Abstract: Objectives: This study replicates and extends the research literature on poly-victimization with a vulnerable and under-served population, juvenile justice-involved youths.
Methods: N = 1959 10-16 year old youths (76% male; 74% Black or Latino ethnicity) newly admitted to juvenile detention facilities completed psychometric measures of trauma history, posttraumatic stress, affect regulation, alcohol/drug use, suicide risk, and somatic complaints.
Results: Using latent class analysis derived from 19 types of traumatic events, three unique classes best fit the data. One class (49% female, 51% Black or Latino ethnicity) accounted for 5% of the sample and reported on average seven types of traumatic exposure, 12 types of victimization, and the most severe posttraumatic stress symptoms, affect dysregulation, alcohol/drug use, suicide risk, and somatic complaints. A second class (31% female, 70% Black or Latino ethnicity) accounted for 36% of the sample and reported on average of three types of traumatic exposure and eight types of victimization, moderate levels of symptomatic and behavioral problems. The third and largest (59% of the sample) class (17% female, 78% Black or Latino ethnicity) rarely reported traumatic exposure despite on average reporting six types of victimization, and reported the lowest levels of symptoms and behavioral problems.
Conclusions: Study findings demonstrate that a poly-victimization sub-group can be identified in juvenile justice populations using a self-report screening measure for past exposure to a range of traumatic events. Consistent with prior research, poly-victim justice-involved youths had multiple severe psychological and behavioral problems, and they also were particularly likely to have been exposed to non-victimization traumatic incidents and losses that may warrant attention in judicial, clinical, and rehabilitation determinations and services. Poly-victimization and related trauma exposure warrant further scientific study in juvenile justice populations.
April 26, 2012

Dr. David Wolfe
Editor, Child Abuse & Neglect

Dear Dr. Wolfe:

I am submitting the manuscript, “Poly-victimization among Juvenile Justice-Involved Youths” for your review for consideration as a research report in Child Abuse & Neglect. The report was co-authored by Drs. Damion Grasso, Josephine Hawke, and John Chapman, all of whom approve its publication.

The study was conducted using a protocol approved by the Institutional Review Board of the University of Connecticut Health Center and the Internal Research Review Committee of the State of Connecticut Judicial Branch Court Support Service Division. Findings described in this paper are original analyses that have not been reported in any previous publication and will not be published elsewhere without the written consent of the copyright-holder.

Thank you for your consideration of this manuscript. I will look forward to receiving your reviews.

Sincerely,

Julian D. Ford, Ph.D.
Professor
Department of Psychiatry
Poly-Victimization among Juvenile Justice-Involved Youths

Julian D. Ford, Damion J. Grasso, Josephine Hawke, and John F. Chapman

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Conclusions: Study findings demonstrate that a poly-victimization sub-group can be identified in juvenile justice populations using a self-report screening measure for past exposure to a range of traumatic events. Consistent with prior research, poly-victim justice-involved youths had multiple severe psychological and behavioral problems, and they also were particularly likely to have been exposed to non-victimization traumatic incidents and losses that may warrant attention in judicial, clinical, and rehabilitation determinations and services. Poly-victimization and related trauma exposure warrant further scientific study in juvenile justice populations.

Keywords: Victimization, Traumatic Stress, Adolescence, Juvenile Justice, Mental Health
As many as two in three adolescents report having been exposed to psychological trauma (Copeland, Keeler, Angold, & Costello, 2007), including directly experiencing or witnessing intentional or accidental violence, injury, or loss (Kilpatrick et al., 2000) and life threatening disasters (Anthony et al., 2005). Trauma exposed adolescents are at risk for posttraumatic stress disorder (PTSD), major depressive disorder, and substance abuse, and those who develop PTSD are at further risk for drug abuse or dependence (Kilpatrick et al., 2000). A subgroup of trauma-exposed youth are considered “poly-victims”—those who have experienced not just one but several types of traumatic victimization including assault, family and community violence, and physical and sexual abuse (Finkelhor, Ormrod, & Turner, 2007).

The sequelae of poly-victimization include, but extend well beyond, PTSD, including emotion dysregulation, dissociation, impulsivity, reactive aggression, relational problems, and addictive behaviors in childhood (Cloitre et al., 2009; D’Andrea, Ford, Spinazzola, Stolbach, & van der Kolk, in press; Ford, Connor, & Hawke, 2009; Ford, Wasser & Connor, 2011; Turner, Finkelhor, & Ormrod, 2010), adolescence (Cloitre et al., 2009; Ford et al., 2009; Ford, Elhai, Connor, & Frueh, 2010; Turner et al., 2010), and adulthood (Briere, Kaltman, & Green, 2008; Dong et al., 2004). Exposure to multiple types of traumatic victimization also has been shown to place adolescents at risk for severe psychosocial impairment and involvement in delinquency that cannot be fully accounted for by PTSD or other psychiatric or behavioral disorders, in both community (Ford, Elhai, Connor, & Frueh, 2010) and psychiatric (Ford, Connor, & Hawke, 2009) samples. The present study was designed to replicate and extend poly-victimization investigations in a distinct high-risk population of adolescents – youth who are involved in the juvenile justice system (Ford, Chapman, Connor, & Cruise, in press).

Psychological trauma and post-traumatic stress disorder (PTSD) are prevalent among youth involved in the juvenile justice system. More than 90% of a sample of youth (Abram et al.,
2004) in a large urban juvenile detention center reported a history of at least one, and often several, potentially traumatic psychological experiences according to the criteria for PTSD in the *DSM-IV-TR*. This prevalence estimate is more than triple the 25% estimate of exposure to psychological trauma documented in an epidemiological study of a representative sample of youth in the community (Costello, Erklani, Fairbank, & Angold, 2001). One in ten detained juveniles currently meet criteria for post-traumatic stress disorder (PTSD), most often due to witnessing violence or life-threatening accidents (Abram et al., 2004). Lifetime PTSD prevalence estimates in juvenile justice populations range from 25-50% (Abram et al., 2004; Arroyo, 2001) and current or past-year prevalence estimates of PTSD, while lower, exceed those of other service-receiving youth samples (Dolamanta, Risser, Roberts, & Risser, 2003; Garland et al., 2001, Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). PTSD prevalence estimates are four to eight times as high in juvenile justice populations as those reported by studies with community or healthcare samples of similar-age youths (Ford et al., in press).

Poly-victimization is of particular concern among juvenile justice-involved youth, but it has not, to our knowledge, been formally investigated in that population. Abram and colleagues (2004) reported that the average number of distinct traumatic stressors reported by youths in a large detention facility ranged between 12 and 20 across the two genders and three ethnocultural groups (White, Hispanic, Black). The most commonly reported traumatic stressors were types of victimization, including witnessing someone being badly hurt or killed (i.e., likely domestic or community violence; 75% of the boys, 64% of the girls), being threatened with a weapon (59% of the boys; 47% of the girls), being afraid of being killed or badly hurt (54% of the boys, 49% of the girls), and being physically assaulted or badly beaten (36% of the boys, 31% of the girls). In addition, 30% of the girls reported having experienced actual or potential sexual trauma. That study inquired about eight distinct types of potentially traumatic events, compared to more than
15 (Ford et al., 2010, in press) and as many as 50 (Finkelhor et al., 2007; Turner et al., 2010) in studies specifically examining poly-victimization reported by adolescents. Even with a relatively limited number of trauma types, the Abram et al. (2004) findings suggest that there may be one or more subgroups of juvenile justice-involved youths who are poly-victims.

The present study examined patterns of victimization and trauma exposure in a sample of adolescents newly admitted to juvenile detention facilities. We conducted an E-LCA on 19 self-reported trauma types, each satisfying the DSM-IV-TR PTSD Criterion A (i.e., actual/threatened death/serious injury to self/other, response involved intense fear/helplessness/horror). We expected to find at least two subgroups of youths differentiated by the number of trauma types: a highly exposed ‘poly-victimized’ group and a mildly exposed group. We also tested sub-group differences on demographic characteristics, the number of types of (a) traumatic victimization, (b) non-victimization traumatic exposures, and (c) victimization or other stressful experiences that did not meet the DSM-IV Criterion A for traumatic exposure, and several domains indexing emotional, cognitive, and behavioral problems, and psychosocial impairment including alcohol/drug use and suicidality. Consistent with prior research, we hypothesized that a highly exposed poly-victimized subgroup would contain older youths with more severe self-reported symptoms of PTSD, depression/anxiety and cognitive problems and greater endorsement of high-risk behavior: suicidal ideation and alcohol/drug use.

Suicidality and substance abuse were selected as foci because they are: (1) prevalent in juvenile justice populations (suicidality: Giaconia, Reinherz, Paradis, & Stashwick, 2003; Penn, Esposito, Schaeffer, Fritz, & Spirito, 2003; Putnins, 2005; substance abuse: Abram et al., 2003; Giaconia et al., 2003; Morris et al., 1995); (2) commonly comorbid, specifically in juvenile justice samples (Abram et al., 2003; Giaconia et al., 2003; Putnins, 2005); and, (3) likely to be sequelae of exposure to psychological trauma (suicidality: Dube et al., 2001; Green et al., 2005;
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Roy, 2005; Thompson et al., 2005; Ullman & Breckman, 2002; substance abuse: Breslau, Davis, & Schultz, 2003; Chilcoat & Menard, 2003; Hien, Cohen, & Campbell, 2005). Psychological trauma and PTSD often co-occur with suicidality (Dixon, Howie, & Starling, 2005; Erwin, Newman, McMackin, Morrissey, & Kaloupek, 2000; Giaconia, et al., 2003; Sareen, Houlahan, Cox, & Asmundson, 2005; Ullman & Breckman, 2002) and substance abuse (Abram et al., 2004; Breslau et al., 2003; Deykin & Buka, 1997; Giaconia et al., 2003; Mills, Teeson, Ross, & Peters, 2006). In the National Comorbidity Study, among all the anxiety disorders only PTSD was uniquely associated with increased risk of suicidality and suicide attempts, with a nearly threefold increase in risk associated with PTSD (Mills et al., 2006). Adults (Chilcoat & Menard, 2003) and adolescents (Giaconia et al., 2003; Kilpatrick et al., 2000) with PTSD are as much as eight times more likely than those without PTSD to have a substance use disorder. The convergence of traumatic stress, substance abuse and suicide risk is highlighted by the finding that suicidality is a particularly serious risk for adults who experienced multiple childhood adversities (e.g., poverty, maltreatment; community or family violence), many of whom also have had substance abuse problems (Anda et al., 2001).

Lastly, we explored differences across subgroups on three types of familial adversity that do not meet the DSM-IV criterion A1 for traumatic exposure but that have been shown to be associated with psychosocial morbidity, parental physical neglect and emotional/verbal abuse and arrest of a parent (Anders, Shallcross, & Frazier, 2012; Ford et al., 2009). We hypothesized that poly-victims would more often report these adversities than other justice-involved youth.

**Method**

**Participants**

Study participants were 1959 youths (76% boys) ages 10-17 years old (Median = 14 years old; $M = 14.43, SD = 0.96$) admitted within the prior 24-72 hours to State of Connecticut
pretrial juvenile detention centers between January 2005 and June 2008. The highest age generally admitted to Connecticut juvenile detention facilities in that time period was 15 years, although older youths with outstanding cases were sometimes detained. Participants’ self-reported ethnicities were comparable to those of census data for detained youths in Connecticut, including: White, not Hispanic (26% of this sample versus 36% in detention facilities overall), Black (African-American and Caribbean American, 43% versus 39% statewide), Latino/Hispanic (31% of sample versus 25% statewide). The types of legal charges were consistent with those of samples in past studies with this population (Ford et al., 2008) and with Connecticut’s juvenile detention population: mainly nonviolent acts and technical violations (e.g., theft, breach of peace, drug use, failure to adhere to probation), and approximately 23% violent crimes (e.g., rape, murder, aggravated assault).

**Procedure and Measures**

As mandated by State statute, self-report screening occurs at the time of intake, within 24-72 hours of admission to one of the three pretrial detention centers for youth in Connecticut. Staff ratings of youth violence risk were collected for all new admissions throughout the first week, on a schedule dictated by each facility’s logistics and policies. All youths completed self-report measures with assistance if needed from Masters-level counseling staff, including having questionnaires read to any youth who reported or showed behavioral evidence of difficulty in reading or understanding items on any measure. The staff were carefully trained and supervised to introduce and address respondents’ questions about the measures in a manner that reflected awareness of the sensitivity of questions about psychological trauma, PTSD, suicidal ideation, and substance use for the youths. No participants experienced more than mild transient discomfort while answering the self-report measures, and the staff were prepared to immediately assist any youth in getting help from mental health providers (on-site or on-call) in the event of
severe or lasting distress. Each youth was clearly told that: (a) the information was being collected in order to help detention staff to understand the youth’s difficulties and strengths, and to work with the youth on positive goals in and after detention; (b) he or she could choose not to answer some or all of the questions with no adverse consequences or loss of any services or privileges, and (c) that answers would not in any way lead to an increase or reduction in the seriousness of their legal status or adjudication.

Data were abstracted on a redacted basis to ensure anonymity from secure institutional electronic databases by co-authors (JH, JC), according to an exempt protocol for the management of archival data approved by the institutional review boards of the Court Support Services Division (IRRC) and University of Connecticut Health Center. All procedures for data collection and redaction were identical in the participating Detention Centers.

**Traumatic Experiences Screening Instrument (TESI).** This computer-assisted version of a self-report questionnaire asks about 19 behaviorally-anchored specific events within seven categories: (1) accident/illness/disaster, (2) physical assault, (3) neglect, (4) physical abuse, (5) family violence, (6) community violence, (7) sexual abuse, (8) emotional abuse, and (9) caregiver loss/separation. The TESI categories have shown evidence of retest reliability and criterion validity with similar-age youth in healthcare and psychiatry samples (Daviss et al., 2000; Ford et al., 2000, 2008). Each event reported as having occurred is followed by probe questions determining if the experience qualifies for the *DSM-IV-TR* (American Psychiatric Association, 1994) definition of traumatic stressors (i.e., “Criterion A” for PTSD). Scoring involves first identifying specific items for which there is an event (or series of events) that meet Criterion A, and then coding each of the seven composite categories as “present” (i.e., at least one item/event representative of that category is acknowledged and meets Criterion A) or “absent” (i.e., no item/event representative of that category is acknowledged, or the item/events
acknowledged do not fulfill Criterion A). For example, TESI item 3.1 represents the category of witnessed family violence: “Have you ever seen or heard people in your family physically fighting, hitting, slapping, kicking, or throwing things at each other? What about shooting with a gun or a stabbing, or any other kind of dangerous weapon?” If this item is answered “Yes,” the follow-up probe question assessing Criterion A is: “Did you feel really bad, upset, scared, sad, or mixed up the worst time this happened?” If the probe is answered, “Yes,” the event/experiences are considered to have occurred and to have been psychologically traumatic, and the category of witnessed family violence is scored as present for that youth.

UCLA PTSD Reaction Index (UCLA PTSD-RI). The UCLA PTSD RI is a self-report questionnaire that assesses PTSD symptom severity in the past 30 days with demonstrated reliability and validity (Steinberg, Brymer, Decker, & Pynoos, 2004). Specifically, retest reliability over a 7-day period is .87 (intraclass correlation), internal consistency is >.85 (Cronbach’s Alpha), and convergent validity coefficients of .70 and .82 were found in relationship to standardized structured interviews for PTSD (Steinberg et al., 2004, p. 98).

Massachusetts Youth Screening Instrument, Version 2 (MAYSI-2). The MAYSI-2 is a 52-item self-report measure that requires about 10 minutes to administer and is readable at the fifth grade level (Grisso Barnum, Fletcher, Cauffman, & Peuschold, 2001). The computerized Voice CD Version 3 was used, with dichotomous “yes” or “no” items answered based on “the past few months” (Cauffman, 2004). Face valid items suggested by adolescent mental health experts and juvenile detention staff were refined in the MAYSI-2 based on psychometric studies of seven factor analytically-derived subscales: Alcohol/Drug Use, Angry-Irritable, Depressed-Anxious, Somatic Complaints, Suicide Ideation, Thought Disturbance, and Traumatic Experiences. The MAYSI-2 shows evidence of internal consistency (median $\alpha = .70$; median item-total correlations = 0.35-0.62, with none below 0.20) and retest reliability (median
intraclass correlation = .74), convergent validity with the Child Behavior Checklist Youth Self Report and Millon Adolescent Clinical Inventory (rs = .35-.65); and criterion and predictive validity based on correctional records identifying youths with: (a) prior mental health treatment, (b) post-detention placement in secure facilities, and (c) a low likelihood of receiving post-detention mental health services (Grisso & Barnum, 2006).

Statistical Analyses

After initial review and cleaning of all data to eliminate extreme outliers and cases with invalid or missing data, Mplus (Muthen & Muthen, 2007) was used to conduct an exploratory latent class analysis (E-LCA) using maximum likelihood estimation with robust standard errors in order to determine the number of underlying latent classes best corresponding to the observed trauma exposure and diagnostic data. Model fit indices of various class solutions were examined and compared in an incremental manner. The sample size adjusted Bayesian information criterion (aBIC), which applies a penalty for an increased number of parameters, has shown superior performance in an extensive simulation study compared to alternative fit indices (Muthen & Muthen, 2007). In addition, The Lo-Mendell-Rubin adjusted likelihood ratio test (LMR; Lo, Mendell, & Rubin, 2001) provides empirical support for comparing a model with K classes against a model with K – 1 classes (Nyland, Asparouhov, & Muthen, 2007). Thus, the aBIC and LMR were used to determine the best class solution.

Traumatic stressor exposure indicators included 19 dichotomous variables (see Table 2). Results of the E-LCA informed further analyses examining potential differences in demographics and other measures across classes. In comparing classes, chi-square Goodness-of-Fit tests, one-way analyses of variance (ANOVAs), and multivariate analyses of variance (MANOVAs) were employed. If a MANOVA was significant, subsequent one-way ANOVAs were conducted to evaluate potential group differences on the individual measures. For
ANOVAs revealing significant effects, pairwise post-hoc comparisons were conducted using Cohen’s (1988) modified Step-Up Bonferroni procedure. The first step is to test the largest \( p \)-value in the set of comparisons. If \( p < .05 \) then all subsequent \( p \)-values \( < .05 \) are considered significant. The next largest \( p \)-value \( > .05 \) is then compared to \( .05 / (\# \text{ comparisons}) - (\# \text{ comparisons} - 1) \). All subsequent \( p \)-values less than this new critical value are considered significant. These steps continue, increasing the denominator at each step (i.e., \( \# \text{ comparisons} - (\# \text{ comparisons} - n) \), for \( n = 1, 2, …\# \text{ comparisons} \)), until \( n \) reaches its maximum. Partial eta-squared values are reported to demonstrate the size of effects in ANOVA models, where .02 represents a small effect, .13 a medium effect, and .26 a large effect (Cohen, 1988).

**Results**

**Trauma Exposure and Symptom Severity**

More than half of the sample (58%) endorsed a potentially traumatic event that met *DSM-IV-TR* criterion A, with total number of trauma types reported ranging from 0 to 16 (\( M = 1.48, SD = 0.91 \)). Of the youths who endorsed exposure to any traumatic event(s), the mean number of types reported was 2.56 (\( SD = 1.88 \)). Twenty-eight percent of the sample reported past traumatic victimization, with total number of traumatic victimization types endorsed ranging from 0 to 9 (\( M = 0.48, SD = 0.96 \)). Experiencing Criterion A traumatic event(s) characterized by loss or separation from a primary caregiver, surveyed by two items, was endorsed by 36% of the sample. Experiencing traumatic event(s) not characterized by victimization was endorsed by 53% of the sample with total number of types ranging from 0 to 7 (\( M = 1.0, SD = 1.25 \)). Missing data on any given trauma category ranged from 1.22% to 10.46% (\( M = 6.40, SD = 4.28 \)). Items with missing data were conservatively counted as “not present” for that event type.

Respondents’ scores on the UCLA PTSD-RI (\( M = 16.04, SD = 15.8 \)) were comparable to those in samples of youths known to have been exposed to traumatic stressors, but lower than
those usually found in clinical samples (Steinberg et al., 2004). Scores on the MAYSI-2 Alcohol/Drug Use ($M = 1.13$, $SD = 1.82$), Anger/Irritability ($M = 2.85$, $SD = 2.79$), Thought Disturbance ($M = 0.72$, $SD = 1.38$), Somatic Complaints ($M = 1.66$, $SD = 1.84$), Suicidal Ideation ($M = 0.65$, $SD = 1.33$), and Depression/Anxiety ($M = 1.21$, $SD = 1.52$) subscales were comparable to those of large representative juvenile justice samples (Grisso & Barnum, 2006).

**Exploratory Latent Class Analysis**

An E-LCA conducted on the 19 TESI items yielded fit indices that are presented in Table 1 for models with 1-4 class solutions. A 3-class solution best fit the data. Class I was comprised of 103 youths (5.3%), and Classes II and III were comprised of 702 (35.8%) and 1154 (58.9%) youths, respectively. Indicators and class proportions are displayed in Figure 1.

**Demographic Characteristics**

Child gender distribution differed significantly across classes, $\chi^2 = 36.59$, $p < .001$, with a comparable proportion of girls and boys in Class I (48.9% girls), fewer girls than boys in Class II (30.9%), and still fewer girls (16.8%) than boys in Class III. Ethnicity distributions also differed across classes, $\chi^2 = 9.39$, $p = .009$, with White youths over-represented in Class I (31.4% African American, 20.0% Hispanic, and 48.6% Non-Hispanic White), and more non-white than white youths in Classes II (0.4% Asian, 37.0% African American, 33.0% Hispanic, and 29.6% Non-Hispanic White) and III (0.2% Asian, 42.9% African American, 30.5% Hispanic, 26.3% Non-Hispanic White). There was no difference in distribution of grade levels ($p > .4$) or age $p > .7$.

**Comparisons Across Classes**

**Traumatic Stressor and Victimization Exposure.** Table 2 compares the classes on potentially traumatic events meeting and not meeting *DSM-IV-TR* Criterion A. With one exception (Kidnapping), Class I had a greater proportion of youth exposed to each type of stressor, regardless of criterion A status, than Classes II and III. Class II had a greater proportion.
of participants endorsing each type of potential trauma than Class III. When considering events meeting Criterion A, Classes I and II had a greater proportion of youth exposed to each type of traumatic stressors than Class III. Class I had a greater proportion of youths exposed to more than half of the types of traumatic stressors than Class II, predominantly those representing victimization rather than non-victimization traumatic stressors. The traumatic stressors that Class II members were as likely as Class I members to endorse included disasters, accidents requiring emergency treatment, losses (due to illness, death, or suicide), and low frequency victimization events including being kidnapped, exposure to war/terrorism, or witnessing sexual abuse.

Table 3 compares classes on exposure to three domains of traumatic exposure: traumatic victimization, loss/death of a caregiver, and non-interpersonal victimization. The total sum of criterion A traumatic stressor types differed across classes for both the proportion of each class endorsing each domain of traumatic exposure, as well the mean number of types of traumatic events endorsed within each domain. Within each domain, Class I had a significantly greater proportion of youths endorsing traumatic events compared to Classes II and III, and Class II had a greater proportion of youths endorsing traumatic exposure relative to Class III. In addition, for each domain of traumatic exposure, Class I had a greater mean number of traumatic exposure types endorsed than Classes II and III, and Class II had a greater mean number than Class III.

**Posttraumatic Stress.** Table 4 presents results from a MANOVA with class type (Class I vs. Class II vs. Class III) as the independent variable and the three UCLA PTSD RI symptom cluster scores (re-experiencing, avoidance, hyperarousal) as dependent variables. Overall, and for each of the three posttraumatic stress symptom clusters, Class I had more severe symptom scores than Classes II and III, and Class II had more severe scores than Class III.

**MAYSI-2 Subscales.** Table 4 also presents results from a MANOVA with class as the independent variable and MAYSI-2 scales (Alcohol/Drug, Angry/Irritable, Thought Disturbance,
Somatic Complaints, Suicide Ideation, Traumatic Experiences, Depression/Anxiety) as dependent variables. Except for the Thought Disturbance subscale, in which Classes I and II did not significantly differ, Class I had significantly higher scores on all subscales relative to Classes II and III, and Class II had higher scores on all subscales compared to Class III.

**Discussion**

In a sample of juvenile justice-involved adolescents, three subgroups were identified using exploratory latent class analysis. A high exposure class with a mean of seven distinct types of exposure to traumatic stressors and particularly high rates of victimization both within and outside the family represented 5% of the sample. A moderate exposure class with a mean of 3 types of traumatic exposure and high rates of loss and separation represented 36% of the sample. Finally a third class with low rates of trauma exposure and almost no interpersonal victimization represented 59% of the sample. Youths in Class I endorsed multiple types of non-interpersonal trauma and loss of or separation from a primary caregiver as well as interpersonal victimization, and, they demonstrated much higher rates of all of these experiences than Classes II and III.

Based on Finkelhor et al.’s (2007) definition of poly-victimization, in which youth were classified as poly-victims if they endorsed experiencing at least seven types of victimization, youths in Class I appear to be accurately characterized as poly-victims. They often were victims of a variety of offenders: physically and emotionally maltreated by caregivers, bullied by peers, sexually abused by acquaintances, and witness to a host of violent and traumatic incidents in the community (Finkelhor et al., 2010; Saunders, 2003). Moreover, study results show that the poly-victims were exposed not only to many types of victimization but specifically to victimization that was traumatic (i.e., Criterion A), and also to multiple types of non-victimization traumatic stressors. Notably, poly-victimized youths in this juvenile justice sample showed markedly higher rates of caregiver loss and separation and non-interpersonal traumatic stressors compared
to other justice-involved youth. This is consistent with the notion that poly-victimized youth encounter adversity across multiple contexts, where violence is pervasive, respite is difficult to achieve, and the risk of potential trauma exposure, including events not characterized by victimization (e.g., accidents, loss, displacement), is high.

Contrary to our expectation, the three classes did not differ in age. However, the classes did differ on gender and ethnicity, with Black and Hispanic youth over-represented in Classes II and III, and White youth and girls over-represented in Class I. Thus, despite findings suggesting that boys are as likely to develop PTSD in juvenile justice detention populations as girls (Abram et al., 2004), girls appear to be at risk for poly-victimization in juvenile justice populations (Chamberlain et al., 2002). Findings concerning the relationship of age and ethnicity to traumatic exposure in general and poly-victimization specifically have been quite variable, with evidence of increasing severity of violence exposure among older youth and minority youth – but not necessarily a larger range of types of violent or victimization exposures (Finkelhor et al., 2007).

As hypothesized, the two highest exposure classes (Classes I and II), and especially Class I poly-victims, reported more severe posttraumatic stress symptoms, emotional and behavioral problems, suicide risk, and alcohol and drug use problems than the subgroup whose members generally denied exposure to any traumatic events. These findings replicate prior independent studies’ results with seriously emotionally disturbed children (Ford et al., 2009; Ford, Wasser et al., 2011) and a representative community sample of adolescents (Ford, Elhai et al., 2010), demonstrating that even in a relatively homogeneous sample of high-risk and frequently trauma-exposed adolescent juvenile justice detainees, a subgroup with extensive trauma histories can be identified empirically and its members appear to experience particularly severe PTSD, emotional and behavioral problems, and psychosocial impairment. The findings are consistent with those of prior studies of the relationship of trauma exposure to PTSD (Abram et al., 2004) and to suicide
risk and substance use problems (Ford et al., 2008), extending the results of those investigations by suggesting that within the sizable group of trauma-exposed justice-involved youth there is a distinct subgroup who are poly-victims (Finkelhor et al., 2007; Turner et al., 2010) and whose trauma history often includes loss, separation, accidental, disaster, and illness traumas as well as multiple forms of traumatic victimization. Not surprisingly, poly-victims reported particularly severe emotional and behavioral problems (Turner et al., 2010). Study findings thus indicate that attention is warranted in rehabilitative and clinical services, and in research, to determining how best to help poly-victimized youth who enter the juvenile justice system—including considering the role that non-victimization trauma exposure may play in their symptoms and impairments.

The finding that self-reported suicidality was most prevalent in the highly exposed classes, and particularly the highly exposed poly-victimized group, suggests that screening for poly-victimization and multiple trauma exposure may provide an important adjunctive means to identify detained youths who pose significant risk for suicidal behavior in addition to direct questioning about suicidal thoughts and intent. Suicidality among detained youth is more prevalent than typically recognized, including approximately one in ten who had thought about committing suicide in the past six months, and a similar number who had ever attempted suicide, in a recent study of a large sample from an urban juvenile detention system (Abram et al., 2008). In that study, fewer than half of detainees who had thoughts of suicide had actually told anyone of this, underlining the need to identify and provide assistance to these (often invisible or overlooked) high-risk youths in order to prevent suicide. While poly-victimization cannot be presumed to indicate more than the possibility of suicidality, nor should it be considered a substitute for thoughtful assessment of suicide risk, if assessed it can provide a basis for efficiently targeting detained youths for further assessment of suicidality. Further, youths identified as having increased risk of suicidal behavior might benefit from services designed to
help them understand and manage or overcome symptoms related to trauma—which can manifest in the form of problems with anger, anxiety, depression, impulsivity, or distractibility.

Children in the highly exposed classes, and especially Class I, were also significantly more likely to report alcohol and drug use compared to children in the other classes. This is in accord with studies showing more problems with drug and alcohol use in youth with extensive trauma exposure and trauma-related psychopathology (Cornelius et al., 2010; Danielson et al., 2009). As in the case of suicidality, knowledge of poly-victimization and multiple trauma exposure may help to identify youth who are high risk for alcohol and drug related problems. Further, trauma exposure and related symptoms likely contribute to the etiology of problem alcohol and drug use in trauma-exposed populations (Breslau, Davis, & Schultz, 2003; Jacobsen, Southwick, & Kosten, 2001). Thus, screening to identify poly-victimized youth and their often severe symptoms may help to inform drug and alcohol treatment for these youth.

The high prevalence of caregiver loss and separation in the highly exposed groups is also of importance. Caregiver loss and separation, including out-of-home placements has been found to be associated with emotional and behavioral problems (Ford, Wasser et al., 2011), as well as with delinquent peer associations (Ford et al., 2009) and problems with reactive aggression (Ford, Fraleigh, & Connor, 2010). Separation from primary caregivers has been hypothesized to have a debilitating effect on the development of self-regulation competences by children who are traumatically victimized (D’Andrea et al., in press), leading to or exacerbating disorganized working models of attachment and placing children at risk for lifelong dissociative problems in relationships (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006). If replicated in independent samples, this finding suggests that poly-victimized youth in the juvenile justice system may be particularly vulnerable to these extreme self-regulatory and relational problems due to the high likelihood that they have experienced loss of or prolonged separations from primary caregivers.
Youths who endorsed multiple types of traumatic exposure, especially the poly-victims in Class I, were also more likely to report a history of physical neglect and emotional/verbal abuse by a caregiver. These are forms of maltreatment that may not meet the *DSM-IV-TR* definition of trauma exposure, yet their adverse impacts tend to be profound and persistent (D’Andrea et al., in press). Physical and emotional neglect and abuse by a caregiver who is expected to protect rather than harm, whether purposefully or by omission, has been empirically linked to a broad spectrum of internalizing, externalizing, and interpersonal problems (D’Andrea et al., in press), and to high-risk behavior and delinquency (Ryan & Testa, 2005). This finding may reflect the high overlap between the juvenile justice and child welfare systems, as well as the point made earlier that for poly-victimized and multiply traumatized youth adversity is the rule, not the exception, and it manifests in many forms and in many life contexts.

The current study had several methodological limitations. A convenience sample of consecutive admissions to three juvenile detention centers was used rather than a sample systematically constructed to be representative of the juvenile justice population. Although the youths in the study were similar demographically and in legal charges to the overall census of the detention centers during the study period, only those for whom trauma history data were obtained in the admission intake process could be included in this study. Data were missing for up to 10% of the trauma history items, although generally not for more than 1-3%. Those items were conservatively counted as “not present” in order to not over-estimate trauma exposure, but this may have led to an under-estimate of trauma and victimization prevalence. The detention centers and the communities served also may not be representative of juvenile justice detention populations in different geographic locales. However, participants were from a variety of urban, rural, and suburban communities and included large cohorts of Black and Hispanic youths, consistent with the geographic dispersion and large minority representation in the juvenile justice
system in the United States. In addition, although females tend to be a minority in juvenile justice populations, the sub-sample of females was much smaller than that of males, limiting data analyses to the whole sample and precluding testing for gender-specific relationships. Future studies are needed with larger female sub-samples, particularly because girls reported sexual trauma (see also Abram et al., 2004) and poly-victimization more often than boys in this study.

The validity of self-report of sensitive matters such as trauma history, mental/behavioral problems, suicidality, and substance use problems by adolescents in the juvenile justice system may be affected by the constraints of the detention context (e.g., reluctance to disclose due to fear of stigma or legal consequences), learning or reading impairments (Delaney-Black et al., 2002), or dysphoria (Kuyken, Howell, & Dalgleish, 2006). Justice-involved youth often have had serious school problems, with reading levels typically less than their chronological age (Snyder, 2004). However, juvenile detainees usually have completed at least the fifth grade and are able to read and (despite threats to validity such as early post-admission dysphoria and reluctance to admit problems) validly respond to self-report questionnaires (Dolamanta et al., 2003; Ford et al., 2008) or structured interviews (Abram et al., 2004; Teplin et al., 2002) such as those used in the present study. Under-reporting remains the principal likely source of bias in this population (Dolamanta et al., 2003; Garland et al., 2001; Wasserman et al., 2002), and as such the findings of prevalent or correlated problems such as those in this study arguably are particularly robust.

The study findings have implications for criminal justice and mental health services and policy. While the juvenile court judges and juvenile correctional/detention and parole/probation officers and administrators in many systems nationally and internationally have identified trauma as a critical focus for screening, assessment, adjudication, milieu management, rehabilitation, and recidivism prevention programs (Ford et al., 2006; Ford & Blaustein, in press), the pressure to allocate scarce fiscal and programmatic resources cost-effectively has led the implementation
of “trauma-informed” services to move slowly and in a fragmented manner in most jurisdictions. It simply may not be possible to provide every justice-involved youth who has a trauma history with specialized milieu and community services, given the likelihood that at least three of every four (and possibly as many as 90%; Abram et al., 2004) of these youths has a trauma history. However, if a much smaller (i.e., one in twenty juvenile detainees) but still substantial subgroup can be identified with the most severe trauma exposure and emotional and behavioral problems, this poly-victim subgroup could more feasibly be screened, assessed, and provided with newly emerging evidence-based educational/rehabilitative interventions (e.g., Ford & Blaustein, in press; Ford, Steinberg, Hawke, Levine, & Zhang, 2012) in a cost-effective manner. Further, by focusing on teaching and role modeling responsible self-regulation (Ford & Blaustein, in press), those interventions provide a basis for enhancing the capacity of juvenile justice programs to not only assist complex trauma survivors but moreover to create milieus and communities that are safer for all of the youths (regardless of trauma history) and the adults in those settings.

Finally, while study findings do not demonstrate that youths with poly-victimization histories require new diagnoses or treatments, they suggest that there is a subgroup of youth who can be found in the juvenile justice and mental health systems, as well as in the community, who require assessment and treatment not only for PTSD but also for a wider range of emotional and behavioral problems and serious personal and legal risks. These youths may end up with multiple severe psychiatric diagnoses, yet their self-regulatory problems may be more parsimoniously diagnosed and treated (and with less stigma) by taking a developmental trauma perspective (Ford & Cloitre, 2009). Research on the identification, rehabilitation, and treatment of justice-involved youths with poly-victimization histories thus is an urgent need (Cruise & Ford, 2011).
Figure Caption

*Figure 1.* Exploratory latent class analysis: A 3-class solution with 19 victimization and non-victimization trauma history indicators: 1, Being in an accident; 2, Seeing a really bad accident; 3, Being in a natural disaster; 4, Someone close badly injured/sick; 5, Someone close died; 6, Being so sick that I thought I might die; 7, Being separated from primary caregiver; 8, Someone close tired to kill or hurt self; 9, Being physically attacked; 10, Threatened to be attacked or killed; 11, Being mugged; 12, Being kidnapped; 13, Attacked by dog or animal; 14, Heard family fighting, shooting a gun, or stabbing; 15, Witnessing family act like they were going to kill or hurt each other; 16, Witnessing people outside of family fight, hit, beat, shot, or attack each other; 17, Being in a war or terrorist attack; 18, Being made to see or do something sexual; 19, Seeing or hearing someone else being forced to do sex acts.
References


Proportion

Class I (5.3%)  Class II (35.8%)  Class III (58.9%)
Table 1.

*Exploratory Latent Class Analysis: Models with 1-5 Class Solutions (Criterion A Events)*

<table>
<thead>
<tr>
<th>Class</th>
<th>Log Likelihood</th>
<th>aBIC</th>
<th>Entropy</th>
<th>LMR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Class</td>
<td>-9240.157</td>
<td>18563.974</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>2-Class</td>
<td>-8392.007</td>
<td>16955.737</td>
<td>0.742</td>
<td>1498.601</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>3-Class</td>
<td>-8275.662</td>
<td>16811.110</td>
<td>0.711</td>
<td>205.570</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>4-Class</td>
<td>-8240.035</td>
<td>16827.919</td>
<td>0.672</td>
<td>70.79</td>
<td>.240</td>
</tr>
</tbody>
</table>

Note. aBIC = adjusted Bayesian information criterion; LMR = Low-Mendell-Rubin adjusted likelihood ratio test. Entropy is the overall proportion of correct class classification.
<table>
<thead>
<tr>
<th>Event</th>
<th>Class I $(N = 102)$</th>
<th>Class II $(N = 693)$</th>
<th>Class III $(N = 1134)$</th>
<th>$\chi^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being in an accident</td>
<td>% Criterion A$^{abc}$ 76.1</td>
<td>61.6</td>
<td>17.6</td>
<td>86.57</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 65.7</td>
<td>30.4</td>
<td>12.0</td>
<td>211.87</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Seen an accident</td>
<td>% Criterion A$^{abc}$ 72.9</td>
<td>57.1</td>
<td>16.1</td>
<td>94.89</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 68.6</td>
<td>41.2</td>
<td>14.8</td>
<td>244.87</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Being in a disaster</td>
<td>% Criterion A$^{bc}$ 78.3</td>
<td>58.9</td>
<td>15.6</td>
<td>24.25</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 22.8</td>
<td>8.1</td>
<td>2.8</td>
<td>78.58</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Loved one sick/injured</td>
<td>% Criterion A$^{bc}$ 83.5</td>
<td>75.3</td>
<td>30.3</td>
<td>118.46</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 88.3</td>
<td>46.9</td>
<td>15.2</td>
<td>377.39</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Loved one died</td>
<td>% Criterion A$^{bc}$ 78.8</td>
<td>77.4</td>
<td>68.4</td>
<td>126.89</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 82.5</td>
<td>56.3</td>
<td>20.6</td>
<td>335.48</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Emergency treatment</td>
<td>% Criterion A$^{bc}$ 70.4</td>
<td>59.3</td>
<td>9.1</td>
<td>28.19</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 27.3</td>
<td>7.7</td>
<td>2.9</td>
<td>104.89</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Kidnapped</td>
<td>% Criterion A$^{abc}$ 85.2</td>
<td>71.2</td>
<td>31.2</td>
<td>441.55</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 79.4</td>
<td>56.8</td>
<td>21.6</td>
<td>310.30</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Suicide attempt by loved one</td>
<td>% Criterion A$^{bc}$ 83.1</td>
<td>71.1</td>
<td>0.0</td>
<td>80.60</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 63.7</td>
<td>21.2</td>
<td>3.3</td>
<td>371.53</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Physically attacked</td>
<td>% Criterion A$^{abc}$ 79.8</td>
<td>46.3</td>
<td>0.0</td>
<td>170.67</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Of % Endorsed$^{abc}$ 83.2</td>
<td>42.2</td>
<td>14.1</td>
<td>332.84</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Being threatened</td>
<td>% Criterion A$^{abc}$ 72.2</td>
<td>39.1</td>
<td>0.0</td>
<td>89.93</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Event</td>
<td>Of % Endorsed</td>
<td>% Criterion A&lt;sup&gt;abc&lt;/sup&gt;</td>
<td>Of % Endorsed&lt;sup&gt;abc&lt;/sup&gt;</td>
<td>% Criterion A&lt;sup&gt;abc&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>-----------------------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>Being mugged</td>
<td>70.6</td>
<td>68.2</td>
<td>43.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Kidnapped</td>
<td>24.9</td>
<td>49.4</td>
<td>22.6</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td>Animal attack</td>
<td>7.5</td>
<td>13.0</td>
<td>8.7</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Familial violence</td>
<td>310.53</td>
<td>50.68</td>
<td>127.36</td>
<td>11.26</td>
<td></td>
</tr>
<tr>
<td>Threatening in family</td>
<td>5.0</td>
<td>2.0</td>
<td>5.0</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Community violence</td>
<td>18.68</td>
<td>18.2</td>
<td>23.0</td>
<td>24.29</td>
<td></td>
</tr>
<tr>
<td>War or terrorism</td>
<td>0.004</td>
<td>6.43</td>
<td>7.95</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>321.99</td>
<td>42.41</td>
<td>13.7</td>
<td>6.43</td>
<td></td>
</tr>
<tr>
<td>Witness Sexual Abuse</td>
<td>40.82</td>
<td>137.48</td>
<td>192.30</td>
<td>15.12</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Class I significantly ($p < .01$) differs from Class II

<sup>b</sup> Class I significantly ($p < .01$) differs from Class III

<sup>c</sup> Class II significantly ($p < .01$) differs from Class III
Table 3

*Interpersonal Victimization versus Loss/Death versus Non-Interpersonal Trauma Across Classes*

<table>
<thead>
<tr>
<th></th>
<th>Class I (N = 103)</th>
<th>Class II (N = 702)</th>
<th>Class III (N = 1154)</th>
<th>(\chi^2) [F]</th>
<th>p</th>
<th>(\eta_p^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td>97.1% (1.51)</td>
<td>59.3% (0.85)</td>
<td>2.8% (0.03)</td>
<td>948.96</td>
<td>&lt; .001</td>
<td>.56</td>
</tr>
<tr>
<td>Loss/Death of Primary</td>
<td>90.3% (0.90)</td>
<td>65.2% (0.65)</td>
<td>13.7% (0.14)</td>
<td>640.06</td>
<td>&lt; .001</td>
<td>.33</td>
</tr>
<tr>
<td>Non-Interpersonal</td>
<td>100% (3.85)</td>
<td>91.2% (1.80)</td>
<td>25.6% (0.26)</td>
<td>848.5</td>
<td>&lt; .001</td>
<td>na</td>
</tr>
<tr>
<td>Trauma\textsuperscript{abc}</td>
<td>100% (3.85)</td>
<td>100% (1.80)</td>
<td>28.4% (0.26)</td>
<td>996.26</td>
<td>&lt; .001</td>
<td>.79</td>
</tr>
<tr>
<td>Any Trauma\textsuperscript{abc}</td>
<td>100% (6.92)</td>
<td>100% (2.65)</td>
<td>28.4% (0.28)</td>
<td>3728.67</td>
<td>&lt; .001</td>
<td>.79</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Class I significantly \((p < .01)\) differs from Class II

\textsuperscript{b} Class I significantly \((p < .01)\) differs from Class III

\textsuperscript{c} Class II significantly \((p < .01)\) differs from Class III
Table 4.

**MANOVA of UCLA PTSD RI Subscales**

<table>
<thead>
<tr>
<th></th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 103)</td>
<td>(N = 702)</td>
<td>(N = 1154)</td>
</tr>
<tr>
<td><strong>M (SD)</strong></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Re-experiencing</td>
<td>8.40 (5.06)</td>
<td>4.45 (4.76)</td>
<td>2.18 (3.12)</td>
</tr>
<tr>
<td>Avoidance</td>
<td>11.31 (6.68)</td>
<td>6.39 (6.13)</td>
<td>3.34 (4.56)</td>
</tr>
<tr>
<td>Hyperarousal</td>
<td>9.07 (4.50)</td>
<td>6.51 (4.27)</td>
<td>3.94 (3.80)</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>132.36</td>
<td>120.97</td>
<td>110.50</td>
</tr>
<tr>
<td><strong>p</strong></td>
<td>&lt; .001</td>
<td>&lt; .001</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>ηp^2</strong></td>
<td>.15</td>
<td>.14</td>
<td>.13</td>
</tr>
</tbody>
</table>

*Note.* Pillai’s Trace $F(6,3014) = 55.44$, $p < .001$, $η_p^2 = .10$.

Missing data: 19.42% Class I, 24.36% Class II, 22.27% Class III.

- Class I significantly ($p < .01$) differs from Class II
- Class I significantly ($p < .01$) differs from Class III
- Class II significantly ($p < .01$) differs from Class III
Table 5.

**MANOVA of MAYSI-2 Subscales**

<table>
<thead>
<tr>
<th>subscale</th>
<th>Class I (N = 65)</th>
<th>Class II (N = 427)</th>
<th>Class III (N = 1045)</th>
<th>F</th>
<th>p</th>
<th>(\eta^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol/Drug</td>
<td>2.26 (2.24)</td>
<td>1.31 (1.96)</td>
<td>0.92 (1.64)</td>
<td>25.38</td>
<td>&lt; .001</td>
<td>.03</td>
</tr>
<tr>
<td>Angry/Irritable</td>
<td>4.60 (3.12)</td>
<td>3.22 (2.92)</td>
<td>2.49 (2.60)</td>
<td>29.17</td>
<td>&lt; .001</td>
<td>.04</td>
</tr>
<tr>
<td>Thought Disturbance</td>
<td>1.16 (1.62)</td>
<td>0.93 (1.57)</td>
<td>0.55 (1.15)</td>
<td>19.10</td>
<td>&lt; .001</td>
<td>.02</td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>2.84 (2.21)</td>
<td>1.87 (1.90)</td>
<td>1.44 (1.72)</td>
<td>27.58</td>
<td>&lt; .001</td>
<td>.04</td>
</tr>
<tr>
<td>Suicide Ideation</td>
<td>1.51 (1.81)</td>
<td>0.83 (1.49)</td>
<td>0.46 (1.09)</td>
<td>33.47</td>
<td>&lt; .001</td>
<td>.04</td>
</tr>
<tr>
<td>Traumatic Experiences</td>
<td>2.59 (1.64)</td>
<td>1.61 (1.51)</td>
<td>1.04 (1.89)</td>
<td>69.35</td>
<td>&lt; .001</td>
<td>.08</td>
</tr>
<tr>
<td>Depression/Anxiety</td>
<td>2.30 (2.07)</td>
<td>1.47 (1.59)</td>
<td>0.97 (1.35)</td>
<td>42.34</td>
<td>&lt; .001</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note.* Pillai’s Trace \(F(14,3058) = 14.25, p < .001, \eta^2 = .06.*

Missing data: 22.33% Class I, 24.07% Class II, 19.93% Class III.

\(a\) Class I significantly \((p < .01)\) differs from Class II

\(b\) Class I significantly \((p < .01)\) differs from Class III

\(c\) Class II significantly \((p < .01)\) differs from Class III