

Trauma Exposure and PTSD in Justice-Involved Youth

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Abstract This special issue of *Child and Youth Care Forum* includes four original research reports that build on the field's knowledge of trauma stress exposure and PTSD in justice-involved youth. Utilizing diverse methodologies, study authors report unique results investigating important questions related to screening and assessment of justice-involved populations, the potential linkage between violence exposure and violence perpetration, and the complex relationships between trauma exposure in childhood and specific problematic offending behaviors. Each article includes specific clinical implications and recommendations for future research to provide useful information to juvenile justice administrators, mental health professionals, and researchers involved in the care and management of trauma exposed youth within the juvenile justice system. This introduction provides an overview of how empirical studies of the nature and sequelae of traumatic stress exposure are currently a focus for research and services in the juvenile justice field, highlighting how the articles in the Special Issue exemplify the progress to date, and promise for the future, of several lines of research involving psychometrics, health and correctional services, and clinical epidemiology.

Keywords Trauma · PTSD · Juvenile justice

It is well established that exposure to traumatic stressors places children and youth at risk for a range of serious internalizing (e.g., posttraumatic stress, anxiety, depression, somatic complaints) and externalizing (anger, aggression, oppositional-defiant, conduct disorder, substance abuse) problems (Copeland et al. 2007; Fairbank et al. 2007). We also know that exposure to traumatic stressors often is cumulative, involving repeated episodes over

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prolonged periods or multiple types/stressors that have been described as “poly-victimization” (Finkelhor et al. 2009). As such, increasing complexity of trauma exposure is associated with patterns of severe and chronic symptomatic problems and impairment (Elliott et al. 2009; Finkelhor et al. 2007; Ford et al. 2010a; Gustafsson et al. 2009; Richmond et al. 2009; Turner et al. 2006).

Collectively, these posttraumatic stress problems may be understood as the result of deficits in core self-regulatory competences (Ford 2005). As a result of impairments in self-regulation, youth with complex trauma histories are at elevated risk to develop specific externalizing problems (e.g., hostility, oppositionality, impulsivity) in childhood (Ford et al. 1999, 2010b; Mongillo et al. 2009) and adolescence (Farrington 1993; Ford et al. 2008, 2009; Ruchkin et al. 2007; Turner et al. 2006).

Youth involved in the juvenile justice system exemplify these patterns of cumulative exposure to traumatic stressors, impairment in self-regulation, and combination of internalizing and externalizing problems. To illustrate, justice-involved youth often have experienced multiple forms of traumatic stressors, including victimization (e.g., abuse, family and community violence), life-threatening accidents or disasters, and interpersonal losses (Abram et al. 2004, 2007; Ford et al. 2008). Research consistently demonstrates that estimates of traumatic and complex trauma stressor prevalence are higher among youth in juvenile justice programs relative to community samples. Approximately 90% of youth in juvenile detention facilities reported a history of exposure to at least one potentially traumatic event in two independent surveys of representative samples (Abram et al. 2004; Ford et al. 2008). Prevalence estimates of being threatened with a weapon (58%) (Abram et al. 2004), traumatic loss (48%) (Ford et al. 2008), and physical assault (35%) (Abram et al. 2004; Ford et al. in review) were particularly high in juvenile detention samples compared to community samples. A hierarchical cluster analysis of a representative sample of youth in juvenile detention facilities revealed two complex trauma sub-groups: 20% of the sample reported some combination of sexual or physical abuse or family violence, and 15% of the sample had experienced emotional abuse and family violence but not physical or sexual abuse (Ford et al. in review).

The prevalence of PTSD in juvenile justice samples is substantially higher than for community samples of children and adolescents. To illustrate, samples of justice involved youth across diverse settings have revealed that 33% of Japanese female juvenile offenders (Ariga et al. 2008), 27% of Swiss male juvenile offenders (Urbaniok et al. 2007), and 10–19% of detained youth in the United States (Abram et al. 2004; Cauffman et al. 1998; Ford et al. 2008; Steiner et al. 1997) meet criteria for PTSD. By comparison, in the United States (Copeland et al. 2007; Mongillo et al. 2009), PTSD is rare among young (ages 0–4) children (0.6% prevalence) and school-age children (1% prevalence), but more common among adolescents (5% prevalence) (Kilpatrick et al. 2003).

As referenced above, traumatic stress exposure and PTSD can lead to a highly problematic combination of disrupted information processing (Bradshaw and Garbarino 2004; Dodge et al. 1995) dysregulated affect (Hazen et al. 2009; Holmes and Sammel 2005; Kilpatrick et al. 2000, 2003); impulse control problems (Ford et al. 2008; Swahn and Bossarte 2007; Waldrop et al. 2007), and deviant peer relationships (Ford et al. 2010a) that model and reinforce disinhibited, aggressive, and delinquent ways of thinking and behaving (Dembo et al. 1989; Ford et al. 2010a; Holmes and Sammel 2005; Nofziger and Kurtz 2005).

The purpose of this special issue of *Child and Youth Care Forum* is to showcase four original research reports that build on the field’s knowledge of traumatic stress exposure and PTSD in justice-involved youth by investigating important questions related to screening and assessment of justice-involved populations, investigating the linkage

between violence exposure and violence perpetration, and understanding the complex relationship between trauma exposure in childhood and specific problematic offending behaviors.

In the past decade, great advances have been made in systemic implementation of intake mental health screening referral practices in juvenile justice settings (Wasserman et al. 2003; Grisso et al. 2005). In the first of these articles Kerig et al. (2011, this issue) investigate the utility of a widely used and extensively validated mental health screening instrument, the Massachusetts Youth Screening Instrument (MAYSI-2; Grisso and Barnum 2006), in detecting trauma exposure and PTSD symptoms in a sample of detained youth. Particular emphasis is placed on gender differences in sensitivity and specificity of MAYSI-2 screening results. This study involves a large sample of detained youth and multiple measures of trauma exposure and PTSD symptomatology to examine screening practices. Their results indicate that the MAYSI-2 Traumatic Experiences Scale (TE) is a moderately accurate predictor of PTSD symptoms for both boys and girls. Kerig and colleagues further report that multiple MAYSI-2 scales, including the MAYSI-2 TE scale, significantly predict PTSD symptoms such that different combinations of screening results may inform gender specific detection strategies. The primary conclusion by the authors is that the MAYSI-2 TE scale has the potential to serve as an efficient and cost-effective screen for trauma exposure. However, they offer a cautious reminder that their results show that detained youth who likely meet diagnostic criteria for PTSD exhibit mental health distress across a variety of MAYSI-2 scales. The authors renew a call for continued focus on a multi-faceted approach to screening and assessing for trauma exposure and associated symptoms of PTSD.

There are many unanswered questions concerning the extent to which mental health evaluators include specific assessments of trauma exposure and PTSD in juvenile court assessments and how information concerning trauma exposure is understood in relation to specific juvenile forensic questions. In the second article, Riggs Romaine et al. (2011, this issue) investigate whether trauma-related information is included in juvenile decertification evaluations and explore to what extent information concerning potential traumatic events is associated with juvenile court decisions. The authors investigate these questions via a retrospective review of 144 juvenile decertification cases from one large urban county in Pennsylvania. The authors implemented a coding scheme to identify potential traumatic events, other relevant factors associated with the legal criteria for decertification specific to this jurisdiction, and the legal outcome in each case. Consistent with prior research, the authors report that information regarding potential traumatic events was documented in 71% of the decertification evaluations. Significant associations were found between the presence of and number of types of potential traumatic events with the judicial decision to retain jurisdiction of youth in adult criminal court. However, when controlling for other legal factors (age, seriousness of the offense, prior juvenile court history), information regarding potential traumatic events no longer predicted judicial decision-making in the decertification cases. The authors' primary conclusion is that while historical information concerning potential traumatic experiences is frequently documented in decertification assessments, the evaluations rarely assess for PTSD symptoms in a systematic manner or integrate this information into trauma-specific treatment recommendations. While acknowledging that the study focused on only one type of juvenile forensic assessment within one jurisdiction, the authors suggest that when court-based assessments require addressing the question of treatment amenability, failure to assess for trauma exposure and current PTSD symptomatology, and not linking this assessment information with relevant

treatment recommendations, may lead to judicial decisions that do not adequately take into account the impact of traumatic stress on offending or rehabilitation.

In the third article, Kimonis et al. (2011, this issue) investigate to what extent PTSD symptoms and anger problems mediate the association between violence exposure and violence perpetration in a sample of incarcerated boys. A unique feature of this study is the comparison of statistical mediation models exploring these specific associations with other empirically supported risk factors for youth violence. The authors test these associations in an ethnically diverse sample of 373 boys housed in a secure confinement facility in California using data derived from baseline and follow-up interviews. Using a combination of hierarchical linear regression and latent variable path analysis, the authors report that self-reported anger partially mediates the relationship between violence exposure and violence perpetration, with this result being present when exposure was operationalized as either witnessing or experiencing violence. Callous-unemotional traits added incremental variance to the prediction of aggression and lifetime offending beyond the effects of violence exposure and anger, but did not contribute to prediction of institutional violence. The authors found no evidence supporting PTSD symptoms as a key mechanism linking violence exposure to violence perpetration. A key conclusion reached by Kimonis et al. is that anger problems are an important mechanism through which violence-exposed youth are at risk for perpetrating violence in both community and institutional settings. The finding of incremental variance associated with callous-unemotional traits and anger, reinforces the view that there are multiple pathways to violence present in justice-involved boys. Based on these results, Kimonis et al. specifically address the need for early identification of anger problems at intake screening and linking these screening results to evidence-based interventions for youth with anger problems in order to reduce or prevent further violence perpetration. Although PTSD *per se* was not associated with violence perpetration, it is noteworthy for future research that PTSD symptoms include both anger/irritability and emotional numbing and avoidance, which may contribute to the problems with anger and callousness that were found to increase risk of perpetration.

Juveniles charged with sex offenses (JSOs) represent a key population in juvenile justice settings (Andrade et al. 2006) because they are often considered to be at increased risk for non-sexual as well as sexual re-offending (Caldwell 2007; Waite et al. 2005). Sexual abuse has been hypothesized as an important risk factor for adolescent sexual offending (Friedrich 2000) with mixed evidence being found regarding this association (see Hunter et al. 2003). In the final article, Mallie et al. (2011) report the results of a meta-analysis investigating the association between childhood abuse (physical and sexual) and sexual offending behavior. The authors calculated 29 effect sizes from 11 studies representing a total of 1,542 adolescents detected for sexual offending behavior including studies that examined both sexual and general recidivism rates. Across these studies, the authors detected a small but significant association between history of sexual abuse and sexual re-offending (OR = 1.51, $p < .05$). This small association was not detected for physical abuse and did not extend to general recidivism. While results supported the association between sexual abuse and sexual re-offending, the authors acknowledge that only a small number of studies have investigated this association with many studies having methodologic limitations (i.e., retrospective follow-up designs). The authors cautiously conclude that the data support the hypothesis that histories of sexual abuse may be a unique risk marker for sexual re-offending among youth detected for sexual offenses, but call for greater focus on identifying the mechanisms underlying this relationship through more rigorous assessment of both physical and sexual abuse histories and follow-up via prospective designs. The authors specifically note that we currently lack information about

abuse severity, chronicity, or the additive effects of physical and sexual abuse and appropriately note that assessments and treatment with this subgroup of justice-involved youth would benefit from improved, rigorous studies of this association.

In summary, these four original studies employ a variety of research methods to investigate the relevance of trauma exposure and PTSD symptoms in justice-involve youth. These studies expand on well-documented findings of greater prevalence of both trauma exposure and PTSD diagnoses in justice-involved youth compared to rates found in community and other clinical samples. The studies report unique results relevant to both assessment and treatment of trauma-exposed youth but highlight that many important questions remain. Our hope is that the articles in this special issue provide useful information to juvenile justice administrators and mental health professional responsible for assessing and developing treatment/rehabilitation plans for affected youth. The questions asked, and the findings offered, by these articles also highlight many important unanswered questions that can guide the development of future applied research that is needed to inform both the assessment standards and treatment services provided for trauma-exposed youth within the juvenile justice system.

References

- Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Archives of General Psychiatry*, *61*(4), 403–410.
- Abram, K. M., Washburn, J. J., Teplin, L. A., Emanuel, K. M., Romero, E. G., & McClelland, G. M. (2007). Posttraumatic stress disorder and psychiatric comorbidity among detained youths. *Psychiatric Services*, *58*(10), 1311–1316.
- Andrade, J. T., Vincent, G. M., & Saleh, F. M. (2006). Juvenile sex offenders: A complex population. *Journal of Forensic Science*, *51*(1), 163–167.
- Ariga, M., Uehara, T., Takeuchi, K., Ishige, Y., Nakano, R., & Mikuni, M. (2008). Trauma exposure and posttraumatic stress disorder in delinquent female adolescents. *Journal of Child Psychology and Psychiatry*, *49*(1), 79–87.
- Bradshaw, C. P., & Garbarino, J. (2004). Social cognition as a mediator of the influence of family and community violence on adolescent development: Implications for intervention. *Annals of New York Academic Science*, *1036*, 85–105.
- Caldwell, M. F. (2007). Sexual offense adjudication and sexual recidivism among juvenile offenders. *Sex Abuse*, *19*(2), 107–113.
- Cauffman, E., Feldman, S. S., Waterman, J., & Steiner, H. (1998). Posttraumatic stress disorder among female juvenile offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *37*(11), 1209–1216.
- Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, *64*(5), 577–584.
- Dembo, R., Williams, L., La Voie, L., Berry, E., Getreu, A., Wish, E. D., et al. (1989). Physical abuse, sexual victimization, and illicit drug use: Replication of a structural analysis among a new sample of high-risk youths. *Violence and Victims*, *4*(2), 121–138.
- Dodge, K. A., Pettit, G. S., Bates, J. E., & Valente, E. (1995). Social information-processing patterns partially mediate the effect of early physical abuse on later conduct problems. *Journal of Abnormal Psychology*, *104*(4), 632–643.
- Elliott, A. N., Alexander, A. A., Pierce, T. W., Aspelmeier, J. E., & Richmond, J. M. (2009). Childhood victimization, poly-victimization, and adjustment to college in women. *Child Maltreatment*, *14*(4), 330–343.
- Fairbank, J. A., Putnam, F. W., & Harris, W. W. (2007). The prevalence and impact of child traumatic stress. In M. J. Friedman, T. M. Keane, & P. A. Resick (Eds.), *Handbook of PTSD* (pp. 229–251). New York, NY, USA: Guilford Press.
- Farrington, D. P. (1993). Childhood origins of teenage antisocial behaviour and adult social dysfunction. *Journal of Royal Society Medicine*, *86*(1), 13–17.

- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse and Neglect*, *31*(1), 7–26.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2009). Lifetime assessment of poly-victimization in a national sample of children and youth. *Child Abuse and Neglect*, *33*, 403–411.
- Ford, J. D. (2005). Treatment implications of altered neurobiology, affect regulation and information processing following child maltreatment. *Psychiatric Annals*, *35*, 410–419.
- Ford, J. D., Connor, D. F., & Hawke, J. (2009). Complex trauma among psychiatrically impaired children: A cross-sectional, chart-review study. *Journal of Clinical Psychiatry*, *70*(8), 1155–1163.
- Ford, J. D., Elhai, J. D., Connor, D. F., & Frueh, B. C. (2010a). Poly-victimization and risk of posttraumatic, depressive, and substance use disorders and involvement in delinquency in a national sample of adolescents. *Journal of Adolescent Health*, *46*(6), 545–552.
- Ford, J. D., Fraleigh, L. A., & Connor, D. F. (2010b). Child abuse and aggression among psychiatrically impaired children. *Journal of Clinical Child and Adolescent Psychology*, *39*, 25–34.
- Ford, J. D., Hartman, J. K., Hawke, J., & Chapman, J. C. (2008). Traumatic victimization posttraumatic stress disorder, suicidal ideation, and substance abuse risk among juvenile justice-involved youths. *Journal of Child and Adolescent Trauma*, *1*, 75–92.
- Ford, J. D., Hawke, J., & Chapman, J. C. (In Review). Complex psychological trauma among juvenile justice-involved youths.
- Ford, J. D., Racusin, R., Daviss, W. B., Ellis, C. G., Thomas, J., Rogers, K., et al. (1999). Trauma exposure among children with oppositional defiant disorder and attention deficit-hyperactivity disorder. *Journal of Consulting and Clinical Psychology*, *67*(5), 786–789.
- Friedrich, W. N. (2000). Children and adolescents who are sexually abusive of others. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*(7), 809–810.
- Grisso, T., & Barnum, R. (2006). *Massachusetts youth screening instrument-2: User's manual and technical report*. Sarasota, FL: Professional Resources Press.
- Grisso, T., Vincent, G., & Seagrave, D. (2005). *Mental health screening and assessment in juvenile justice*. New York: Guilford.
- Gustafsson, P. E., Nilsson, D., & Svedin, C. G. (2009). Polytraumatization and psychological symptoms in children and adolescents. *European Child and Adolescent Psychiatry*, *18*(5), 274–283.
- Hazen, A. L., Connelly, C. D., Roesch, S. C., Hough, R. L., & Landsverk, J. A. (2009). Child maltreatment profiles and adjustment problems in high-risk adolescents. *Journal of Interpersonal Violence*, *24*(2), 361–378.
- Holmes, W. C., & Sammel, M. D. (2005). Brief communication: Physical abuse of boys and possible associations with poor adult outcomes. *Annals of Internal Medicine*, *143*(8), 581–586.
- Hunter, J. A., Figueredo, A. J., Malamuth, N. M., & Becker, J. V. (2003). Juvenile sex offenders: Toward the development of a typology. *Sex Abuse*, *15*(1), 27–48.
- Kerig, P. K., Moeddel, M. A., & Becker, S. P. (2011). Assessing the sensitivity and specificity of the MAYSI-2 for detecting trauma among youth in juvenile detention. *Child & Youth Care Forum*. doi: [10.1007/s10566-010-9124-4](https://doi.org/10.1007/s10566-010-9124-4).
- Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., Best, C. L., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology*, *68*(1), 19–30.
- Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology*, *71*(4), 692–700.
- Kimonis, E. R., Ray, J. V., Branch, J. R., & Cauffman, E. (2011). Anger mediates the relation between violence exposure and violence perpetration in incarcerated boys. *Child & Youth Care Forum*. doi: [10.1007/s10566-010-9121-7](https://doi.org/10.1007/s10566-010-9121-7).
- Mallie, A. L., Viljoen, J. L., Mordell, S., Spice, A., & Roesch, R. (2011). Childhood abuse and adolescent sexual re-offending: A meta-analysis. *Child & Youth Care Forum*. doi: [10.1007/s10566-010-9136-0](https://doi.org/10.1007/s10566-010-9136-0).
- Mongillo, E. A., Briggs-Gowan, M., Ford, J. D., & Carter, A. S. (2009). Impact of traumatic life events in a community sample of toddlers. *Journal of Abnormal Child Psychology*, *37*(4), 455–468.
- Nofziger, S., & Kurtz, D. (2005). Violent lives: A lifestyle model linking exposure to violence to juvenile violent offending. *Journal of Research in Crime and Delinquency*, *42*, 3–26.
- Richmond, J. M., Elliott, A. N., Pierce, T. W., Aspelmeier, J. E., & Alexander, A. A. (2009). Polyvictimization, childhood victimization, and psychological distress in college women. *Child Maltreatment*, *14*(2), 127–147.

- Riggs Romaine, C. L., Goldstein, N. E. S., Hunt, E., & DeMatteo, D. (2011). Traumatic experiences and juvenile amenability: The role of trauma in forensic evaluations and judicial decision making. *Child & Youth Care Forum*. doi:10.1007/s10566-010-9132-4.
- Ruchkin, V., Henrich, C. C., Jones, S. M., Vermeiren, R., & Schwab-Stone, M. (2007). Violence exposure and psychopathology in urban youth: The mediating role of posttraumatic stress. *Journal of Abnormal Child Psychology*, 35(4), 578–593.
- Steiner, H., Garcia, I. G., & Matthews, Z. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 357–365.
- Swahn, M. H., & Bossarte, R. M. (2007). Gender, early alcohol use, and suicide ideation and attempts: Findings from the 2005 youth risk behavior survey. *Journal of Adolescent Health*, 41(2), 175–181.
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social Science and Medicine*, 62(1), 13–27.
- Urbaniok, F., Endrass, J., Noll, T., Vetter, S., & Rossegger, A. (2007). Posttraumatic stress disorder in a Swiss offender population. *Swiss Medical Weekly*, 137(9–10), 151–156.
- Waite, D., Keller, A., McGarvey, E. L., Wieckowski, E., Pinkerton, R., & Brown, G. L. (2005). Juvenile sex offender re-arrest rates for sexual, violent nonsexual and property crimes: A 10-year follow-up. *Sex Abuse*, 17(3), 313–331.
- Waldrop, A., Hanson, R. F., Resnick, H. S., Kilpatrick, D. G., Naugle, A. E., & Saunders, B. E. (2007). Risk factors for suicidal behavior among a national sample of adolescents: Implications for prevention. *Journal of Traumatic Stress*, 20(5), 869–879.
- Wasserman, G. A., Jensen, P. S., Ko, S. J., Cocozza, J., Trupin, E., Angold, A., et al. (2003). Mental health assessments in juvenile justice: Report on the consensus conference. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42, 752–761.