Trauma-Informed Care Training in Forensic Mental Health Services: A Scoping Review

Article *in* International Journal of Forensic Mental Health · March 2024

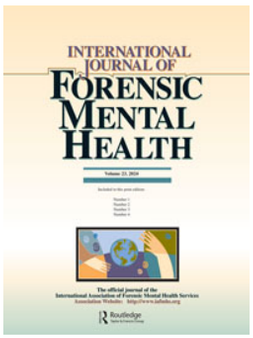
DOI: 10.1080/14999013.2024.2323934

3 authors:

Annabel Simjouw
De Forensische Zorgspecialisten
5 PUBLICATIONS **3** CITATIONS
SEE PROFILE

Vivienne de Vogel
Hogeschool Utrecht and Maastricht University
221 PUBLICATIONS **3,961** CITATIONS
SEE PROFILE

Corine De Ruiter
Maastricht University
364 PUBLICATIONS **6,852** CITATIONS
SEE PROFILE



International Journal of Forensic Mental Health

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/ufmh20

Trauma-Informed Care Training in Forensic Mental Health Services: A Scoping Review

Annabel Simjouw, Vivienne de Vogel & Corine de Ruiter

To cite this article: Annabel Simjouw, Vivienne de Vogel & Corine de Ruiter (05 Mar 2024): Trauma-Informed Care Training in Forensic Mental Health Services: A Scoping Review, International Journal of Forensic Mental Health, DOI: 10.1080/14999013.2024.2323934

To link to this article: https://doi.org/10.1080/14999013.2024.2323934

Published online: 05 Mar 2024.

INTERNATIONAL JOURNAL OF FORENSIC MENTAL HEALTH
https://doi.org/10.1080/14999013.2024.2323934

Routledge
Taylor & Francis Group

Trauma-Informed Care Training in Forensic Mental Health Services: A Scoping Review

Annabel Simjouw[a], Vivienne de Vogel[a,b], and Corine de Ruiter[b]

[a]De Forensische Zorgspecialisten, Utrecht, The Netherlands; [b]Maastricht University, Maastricht, The Netherlands

ABSTRACT

Within forensic populations, exposure to traumatic experiences is high. These experiences are associated with multiple mental and physical health problems later in life. Forensic services would therefore ideally adopt a trauma-informed approach. The aim of this scoping review is to identify trauma-informed training or education for staff within forensic mental health care. A database search of English or Dutch language articles from PubMed, PsycINFO, Embase, Scopus and Web of Science was performed. Researchers reviewed 6,386 articles and nine were included for final analysis, all in justice-involved youth populations. Results show that training in trauma-informed care may facilitate the relationship between staff members and residents and create safer treatment units. Besides this, a reduction in post-traumatic stress symptoms and greater clinical improvement in depression, anxiety, hope and optimism among justice-involved youth was noted. Trauma-informed staff training may also lead to a decrease in incidents taking place as well as a decrease in use of restraints and seclusion.

KEYWORDS

Trauma-informed care; forensic mental health; juvenile justice

Introduction

Psychological trauma is a term describing the negative mental and physical (including neurological) consequences potentially traumatic events can cause (Alessi & Kahn, 2019). Events produce these responses when the stress issuing from them transcends an individual's psychological ability to cope with them (Varchevker & McGinley, 2013). The potentially traumatic event can be of any kind, such as natural disasters, loss of a loved one, physical assault, sexual abuse or serious accidents (Fear et al., 2016). The event changes the individual's perception of well-being, making it more fragile and unstable (Perrotta, 2020). Individuals who experience psychological trauma are more likely to develop mental health problems, such as mood and anxiety disorders, low self-esteem, suicidality, and self-harming behavior (Mandelli et al., 2015; Sayed et al., 2015).

A type of experiences that have the potential to be traumatic are adverse childhood experiences (ACEs). ACEs have been described as childhood events occurring within a child's family or social environment that cause harm or distress, thereby disrupting the child's physical or psychological health and development (Kalmakis & Chandler, 2014). When ACEs were first studied it was found that they were more prevalent than commonly acknowledged (Felitti et al., 1998). Adverse experiences during childhood are a potential risk factor for revictimization later in life (Finkelhor, 2011; Ruback et al., 2014) as well as for psychoactive substance abuse as a coping mechanism (Begle et al., 2011). ACEs also show a relationship to multiple physical health problems later in life, such as ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease (Felitti et al., 2019). Higher prevalence of childhood psychological trauma is associated with higher psychotropic medication use, specifically antipsychotic medication and mood stabilizers (Schneeberger et al., 2014) and more time in seclusion and longer hospitalizations in general psychiatric patients (Hammer et al., 2011; Read et al., 2007). Experiencing ACEs is also strongly associated with risk of interpersonal and self-directed violence (Hughes et al., 2017).

Trauma-informed care

Since the beginning of this century, an increased awareness of the impact of traumatic experiences in vulnerable populations exists, resulting in calls for the

CONTACT Annabel Simjouw asimjouw@dfzs.nl Department of Research, De Forensische Zorgspecialisten, 3500 AD, PO Box 174, Utrecht, The Netherlands.

creation of trauma-informed policies in public service systems (SAMHSA, 2014). Trauma-informed care was first described by Fallot and Harris (2006), who developed five guiding principles of trauma-informed care, namely safety, trustworthiness, choice, collaboration, and empowerment. According to these authors, human service systems should develop policies based on these principles to become trauma-informed.

SAMHSA (2014) defined trauma-informed care as follows: "A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization" (p. 9). Several studies outside the field of forensic mental health services have found that trauma-informed care is associated with greater collaboration with patients, less stress as perceived by patients, a greater feeling of safety and less use of seclusion in psychiatric settings (Baker et al., 2018; Cocozza et al., 2005; Muskett, 2014). Despite these positive preliminary results, trauma-informed care has also drawn criticism for its lack of precision (Mihelicova et al., 2018). It has been suggested that trauma-informed care offers too little practical guidance, urging the need for specific mental health settings to develop their own definitions and practices (Bendall et al., 2021).

Potentially traumatic experiences and psychological trauma in forensic populations

In forensic populations, including both forensic patients and individuals who are incarcerated, the prevalence of individuals who have experienced potentially traumatic experiences is high (Bruce & Laporte, 2015; Wright et al., 2006). Justice involved youth report high rates of physical and sexual victimization, witnessing domestic violence and exposure to violence in the community (Abrams, 2006; Ford et al., 2008). Surveys among forensic patients consistently show that about 64–100% have experienced at least one potentially traumatic event in life, either in childhood, adulthood, or both (MacInnes et al., 2016; Papanastassiou et al., 2004; Sarkar et al., 2005; Spitzer et al., 2001). Despite the high prevalence of experiences of potentially traumatic events among forensic patients, a focus on the psychological sequelae of trauma within forensic treatment is often lacking (Garieballa et al., 2006; McKenna et al., 2019). Individuals who spent a considerable period of their lives exposed to violence may show a diagnostic picture that is not often associated with trauma. Instead of a primary display of anxiety, anger and hostility may be more prominent features of their presentation (Sampson & Bean, 2006). This may be seen in justice-involved youth and adults (Sarchiapone et al., 2009). Within forensic settings there exists a focus on the risk patients present to others which may result in staff overlooking their dual roles of both perpetrator and victim (Bailey & Brown, 2020).

The pathway from experiencing potentially traumatic events in childhood to disrupted development is emphasized in different conceptual models on offending behavior. Neglect, maltreatment, and early caregiver discontinuities interrupt the development of secure attachment relationships, resulting in dysfunctional interpersonal schemas. Schemas are conceptual frameworks based on prior life experiences that help interpret and organize incoming information (Young et al., 2003). Negative early interactions with caregivers impact schemas about oneself, others, and the world, which may, for example, result in viewing oneself as unworthy of love and the world as dangerous (Bach et al., 2018). Through negative schemas, neutral stimuli may be interpreted as aggressive or threatening, causing an individual to react defensively (Greenwald et al., 2002). Attachment theory (Bowlby, 1979) postulates that repeated interactions with attachment figures shape children's internal working models of the world, self, and relations. Insecure attachment may leave a child with inadequate skills to stay away from engaging in antisocial behavior as a way of surviving in the world (Appleyard & Osofsky, 2003).

Trauma-informed forensic mental health services

Besides being a possible risk factor for violent behavior through negative interpersonal schemas, trauma-related symptoms such as hypervigilance and hyperarousal may also complicate forensic treatment due to difficulties in building a therapeutic alliance (Fritzon et al., 2021). Taking into consideration that forensic patients are likely to have suffered or are suffering psychological trauma, forensic services would ideally be adopting a trauma-informed approach. Adopting trauma-informed care (TIC) within these settings could increase patients' treatment responsivity and reduce the risk of future offending behavior (Miller & Najavits, 2012). Whereas trauma-informed care has been implemented within the field of inpatient and acute mental health services (Beckett et al., 2017; Wilson et al., 2017)

as well as within juvenile justice systems (Branson et al., 2017; Crosby, 2016), literature on trauma-informed forensic mental health care appears to be scarce. Trauma-informed patient programs that were developed within this field are specifically adjusted to the needs of women (Covington, 2003, 2008), but childhood maltreatment seems to presage violent behavior in both male and female justice involved youth and men and women (Jackson et al., 2021; Malvaso et al., 2018, 2022; McLachlan, 2022).

For organizations to become trauma-informed, it is of importance to adjust organizational factors, such as modification to the physical environment and policies on the use of coercive measures (Levenson et al., 2018). Readiness for change is of importance and organizational culture is a salient change mechanism (McAnallen &McGinnis, 2021). Participating in trauma-informed trainings improves knowledge, attitudes and behaviors related to trauma-informed practice. It is not yet clear if these improvements are held over time and if they translate into client outcomes (Purtle, 2020). Staff training is however named as an important ingredient in developing trauma-informed services (Menschner & Maul, 2016). Through training staff can be educated on the topic of past traumatic experiences and their effects (Baker et al., 2018; Elwyn et al., 2017). This review will therefore focus on staff education. To understand the different ways trauma-informed care has been operationalized in daily practice, this review seeks to identify trauma-informed care training and education provided to mental health professionals. As juvenile justice and correctional care share similarities in working with clients, especially with respect to the focus on preventing recidivism, research in these settings will be explored as well. Prior systematic and scoping reviews on trauma-informed care within these settings have focused solely on trauma-informed treatment (Hill et al., 2023; Zettler, 2021). To the best of our knowledge no reviews have focused on trauma-informed care training and education provided to mental health professionals.

Through this scoping literature review, we want to answer the following questions: (1) How is trauma-informed care training and education operationalized within forensic mental health, juvenile justice and correctional care settings?, and (2) how is this training and education experienced by staff and patients?. This knowledge may contribute to improvements in the approach to trauma-related symptomatology in the everyday practice of forensic mental health care services.

Method

A scoping review may summarize the findings related to constructs examined with heterogeneous methods and identify the aspects that future research should focus on (Tricco et al., 2018). The first author developed a study protocol based on the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) guidelines (Tricco et al., 2018). Based on this protocol, a search strategy was developed (see Appendix A). To optimize this search strategy a research librarian was consulted. A literature search of the electronic databases PubMed, PsycINFO, Embase, Scopus and Web of Science was performed.

Eligibility criteria

This review aimed to identify peer-reviewed academic articles that aimed to provide an evaluation of a training or educational program. All types of peer-reviewed articles (original research articles, commentaries, letters to editors, and reviews) that were published in English or Dutch were eligible for inclusion in this review.

Exclusion criteria were as follows:

1. Articles merely describing definitions, theoretical models, or guidelines, not evaluating training or education.
2. Articles not focusing on forensic mental health care, juvenile justice or correctional care settings.
3. Articles published but not peer reviewed or under review at the time the search was carried out. Blogs posts, conference papers, popular press articles, webinars or online presentations were not included in the review.

Study selection

The first author (AS) uploaded the search results to Rayyan for a blinded evaluation. Rayyan provides a platform for article uploading, blinded and unblinded comparison of articles, and examining reasons for exclusion (Ouzzani et al., 2016). All extracted titles and abstracts were screened for relevance by the first author (AS), with 10% being screened by a second author (VdV). After screening was completed, the first and second author discussed the publications eligible for full text review. Disagreements on the inclusion or exclusion of publications were discussed by all authors until agreement was reached. Publications selected in this way were read in full by the first author. The reference lists of all included publications were searched

for additional studies, which resulted in two additional publications.

Data extraction

The characteristics of all included studies were extracted by one author (AS). Data items that were extracted from each included study were author and year of publication, sample, setting and country of origin, study design, outcome measures, control group and main findings.

Results

Our search identified 7,940 publications. After duplicates were removed, 6,386 publications remained. Through title and abstract review 6,358 articles were excluded and the remaining 23 publications were included for full-text screening. Nine publications were included for final analysis (see Figure 1). A summary of the articles included for final analysis can be found in Table 1.

Study demographics

The countries of origin for the nine included studies were USA ($n = 8$) and England and Scotland ($n = 1$).

Study settings and samples

Six publications (Baetz et al., 2019; Barron & Mitchell, 2019; Elwyn et al., 2015, 2017; Marrow et al., 2012; Olafson et al., 2018) report on juvenile justice facilities, one publication reported on a public charter high school, affiliated with a large child welfare agency where girls who have histories of abuse and neglect are enrolled, referred from either the foster care or juvenile justice systems (Crosby et al., 2019). One publication reported on a community-based, work-training program for adolescents and young adults with histories of court or gang-involvement (Griffing et al., 2021) and one publication reported on residential treatment for adolescents placed there by the juvenile justice system (Kramer, 2016). All publications included youth samples, no publication included an adult sample.

Study designs

Investigation of the outcomes in the identified studies was conducted quantitatively ($n = 5$), qualitatively ($n = 3$), or through a mixed method approach ($n = 1$).

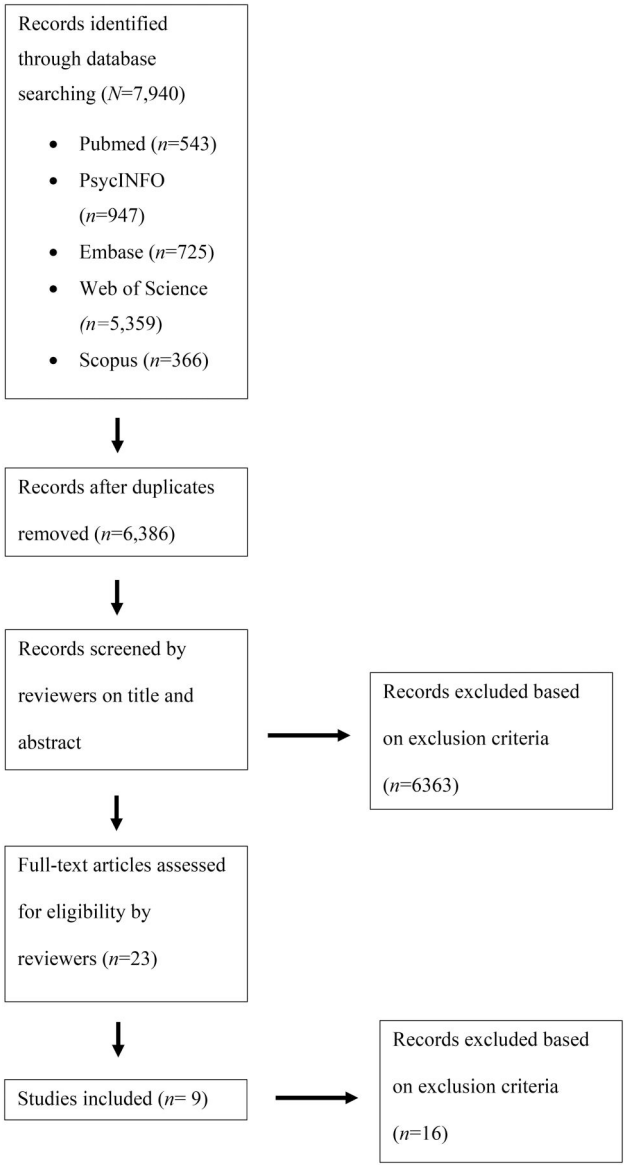


Figure 1. Scoping review search process.

One study made use of a control group (Marrow et al., 2012).

TIC programs identified

Below, the following six models and programs are described: *Sanctuary Model, Think Trauma, EQ2, Fairy Tale Model, Trauma Affect Regulation: Guide for Education and Therapy (TARGET), Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT).*

Three articles reported on the implementation of the *Sanctuary Model* (Elwyn et al., 2015, 2017; Kramer, 2016). The model focuses on establishing a therapeutic community, because it is believed that the community itself is the most influential factor for

Table 1. Main findings: Trauma-informed care programs in juvenile justice.

Author	Approach	Sample, setting, country	Design, outcome measures	Control group	Findings
Baetz et al. (2019)	Think Trauma: A Training for Staff in Juvenile Justice Residential Settings	*Sample:* Youth sample ($n = 3,213$ for Facility A; $n = 11,643$ for Facility B) *Setting:* Two secure juvenile detention facilities *Country:* United States	*Design:* Two-group, quasi-experimental with random allocation and delayed start *Outcome measures:* Youth demographics, youth-on-youth assaults and altercations reported in the administrative database	None	A reduction of youth-on-youth violent incidents in Facility A, but not in Facility B. A larger proportion of youth in Facility A completed the skills group program as compared with youth in Facility B (16% vs. 9%). Youth in facility B also had shorter stays. Only after both staff training and youth skills components were completed, reduction in violence at Facility A was realized.
Barron and Mitchell (2019)	Fairy Tale Model (FTM)	*Sample:* Therapists ($N=10$) from four secure facilities *Setting:* Four secure youth facilities *Country:* Scotland and England	*Design:* Quasi-qualitative *Outcome measures:* Semi-structured interviews explored therapists' perceptions of the benefits, challenges, and facilitating factors of implementing a trauma-informed phase approach	One	Youth were perceived by therapists to make gains in motivation, stabilization, problem-solving, anticipating risks, and imagining more hopeful futures. Gains observed by care staff indicated that youth had applied FTM strategies in care and educational settings. Increased effort, managing emotions, talking about past harms, and applying coping strategies were all reported.
Crosby et al. (2019)	The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT) curriculum	*Sample:* Youth sample ($N = 109$) consisting of girls who have histories of abuse and neglect and are referred by either the foster care or juvenile justice systems *Setting:* A public, charter high school, affiliated with a large child welfare agency *Country:* United States	*Design:* Pre- and post-group assessment *Outcome measures:* Youth demographics and CROPS	None	Findings demonstrate that students experienced a decrease in trauma symptoms after being exposed to a trauma-sensitive school intervention.
Elwyn et al. (2015)	Sanctuary Model	*Sample:* Youth sample ($N = 30$) *Setting*: A secure juvenile justice facility for adjudicated delinquent females *Country:* United States	*Design*: Quantitative *Outcome measures*: Demographic and related information and administrative and performance-based standards (PbS) data such as incidents of youth misconduct resulting in injury, confinement, and/or restraint, isolation, room confinement, segregation/special management use per 100 person-days of youth confinement, injuries to youth per 100 person-days of youth confinement, injuries to staff per 100 staff-days of employment.	None	Findings suggest that the facility was a safer place for both residents and staff after implementation of the model. Its safety indicators also compare favorably to those of the juvenile justice correctional field in general.

(*Continued*)

Table 1. Continued.

Author	Approach	Sample, setting, country	Design, outcome measures	Control group	Findings
Elwyn et al. (2017)	Sanctuary Model	*Sample:* Staff sample ($N = 17$) *Setting:* A secure facility for adjudicated delinquent women *Country:* United States	*Design:* A descriptive exploratory examination, based on retrospective accounts by program staff *Outcome measures:* Interviews and focus groups with staff members	None	Over time, improvement in physical and psychological safety; staff morale; accountability and attitudes toward work; and the relationships of staff members with administrators, other staff members, and residents was detected. The Sanctuary Model facilitated these changes, but other environmental changes occurred too during the implementation period, such as investment by leadership and eventually staff and resident buy-in, suggesting that the Sanctuary Model alone may not be sufficient in bringing about change.
Griffing et al. (2021)	EQ2 (Empowering Direct Care Staff to Build Trauma-Responsive Communities for Youth)	*Sample:* Staff members ($N = 31$) *Setting:* Residential (a short-term crisis stabilization program, a program for adolescent mothers under the auspices of the state's child welfare agency and a treatment program for adolescent males with behavioral issues) and a community-based, work-training program for adolescents and young adults with histories of court or gang-involvement *Country:* United States	*Design:* Mixed methods *Outcome measures:* Tracking recruitment and retention rates and weekly attendance, follow-up interviews with program directors and the EQ2 survey, measuring acceptability and efficacy of the program	None	Staff reported an increase in understanding of the impact of trauma and skills in dealing with challenging youth behaviors and staff conflict. The program was viewed as educational, relatable, and rated very good or excellent overall.
Kramer (2016)	Sanctuary Model	*Sample:* Staff ($n = 33$) and resident ($n = 3$) sample *Setting*: Residential treatment facility *Country:* United States	*Design:* Qualitative *Outcome measures:* Observation of groups and meetings, content analysis of existing quantitative data and agency documents, focus groups with staff and residents and individual interviews with staff.	None	Data show that the Sanctuary model alleviates the symptoms of complex trauma. Residents spoke of having more hopeful outlooks on their lives, on their futures through planning for it and stating their desired goals
Marrow et al. (2012)	One day psychoeducational training + Trauma Affect Regulation: Guide for Education and Therapy (TARGET) training	*Sample:* Youth intervention sample ($N = 38$) and TAU sample ($N = 36$) *Setting:* A moderate-high security correctional facility *Country:* United States	*Design:* Nonrandomized group comparison *Outcome measures:* MFQ, SCARED, TESI, UCLA PTSD RI, OS, NMR, MAYSI-2 Youth incident reports were used to measure frequency of seclusion, restraint, and threatening behavior by youth	TAU: One-day psychoeducational training for staff and psychiatry services, psychological services, and social work services.	Clinical improvements in depression and anxiety, hope and optimism. Youth on intervention units expressed more satisfaction with mental health services and a reduction in youth threats toward staff, as well as use of restraint and seclusion rates were observed.

(*Continued*)

Table 1. Continued.

Author	Approach	Sample, setting, country	Design, outcome measures	Control group	Findings
Olafson et al. (2018).	Trauma and Grief Component Therapy for Adolescents (TGCTA) & Think Trauma: a trauma-informed milieu training for staff.	*Sample*: Youth sample ($N = 69$) *Setting*: Six residential juvenile justice (JJ) facilities *Country*: United States	*Design*: Pre- and post-group assessment *Outcome measures*: TSCC, UCLA PTSD RI & ADES	None	Significant reductions in symptoms of posttraumatic stress, depression, and anger, but not in anxiety or sexual concerns (TSCC). There were significantly greater reductions in posttraumatic stress disorder (PTSD) among incarcerated youth who completed all modules of the group treatment intervention relative to incarcerated youth who received an abbreviated version.

Note. CROPS = Child Report Of Post-traumatic Symptoms (Greenwald & Rubin, 1999), MFQ = The Mood and Feelings Questionnaire (Angold et al.,1987), SCARED = Self-Report for Childhood Anxiety Related Disorders (Birmaher et al., 1997), TESI = Trauma Events Screening Inventory, RI = UCLA PTSD Reaction Index (Steinberg et al., 2004), OS = Ohio Scales (Ogles et al., 2001), NMR = Generalized Expectancies for Negative Mood Regulation (Catanzaro & Mearns, 1990), MAYSI-2 = Massachusetts Youth Screening Instrument (Grisso & Barnum, 1998), TSCC = Trauma Symptom Checklist for Children (Briere, 1996), ADES = Adolescent Dissociative Experiences Scale (Armstrong et al., 1997).

modeling healthy relationships among its members. A trauma recovery framework (Foderaro & Ryan, 2000) is used, and youth are taught cognitive-behavioral strategies to replace non-adaptive cognitive, social and behavioral skills with adaptive ones. This trauma-recovery framework is referred to as 'SELF', representing the four stages of recovery: Safety, Emotional management, Loss, and Future. A core team, representing employees from all departments, is formed who are the primary change agents to implement the model. Operationalization of the Sanctuary Model is performed through a series of staff dialogues and self-evaluations of residential units' structure and functioning, staff training and twice daily community meetings. Besides this, staff are taught a range of psychoeducational exercises to use in their daily interactions with youth, and weekly psychoeducation groups take place to teach knowledge and skills needed to make progress through the four stages of recovery.

Baetz et al. (2019) and Olafson et al. (2018) both describe *Think Trauma*, a trauma-informed milieu training for staff. This training consists of four modules that teach about how psychological trauma impacts development and behavior, managing post-traumatic behavior of youth and methods for coping with secondary trauma and compassion fatigue among staff. Think Trauma is meant to raise awareness that problematic youths' attitudes and behaviors may be partly formed by histories of psychological trauma and loss. A train-the-trainer model is used; co-trainers from different disciplines, including direct care staff, managers, school social workers, and juvenile justice staff trainers, learn the curriculum, rehearse and co-present several sessions, together with psychologists who give the training.

EQ2 (Griffing et al., 2021) is an organizational intervention that combines trauma-informed knowledge, mindfulness-based practices, and practices from restorative justice, to support staff and to serve as a buffer against secondary traumatic stress. The focus is on helping staff to understand the impact of psychological trauma on the behavior of youth while also improving staff's ability to adequately respond to trauma-related behavior. Adapted from restorative justice, meetings ("Circles") are organized where staff provide support to another, validate personal experiences and focus on building trust in one another.

The Fairy Tale Model (Barron & Mitchell, 2019) is introduced in staff training by telling a fairy tale in which every element of the story resembles one of the treatment phases. Focusing on trauma recovery, the model includes 14 sessions about the determination of

youth's strengths and resources, trauma and loss history, life situation, and presenting problems; assessment and enrichment of the youth's goals and motivation, as well as coping and affect tolerance skills; trauma-informed case conceptualization and treatment contract; stabilization; resolution of trauma and loss memories; strengthening of gains; and prospect of future challenges.

Trauma Affect Regulation: Guide for Education and Therapy (TARGET) (Marrow et al., 2012) is a group therapy for youth who are in contact with justice. TARGET is a 10-session treatment for adolescents and adults with past trauma experiences. It teaches skills for processing and managing psychological trauma-related reactions to current stressful experiences, such as grief, symptoms brought on by past trauma experiences, feelings of rejection, shame, survivor guilt, and alienation. Staff receive general trauma training: training designed to provide information on childhood trauma and its prevalence in juvenile justice involved youth, and the relationship between traumatic experiences and emotional and behavioral dysregulation in youth.

The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT; Crosby et al., 2019) is grounded in attachment and ecological theories. Training for school staff consists of role-plays, games, case vignettes, individual coaching and specific trauma-informed strategies. It has been modified to provide information to teachers and school staff on issues related to student court-involvement and diversity, including gender and racial identity.

Staff outcomes

Staff members report that the use of trauma theories clarifies the way youth's problems and behaviors are linked to developmental adversities, and in focusing treatment on trauma recovery (Barron & Mitchell, 2019). Staff attitudes toward their own work changed favorably: after implementation of trauma-informed care, they experienced a greater sense of shared responsibility regarding treatment (Elwyn et al., 2017). Treatment units that implemented trauma-informed care are more likely to operate as a therapeutic community (Kramer, 2016) and are considered safer environments compared to the field average of all facilities participating, representing approximately 100 facilities and thousands of residents (Elwyn et al., 2015). Working in a trauma-informed manner can also facilitate the relationship between staff members and youth since these programs allow for improved listening and discussion (Kramer, 2016).

Youth outcomes

Results indicate that implementation of a trauma-informed model or program could lead to a reduction in post-traumatic stress symptoms (Crosby et al., 2019; Olafson et al., 2018) and greater clinical improvement in depression, anxiety, hope and optimism in justice-involved youth, as compared to treatment as usual (Marrow et al., 2012). Implementation may also lead to a decrease in youth-on-youth violent incidents (Baetz et al., 2019) as well as a decrease in use of restraints and seclusion, and number of threats made by youth (Marrow et al., 2012). Youth residing within the facilities reported that in communication with staff they experienced less victim-blaming, and fewer punitive and judgmental responses. Furthermore, clearer interpersonal boundaries were observed (Kramer, 2016). Youth also acknowledge the effect of their behavior on staff members and other residents (Elwyn et al., 2017).

Discussion

The aim of this review was to answer the following questions: How is trauma-informed care training and education operationalized within forensic mental health, juvenile justice and correctional care settings, and (2) how is this training and education experienced by staff and patients. For this purpose, we performed a scoping review of different literature databases. As described above, we identified no publications that targeted adult forensic populations. Therefore, the focus of this review became trauma-informed care programs for juvenile justice services. Throughout this review, the different programs and their effects on staff and service users were analyzed. The most important findings will be discussed below, followed by suggestions for future research.

TIC programs: Methods of education

The models and programs discussed in this article all focus on the way psychological trauma impacts the development of behavior, illustrating the (mental) health difficulties brought on by potentially traumatic experiences. The way justice-involved youth cope with psychological trauma is also an important part of these trauma-informed interventions. Throughout these programs, youth learned to move from trauma

related survival coping skills to more healthy coping (Baetz et al., 2019). The programs also shape an understanding of how psychological trauma may impact relationships (Kramer, 2016). Some programs offer an additional focus on coping behavior of staff members, meaning the different ways they react to and interact with antisocial behavior of youth. The various programs use different teaching methods. Some of these methods are role-plays, games, case vignettes, individual coaching, staff dialogues and self-evaluations of residential units' structure and functioning. Besides this, daily community meetings and a range of psychoeducational exercises were used. One study also employed a train-the-trainer model where co-trainers from different disciplines learn the curriculum, rehearse and co-present several sessions together with psychologists who give the training.

TIC programs: Operationalization in daily practice

The translation from theoretical framework to practice is left to those who give training in principles as well as to the professionals who do the actual work (Steinkopf et al., 2020). Kramer (2016) describes the translation of the Sanctuary Model. Skill sets of participants were increased through the Sanctuary commitments by using specific strategies. A commitment to nonviolence was achieved by using the SELF model and safety plans expressing feelings in community meetings. Youth are actively participating in their healing process, by engaging in conflict resolution and creating a safety plan, which consists of a visual reminder focusing on triggers that could lead to aggressive behavior. Elwyn et al. (2017) report consistent community meetings where staff and youth gather, and red-flag meetings to alleviate possible serious incidents. Staff and residents all wear safety-plan cards all the time and the terminology of Sanctuary is reflected in all documentation concerning residents and employees. Focusing on performance-based standards (PbS), such as incidents of youth misconduct resulting in injury, confinement, and/or restraint, isolation, Elwyn et al. (2015) give no description of how the Sanctuary principles are practiced in daily use.

Baetz et al. (2019) describe the content of the Think Trauma program, but no examples are provided of how the program is used in daily interaction. Olafson et al. (2018), also reporting on Think Trauma, construe how all staff could be enlisted to support the youth in practicing positive coping strategies to manage their responses to trauma and loss triggers instead of youth resorting to reactive aggression, avoidance, and/or high-risk behaviors. Griffing et al. (2021) provide examples of how EQ2 is used by staff. Participants report that they actively use specific skills from the intervention such as the use of "cool thoughts" when youth ran away from them, more active listening, as it helps youth feel less frustrated, and the use of the Stop, Breathe and Choose technique when youth try to get them involved into an argument. To help staff manage their reactions to highly charged events the program also focusses on strengthening staff's social and emotional regulation skills. The program uses an application to reinforce the use of these self-regulation and mindfulness skills.

Barron and Mitchell (2019) detail how the Fairy Tale Model enabled a shift for most therapists in understanding trauma as the underlying driver of behavior. Participants recall how they talk about the impact of psychological trauma on behavior more with youths, their parents, and staff. There also exists heightened awareness about psychological trauma in assessment, focusing on its relation to presenting problems such as impulsivity and managing emotions. Traumatization and resultant symptomatology were also increasingly discussed in placement transition meetings. Marrow et al. (2012) discuss the effect of TARGET and general trauma training for staff on youth clinical symptoms as well as restraint measures and seclusion. However, no examples are provided how this training is used in daily practice. Crosby et al. (2019) describe the use of The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success (HLT). There is no description of how this training is used in everyday practice, but reference is made to a qualitative study demonstrating how students experience trauma-informed school settings (Crosby et al., unpublished).

Implementation of TIC

Besides the aforementioned positive results of TIC programs on both staff and justice-involved youth, difficulties in implementation were also reported. As organizational culture begins to shift, it becomes more difficult to incorporate staff from other programs (Elwyn et al., 2017) and experienced staff may feel less skilled when implementing new forms of care (Barron & Mitchell, 2019). In settings where cognitive behavioral therapy was the standard approach, paradigm clashes occurred as a trauma-informed perspective was implemented into a context that traditionally used a behavioral risk paradigm (Barron & Mitchell, 2019). Several authors recommend caution in

interpreting their research results. Reported changes could not be directly attributed to the implemented trauma-informed programs, because other developments occurred during the implementation period. For example, Elwyn et al. (2017) report that during the implementation period of the Sanctuary Model, a change in leadership within the facility occurred. As new employees are trained in other models designed to improve conditions and outcomes for youth in correctional facilities, observed changes might be attributable to this as well. Extraneous factors, such as psychotherapy and removal from harmful home environments are also likely to impact the reduction of symptoms associated with psychological trauma such as hypervigilance, hyperarousal, and nightmares (Crosby et al., 2019). Baetz et al. (2019) describe how staff training alone was not sufficient to create changes at facility level. Reductions in incidents were realized only after both staff training and youth skills groups had been implemented.

Changing organizational culture is challenging, as work environments during change may be characterized by poor cohesion, conflicts, and other psychosocial challenges (Andersen, 2006). Change begins with management's investment in the use of trauma-informed principles in service delivery. For organizations to change, 'organizational readiness' must exist, where readiness signifies a state of organizational members being both willing and able to take action (Weiner, 2009). The characteristics of the change process influence members' acceptance of change (Gordon & Pollack, 2018), therefore members must have confidence in the reliability and integrity of its change agents (Battilana & Casciaro, 2012).

As mentioned, we were not able to retrieve publications on TIC programs for adult forensic patients. Thus, the question in how far these TIC programs for justice-involved youth fit the needs of adult forensic patients should be further explored. The Sanctuary Model was initially developed for adults and older adolescents in short-term inpatient psychiatric treatment, suggesting it may be suitable for use with adult forensic patients. The other programs share a clear focus on the impact of potentially traumatic experiences on behavior during development, targeting youth as they are growing up. Therefore, it is likely that change can be obtained more easily with youth as compared to adults. Still, trauma theories will be valuable for use in an adult population, as they allow staff to better understand certain patient behaviors that may stem from psychological trauma. Teaching staff coping skills could help them create a safe environment in adult inpatient forensic care, both for patients and for themselves. Learning through role-play, case vignettes, psychoeducation and staff dialogues will foster the development of skills that can be used in practice.

Limitations

This scoping review has several limitations. Only studies carried out in English or Dutch were included, and only English keywords were used. This may have resulted in the exclusion of studies published in other languages. In this review, we chose to only include curricula that were already implemented in practice. Thus, curricula that have been developed but are not implemented, are missing.

Implications for practice and research

The outcomes of this review show that trauma-informed staff training is of importance for organizations to become trauma-informed. Results however also indicate that staff training alone may not be enough to facilitate change. Extraneous and contextual factors, as well as the implementation of patient interventions are likely to have contributed to the observed changes in the studies included in this review.

To understand how interventions generate changes in social settings, context and intervention can be understood as two independent elements of the same system that interact and adapt over time (Durie & Wyatt, 2013; Hawe, 2015). Hence, it is important for future research to incorporate both aspects of intervention and context and to apply different research methods. First, it is important to study the way psychological trauma is currently part of forensic treatment. This can be done through studies using observational methods of multidisciplinary team meetings allowing for a mapping of everyday clinical practice (Gerritse et al., 2018). Besides this, interviewing and self-report questionnaires can be used. Secondly, the development of a TIC program for adult forensic patients is needed, including both staff training and patient intervention. This program should be tested in a pilot study and its use should be evaluated by staff and patients. Thirdly, it is of importance that future research focusses on the process of implementing trauma-informed care within forensic services, applying both quantitative and qualitative evaluation methods. Implementing a new model of care undoubtedly comes with challenges, as staff might struggle balancing organizational rules in managing safety and risk

while simultaneously focusing on trauma-informed care principles by promoting recovery and reducing coercive practices (Isobel & Edwards, 2017). Lastly, longitudinal studies and randomized controlled trials focusing on the effects of trauma-informed care on quality of care, staff and patient satisfaction and health outcomes are needed. Besides this, future research should focus on how TIC programs achieve to operationalize the five guiding principles by Fallot and Harris (2006), and the 4Rs as developed by SAMHSA (2014).

All in all, it can be concluded that trauma-informed forensic mental health care could help direct attention toward the impact of psychological trauma in the lives of forensic patients. This could help contextualize their behavior, their diagnosis, and their experiences, while informing practice in a way that aids effective treatment and recovery.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

ORCID

Annabel Simjouw http://orcid.org/0000-0002-5743-8594
Vivienne de Vogel http://orcid.org/0000-0001-7671-1675
Corine de Ruiter http://orcid.org/0000-0002-0135-9790

References

Abrams, L. S. (2006). From corrections to community: Youth offenders' perceptions of the challenges of transition. *Journal of Offender Rehabilitation*, *44*(2–3), 31–53. https://doi.org/10.1300/J076v44n02_02

Alessi, E. J., & Kahn, S. (2019). Using psychodynamic interventions to engage in trauma-informed practice. *Journal of Social Work Practice*, *33*(1), 27–39. https://doi.org/10.1080/02650533.2017.1400959

Andersen, R. G. (2006). Conflicts during organizational change. *Nordic Psychology*, *58*(3), 215–231. https://doi.org/10.1027/1901-2276.58.3.215

Angold, A., Weissman, M. M., John, K., Merikancas, K. R., Prusoff, B. A., Wickramaratne, P., Davis Gammon, G., & Warner, V. (1987). Parent and child reports of depressive symptoms in children at low and high risk of depression. *Journal of Child Psychology and Psychiatry*, *28*(6), 901–915. https://doi.org/10.1111/j.1469-7610.1987.tb00678.x

Appleyard, K., & Osofsky, J. D. (2003). Parenting after trauma: Supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal*, *24*(2), 111–125. https://doi.org/10.1002/imhj.10050

Armstrong, J. G., Putnam, F. W., Carlson, E. B., Libero, D. Z., & Smith, S. R. (1997). Development and validation of a measure of adolescent dissociation: The adolescent dissociative experiences scale. *Journal of Nervous & Mental Disease*, *185*(8), 491–497. https://doi.org/10.1097/00005053-199708000-00003

Bach, B., Lockwood, G., & Young, J. E. (2018). A new look at the schema therapy model: Organization and role of early maladaptive schemas. *Cognitive Behaviour Therapy*, *47*(4), 328–349. https://doi.org/10.1080/16506073.2017.1410566

*Baetz, C. L., Surko, M., Moaveni, M., McNair, F., Bart, A., Workman, S., Tedeschi, F., Havens, J., Guo, F., Quinlan, C., & Horwitz, S. M. (2019). Impact of a trauma-informed intervention for youth and staff on rates of violence in juvenile detention settings. *Journal of Interpersonal Violence*, *36*(17–18), NP9463–NP9482. https://doi.org/10.1177/0886260519857163

Bailey, T. D., & Brown, L. S. (2020). Complex trauma: Missed and misdiagnosis in forensic evaluations. *Psychological Injury and Law*, *13*(2), 109–123. https://doi.org/10.1007/s12207-020-09383-w

Baker, C. N., Brown, S. M., Wilcox, P., Verlenden, J. M., Black, C. L., & Grant, B. J. E. (2018). The implementation and effect of trauma-informed care within residential youth services in rural Canada: A mixed methods case study. *Psychological Trauma*, *10*(6), 666–674. https://doi.org/10.1037/tra0000327

*Barron, I., & Mitchell, D. (2019). The fairy tale model: Secure facility therapist perceptions. *Journal of Child & Adolescent Trauma*, *12*(2), 257–267. https://doi.org/10.1007/s40653-018-0203-2

Battilana, J., & Casciaro, T. (2012). Change agents, networks, and institutions: A contingency theory of organizational change. *Academy of Management Journal*, *55*(2), 381–398. https://doi.org/10.5465/amj.2009.0891

Beckett, P., Holmes, D., Phipps, M., Patton, D., & Molloy, L. (2017). Trauma-informed care and practice: Practice improvement strategies in an inpatient mental health ward. *Journal of Psychosocial Nursing and Mental Health Services*, *55*(10), 34–38. https://doi.org/10.3928/02793695-20170818-03

Begle, A. M., Hanson, R. F., Danielson, C. K., McCart, M. R., Ruggiero, K. J., Amstadter, A. B., Resnick, H. S., Saunders, B. E., & Kilpatrick, D. G. (2011). Longitudinal pathways of victimization, substance use, and delinquency: Findings from the national survey of adolescents. *Addictive Behaviors*, *36*(7), 682–689. https://doi.org/10.1016/j.addbeh.2010.12.026

Bendall, S., Eastwood, O., Cox, G., Farrelly-Rosch, A., Nicoll, H., Peters, W., Bailey, A. P., McGorry, P. D., & Scanlan, F. (2021). A systematic review and synthesis of trauma-informed care within outpatient and counseling health settings for young people. *Child Maltreatment*, *26*(3), 313–324. https://doi.org/10.1177/1077559520927468

Birmaher, B., Khetarpal, S., Brent, D., Cully, M., Balach, L., Kaufman, J., & Neer, S. M. (1997). The screen for child anxiety related emotional disorders (SCARED): Scale construction and psychometric characteristics. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(4), 545–553. https://doi.org/10.1097/00004583-199704000-00018

Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, *2*(4), 637–638. https://doi.org/10.1017/S0140525X00064955

Branson, C. E., Baetz, C. L., Horwitz, S. M., & Hoagwood, K. E. (2017). Trauma-informed juvenile justice systems: A systematic review of definitions and core components. *Psychological Trauma*, *9*(6), 635–646. https://doi.org/10.1037/tra0000255

Briere, J. (1996). *Trauma symptoms checklist for children (TSCC): Professional manual*. Psychological Assessment Resources.

Bruce, M., & Laporte, D. (2015). Childhood trauma, antisocial personality typologies and recent violent acts among inpatient males with severe mental illness: Exploring an explanatory pathway. *Schizophrenia Research*, *162*(1–3), 285–290. https://doi.org/10.1016/j.schres.2014.12.028

Catanzaro, S. J., & Mearns, J. (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of Personality Assessment*, *54*(3–4), 546–563. https://doi.org/10.1080/00223891.1990.9674019

Covington, S. (2003). *Beyond trauma: A healing journey for women*. Facilitator's guide. Hazelden Press.

Covington, S. (2008). Women and addiction: A trauma-informed approach. *Journal of Psychoactive Drugs*, *Suppl 5*(sup5), 377–385. https://doi.org/10.1080/02791072.2008.10400665

Crosby, S. D. (2016). Trauma-informed approaches to juvenile justice: A critical race perspective. *Juvenile and Family Court Journal*, *67*(1), 5–18. https://doi.org/10.1111/jfcj.12052

*Crosby, S. D., Day, A., Baroni, B. A., & Somers, C. (2019). Examining trauma-informed teaching and the trauma symptomatology of court-involved girls. *Urban Review*, *51*(4), 582–598. https://doi.org/10.1007/s11256-019-00533-2

Durie, R., & Wyatt, K. (2013). Connecting communities and complexity: A case study in creating the conditions for transformational change. *Critical Public Health*, *23*(2), 174–187. https://doi.org/10.1080/09581596.2013.781266

*Elwyn, L. J., Esaki, N., & Smith, C. A. (2015). Safety at a girls secure juvenile justice facility. *Therapeutic Communities*, *36*(4), 209–218. https://doi.org/10.1108/TC-11-2014-0038

*Elwyn, L. J., Esaki, N., & Smith, C. A. (2017). Importance of leadership and employee engagement in trauma-informed organizational change at a girls' juvenile justice facility. *Human Service Organizations: Management, Leadership & Governance*, *41*(2), 106–118. https://doi.org/10.1080/23303131.2016.1200506

Fallot, R. D., & Harris, M. (2006). *Trauma-informed services: A self-assessment and planning protocol*. Community Connections.

Fear, N. T., Bridges, S., Hatch, S., Hawkins, V., & Wessely, S. (2016). Posttraumatic stress disorder. In S. McManus, P. Bebbington, R. Jenkins, & T. Brugha (Eds.), *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014* (pp. 1–25). NHS Digital. http://content.digital.nhs.uk/catalogue/PUB21748/apms-2014-ptsd.pdf

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258.https://doi.org/10.1016/S0749-3797(98)00017-8

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (2019). REPRINT OF: Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, *56*(6), 774–786. https://doi.org/10.1016/j.amepre.2019.04.001

Finkelhor, D. (2011). Prevalence of child victimization, abuse, crime, and violence exposure. In J. W. White, M. P. Koss, & A. E. Kazdin (Eds.), *Violence against women and children* (Vol. *1*, pp. 9–29). American Psychological Association. https://doi.org/10.1037/12307-001

Foderaro, J. F., & Ryan, R. A. (2000). SAGE: Mapping the course of recovery. *Therapeutic Communities-London-Association of Therapeutic Communiities*, *21*(2), 93–104.

Ford, J. D., Hartman, J. K., Hawke, J., & Chapman, J. F. (2008). Traumatic victimization, posttraumatic stress disorder, suicidal ideation, and substance abuse risk among juvenile justice-involved youth. *Journal of Child & Adolescent Trauma*, *1*(1), 75–92. https://doi.org/10.1080/19361520801934456

Fritzon, K., Miller, S., Bargh, D., Hollows, K., Osborne, A., & Howlett, A. (2021). Understanding the relationships between trauma and criminogenic risk using the risk-need-responsivity model. *Journal of Aggression, Maltreatment & Trauma*, *30*(3), 294–323. https://doi.org/10.1080/10926771.2020.1806972

Garieballa, S. S., Schauer, M., Neuner, F., Saleptsi, E., Kluttig, T., Elbert, T., Hoffmann, K., & Rockstroh, B. S. (2006). Traumatic events, PTSD, and psychiatric comorbidity in forensic patients–assessed by questionnaires and diagnostic interview. *Clinical Practice and Epidemiology in Mental Health*, *2*(1), 7. https://doi.org/10.1186/1745-0179-2-7

Gerritse, K., Hartman, L., Antonides, M. F., Wensing-Kruger, A., de Vries, A. L., & Molewijk, B. C. (2018). Moral challenges in transgender care: A thematic analysis based on a focused ethnography. *Archives of Sexual Behavior*, *47*(8), 2319–2333. https://doi.org/10.1007/s10508-018-1287-3

Gordon, A., & Pollack, J. (2018). Managing healthcare integration: Adapting project management to the needs of organizational change. *Project Management Journal*, *49*(5), 5–21. https://doi.org/10.1177/8756972818785321

Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott, D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychological Review*, *109*(1), 3–25. https://doi.org/10.1037/0033-295X.109.1.3

Greenwald, R., & Rubin, A. (1999). Assessment of posttraumatic symptoms in children: Development and preliminary validation of parent and child scales. *Research on Social Work Practice*, *9*(1), 61–75. https://doi.org/10.1177/104973159900900105

*Griffing, S., Casarjian, B., & Maxim, K. (2021). EQ2: Empowering direct care staff to build trauma-informed communities for youth. *Residential Treatment for Children & Youth*, *38*(4), 362–380. https://doi.org/10.1080/0886571X.2020.1751018

Grisso, T., & Barnum, R. (1998). *Massachusetts youth screening instrument (MAYSI)*. University of Massachusetts Medical School.

Hammer, J. H., Springer, J., Beck, N. C., Menditto, A., & Coleman, J. (2011). The relationship between seclusion and restraint use and childhood abuse among psychiatric inpatients. *Journal of Interpersonal Violence*, *26*(3), 567–579. https://doi.org/10.1177/0886260510363419

Hawe, P. (2015). Lessons from complex interventions to improve health. *Annual Review of Public Health*, *36*(1), 307–323. https://doi.org/10.1146/annurev-publhealth-031912-114421

Hill, L., Barnett, J. E., Ward, J., Morton, A., & Schmidt, A. T. (2023). Trauma-informed care for justice-involved youth: A narrative review and synthesis. *Juvenile and Family Court Journal*, *74*(2), 21–33. https://doi.org/10.1111/jfcj.12236

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *Lancet*, *2*(8), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Isobel, S., & Edwards, C. (2017). Using trauma informed care as a nursing model of care in an acute inpatient mental health unit: A practice development process. *International Journal of Mental Health Nursing*, *26*(1), 88–94. https://doi.org/10.1111/inm.12236

Jackson, V., Sullivan, D. H., Mawren, D., Freiberg, A., Kulkarni, J., & Darjee, R. (2021). Trauma-informed sentencing of serious violent offenders: An exploration of judicial dispositions with a gendered perspective. *Psychiatry, Psychology, and Law*, *28*(5), 748–773. https://doi.org/10.1080/13218719.2020.1855267

Kalmakis, K. A., & Chandler, G. E. (2014). Adverse childhood experiences: Towards a clear conceptual meaning. *Journal of Advanced Nursing*, *70*(7), 1489–1501. https://doi.org/10.1111/jan.12329

*Kramer, M. G. (2016). Sanctuary in a residential treatment center: Creating a therapeutic community of hope countering violence. *Therapeutic Communities*, *37*(2), 69–83. https://doi.org/10.1108/TC-01-2015-0005

Levenson, J. S., Willis, G. M., & Prescott, D. (2018). Incorporating principles of trauma-informed care into evidence-based sex offending treatment. In E. Jeglic, C. Calkins (Eds.), *New frontiers in offender treatment*. Cham: Springer. https://doi.org/10.1007/978-3-030-01030-0_9

MacInnes, M., Macpherson, G., Austin, J., & Schwannauer, M. (2016). Examining the effect of childhood trauma on psychological distress, risk of violence and engagement, in forensic mental health. *Psychiatry Research*, *246*, 314–320. https://doi.org/10.1016/j.psychres.2016.09.054

Malvaso, C. G., Delfabbro, P. H., Day, A., & Nobes, G. (2018). The maltreatment-violence link: Exploring the role of maltreatment experiences and other individual and social risk factors among young people who offend. *Journal of Criminal Justice*, *55*, 35–45. https://doi.org/10.1016/j.jcrimjus.2018.01.006

Malvaso, C. G., Cale, J., Whitten, T., Day, A., Singh, S., Hackett, L., Delfabbro, P. H., & Ross, S. (2022). Associations between adverse childhood experiences and trauma among young people who offend: A systematic literature review. *Trauma, Violence & Abuse*, *23*(5), 1677–1694. https://doi.org/10.1177/15248380211013132

Mandelli, L., Petrelli, C., & Serretti, A. (2015). The role of specific early trauma in adult depression: A meta-analysis of published literature. Childhood trauma and adult depression. *European Psychiatry*, *30*(6), 665–680. https://doi.org/10.1016/j.eurpsy.2015.04.007

*Marrow, M. T., Knudsen, K. J., Olafson, E., & Bucher, S. E. (2012). The value of implementing TARGET within a trauma-informed juvenile justice setting. *Journal of Child & Adolescent Trauma*, *5*(3), 257–270. https://doi.org/10.1080/19361521.2012.697105

Menschner, C., & Maul, A. (2016). *Key ingredients for successful trauma-informed care implementation*. Center for Health Care Strategies.

McAnallen, A., & McGinnis, E. (2021). Trauma-informed practice and the criminal justice system: A systematic narrative review. *Irish Probation Journal*, *18*, 109–129.

McKenna, G., Jackson, N., & Browne, C. (2019). Trauma history in a high secure male forensic inpatient population. *International Journal of Law and Psychiatry*, *66*, 101475. https://doi.org/10.1016/j.ijlp.2019.101475

McLachlan, K. J. (2022). Trauma-informed sentencing in South Australian courts. *Journal of Criminology*, *55*(4), 495–513. https://doi.org/10.1177/26338076221113073

Mihelicova, M., Brown, M., & Shuman, V. (2018). Trauma-informed care for individuals with serious mental illness: An avenue for community psychology's involvement in community mental health. *American Journal of Community Psychology*, *61*(1–2), 141–152. https://doi.org/10.1002/ajcp.12217

Miller, N. A., & Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. *European Journal of Psychotraumatology*, *3*(1), 17246. https://doi.org/10.3402/ejpt.v3i0.17246

Cocozza, J. J., Jackson, E. W., Hennigan, K., Morrissey, J. P., Reed, B. G., Fallot, R., & Banks, S. (2005). Outcomes for women with co-occurring disorders and trauma: Program and person-level effects. *Journal of Substance Abuse Treatment*, *28*(2), 109–119. https://doi.org/10.1016/j.jsat.2004.08.010

Muskett, C. (2014). Trauma-informed care in inpatient mental health settings: A review of the literature. *International Journal of Mental Health Nursing*, *23*(1), 51–59. https://doi.org/10.1111/inm.12012

Ogles, B. M., Melendez, G., Davis, D. C., & Lunnen, K. M. (2001). The Ohio scales practical outcome assessment. *Journal of Child and Family Studies*, *10*(2), 199–212. https://doi.org/10.1023/A:1016651508801

*Olafson, E., Boat, B. W., Putnam, K. T., Thieken, L., Marrow, M. T., & Putnam, F. W. (2018). Implementing trauma and grief component therapy for adolescents and think trauma for traumatized youth in secure juvenile justice settings. *Journal of Interpersonal Violence*, *33*(16), 2537–2557. https://doi.org/10.1177/0886260516628287

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. *Systematic Reviews*, *5*(1), 210. https://doi.org/10.1186/s13643-016-0384-4

Papanastassiou, M., Waldron, G., Boyle, J., & Chesterman, L. P. (2004). Post-traumatic stress disorder in mentally ill perpetrators of homicide. *Journal of Forensic Psychiatry*

& *Psychology*, *15*(1), 66–75. https://doi.org/10.1080/14789940310001630419

Perrotta, G. (2020). Psychological trauma: Definition, clinical contexts, neural correlations and therapeutic approaches. Recent Discoveries. *Current Research in Psychiatry and Brain Disorders*, *2019*(1).

Purtle, J. (2020). Systematic review of evaluations of trauma-informed organizational interventions that include staff trainings. *Trauma, Violence & Abuse*, *21*(4), 725–740. https://doi.org/10.1177/1524838018791304

Read, J., Hammersley, P., & Rudegeair, T. (2007). Why, when and how to ask about childhood abuse. *Advances in Psychiatric Treatment*, *13*(2), 101–110. https://doi.org/10.1192/apt.bp.106.002840

Ruback, R. B., Clark, V. A., & Warner, C. (2014). Why are crime victims at risk of being victimized again? Substance use, depression, and offending as mediators of the victimization–revictimization link. *Journal of Interpersonal Violence*, *29*(1), 157–185. https://doi.org/10.1177/0886260513504626

Sampson R. J., & Bean L. (2006). Cultural mechanisms and killing fields: A revised theory of community-level racial inequality. In R. D. Peterson, L. I. Krivo, & J. Hagan, *The many colors of crime: Inequalities of race, ethnicity, and crime in America* (pp. 8–36). NYU Press.

Sarchiapone, M., Carli, V., Cuomo, C., Marchetti, M., & Roy, A. (2009). Association between childhood trauma and aggression in male prisoners. *Psychiatry Research*, *165*(1–2), 187–192. https://doi.org/10.1016/j.psychres.2008.04.026

Sarkar, J., Mezey, G., Cohen, A., Singh, P. S., & Olumoroti, O. (2005). Comorbidity of post-traumatic stress disorder and paranoid schizophrenia: A comparison of offender and non-offender patients. *Journal of Forensic Psychiatry & Psychology*, *16*(4), 660–670. https://doi.org/10.1080/14789940500279836

Sayed, S., Iacoviello, B. M., & Charney, D. S. (2015). Risk factors for the development of psychopathology following trauma. *Current Psychiatry Reports*, *17*(8), 612. https://doi.org/10.1007/s11920-015-0612-y

Schneeberger, A. R., Muenzenmaier, K., Castille, D., Battaglia, J., & Link, B. (2014). Use of psychotropic medication groups in people with severe mental illness and stressful childhood experiences. *Journal of Trauma & Dissociation*, *15*(4), 494–511. https://doi.org/10.1080/15299732.2014.903550

Spitzer, C., Dudeck, M., Liss, H., Orlob, S., Gillner, M., & Freyberger, H. J. (2001). Post-traumatic stress disorder in forensic inpatients. *Journal of Forensic Psychiatry*, *12*(1), 63–77. https://doi.org/10.1080/09585180010027879

Steinberg, A. M., Brymer, M. J., Decker, K. B., & Pynoos, R. S. (2004). The University of California at Los Angeles post-traumatic stress disorder reaction index. *Current Psychiatry Reports*, *6*(2), 96–100. https://doi.org/10.1007/s11920-004-0048-2

Steinkopf, H., Nordanger, D., Stige, B., & Milde, A. M. (2020). How do staff in residential care transform trauma-informed principles into practice? A qualitative study from a Norwegian child welfare context. *Nordic Social Work Research*, *12*(5), 625–639. https://doi.org/10.1080/2156857X.2020.1857821

Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication No. (SMA) 14-4884.

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., … Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*(7), 467–473. https://doi.org/10.7326/M18-0850

Varchevker, A., & McGinley, E. (2013). *Enduring migration through the life cycle*. Karnac Books.

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, *4*(1), 67. https://doi.org/10.1186/1748-5908-4-67

Wilson, A., Hutchinson, M., & Hurley, J. (2017). Literature review of trauma-informed care: Implications for mental health nurses working in acute inpatient settings in Australia. *International Journal of Mental Health Nursing*, *26*(4), 326–343. https://doi.org/10.1111/inm.12344

Wright, L., Borrill, R., Teers, R., & Cassidy, T. (2006). The mental health consequences of dealing with self-inflicted death in custody. *Counselling Psychology Quarterly*, *19*(2), 165–180. https://doi.org/10.1080/09515070600811824

Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). Schema therapy.

Zettler, H. R. (2021). Much to do about trauma: A systematic review of existing trauma-informed treatments on youth violence and recidivism. *Youth Violence and Juvenile Justice*, *19*(1), 113–134. https://doi.org/10.1177/1541204020939645

Appendix A.

Overview of search strings

Pubmed

Number	Search	Results
1	''trauma informed''[tiab] OR ''trauma focused''[tiab] OR ''trauma responsive''[tiab] OR ''trauma sensitive''[tiab]	2,965
2	forensic psychiatry [mh] OR ''inpatient''[tiab] OR ''forensic'' [tiab] OR ''correctional'' [tiab] OR ''incarcerated''[tiab] OR ''justice''[tiab] OR prison*[tiab] OR offender*[tiab] OR psychiatr*[tiab] OR juvenile*[tiab] OR ''residential youth''[tiab]	561,189
3	#1 AND #2	543

Psycinfo

Number	Search	Results
1	(DE "Trauma-Informed Care" OR DE "Trauma Treatment") OR TI (''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'') OR AB (''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'') OR KW (''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'')	5,408
2	(DE "Psychiatric Hospitals" OR DE "Psychiatric Units" OR DE ''Correctional Institutions'' OR DE "Prisons" OR DE "Reformatories" OR DE ''Forensic Psychology'' OR DE ''Criminal Offenders'' OR DE "Female Criminal Offenders" OR DE "Male Criminal Offenders" OR DE "Mentally Ill Offenders" OR DE ''Prisoners'' OR DE ''Forensic psychiatry'') OR TI (''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR ''prison'' OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'') OR AB (''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR ''prison'' OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'') OR KW (''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR prison* OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'')	426,413
3	#1 AND #2	947

Embase

Number	Search	Results
1	(''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'').ab,kf,ti.	3,460
2	exp forensic psychiatry/ OR exp correctional facilities/ OR exp mental hospital/ OR (''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR prison* OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'').ab,kf,ti.	736,602
3	#1 AND #2.	725

Web of Science

Number	Search	Results
1	TS=(''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'')	35,279
2	TS=(''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR prison* OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'')	1,174,960
3	#1 AND #2	5,359

Scopus

Number	Search	Results
1	TS=(''trauma informed'' OR ''trauma focused'' OR ''trauma responsive'' OR ''trauma sensitive'')	5,436
2	TS=(''forensic'' OR ''correctional'' OR ''incarcerated'' OR ''justice'' OR prison* OR offender* OR psychiatr* OR ''inpatient'' OR juvenile* OR ''residential youth'')	40,648
3	#1 AND #2	366