2005.12.001>
- Stover CS, Hahn H, Im JJY, & Berkowitz S (2010). Agreement of parent and child reports of trauma exposure and symptoms in the early aftermath of a traumatic event. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2, 159–168. 10.1037/a0019156.
- Suliman S, Mkabale SG, Fincham DS, Ahmed R, Stein DJ, & Seedat S (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry*, 50, 121–127. 10.1016/j.xomppsy.2008.06.006 [PubMed: 19216888]
- Sullivan TP, Fehon DC, Andres-Hyman RC, Lipschitz DS, & Grilo CM (2006). Differential relationships of childhood abuse and neglect subtypes to PTSD symptom clusters among adolescent inpatients. *Journal of Traumatic Stress*, 19, 229–239. 10.1002/jts [PubMed: 16612815]
- Zimmerman GM, & Pogarsky G (2011). The consequences of parental underestimation and overestimation of youth exposure to violence. *Journal of Marriage and Family*, 73, 194–208. 10.1111/j.1741-3737.2010.00798.x

Figure 1. Item-response probabilities for caregiver and youth latent class models (invariant measurement model solution). Poly = polyvictimization; CG = caregiver; Y = youth

Table 1.
Descriptive Statistics of Parent and Youth Trauma Exposure Reports, Covariates, and Child Well-Being Outcomes

Variable	Parent Report			Youth Report		
	N	%	M	SD	N	%
Trauma history items						
Been physically hurt or threatened	327	46.6			387	55.2
Been forced to see or do something sexual	206	29.4			229	32.7
Time when did not have right care	222	31.7			182	26.0
Unexpectedly separated from caregiver	456	65.0			463	66.0
Been or seen someone robbed	73	10.4			151	21.5
Been so sick or hurt, might die	71	10.1			81	11.6
Been in or seen very bad accident	184	26.2			286	40.8
Been in or seen disaster or bad fire	216	30.8			325	46.4
Been attacked by a dog or other animal	109	15.5			227	32.4
Seen or heard physical fight or threats to hurt	482	68.8			530	75.6
Know someone injured or sick, almost died	273	38.9			342	48.8
Know someone who died	482	68.8			561	80.0
Family member arrested or in jail	324	46.2			352	50.2
Watched people using drugs	192	27.4			288	41.1
Know someone who attempted suicide	188	26.8			268	38.2
Seen somebody using a gun, knife, or weapon	184	26.2			241	34.4
Seen/heard someone forced to have sexual contact	76	10.8			68	9.7
Covariates						
Gender (male)	265	37.8				
Race						
White	273	38.9				
African American	89	12.7				
Hispanic	223	31.8				
Other Race/Ethnicity	100	14.3				
Age (years)			12.39	3.04		
Outcomes						

Variable	Parent Report			Youth Report		
	N	%	M	SD	N	%
THIS sum			6.23	2.79		7.28
CPSS total score			19.64	11.58		21.37
SMFQ total score			10.14	6.46		9.82
Ohio Problem Severity scale			24.67 ^a	14.95 ^a		26.93 ^b
Ohio Functioning scale			46.82 ^a	15.09 ^a		47.13 ^b

Note: THIS = Trauma History Screen; CPSS = Child PTSS Symptom Scale; SMFQ = Short Moods and Feelings Questionnaire.

^a As reported by caregivers.

^b As reported by therapist (rather than youth).

Table 2.

Fit Statistic Comparisons of Trauma Exposure Latent Class Analysis Models

Model	Description	AIC	BIC	Adjusted BIC	LMR LRT <i>p</i>	BLRT <i>p</i>	Entropy
Caregiver Models							
CG1	1 class	12,459.6	12,535.9	12,481.9	–	–	–
CG2	2 class	12,071.4	12,228.5	12,117.4	<.001	<.001	0.63
CG3	3 class	11,993.3	12,231.1	12,062.8	.149	<.001	0.67
CG4	4 class	11,966.1	12,284.7	12,059.3	.081	<.001	0.69
CG5	5 class	11,952.0	12,351.4	12,068.9	.481	.020	0.70
Youth Models							
Y1	1 class	13,769.3	13,846.4	13,792.4	–	–	–
Y2	2 class	13,182.4	13,341.0	13,229.9	<.001	<.001	0.68
Y3	3 class	13,078.6	13,318.9	13,150.6	.003	<.001	0.73
Y4	4 class	13,028.0	13,349.9	13,124.5	.073	<.001	0.67
Y5	5 class	13,007.9	13,411.4	13,128.8	.625	<.001	0.66
Joint Models							
Joint1	2 class (CG) 3 class (Y)	25,150.1	25,550.7	25,271.3	–	–	–
Joint2	2 class, relaxed	25,253.8	25,572.5	25,350.2	–	–	–
Joint3	2 class, invariant	25,359.6	25,523.5	25,409.2	–	–	–
Joint4	3 class, relaxed	25,071.9	25,554.5	25,217.9	–	–	–
Joint5	3 class, invariant	25,116.2	25,366.5	25,191.9	–	–	–
Joint6	4 class, relaxed	24,994.1	25,640.6	25,189.7	–	–	–
Joint7	4 class, invariant	24,980.5	25,317.4	25,082.5	–	–	–

Note. CG = caregiver; Y = youth; AIC = Akaike information criterion; BIC = Bayesian information criterion; LMR LRT = Lo-Mendell-Rubin likelihood ratio test; BLRT = bootstrapped likelihood ratio test.

Table 3.
Probability of Youth Exposure Class Given Caregiver Exposure Class Membership (Combined Model)

	Youth Exposure Class			
	High (16.4%)	Moderate (General; 43.5%)	Moderate (Interpersonal; 13.7%)	Low (26.4%)
Caregiver Exposure Class				
High (6.6%)	0.22	0.45	0.13	0.20
Moderate (General; 18.3%)	0.20	0.47	0.12	0.21
Moderate (Interpersonal; 33.5%)	0.15	0.42	0.15	0.27
Low (41.5%)	0.16	0.45	0.13	0.27

Note. Column headings indicate class membership based on degree of polyvictimization.

Table 4.

Class Specific Intercepts for Child Well-Being Outcomes Based on Caregiver-Reported Classes^a

	Class 1: High		Class 2: Moderate (General)		Class 3: Moderate (Interpersonal)		Class 4: Low	
	M	SE	M	SE	M	SE	M	SE
CPSS ^b								
Caregiver	23.3 _a	2.9	24.5 _a	3.1	16.4 _b	1.1	11.8 _c	1.6
Youth	23.5	2.7	23.3	2.2	20.8	1.1	19.0	1.1
SMFQ ^c								
Caregiver	11.8 _a	1.5	11.6 _a	1.3	9.6 _{a,b}	0.7	8.4 _b	0.7
Youth	12.4 _a	1.4	11.1 _{a,b}	1.5	10.1 _{a,b}	0.7	9.6 _b	0.7
Ohio PS ^d								
Caregiver	33.9 _a	4.2	34.3 _a	2.9	16.9 _b	2.5	22.0 _b	1.4
Therapist	31.8 _a	3.0	32.8 _a	3.1	23.1 _b	2.2	24.3 _b	1.2
Ohio Functioning ^e								
Caregiver	43.7	3.9	49.4	3.7	48.2	1.9	49.7	1.6
Therapist	44.2 _a	2.5	49.5 _{a,b}	1.6	49.7 _{a,b}	1.4	49.7 _b	1.1

Note. Column headings indicate class membership based on degree of polyvictimization.

Cells with differing subscripts are statistically different from one another at $p < .05$ (within caregiver and youth class comparisons). CPSS = Child PTSD Symptom Scale; SMFQ = Short Moods and Feelings Questionnaire; Ohio PS = Ohio Problem Severity subscale.

^aControlling for demographic covariates.

^bCPSS: WaldCG (3) = 17.38, $p = .001$; WaldY (3) = 6.08, $p = .108$.

^cSMFQ: WaldCG (3) = 7.80, $p = .050$; WaldY (3) = 4.15, $p = 0.246$.

^dOhio PS: Wald CG (3) = 33.34, $p < .001$; WaldTh (3) = 10.68, $p = .014$.

^eOhio Functioning: WaldCG (3) = 2.81, $p = .421$; WaldTh (3) = 4.66, $p = .198$.

Table 5.

Class Specific Intercepts for Child Well-Being Outcomes, Based on Youth-Reported Classes^a

	Class 1: High		Class 2: Moderate (General)		Class 3: Moderate (Interpersonal)		Class 4: Low	
	M	SE	M	SE	M	SE	M	SE
CPSS ^b								
Caregiver	17.1	1.6	16.2	1.5	19.2	2.6	14.2	1.5
Youth	24.5 _a	1.7	20.5 _a	1.2	25.8 _a	2.5	14.8 _b	1.6
SMFQ ^c								
Caregiver	10.1	1.0	9.8	0.7	10.3	1.3	8.2	1.0
Youth	13.6 _a	1.0	10.0 _{b,c}	1.0	12.7 _{a,b}	1.2	5.9 _c	2.5
Ohio PS ^d								
Caregiver	15.3 _a	4.9	30.5 _b	1.9	22.4 _a	4.1	17.3 _a	2.5
Therapist	25.9 _a	2.0	29.8 _a	1.5	20.8 _{a,b}	6.8	19.4 _b	1.6
Ohio Functioning ^e								
Caregiver	49.6	2.4	48.2	1.8	47.3	3.3	49.7	1.9
Therapist	49.8 _{a,b}	1.6	47.2 _a	1.3	52.1 _{a,b}	2.2	51.5 _b	1.4

Note. Column headings indicate class membership based on degree of polyvictimization. Cells with differing subscripts are statistically different from one another at $p < .05$ (within caregiver and youth class comparisons). CPSS = Child PTSD Symptom Scale; SMFQ = Short Moods and Feelings Questionnaire; Ohio PS = Ohio Problem Severity subscale.

^aControlling for demographic variables.

^bCPSS: WaldCG (3) = 4.08, $p = .253$; WaldY (3) = 23.12, $p < .001$.

^cSMFQ: WaldCG (3) = 3.03, $p = .387$; WaldY (3) = 13.59, $p = .004$.

^dOhio PS: WaldCG (3) = 26.76, $p < .001$; WaldTh (3) = 22.79, $p < .001$.

^eOhio Functioning: WaldCG (3) = 0.83, $p = .841$; WaldTh (3) = 6.94, $p = .074$.