Introduction

Child traumatic stress occurs when children and adolescents are exposed to traumatic events or situations, and this exposure overwhelms their ability to cope with what they have experienced [1]. Traumatic events can include physical abuse, sexual abuse, domestic violence, community violence, and/or disasters [2]. Although estimates vary, it is believed that the prevalence of trauma among children and youth in the general population is substantial. In one nationally representative survey of 9–16 year olds, 25% reported experiencing at least one traumatic event, 6% in the past 3 months [3]. The National Center on Child Abuse and Neglect reports that more than 2% of all children are victims of maltreatment, 13% are victims of neglect, and 11% are victims of physical, sexual, or emotional abuse [2].

For youth involved with the juvenile justice system, the prevalence of youth exposed to trauma is believed to be higher than that of community samples of similarly aged youths [4]. Studies report varying rates of Post-Traumatic Stress Disorder (PTSD) among youth in the juvenile justice system, with estimates ranging from a low of 3% to a high of 50% [5]. One study found that over 90% of juvenile detainees reported having experienced at least one traumatic incident [6]. While few studies have focused exclusively on girls, PTSD has been found to be equally [5] or more common among juvenile justice-involved girls than boys [7] [8].

Youth exposed to traumatic events exhibit a wide range of symptoms, presenting with not just internalizing problems, such as depression or anxiety, but also externalizing problems like aggression, conduct problems, and oppositional or defiant behavior [2]. Although trauma does not necessarily cause these problems, traumatic stress can interfere with a child’s ability to think and learn, and can disrupt the course of healthy physical, emotional, and intellectual development [9]. Further, traumatic stress among children and youth is associated with increased utilization of health and mental health services [10] and increased risk of involvement with the child welfare and juvenile justice systems [1].
The use of standardized mental health assessment instruments is increasingly common in juvenile justice systems [11] [12], and this increase has led to a greater awareness of the nature and prevalence of psychiatric disorders, including PTSD, among the juvenile justice population [5]. In addition, new trauma-focused screening instruments, as well effective treatment interventions, have been developed to assist the field in identifying and treating traumatic stress related disorders among youth [4]. Many of these instruments and interventions could be used in the juvenile justice system to help youth deal with past trauma, recognize its current impact, and teach them ways to manage or overcome the emotional and behavioral problems caused by PTSD. Yet, despite the availability of these tools and resources, very few juvenile justice agencies, facilities, or programs are routinely screening for trauma or offering trauma-specific treatment interventions to the youth in their care. The purpose of this paper is to discuss the prevalence and impact of trauma and traumatic stress among youth in the juvenile justice system and to describe emerging responses for identifying and treating these problems.

Trauma Among Youth in the Juvenile Justice System: Scope of the Problem

Estimates of the prevalence of PTSD among youth in the juvenile justice population vary widely, and these variations are attributable to the lack of standardized instruments used across studies and differences in study methodologies [4]. Despite these variations, evidence suggests that many youth involved with the juvenile justice system have experienced traumatic events and suffer from PTSD [4]. Selected studies conducted among youth involved in the juvenile justice system have found that:

- More than one in three youth in the California Youth Authority met full criteria for PTSD, and 20% met partial criteria for PTSD [6];
- The incidence of PTSD among youth in the juvenile justice system is similar to youth in the mental health and substance abuse systems [13], but up to eight times higher than comparably aged youth in the general, community population [5];
- Among non-incarcerated youth seen in juvenile court clinics, one in nine met criteria for PTSD [14];
- The prevalence of PTSD is higher among incarcerated female delinquents (49%) than among incarcerated male delinquents (32%), and higher than among youths in the community (<10%) [6] [7].

While the prevalence of PTSD is high, the prevalence of self-reported exposure to traumatic experiences is much higher, as high as 93% in juvenile detention centers [5]. A number of sources note that traumatic experiences symptoms are higher among girls than boys in the juvenile justice system [4], [7], [12], [8]. Additionally, different types of traumatic experiences are reported by boys and girls, with girls more likely than boys to report sexual abuse and physical punishment. While boys more often report witnessing violence, girls more frequently report experiencing violence [5] [8].

African-American and Latino/Hispanic youth are disproportionately placed in the juvenile justice system, but are not more likely than white youth to report exposure to traumatic stressors [5]. Among boys in a representative sample from an urban juvenile detention facility [5], white youth were more likely than African-American youth to report having been physically assaulted or severely beaten (58% vs. 32%), with 44% of Hispanic boys reporting violence exposure.

Trauma and Its Impact on Youth

Traumatic experiences can include not only physical or sexual abuse or assault but also serious accidents, illnesses, disasters, and the loss of important relationships or caregivers. When trauma occurs early in childhood, critical aspects of brain and personality development may be disrupted [9] [10]. The ability to self-regulate, which is critical to success in late childhood and adolescence, can be compromised [9]. Trauma in adolescence is often layered on earlier life trauma. Traumatized youth can be from any background, but those who experience significant early life trauma often come from environments in which they are subject to more stress and have fewer resources to help them develop than children who do not suffer early life trauma. Such children may place themselves in harm’s way for traumatic accidents or violence because of impulsivity and poor supportive relationships [15]. Traumatized adolescents typically do not lack a sense of self or values, but are often too anxious, angry, or confused to rely upon these psychological resources while struggling with a sense of being in constant danger.

Although most youth who experience psychological trauma recover healthy functioning, as many as half of the youth in the juvenile justice system experience chronic health and psychological impairments related to trauma [6]. The reasons why youth in the juvenile justice system seem vulnerable to traumatic stress disorders are complex and just beginning to be fully understood through scientific research.

Trauma involving victimization by others is more likely than other forms of trauma to lead to impairment in psychosocial functioning and physical health [16]. Although not every
delinquent youth has experienced traumatic victimization, clinical and epidemiological studies indicate that at least three in four youth in the juvenile justice system have been exposed to severe victimization [5] [6] [7].

While most professionals agree that no single risk factor or experience leads a youth to delinquency, the likelihood of offending appears to increase when a teenager is a witness or victim of violence and experiences traumatic stress as a result [9]. When exposed to trauma or mistreatment, a youth may cope by resorting to indifference, defiance, or aggression as self-protective reactions. In these cases, risk taking, breaking rules, fighting back, and hurting others who are perceived to be powerful or vulnerable may become a way to survive emotionally or literally. It is often these behaviors that bring youth into the juvenile justice system.

It is possible that traumatic stress symptoms may worsen as a result of juvenile justice system involvement. Court hearings, detention, and incarceration are inherently stressful, and stressful experiences that are not traumatic per se can exacerbate trauma symptoms. Girls in particular may be susceptible to trauma after incarceration due to their high rates of exposure to traumatic stress and the possibility of retraumatization [8]. Seclusion and restraint in psychiatric units is cited as an example of a practice that can be retraumatizing. [17]. Prescott [18] discusses a cycle of escalating interventions at times of crisis which can lead to increased self-injury and the use of physical restraints by custodial personnel. These interventions include the presence of male security personnel, being strapped to beds, forced medication, seclusion, precautions which force disrobing, forced physical exams, and invasive body searches.

Theories regarding retraumatization also extend to males. It has been suggested that patterns of retraumatization may contribute to angry acting out among adult men who have experienced trauma as children [19]. While clear empirical evidence is elusive and at times contradictory [20], the potential for retraumatization exists for both boys and girls in the juvenile justice system — especially in confinement settings.

Addressing Trauma Among Youth in the Juvenile Justice System

For the most part, juvenile justice systems have not routinely responded to the trauma histories of youth who come into contact with their system. It has only been within the past decade, as the collective knowledge base on youth exposure to psychological trauma has grown, that there has been a push to improve the juvenile justice system’s response to traumatized youth. At the same time that our knowledge of trauma among the juvenile justice population has grown, new approaches for identifying and treating traumatic stress disorders among youth have emerged in the field. While we have much to learn, these developing tools and approaches provide the juvenile justice system, for the first time, the opportunity to intervene with these youth to diminish the impact of traumatic experiences and PTSD [21]. These new resources for assisting traumatized youth are described below.

Trauma Screening. Because behaviors associated with trauma often look very similar to common delinquent behaviors, it is important for juvenile justice staff (and mental health staff working within juvenile justice systems) to recognize that there are multiple pathways to similar symptom patterns [9]. As such, all youth entering the juvenile justice system should undergo a standardized mental health screening to identify the possibility of psychiatric conditions [11] [12], including traumatic stress disorders [4], which require immediate attention or further clinical assessment [22] [23].

Trauma screening typically focuses on two core issues: 1) trauma exposure and 2) traumatic stress symptoms. In terms of exposure, it is important to determine what specific traumas have occurred at what ages, and in what circumstances, in each youth’s life. In terms of symptoms, it is important to determine what specific PTSD or associated traumatic stress reactions or trauma-exacerbated symptoms are interfering with a youth’s ability to think clearly and demonstrate healthy choices and positive growth.

Screening for trauma history and traumatic stress should be performed by appropriately trained staff. Most instrument developers provide guidelines for the level of training and/or education needed to appropriately administer the instrument [23]. Examples of existing screening instruments that can be used to screen for trauma exposure and traumatic stress among youth in the juvenile justice system include:

- **MAYSi-2.** This is a mental health screening instrument frequently used in juvenile justice programs. It is a 52 item self-report instrument that includes a Traumatic Experiences scale, which is used to provide an indication that the youth may have had traumatic experiences and may be experiencing traumatic stress symptoms [24].

- **Traumatic Events Screening Inventory (TESI).** This is a structured clinical interview that briefly assesses a youth, parent or guardian’s report of the youth’s past or current exposure to a range of traumatic events, including life-threatening or severe accidents, illnesses, disaster, threats, violence or abuse. It has
been shown to reliably and validly identify exposure to traumatic events in children and adolescents in psychiatric and pediatric healthcare samples [20] [25] [26].

- **PTSD Reaction Index (PTSD-RI).** This is a self-report symptom inventory based closely on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for PTSD. Twenty of the items assess PTSD symptoms, and two items assess the associated features of fear of recurrence and trauma-related guilt. The measure has shown evidence of reliability and validity in psychiatric and school samples [27].

- **Trauma Symptom Checklist for Children (TSCC).** This is a 54 item self-report symptom inventory made up of six scales and four subscales designed to evaluate acute and chronic traumatic stress symptoms. The instrument has been found to be reliable and valid in child psychiatric samples [28].

- **PTSD Checklist for Children/Parent Report (PCL-C/PR).** This is a brief measure of PTSD symptom severity completed by parents or other adults who have daily contact with the youth (e.g., detention or probation staff). It has been shown to be reliable and valid with child and adolescent psychiatric and pediatric healthcare samples [25] [26].

**Trauma Assessment.** Trauma assessments are more thorough and time consuming than trauma screenings, and are indicated when a screening suggests that a youth may be suffering from a trauma-related disorder [4]. These assessments typically involve focused, clinical interviews that include, whenever possible, several components:

- A diagnostic interview with the youth [29];
- Interviews with persons who know the youth;
- A review of pertinent collateral (e.g., school, probation) information;
- Observations of the youth within their home or school environment;

In order to be qualified to conduct in-depth traumatic stress assessments with youth in the juvenile justice system, a mental health professional should have specialized training and experience in child and adolescent traumatic stress assessment as well as in the assessment of psychiatric disorders, psychosocial factors and resources.

**Treatment and Rehabilitation of Traumatic Stress Disorders.** Several therapies and interventions currently being adapted and field tested with youth in the juvenile justice system emphasize the development of self-regulation and interpersonal effectiveness skills in their present lives as a way to reduce PTSD symptoms and enhance psychosocial and educational attainment. These include:

- **Trauma Affect Regulation: A Guide for Education and Therapy (TARGET).** TARGET is a strength-based approach designed to enhance self-regulation capacities that are compromised by psychological trauma in childhood [10]. The goal is to help survivors understand how trauma changes the body and the brain’s normal stress response into an alarm response, which can become PTSD. TARGET teaches a sequence of practical self-regulatory skills with creative exercises designed to enhance youths’ self-esteem and ability to manage anger, impulsivity, grief, shame, and guilt [42] [43].

- **Trauma Recovery and Empowerment Model (TREM).** TREM focuses on long-term cognitive, emotional, and interpersonal consequences of physical and sexual abuse in a supportive skill-building curriculum designed to enhance strengths [44] [45]. TREM was originally designed for women with serious mental health and substance use disorders, but later adaptations of the model include one specifically for adolescent girls (G-TREM).

- **Seeking Safety** [46] [47]. Seeking Safety is a present-focused therapy designed to help people attain safety from trauma, PTSD, and substance abuse. It comprises 25 topics that are divided among cognitive, behavioral, and interpersonal domains. While originally designed for women, the treatment was developed for flexible use and can be used with adolescent females and males. A recent study with substance abusing women found better outcomes with Seeking Safety than treatment as usual in reducing substance use PTSD symptoms [48].

- **Brief Eclectic Therapy.** This is a manualized approach that combines a variety of theoretical viewpoints into five basic components: psychoeducation, image exposure, writing tasks, meaning and integration, and a farewell ritual [49]. Traumatic events are not only imagined but meaning is sought from the event using an approach that integrates cognitive-behavioral, psycho-educational, and psychodynamic therapies [50]. The sharing of traumatic experiences with sympathetic peers and adults was reported to be helpful by incarcerated male delinquents in group treatment [51].
Cognitive-behavioral approaches are frequently used PTSD treatments. Cognitive behavioral therapies combine therapeutic techniques designed to alter problematic beliefs and patterns of thinking (cognitive therapy) and interventions designed to elicit and reinforce adaptive behaviors (behavior therapy). Examples of cognitive behavioral therapies for youth experiencing traumatic stress disorders include:

- **Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT)**, which is a short-term, clinic-based treatment for children and youth who are experiencing PTSD as a result of physical or sexual abuse or traumatic violence or losses. TF-CBT utilizes one to one counseling to develop cognitive and behavioral self-management skills, as well as “exposure” therapy in which trauma memories are recalled by the child and then shared by the child with the parent. [32] [33] [34]. However, exposure therapy has not been tested with juvenile-justice-involved youth and has been found to be associated with high rates of treatment dropout in some adult studies [35]. Additionally, most research participants in studies of exposure therapy have more stable and secure life circumstances than are possible for many juvenile justice-involved youths and their families [36]. Therefore, caution should be used when using treatments that involve exposure therapy with youth in the juvenile justice system.

- **Eye Movement Desensitization and Reprocessing Therapy (EMDR)**, which is a somewhat controversial technique involving recalling traumatic memories while focusing on personal strengths and engaging in distracting behaviors such as lateral eye movements. EMDR generally is conducted for fewer sessions than TF-CBT, and has shown preliminary evidence of efficacy with conduct-disordered boys [38], child disaster survivors [39], and girls who experienced sexual abuse [40]. EMDR [41] is generally conducted as only one part of a multimodal therapy program rather than a stand-alone treatment.

- **Skills Training in Affective and Interpersonal Regulation (STAIR)**, which is a 16-session one-to-one clinic-based cognitive behavioral therapy targeting emotion management and interpersonal skills. [37] The first eight sessions in STAIR teach a set of self-regulation and interpersonal effectiveness skills, in order to prepare for the final eight sessions in which exposure therapy is conducted. The provision of skills training in affective and interpersonal regulation was found to enhance the efficacy of exposure therapy among women with severe PTSD and histories of childhood abuse [37].

**Pharmacological Treatment.** Clinical trials that support the efficacy of pharmacological treatment of PTSD have been conducted primarily with adults [52]. Medications approved to treat adults with PTSD include selective serotonin reuptake inhibitors (SSRIs), mood stabilizers such as lithium or divalproex sodium (which also has shown promise with youths with explosive temper problems [53]), and medications that help with sleep problems. Anti-depressant medications such as SSRIs are most frequently used [52]. Because of well-publicized concerns regarding potential increases in suicidality associated with the use of SSRIs in children and adolescents, juveniles who are prescribed SSRIs must be carefully monitored (FDA Public Health Advisory, October 15, 2004; FDA Public Health Advisory, June 30, 2005).

**Phase-Oriented Treatment.** Ford and colleagues recommend a three-phase approach to PTSD treatment, employing multiple interventions in stages [43]. In Phase I, emotional regulation and basic coping skills are taught with a primary emphasis on safety and gaining control over intense reactions, impulsive behavior and self-destructive thoughts. Seeking Safety, TREM, TARGET, the first phase of STAIR, and Brief Eclectic Therapy are examples of Phase I PTSD interventions. These skill-building interventions are designed to enhance the ability to manage impulses, think clearly, and act effectively in peer, family, school, and institutional (e.g., detention or probation) relationships.

Phase II is more directly “trauma-focused.” Patients begin to explore trauma memories at a pace that is safe, manageable, and not overwhelming. TF-CBT, EMDR, and the second phase of STAIR are examples of Phase II PTSD interventions. Phase II interventions typically require skilled mental health professionals to guide the work on trauma memories and are not truly portable into juvenile justice settings unless managed by clinical staff. Phase III involves confronting the challenge of sustained recovery, including gaining a stable, satisfying, and productive life and also fine-tuning self-regulation skills to manage PTSD symptoms and deal effectively with daily life.

**Implementing Trauma Services within the Juvenile Justice System**

It is important to note that the issue of trauma among children and youth has received attention only recently within the general children’s services field. Concerted efforts to promote the idea of routinely identifying trauma-related disorders specifically among youth in the juvenile justice system and offering appropriate services to address their trauma-specific needs are only now being initiated. As a result, very few juvenile justice settings systematically screen for trauma-related symptoms among youth, very few
have procedures for determining when and how to provide PTSD treatment services or referrals and very few actually provide trauma-informed care. The only exceptions have been in isolated programs [23]. As a positive counterpoint, recent innovations in two state juvenile justice systems and by a national network of traumatic stress programs provide examples of possible new directions for improving the juvenile justice system’s response.

In the state of Connecticut, a systematic screening protocol for traumatic stress and associated behavioral and socio-emotional impairments based upon the TARGET model has recently been implemented [54]. TARGET is serving as a foundation for making every detention center, every probation officer working with girls (those working with boys expected to soon follow), and other youth programs trauma-informed. Administrators, line staff, health care staff, probation officers, and community program providers and consulting clinicians have received training and are receiving ongoing consultation to enable them to adapt the TARGET model to each distinct setting with gender sensitivity and cultural competence. Several presentations at national meetings and in national journals [55] have been given by the juvenile justice, judicial, and health care professionals and administrators who are leading this effort. These presentations have documented and described the state’s efforts to promote trauma-informed care for youth in the juvenile justice system.

Florida has a vastly larger juvenile justice system than Connecticut and is implementing a trauma initiative incrementally due to the size of the system. Florida’s Department of Juvenile Justice has determined that trauma exposure is of sufficient prevalence that trauma-informed services are a top priority for all youth involved in the system. Staff within six programs, ranging from large residential detention or treatment centers to smaller specialized girls’ detention and rehabilitation centers to outward bound programs, have received intensive training in the TARGET model, and are beginning to receive ongoing consultation as they revise their policies and procedures and implement milieu and group programs using the self-regulation skills taught in TARGET. A quasi-experimental evaluation study comparing similar programs that do not adopt the TARGET curriculum and clinical model is under review for funding based on a collaboration involving the Florida Department of Juvenile Justice, the University of South Florida, and the University of Connecticut.

On a national level, the Substance Abuse Mental Health Services Administration (SAMHSA)-funded National Child Traumatic Stress Network (www.nctsnet.org) has established a juvenile justice work group involving six sites within the 50 plus site network. The Learning Collaborative Model for Innovation and Implementation of Evidence-Informed Practices was used by the Network in a year-long intensive training and consultation process to prepare the six juvenile justice Network sites to implement the TARGET model within probation settings, detention centers, correctional facilities, child protective service units, and court programs serving justice-involved youth. The TARGET model has been adapted for large and small settings of varying degrees of security, as well as in milieu, group, family, and individual counseling and education formats, and at one site as a preparation for Stage II Trauma Focused Cognitive Behavior Therapy.

From a fiscal perspective, the development of trauma services in existing programs and settings need not be expensive. Trauma-informed service delivery may be as cost effective as other prevention and education programs when one considers that a disorder discovered and treated early will have less fiscal impact than one left to be treated later. Shared services and blended funding strategies provide further alternate cost savings [56]. Other strategies for funding include utilization of Medicaid, mental health block grants, Temporary Assistance to Needy Families (TANF), Title IV-E waivers, and state children’s health insurance programs [57].

Summary

Exposure to trauma is often overlooked in the assessment and treatment of youth involved in the juvenile justice system [58]. Given the reported high rates of incidence, screening for trauma should be routinely performed on youth at their earliest point of contact with the juvenile justice system. Further, programming for treating trauma disorders among youth now exists and should be available to youth involved with the juvenile justice system who have histories of traumatic experiences—particularly (but not exclusively) for those who meet criteria for PTSD and complex associated behavioral and self-regulation problems. Efforts in several states to provide trauma-informed care and services to youth suggest that there is growing interest on the part of the juvenile justice community to offer these kinds of services and interventions. Traumatic stress services have the capacity to relieve the suffering caused by psychological trauma and PTSD for youth and families involved in the juvenile justice system, as well as to potentially reduce future health, mental health, and correctional costs. Increased emphasis within the juvenile justice system on trauma treatment, outcomes, and research is a fiscally sound and clinically responsible idea whose time has come.
References


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**About the National Center for Mental Health and Juvenile Justice**

Recent findings show that large numbers of youth in the juvenile justice system have serious mental health disorders, with many also having a co-occurring substance use disorder. For many of these youth, effective treatment and diversion programs would result in better outcomes for the youth and their families and less recidivism back into the juvenile and criminal justice systems. Policy Research Associates has established the National Center for Mental Health and Juvenile Justice to highlight these issues. The Center has four key objectives:

- Create a national focus on youth with mental health disorders in contact with the juvenile justice system
- Serve as a national resource for the collection and dissemination of evidence-based and best practice information to improve services for these youth
- Conduct new research and evaluation to fill gaps in the existing knowledge base
- Foster systems and policy changes at the national, state and local levels to improve services for these youth

For more information about the Center visit our website at www.ncmhjj.com.

—Joseph J. Cocozza, PhD, Director