The nature and impact of trauma in young adult prisoners:

screening for trauma and exploring the past and present experiences

RACHEL O'ROURKE

A thesis submitted in partial fulfilment of the requirements of

Nottingham Trent University for the degree of Doctorate of Psychology in

Forensic Psychology

January 2022

COPYRIGHT STATEMENT

Acknowledgments and Dedication

I want to thank all the young men who chose to take part in this study, to talk about painful experiences and their determination to deal with what has happened and is still happening to them. I would also like to express my gratitude to my academic supervisors, Dr. Mike Marriott, Dr. Richard Trigg and Dr. Rosie Kitson-Boyce for their advice, guidance and feedback throughout my doctoral studies. Thanks to all the librarians, near and far who provided astonishing service, even during a global pandemic and NTU's Sharon Potter who was a shining example of patient help and support from start to finish. I also want to say thank you to Her Majesty's Prison and Probation Service (HMPPS) Psychology Services who provided the funding to complete this work.

It has been a long three years, but my partner and daughter never doubted my ability to complete this work, giving me the confidence and determination to get it done. I hope my journey gives Nell something for her own path through life.

This thesis is dedicated to all those trying to better the lives of young adults in prison.

Contents   Page

Contents	Page

Contents **Page**

Appendices

Chapter 1 Thesis overview

1.1 Introduction

This chapter will briefly summarise the research into the childhood trauma typically experienced by young adult male prisoners. It will review the available evidence of the prevalence of the issue, the implications of trauma in this group, particularly its links to criminal justice involvement, and the difficulties arising from the varying concepts and language in this field as trauma has moved to being understood as a disorder. An overview is provided of the key issues for both practitioners and researchers, including the position with regards to available and appropriate assessment tools, and the need for research in this field. Finally, the overarching aim of the thesis along with its structure is presented.

1.2   Trauma theory

All contemporary trauma theory relies on evolutionary psychological theory, which suggests how the brain and body react to threat and stress. According to this theory humans respond with a basic 'fight or flight' reaction generically known as the 'human stress response', which takes place in the autonomic and limbic systems (see Sapolsky, 1998, for early theory and Aupperle, Melrose, & Paulus, 2012; Everly, & Lating, 2019; Yaribeygi, Panahi, Sahraei, Johnston, & Sahebkar, 2017), for later reviews). While some degree of adversity is a normal and essential part of human development, the evidence base for how extreme stress affects memory, information processing, attention and decision making is well developed. The field is dominated by psychological studies evidencing the multitude of long-term problems faced by survivors of trauma (Gilbertson et al., 2001; Grossman and Christiansen, 2007). The

same is true for the evidence for how emotional difficulties affect arousal, numbing, avoidance (LeDoux, 1994, Van der Kolk, 1996a), for behavioural difficulties such as controlling arousal, impulsive behaviour (Perry & Pate, 1995), and for physical problems such as immune system disorders (Anda, Butchart, Felitti, & Brown, 2010; Van der Kolk 2004). Current psychological theory agrees that trauma can change people and as Judith Herman put it, that a traumatic event can "overwhelm the ordinary human adaptations to life" (Herman, 2015, p33).

There are points of difference in the field though. Whilst some like Herman have focused on the role of memory, others have differentiated complex from simple or other trauma (Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005), and some have investigated the neurobiology of trauma as described above. Cognitive theorists describe the processing of the traumatic memory and the ongoing influence on how the individual sees themselves, others and the world around them, arguing that the appraisal of threat is what maintains the trauma-related difficulties (see review by Dalgleish, 1999). The variety of theoretical approaches form the foundation of models of assessment and intervention, and integrated approaches appear fruitful. However, the theoretical differences give rise to conceptual confusion, which is unhelpful for clarity in research work. Concepts and theory in the field require considerable clarification or reworking to fully inform clinical assessment and intervention.

1.3   The concept of trauma

As is described further below, the evidence around the prevalence and impact of trauma is varied, due in part to the differences in defining trauma, so it is important to

delineate the different definitions in recent and current use. When spoken about in the literature the word trauma is used to refer to those events or circumstances that individuals have found to be harmful or life threatening. These events can be one-off or cumulative over time, and either directly or vicariously experienced. This is necessary but not sufficient to be deemed traumatic unless also accompanied by an ongoing impact on the individual's mental, physical, and/or emotional well-being.

An example of a specific definition of trauma is in a study by Felitti and his collaborators (Felitti et al., 1998). They put cumulative childhood trauma into the public consciousness by describing trauma as 'Adverse Childhood Experiences' (ACEs) and linking them to a variety of mental and physical health problems. They described a list of ten ACEs, and their results indicated how the risk of adult mental health difficulties rose in tandem with the frequency of ACEs experienced before the age of 18-years-old. Studies had tended to quantify the effects for individual ACEs in a similar way, until a systematic review by Hughes et al (2017), analysed data on roughly a quarter of a million subjects across 37 studies. Hughes et al concluded that individuals with at least four ACEs were at increased risk of all health outcomes compared with individuals with no ACEs. ACEs have since been linked to negative, internalised and externalised outcomes (Lee & Chen, 2017; Muniz et al., 2019). This body of research has been useful in identifying cohort-level risk factors but is not sufficient for an understanding of individual differences in the experience and impact of trauma, nor of the unique presentations often found in forensic settings.

Whilst the ACEs research provided a significant seedbed for understanding negative childhood events, the next steps are to take full account of the key factors

in what leads an event be perceived as negative. An ACE score says little about the nature or impact of childhood experiences, nor does it consider mediating or mitigating factors, such as a strong bond to an adult. It also does not take into account other possibly impactful experiences that are common such as family deaths, long-term physical ill health, parental incarceration, etc. It, of course, is not able at all to capture the unique experiences of young men who have committed serious offences, who have been imprisoned at a young age and for a long time. The 10 ACEs listed by Felitti et al (1998) are not the only ACEs, when trauma is defined by the person experiencing it.

Reviewing the trauma literature is made complicated by the variety of psychiatric terminology and concepts used (see for example the DSM-5 definition provided by the American Psychiatric Association, pp. 271-280, 2013). Some studies use traditional medical terms used by the DSM-5 (American Psychiatric Association, 2013), and others include vocabulary such as abuse, toxic stress, PTSD and multiple traumas, often used to mean the same thing. Unlike other mental 'disorders', PTSD is defined by the impact of an external cause. To date, there is a lack of theory to explain the development of traumatic responses in children and young adults (Van Wesel, Boeije, Alisic, & Drost, 2012). Salmon and Bryant, (2002) noted the need for differential theory due to the agreed understanding of young people's differing cognitive abilities for processing traumatic events. Of course, not all children who are exposed to a traumatic event develop PTSD (Ozer, Best, Lipsey, & Weiss, 2003) and so the risk and protective factors for developing PTSD are still not clear with no agreement on a theoretical basis for the field (La Greca, Silverman, Vernberg, & Prinstein, 1996; Pynoos, Steinberg, & Piacentini, 1999). The concept of PTSD itself

is also disputed as some question the influence of culture on the prevalence and expression of trauma-related difficulties (Van Rooyen & Nqweni, 2012).

In an effort to simplify the approach, a single unifying diagnosis of developmental trauma disorder was proposed by Van Der Kolk (Van der Kolk, 2017 for overview). This was proposed to describe difficulties in affective states, bodily states, disassociation and impaired capacity in self-regulation. Van der Kolk described traumatic stress as the failure of time to heal psychological wounds, especially in the cases of prolonged trauma from caregivers (Van Wesel, Boeije, Alisic, & Drost, 2012). Critics of theories that rely on amnesia of trauma, argue that the proposed mechanisms of dissociation and repression are not empirically validated, and that memories of trauma are rarely forgotten by victims (McNally, 2005). It is important to not confuse non-disclosure, or not thinking about previous events, with an inability to recall such memories. However, van der Kolk's work brought a useful focus on how the mind and body are often linked. Others have taken a different approach. Herman proposed 'Complex Attachment Disorder' (Herman, 1992) to focus instead on the significance of attachment difficulties for survivors of prolonged, repeated victimisation.

The field continues to evolve, particularly in light of recent developments in the diagnostic nomenclature. Such development is evidenced in how the International Statistical Classification of Diseases and Related Health Problems (ICD-11), has adopted 'Complex Post Traumatic Stress Disorder' (CPTSD) or 'Developmental PTSD' as it is also called. This refers to the constellation of symptoms that may result from prolonged, chronic exposure to traumatic experiences, especially in

childhood, as opposed to PTSD, which is more typically associated with a discrete traumatic incident or set of traumatic events. It was a contentious decision (see Stein, et al.,2014) but was based on the literature available at that time and so was not included in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). However, since 2013 empirical work supported the discrete profile and utility of the concept of CPTSD (Hyland et al., 2020; Karatzias et al., 2017). Similar development of the field is the addition of the concept of 'poly-victimisation' or 'cumulative' trauma (Finkelhor, Shattuck, Turner, Ormrod, & Hamby, 2011) which is helpful to broadening awareness of how to approach presenting difficulties in a more responsive way which is mindful of poorer outcomes into adulthood (Gilley, 2019; Van der Kolk,. et al., 2005).

This approach is less focused on psychiatric 'symptoms' of previous trauma and frames difficulties instead as 'survival strategies', and the individual's way of coping with what was overwhelming and problematic (Taylor, Akerman, & Hocken, 2020). Work by other psychologists (Johnstone & Boyle, 2018) has been influential in suggesting that practitioners should work to formulate the person's experience rather than diagnose, and so now a range of alternatives to diagnosis is emerging. The professional bodies have responded with advice to practitioners to seek to understand trauma related responses against a background of other factors such as poverty and discrimination (BPS, 2013). It is recommended that behaviour and experience should be described in non-medical terms, and in context, i.e., social and cultural. Language is a significant factor in discussing the mental health of adolescents, in particular, how to understand and express it. Leighton & Dogra (2009) found that professional and academic understanding of the semantic and

conceptual issues was confused, leading to concerns that even if adolescents can identify mental health concerns, they do not necessarily seek help or articulate it. Future research is needed to report the prevalence of the range of difficulties related to stressors among young people, using a variety of clinical samples, which includes those in custody. Equally, further exploration of the relationship of functional difficulties during different developmental periods, in order to establish age-based guidelines, would assist in the management and support of such individuals.

The use of person-first language has been slow to gain influence in the criminal justice sphere, however, it is gaining traction. Cox (2020) recommended that prison researchers should avoid use of stigmatising language, e.g., 'person convicted of sex offence' rather than 'sex offender'. This trend is not without critique for being possibly futile without systemic change in the treatment of such people, and by others as being ignorant of some group's struggle for identity-first language as an act of resistance (Dunn & Andrews, 2015). Being attuned to the debate, to the differences of opinion by those within and outside prison, and ultimately to the meaning of the preferred language is important and relevant to this field. This thesis will use the language suggested by the BPS above, and avoid use of diagnostic, medical model phrasing to describe groups of people and participants. Rechsteiner, Maercker, Heim, and Meili (2020), described the range of metaphorical phrases used for traumatic experiences in different cultures, finding that different metaphorical concepts were often related to bodily processes, such as shock, burden, and wound. It appears largely without problem to use the language of psychological trauma and stress in this thesis, and to be confident that the terminology speaks to many cultures and experiences (see also Appendix 20 for a glossary of terms).

1.4   The prevalence and implications of trauma for young adult men in custody

There is now sufficient evidence to conclude that the experience of traumatic events is both common as well as over-represented in young men in prison. Boswell, (1991), found 92% of young offenders reported exposure to at least one type of trauma, but that exposure to multiple traumas was the norm. Ford and Hawke, (2012) reported a greater likelihood of caregivers being responsible for such experiences and the greater impact this had on physiological and psychological development, e.g. poor emotional regulation, decision making and social judgement (Finkelhor, 2009).

The evidence base reliably finds a relationship between trauma exposure and juvenile justice involvement (Chamberlain & Moore, 2002; Ford, Chapman, Hawke & Alpert, 2007; Kerig, Becker, & Egan, 2010). Young adults who report childhood trauma are also often found to be at higher risk for criminal involvement in both adolescence and adulthood (Smith & Thornberry, 1995; Widom & Maxfield, 1996). There is a wealth of evidence demonstrating that ACEs are related to higher levels of delinquent behaviour in adolescence (Baglivio, Wolff, Piquero, & Epps, 2015; Cudmore, Cuevas, & Sabina, 2017; Farrell & Zimmerman, 2017). Research also finds a consistent correlation between serious offending and serious or ongoing abuse (Boswell, Gwyneth & Wedge, 2001; Weeks & Widom, 1998). Bailey, Smith and Dolan (2001) looked at the background of violent adolescent offenders in the UK, finding 33% of those convicted of sexual offences, 58% of those convicted of arson, and 25% of homicide offenders had sexual or physical trauma in their

background. Physical and sexual abuse and neglect have also been shown to raise the risk of violent offending, with ethnicity being a factor and young, Black males being more affected (Boswell, 1996: Rivera & Widom, 1990; Smith & Thornberry, 1995; Widom, Czaja, Wilson, Allwood, & Chauhan, 2013).

For such a prevalent and important issue, the existing body of literature appears to be insufficient. Reviews of the evidence base regarding trauma in young adult prisoners (Skuse & Matthew, 2015), demonstrate how a variety of age and developmental stages (childhood, adolescence, and young adulthood) are often taken together, often with a focus on the under 18-year-olds or on females only (Casswell, French, & Rogers, 2012; Graf, Chihuri, Blow, & Li, 2021). However, research has reported that 90% of male offenders under 21-years-old show a history of maltreatment or loss (Boswell, 1996; Fonagy et al., 1997). Day, Hibbert and Cadman (2008) reported that a significant number of studies reviewed from the UK and other countries, found 33% to 92% of children in custody having experienced some form of maltreatment. The varying figures may be explained by different definitions of childhood trauma and the use of self-report in studies.

Not only is the prevalence of traumatic experiences high in the young adult prisoner group, but it is also varied across trauma types and frequency, with exposure to multiple traumas being the norm (Abram et al., 2004). Supporting these findings is a Department of Health study that examined the backgrounds of young adult prisoners in England and Wales (Lader, Singleton, & Meltzer, 2000). It reported that 25% of the young men reported suffering violence at home and one in 20 reported previous sexual abuse. Day et al., (2008) recommended viewing such

figures as an under-representation due to the agreed view that young men in prison tend to under-report such experiences.

Multiple researchers have now found that young people in custody tend to have experienced ongoing and varied trauma, often involving threat to life and bereavements, (Ford, Grasso, Hawke, & Chapman, 2013; Ruchkin, Schwab-Stone, Koposov, Vermeiren, & Steiner, 2002; Soberman, Greenwald, & Rule, 2002; Moore, Gaskin, & Indig, 2013). The evidence suggests that this has a significant impact on the bio-psycho-social development of those young people and puts them at risk for other mental health issues such as depression (Stern & Thayer, 2019) anxiety, oppositional defiance (Nagin & Tremblay, 1999) risk taking, substance abuse, and aggression (Jorgenson, 2019). Complex trauma is also known now to be linked to a problematic profile of impaired arousal reactions, information processing, impulse control and negative schema that act to reinforce aggressive and disinhibited behaviours. This combination makes the management and treatment of such young people undoubtedly challenging for professionals (Dalsklev et al., 2019; Wojciechowski, 2020).

1.5   Considerations for specific groups of people in this cohort

There are also specific considerations to take account of with certain cohorts within this group of people. There is a significant relationship between ACEs, intellectual difficulties, complex mental health and offending behaviour (Morrissey et al., 2005) and those with learning disabilities are more at risk of exposure to other types of trauma such as systematic abuse (BPS, 2015) and neglect over long periods of time (Brackenridge & Morrissey, 2010; Hatton & Emerson, 2004; Kessler,

2000; Ryan, 1994; Sobsey & Doe, 1991). Morris, Shergill, & Beber (2019) contended that insufficient attention had been given to the impact of prolonged trauma exposure on functioning, despite what we now know about the impact of trauma on cognitive functioning. The high prevalence rates of trauma in such populations along with those with diagnoses such as Autism Spectrum Disorder (Ahlers, 2019) and ADHD (Brown et al., 2017) suggests the need for trauma to be a primary management and support lens. Focusing on the symptoms of a 'disorder' perhaps ignores previous trauma and prevents appropriate trauma responsive care and support being offered.

The social and systemic context in which this thesis explores trauma is significant. Forensic evaluation, assessment and intervention has to be keenly attuned in a nation of increasing racial, ethnic, and cultural diversity. The disproportionately high numbers of young men from Black and Asian ethnicity (28% in the prison population as opposed to around 13% in the UK population) and the poor outcomes they face in the Criminal Justice System (CJS) was outlined by the Young Review (2014). Similarly, the 2017 independent report led by MP David Lammy emphasised the disproportionality of long-term sentences given to offenders from ethnic minorities compared to their White counterparts. People from ethnic minorities are over-represented in the prison population, a cohort that is influenced by age. Although youth offending had dropped for the population as a whole before 2016, it almost doubled for young people from ethnic minority backgrounds (Lammy, 2017). UK data (Bulman, 2018) also found that Black boys under 18-years-old and convicted of manslaughter, were sentenced more harshly than White boys were and more likely to be convicted of murder. 2019-20 figures (Youth Justice Board, 2021) continue to evidence the disproportionality of boys from ethnic minorities in the CJS.

Whilst recognising that people from ethnic minorities are not a homogenous group and that individual circumstances and needs are complex and varied, it is clear that such communities are disproportionately represented both in mental health care and in the CJS. The rate of diagnosed mental health problems in prisons is lower in Black and Asian groups than among the White population (Durcan & Knowles, 2006), and Black and Asian youths are less likely to be recorded as having health, educational or mental health problems (Lammy, 2017). The issues for young Asian prisoners were found to be different to others, in that they were more likely than young people from other ethnic backgrounds to be influenced by their families' attitudes to mental illness, where seeking help for mental ill health was reportedly not encouraged. The link between individual and structural trauma is not well evidenced in the literature and is complicated by the lack of other dependencies such as socio-economic status (Quiros, Varghese, & Vanidestine, 2020) or intergenerational transmission (Paul et al., 2019). Arguably though, until services in the UK are able to work outside a diagnostic and medical model approach based on White British beliefs about mental distress, this may restrict best efforts to be inclusive to all ethnicities and cultural backgrounds. An inclusive response would be more able to be alert to the range of cultural and faith-related models of mental health and offer support that does not seek to diagnose and label emotional distress expression within a medical model of disease.

1.6   Assessment of trauma in young adult males in custody

A limitation of many studies in the field is how adverse events are assessed and measured in research, or proper validation of those measures that currently exist.

Although more progress has been made on the issue of child maltreatment measurement, similar advancement in measurement has not occurred in the broader abuse, neglect and trauma literature and so the measurement of ACEs has not moved on in the same way (see Afifi & Asmundson, 2020, for future directions for the ACEs field). Indeed, there is insufficient evidence to support the use of suitable assessment tools with young males in custody, despite the ambition to offer services that identify, support and offer trauma interventions (McCarten, 2020). Such tools have to be able to take account of the adolescent expression of trauma exposure, which may not align with traditional models of PTSD, as well as capturing the often unique range of trauma experienced by young men in custody, e.g., being the victim and perpetrators of serious community and custodial violence (Ben-Zion et al., 2019). There are no specific tools available for this cohort, so there was a need to review the ones that might typically be used by practitioners to ensure their psychometric reliability and validity. Chapter 2 provides a systematic review of the empirical literature, and the quality of the psychometric properties of identified measures.

1.7   Trauma informed care

1.7.1 Trauma informed care (TIC) overview

In the last decade in the UK, health, social care services and now criminal justice settings have become increasingly aware of the importance of recognising the prevalence of trauma exposure within service user populations. Typically, such work in health and other settings tends to focus on people's experiences and organisational processes around the factors of connectedness, hope and optimism

about the future, identity, meaning in life and empowerment (usually summarised using the acronym CHIME). Other factors have also been deployed (see for example the inclusion of factors such as safety and trust in Stavropoulos, 2019) but a review by Slade et al (2012), indicated the likely value of the CHIME processes for investigating the relationship between services and people's recovery outcomes.

The various approaches to TIC tend to be based in an understanding of the biological, neurological, psychological, and social effects of trauma and interpersonal violence'. This then translates into a practice relying on a "do no harm" focus, seeking to avoid compounding prior trauma and an ambition to promote recovery. Whilst there is a general agreement on the key principles arising from the evidence base which inform the general approach to TIC, the operationalising of those principles is more complex, and of course usually requires significant organisational change, from across the staff hierarchy and from before entry to the organisational unit, e.g. hospital, school or prison. There is also now a growing literature on various aspects of TIC such as trauma informed leadership (Middleton et al., 2015), staff training (Akin et al., 2017), trauma screening (Menschner & Maul., 2016) and TIC evaluation (Purtle, 2020) with a shared focus in terms of ongoing processes, approaches and values, rather than fixed procedures.

Whilst then there are compelling reasons for trauma-informed care to be integral to all public sector services, the operationalising of TIC principles is affected by the culture already extant in those settings when it is being adopted, and yet those bodies of literature are infrequently brought together to address that wider systemic challenge. Another challenge is the problematic assumption of homogeneity made in

most trauma-informed approaches (Cloitre, 2015), in that all settings, staff groups and service user groups are assumed to benefit or not from the same approach. Evidence is lacking in how to implement such approaches and their effectiveness, particularly in juvenile justice settings (Champine, Lang, Nelson, Hanson, & Tebes, 2019; Collin-Vézina, McNamee, Brazeau, & Laurier, 2019). What is needed to greater inform practice is larger studies with longer follow up periods, using psychometrically valid and reliable assessment instruments. The current available evidence is not yet able to identify what the mechanisms are in what changes service user's perception of care, and what is effective in bringing about an improvement in staff competence and confidence in trauma-informed practice (Purtle, 2020). Feasibly, this is due to the considerable obstacles to achieving such an approach in any single service (Rose, Freeman, & Proudlock, 2012) staff training being expensive, and perhaps not enough to ameliorate the dominant masculine climate (Woodall, 2007). The use of more sophisticated and long term evaluation techniques would help improve the evidence base in this field to help ensure that positive effects are maximised.

1.7.2 Trauma informed custody overview

Since the Farmer report (Farmer, 2019), there has been a slow introduction of trauma informed principles in UK prisons, starting with the Women's Prison Estate. There is now a drive to improve the workforce understanding and practice with regard to the effects of trauma on people in prison, as well as the wider roll out of rehabilitative culture to address counterproductive processes and practice

(Covington et al., 2017; Gibson, 2021; Jones, 2018) and cultivate compassion focused practice (Taylor et al., 2020).

A person's experience of trauma is now more likely to be recognised as a relevant factor in their offending and custodial behaviour. Helpfully this has led to a new consideration of how common custodial practices can trigger trauma responses (Covington, Russo, & Covington, 2017). Whilst there is now an improved understanding of the prevalence and associated needs of traumatised people in prison, and the impact of common custodial practices on triggering trauma responses, there is still a need to ensure that any particular approaches are fit for the prison population as well as the young adult age group. For example, it is not yet established that the CHIME principles translate to a custodial setting or can be evaluated in the same way. Additionally, long custodial sentences have a significant psychological and social impact on the individuals receiving them. HMPPS has seen the emergence of a population consisting of young men receiving very long sentences for extremely violent and/or sexual offences (Jewkes, Crewe, & Bennett, 2016). Research suggests this influences their psychological well-being and custodial behaviour and may be more difficult for those early on in their sentence as they have yet to develop strategies to support them in adapting to life in custody (Harvey, 2006). It is also likely to be particularly challenging for young adults who have experienced trauma and are likely less able to cope and adjust easily. Young adult males do not generally access services offered, volunteer for programmes and comply with incentive schemes as many adult prisoners might do (Cox, 2011; Hulley, Crewe, & Wright, 2016). It is hoped that this thesis will contribute to the evidence

base regarding the most appropriate management, assessment and intervention work with this cohort, as well as the provision of other services to best support them.

1.7.3 Trauma informed care/custody evaluation

There is some evidence (Toner, Daiches, & Larkin, 2013; Sweeney, Clement, Filson, & Kennedy, 2016), that trauma-informed systems can be effective and benefit staff and trauma survivors, although studies focussing on effective implementation have been limited (Unick, Bassuk, Richard, & Paquette, 2019). The intention for custodial settings is that CJS staff are trained to better understand how someone with a history of trauma might present as withdrawn, angry or aggressive, and seek to injure themselves, breach boundaries or develop intense attachments to staff (Kubiak, Covington, & Hillier, 2017; Vaswani & Paul, 2019). Furthermore, Miller and Najavits (2012) identified that implementation of a trauma informed approach can reduce costs, staff turnover, use of seclusion and restraint, and lead to safer environments and increased job satisfaction (see Baetz, Surko, Moaveni, McNair, Bart, Workman, ... & Horwitz, 2019).

An in press publication (Auty et al., 2022) evaluating the 'Becoming Trauma-Informed' initiative introduced into some UK prisons, describes a pilot attempt to operationalise and measure its impact on the prison experience. The results were disappointing with many key factors being reported negatively by the staff and prisoners, and a clear gap between use of the language of trauma and the practice of TIC, for multiple and complex reasons. Undoubtedly it is difficult to implement a trauma informed approach in the prison estate which prioritises security and good order, and which, in turn, threatens attempts to ameliorate the impact of custody on

already traumatised individuals. Therefore, research work to evidence the function of behaviours that might trigger harsh, punitive responses, is important in helping staff to respond to the behaviour of concern. It is early days in the evaluation of such approaches but work by Public Health Wales (Ford, Di Lemma, Gray, & Hughes, 2020) which reviewed over 100 interventions, found four common approaches were likely impactful, i.e., supporting parenting; building relationships and resilience; early identification of adversity; and responding to trauma and specific ACEs. Other authors have brought attention to how typically hostile and decrepit prison architecture tend to undermine trauma-informed/sensitive healthcare services and psychology programmes (Jewkes, Jordan, Wright, & Bendelow, 2019).

1.8 Identifying the need for further research in this field

The current cohort of boys and young men in custody are more likely to have committed very serious offences, with lengthy sentences of 20 years or more, and be sentenced as part of joint enterprise legislation (which allows multiple defendants for the same crime to share culpability). Therefore, this points to the importance of services and practitioners to be able to respond to the needs and risks posed by this cohort, with particular regard to their experience of trauma. Research in this area is limited so far in lacking studies that offer an exploratory and interpretative account of the young men's experiences (perhaps due to the UK being one of only three states that sentences young people indeterminately). There is arguably a limitation in the quantitative approach that offers only indications of prevalence of trauma, without clinical information about the nature or impact of those experiences. Whilst the ACEs research has provided a significant foundation for understanding negative childhood

events, also needed is a better understanding of the social processes that perpetuate adversity or foster resilience and adaptation for this group. A recent study by Daniunaite,et al, (2021) found that cumulative trauma did not necessarily lead to CPTSD in a 12-16-year-old community sample, but exposure to interpersonal trauma did (see also Nikulina et al 2017).

Much is lacking in our knowledge base about how the various factors, experiences, markers and contexts interact with each other in the 18-25yrs age range. Taking each single issue alone, e.g., having experienced parental violence, without the consideration of factors such as intellectual disability, or of context such as socio-economic status and of risk markers such as high sensation seeking, runs the risk of a reductionist literature providing little value to the practitioner dealing with intersecting issues in their population. The study by Daniunaite,et al, (2021) found that social factors such as social and family problems were key to differentiating between samples of those diagnosed with CPTSD. Understanding the impact of trauma on a person requires an intersectional perspective of all the factors that are relevant for that person, and the empirical work for this thesis will explore what trauma means to young adult men serving long sentences in custody.

Therefore, research that increases understanding into trauma as it is experienced by young men in custody is valuable not only for the field of forensic psychology but also for wider society. No studies have asked only young men aged 18-25-years-old in custody (rather than mixed samples) to talk about their experience and understanding of how previous trauma has impacted on them or separated out the findings so the different age ranges can be examined. It also

cannot be assumed that the needs of those in a custodial sample are the same as those of the community. Therefore, research work is needed to understand better how young male prisoners themselves discuss and interpret their adverse experiences and live with the impact of those experiences. In particular, research is needed to explore possible differences in coping and adaptation strategies. Shiner, Allen and Masten (2017) reported a continuity of personality traits from childhood to adulthood, but also an ongoing change process particularly in response to experiences of adversity in adolescence. In sum, research work is welcome where it seeks to close the gap between evidence about cohort-level risk and need factors such as prevalence rates and type of trauma. This would help support the work of practitioner psychologists undertaking individualised assessment and intervention.

1.9   Aim and structure of the thesis

This thesis identifies the need for a better understanding of what is known about trauma in young adult male prisoners, from both a psychological theory and clinical practice perspective. It sought therefore to respond to the literature arguing for early identification and intervention of trauma, with a systematic review of the available tools for identifying trauma in this cohort. The thesis also aimed to access the expert knowledge of trauma with a phenomenological study of the experiences of young men in custody. However, this thesis will take a preferred definition of trauma as 'difficult life events' – meaning any event experienced by a participant which may ordinarily be perceived as overwhelming, distressing or threatening, even if the participant themselves did not report any significant effects due the event/s -

wherever a particular definition is not already stated, and when it is stated it is flagged at those times, for example at sections 2.2.5 and 3.27.

Principally the thesis aimed to:

1. Systematically review the literature to evaluate the available tools for assessing trauma in this cohort.
2. Explore the impact of trauma as experienced by this cohort, e.g., 18-25 year-old men in custody serving long sentences.
3. To explore and further understand the interface between understanding of trauma and offending behaviour for this cohort.
4. To identify recommendations for impact on practice for practitioner psychologists.

This thesis consists of five chapters. Chapter two presents a systematic review of the effectiveness of the trauma screening measures for young males in custody. If early identification of trauma is necessary to both support and manage the young man at the start of custodial sentences, then psychometrically robust and relevant tools are also necessary. This review synthesised the available research literature and presents the findings for psychometric measure developers and practitioners alike. Such professionals need to be alert to the advantages and disadvantages of the available tools in this field. Chapter three consists of a qualitative research study to explore the experience of trauma and its impact on young men in custody. The chapter introduces the study and rationale, including a review of the literature to provide the context for the work. The findings and subsequent discussion seek to make sense of the meaning brought forward by each participant, and to argue for academics and practitioners to be alert to the heterogeneity of trauma in this field. This is important in order to avoid the generalisation of the psychological understanding of trauma and to allow a focus on resilience and thriving as well as

symptomatology. Chapter four provides an overall thesis discussion. It brings together the conclusions of the systematic review and research study to address the thesis aims and objectives. Finally, chapter five presents the individual learning plan, which reflects on the researcher's journey through the doctorate and the research skills required along the way in order to meet the aims of the thesis.

Chapter 2 A systematic review: What measures are effective in trauma screening for young males in custody?

2.1 Abstract

Background

Despite the available evidence identifying the high prevalence rates of experiences of trauma in forensic populations, there is still a lack of evidence to support the use of suitable assessment tools, especially for young males in custody. If services are to be able to identify, support and offer trauma interventions to this cohort then it is important that reliable and valid assessment tools are available to practitioners.

Aim

The aim of this systematic review was to conduct a full review of the empirical literature of all current measures of trauma with young males in custody. It also sought to evaluate the quality of the psychometric properties of the identified measures, and to synthesise the evidence in order to evaluate if there are any best practice measures available for use with this population.

Method

An initial scoping search took place to validate the need for the review and inform the search strategy. A systematic search was then performed in five electronic databases: PsycInfo, The Cochrane Library, ProQuest Dissertations and Theses, PsycTests and PTSDPubs and forward and backward citations for studies published

between database inception and July 24th 2020. Grey literature was sourced to identify measures of trauma in this cohort. Authors were approached to obtain unpublished studies. The author screened the records for eligibility and a peer reviewer screened a sample to review for accuracy. Inclusion criteria: studies of tools to assess for trauma with males aged between 14-25yrs-old in a custodial setting, from any year of publication, and available in the English language. Exclusion criteria: studies not about psychological trauma or reporting primary data, or about an assessment tool with a standalone trauma scale.

A three-step quality assessment method was used. Firstly, the psychometric properties of the measures were evaluated using the COnsensus-based Standards for the Selection of health Measurement INstruments (COSMIN) taxonomy of measurement properties using pre-set psychometric criteria. Then the methodological quality assessment step was carried out and finally the overall quality of the psychometric properties of the measures were evaluated (Cordier et al., 2017; Terwee et al., 2007). The study is registered on the Open Science Framework https://osf.io/r6hbk as it was not eligible for PROSPERO registration.

Results

Fourteen studies including 12 measures met the inclusion criteria and were selected for review. The studies sampled a total of approximately 1,768 male participants and an age range of 12-25yrs. The studies reported on various types of psychometric evidence and due to the lack of homogeneity a narrative synthesis was used to discuss, interpret, and evaluate each measure.

Discussion

Robust quality assessment of the methodological and psychometric quality of the studies concluded that this is a developing field and many of the measures in scope were seeking to test for predictive validity, and so were rated as having limited evidence for reliability and validity. It is not possible to strongly recommend any specific measure, as none gained unequivocal support from the three-step quality assessment method which analysed both the methodological quality of each study, as well as the psychometric quality of the measures in each. Therefore, practitioners in custodial settings should be wary of using any particular measure until such time further empirical work establishes support for measures that have greater empirical validation. The overall quality of the psychometric properties of the measures in this review showed that the currently available instruments for the assessment of trauma with young males in custody is limited but promising.

2.2 Introduction

2.2.1   The concept of psychological trauma

The clinical literature has used a plethora of approaches to describing trauma and often the terms trauma, adverse experiences, and PTSD are used to mean the same thing. Some studies adopt traditional terms used by the DSM-5, others also include vocabulary such as toxic stress, adverse or negative childhood experiences, PTSD and multiple traumas. The definition provided within the DSM-5 (American Psychiatric Association, 2013), defines where the experience must come from and what it must result in to be classified as trauma.

In a landmark 1998 article, Felitti and his collaborators (Felitti et al., 1998) linked adverse childhood experiences (ACEs), to a host of mental and physical health problems. Among other key findings, they reported how the risk of depression and other psychiatric difficulties in adulthood rose in correlation with the frequency of ACEs experienced before the age of 18-years-old. That study evidenced how early traumas pose a lifelong threat to both mental and physical health. Since then, dozens of other research studies replicated the findings with ACEs being shown to increase the risk of a wide range of health conditions.

The field took a significant step when in 2018 the World Health Organization (WHO), (World Health Organization, 2018) introduced the new diagnosis of Complex Posttraumatic Stress Disorder (C-PTSD) to reflect "the loss of emotional, psychological, and social resources under conditions of prolonged adversity". This was welcomed as being more relevant to children and young people reflecting a greater accumulation of different types of childhood traumatic experiences and more inclusive of the different ways in which people can be exposed to trauma and then express it (Elklit, Hyland, & Shevlin, 2014; Karatzias et al., 2017). There is growing agreement that the previous mixed picture is likely attributable to the adolescent expression of trauma exposure being more complex than the PTSD concept allowed for.

2.2.2   Assessment of trauma with young males

Despite early identification being a key component of preventing or mitigating the effects of the traumatic experiences (Issakidis, Sanderson, Corry, Andrews, & Lapsley, 2004), the practitioner is hampered by the lack of psychometrically sound,

trauma screening methods when working with young people (Eklund, Rossen, Koriakin, Chafouleas, & Resnick, 2018). The theoretical underpinnings to explain the development of a stress disorder in traumatised adolescents is also limited; unlike that into adults and PTSD, as described in Chapter One.

2.2.3   Trauma assessment with young males in custody

Effective and accurate assessment of trauma is needed with this group of people. Trauma experienced during childhood and adolescence is significantly impactful in how it can elicit changes that may negatively impact an individual's development, change the neurobiology of the stress response systems, (Agorastos, Pervanidou, Chrousos, & Kolaitis, 2018) and may increase later risk for psychopathologies (Pechtel & Pizzagalli, 2011). In various studies a direct relationship has been shown between the severity of the trauma and the impact on the individual (Ben-Zion et al., 2019). PTSD symptoms have been described in children who have survived sexual, physical abuse and other traumatic events, indicating the impact of cumulative negative childhood experiences akin to the original type of 'shock' experiences envisaged in the early descriptions of PTSD, e.g., war, torture and natural disasters. Therefore, assessment which can take account of the range of experiences, the range of expression of difficulties and the ways in which young males express those difficulties is important to this field.

There is some prevalence rate research (Chitsabesan et al., 2006; Moore, Gaskin, & Indig, 2013) specifically targeted at young male offenders, looking at how trauma presents and best practice in working with this cohort, although limitations are apparent. Firstly, previous research studies have often used mixed age groups in

their methodology, studying ages across different developmental stages together (childhood, adolescence/juvenile and young adulthood) and with much of the published material focused on the younger age ranges. More research has taken place with young offenders on probation or remand, than those in custody or serving longer sentences.

There is an agreed lack of research and evidence on what would count as trauma specific assessment for males aged 14-25yrs-old in the UK CJS. Arguably there is not a direct read across from assessing trauma with non-offending, community based young males to those in custody. Not only is it clear that the latter group report higher rates of child maltreatment (Lader, Singleton, & Meltzer, 2000), but their experiences are also categorically different in that they have been exposed to and/or witnessed or perpetrated significant harm on others, often involving weapons and so resulting in serious injury or death. However, as the concept of trauma informed services and practice becomes more popular in health and custodial services (McCartan, 2020), an evidence-based understanding of trauma assessment with this cohort is necessary. It is argued that recognising the impact also of trauma and childhood experiences is key to reducing re-offending and proactive risk management. Whilst this can be done in a systemic way with service wide approaches to trauma informed processes, environment and staff responsivity, this also requires knowledge of assessment tools for practitioners to prioritise cases and aid case formulation.

2.2.4   Evaluation of Measures

In step with the clinical understanding of trauma and expression of it, there are now also a range of ways to evaluate it. Systematic reviews such as this one, can provide valuable evidence and guidance in reviewing research of such assessment measures and tools. An agreed focus for consideration of research into the use of measures, is the need to establish the level of reliability and validity in such tools. Both domains must be established for a tool to be considered robust and fit for purpose, and both break down into various measurement properties for full evaluation purposes. Reliability and validity are common psychometric properties used to assess the consistency and accuracy of measurement tools (Pallant, 2007).

The psychometric concept of reliability refers to the expectation that a measure is free from error and is consistent. Measurement error refers to where any variance in a test taker's score is not attributed to the construct being measured, for example is instead attributable to administrative error or test-taker fatigue (Geisinger et al., 2013). The three most common forms of reliability that are considered in psychometric tools are (a) internal consistency; which measures the homogeneity of items within a scale, i.e. the degree to which the items in the measure are related to each other or not, and Cronbach's α, is the reliability coefficient typically used to measure the internal consistency of an instrument; (b) test-retest reliability refers to the ability of an instrument to be consistent and stable when the same concepts are measured over time; and (c) inter-rater reliability, with different strategies for calculation include percent agreement, interclass and intraclass correlation (ICC), Pearson r, Spearman ρ, and Cohen's κ (Terwee et al., 2007).

The psychometric concept of validity breaks down into various types but essentially is the degree to which a test measures what it claims to measure. Validity usually is evaluated for both content validity; the extent to which items in a psychometric tool are a representation of the concept the tool purports to measure, and construct validity (Salkind, 2010). Construct validity is concerned with the degree to which scores derived from the tool do indeed assess against the construct in question and is broken down into convergent validity (related constructs tests should be highly correlated) and discriminant validity (tests whether concepts or measurements that are not supposed to be related are indeed unrelated).

Finally, criterion validity (sometimes called concrete validity) refers to a test's correlation with a concrete outcome, for example how well one measure predicts an outcome for another measure (Geisinger et al., 2013). Trochim, (2006) defined criterion validity as that which is typically assessed by comparison with a gold standard test and is divided into concurrent and predictive validity. Concurrent validity being the comparison between the measure in question and an outcome assessed at the same time, whereas predictive validity compares the measure with an outcome assessed later. Finally, longitudinal validity, also known as responsiveness, refers to the ability of a measure to detect clinically meaningful change (Terwee et al., 2007). Responsiveness (Terwee et al., 2007) was not included for analysis in this systematic review as the review question did not relate to considerations of change over time.

Whilst proven reliability can be an indicator that a measurement is valid, and if a measure is not reliable, it probably is not valid, reliability alone is necessary but not

sufficient (Dworkin, Burke, Gewandter, & Smith, 2015). The validity of any measure is more important to establish than reliability alone, which is a measure of consistency rather than accuracy. For example, if it can be demonstrated that a measure has high validity that means it produces results that correspond to real properties, characteristics, and variations relating to the construct in question. Without evidence of a psychometric tool's reliability and validity, it is not usual to adopt the tool in practice. It is critical therefore that the empirical literature is informed by studies offering robust evidence around the most appropriate tools for particular cohorts and settings. Without such an evidence base, practitioners, and commissioners risk unethical practice by including participants in studies that add little to the evidence base but suffer possible risks from participation as well as wasting resources.

2.2.5   Current Study

In UK custodial settings, there is now an improved understanding of the prevalence of trauma within service user populations. As organisations now seek to develop and implement trauma-informed approaches to offer more effective services to those with trauma histories being held in custody, there is consideration being given to the range of implications of this work for specific services such as offending behaviour programmes and drug interventions. Trauma tools that are valid, reliable, and practical in the forensic setting are therefore much needed. The definition of trauma varied to some degree between the texts and studies reviewed in this chapter. As the search terms stated in Appendix 2 lay out, searching was conducted for the following terminology of trauma: trauma, adverse/difficult/negative

childhood/life experiences, PTSD, posttraumatic stress, maltreatment and abuse. Whilst we can acknowledge these terms are heterogenous, they would nevertheless be expected to mostly fall within the broader definition of trauma outlined for this thesis in 1.3 above.

As clinical, forensic services with young males are challenged by commissioners to adopt a trauma responsive approach, there is a need then to develop an understanding of what measures are most appropriate for use to evaluate trauma in this cohort. This synthesis of the literature contributes to the evidence base as well as suggests the need for additional research in particular areas. In order to review and synthesise the set of texts that were all quantitative in method, but with diverse methodologies and differing theoretical constructs, it was decided to use a narrative review approach to summarise the quality of the psychometric evidence for each measure.

2.2.6   Aims and Objectives

This review aimed to synthesise the available research identifying all current measures of trauma for this cohort. More specific objectives were also:

1. To establish what measures are available to screen for trauma in custody with young males
2. To examine how trauma has been conceptualised within such measures
3. To evaluate the psychometric properties of these measures
4. To appraise the position in availability of measures for application in a custodial context

2.3 Method

2.3.1 Protocol

After initial pilot searches to optimise the sensitivity of search terms (March 2020) the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) (see the 2020 statement published later as guidelines by Page, et al, 2021) were followed to produce a comprehensive systematic review protocol, guide the methodology and reporting of this review (see Appendix 1). The PRISMA statement contains a 27-item checklist of elements considered essential for ensuring transparency in performing and reporting of systematic reviews. This protocol was not able to be registered on PROSPERO[1] due to it being a systematic scoping review. The protocol was registered on the Open Science Framework[2] instead (https://osf.io/r6hbk). Prior to commencement of the systematic review (March and June 2020) the PROSPERO database, the Joanna Briggs Institute and Cochrane Library databases were all searched to avoid duplication of previous systematic reviews.

2.3.2 Search Strategy

Several initial scoping searches took place between March and May 2020 to establish the appropriate databases and hone the search terms of relevant article's

---

[1] PROSPERO is an international prospective register of systematic reviews.

[2] Open Science Framework is a free and open-source project management tool that supports researchers to share and collaborate with others.

keywords gained from the literature review. After this period of ongoing adaptation of the search terms, the following electronic databases were searched using the specific terms identified within the protocol (see Appendix 2). In the final search conducted in July 2020, the refined search terms identified in the protocol were applied within the following five relevant databases searching from their start date until 24th July 2020:

1. *The Cochrane Library* which is a collection of databases that hold diverse types of information to inform health care decision making.

2. *ProQuest PsycINFO* which is a large psychology database providing access to international literature in psychology and an array of disciplines related to psychology with both abstracts and index records.

3. *ProQuest Dissertations and Theses* which is an online database that indexes, abstracts, and provides full-text access to dissertations and theses.

4. *PsycTests* which is a research database that provides access to psychological tests, measures, scales, and other assessments as well as descriptive and administrative information.

5. *PTSDPubs* which is a bibliographic database (previously PILOTS), covering the Published International Literature on Traumatic Stress, managed by the National Center for Post-Traumatic Stress Disorder in Vermont.

The search terms combined terms for the following five concepts: adolescents, custody, trauma, males and screening tools. All the above databases were searched using the Boolean operators AND and OR. The NOT operator was not used to search for results due to the risk of excluding relevant studies, although studies relating to other kinds of trauma, e.g., head injury or those solely about substance use were screened out later. The search strategy used for each database is reported in Appendix 2.

2.3.3 Additional Searches

Additional searches included those within key research databases in relevant health, government and forensic organisations and professional society's websites. These included the National Health Service (NHS) Health Research Authority and Her Majesty's Prison and Probation Service (HMPPS) National Research Committee (NRC) research summaries electronic databases. Additional grey literature searches to the ProQuest Dissertations and Theses database search above, were conducted in Electronic Theses Online System (EThOS), and OAIster which is an online, global bibliographic database of online open access resources.

Additional hand searches were conducted from the references of all final screened articles and use of Scopus (due to its wide health related coverage) and Google Scholar to check for later citations. This brought one further text into scope, which due to its limited keywords was not picked up by the original search protocol as it had been poorly indexed in the database. All borderline texts were discussed with the lead supervisor and research librarian to ensure there was no breach of the original protocol and to adapt any search terms accordingly.

Finally, contact was made with all the authors from the final, in scope texts as well as others noted as experts in this field from Scopus. All those authors were contacted in October 2020 to request information about unpublished material and ongoing relevant research. Each author was sent the inclusion/exclusion criteria and current list of in scope texts. Responses from three of those authors brought two further texts into scope; both theses that were not archived outside of the university's

repository. These were included to ensure an accurate picture of the literature available to inform the review question.

2.3.4 Inclusion and Exclusion Criteria

As the title and aims of the review meant it was likely the results would find data that was quantitative in design, a PICO (Population, Intervention, Comparator and Outcome) model was used, (Booth & Fry-Smith, 2004) to define and deconstruct the research question in order to develop the inclusion criteria for searches.

The studies included within this review had to have a sample *Population* of males aged between 14-25yrs old in a custodial *Context*. The group of interest (*Intervention*) was determined by asking how trauma was currently assessed with this population. Studies were not required to have used a *Comparator* group. The *Outcome* of studies would need to have focused on tools that sought to evaluate how to assess for trauma with this population in this context. Given the dearth of published research in this field, it was decided to include studies from any year of publication, and international studies if they were available in the English language.

As the COSMIN stipulates that each Patient Reported Outcome Measure (PROM) subscale must be rated separately, this could be done if the item is then used as a standalone score, and so made up a subscale score within a multi-dimensional PROM. This could not be done for four of the studies as they provided data on a subscale that whilst they had trauma related items on it, were not entirely about trauma, or were not standalone scales and so did not fully represent the construct in question as determined by the COSMIN criteria. Where studies reported

on measures that were multi-dimensional with validated sub scales that could be

scored as separate constructs then it was included.

Tables 1 and 2 below define the key variables and parameters of interest.

Table 1

Inclusion criteria

1.	Must include male participants aged 14-25yrs
2.	Must include above participants from a custody setting
3.	Must include an empirical study using a trauma assessment tool
4.	Must include an empirical study reporting data relevant to the psychometric properties of a trauma tool
5.	Must be published in English
6.	Must have full text available

Table 2

Exclusion criteria

1.	Not about trauma or about other category of trauma only, e.g., brain injury
2.	Text reports no primary data
3.	Not specifically about assessment of trauma, e.g., general mental health screen
4.	Study does not validate a specific tool for assessing for trauma, or the tool does not have a standalone trauma scale.

A cross check on the criteria was conducted with a student peer, using a sample

of 26 texts and found 100% agreement. This indicated that there was consistency in

the application of the criteria to the set of texts. Therefore, it was decided that there

was high enough agreement to continue with single-reviewer application of the

inclusion criteria, with little risk of unjustified exclusion.

2.3.5 Selection of Articles

Using the identified search terms, records were retrieved from the database searching [see Appendix 2). The results from each were exported to RefWorks for storage and identification of any duplicates. The title and abstracts of the remaining papers were hand screened for possible relevance, to winnow down the large number of identified studies to the citations that should be "full-text" screened and eventually included in the review, by ensuring it was likely that the study met the inclusion criteria. A yes/no screen was used, and if any were not immediately out of scope, they were kept in at this point. Full copies of the texts were retrieved via the Library of Nottingham Trent University. A full text review was then conducted to establish if the paper met the inclusion criteria fully and any borderline studies were discussed with the lead supervisor. For example, those studies that were exploring a trauma assessment tool but not reporting psychometric data in the usual way due to the age of the article.

2.3.6 Data Extraction

The data extraction of potentially eligible literature was carried out with the following extracted data: author, year of publication, country, the study title, population and types of psychometric properties tested. This work was done solely by the author. See Appendix 3 for full details.

2.3.7 Methodological Quality Assessment: Step One

To assess for risk of bias in the included studies, a robust approach was needed to assess the methodological quality of each study. This would also be able to gauge

the reliability of the reported results. The COSMIN methodology for systematic reviews of patient-reported outcome measures (Mokkink et al., 2018), and the COSMIN Risk of Bias Checklist (Terwee et al., 2018) were adopted to evaluate the methodological quality of the included studies.

The COSMIN methodology aims to improve the quality of studies on measurement properties by developing methodology and practical tools for assessing measurement properties. The COSMIN guideline was developed in concordance with existing guidelines for reviews, such as the Cochrane Handbook for systematic reviews of interventions (Higgins et al., 2019) and for diagnostic test accuracy reviews, the PRISMA Statement (Page, et al, 2021, the standards for reporting systematic reviews, (Morton, Berg, Levit, & Eden, 2011) for systematic reviews of comparative effectiveness research (Morton et al., 2011) and the Grading of Recommendations Assessment, Development and Evaluation principles (Guyatt, Oxman, Schünemann, Tugwell, & Knottnerus, 2011).

The COSMIN taxonomy, terminology, and definitions of measurement properties for health-related PROMs provides an agreed language surrounding psychometric properties and a checklist for evaluating the methodological quality of studies reporting on validity, reliability and responsiveness. This study focused on assessing the reliability and validity (and the various components of each as described in 2.2.3) of all reviewed measures. The COSMIN Risk of Bias checklist was exclusively developed for assessing the methodological quality of single studies included in systematic reviews of PROMs. It contains nine measurement properties (and one standard for PROM development Box One) including Content Validity (Box Two),

Structural Validity (Box Three), Internal Consistency (Box Four), Cross Cultural

Validity/Measurement Invariance (Box Five), Reliability (Box Six), Measurement

Error (Box Seven), Criterion Validity (Box Eight), Hypotheses Testing for Construct

Validity (Box Nine) and Responsiveness (Box 10). A definition of each psychometric

property, as guided by COSMIN, is provided in Appendix 4. Each box also contains a

standard asking if there were any other important methodological issues not covered

by the checklist, but which may lead to biased results or conclusions.

Content validity was not evaluated at this first stage as the COSMIN Risk of Bias

Checklist requires a subjective judgement of whether the *study* asked patients and

professionals about the relevance, comprehensiveness, and comprehensibility of the

PROM. The studies in this review were not seeking to establish or explore content

validity by this definition and so the COSMIN manual recommends that a PROM not

be further considered. Therefore, to ensure full consideration of each study, the

three-step method used in this systematic review allowed for the psychometric

properties of the *measure* in the study to be reviewed at the second step, using

criteria laid out in Terwee et al., (2007) and Cordier et al., (2017).

Cross-cultural validity was not evaluated as the instruments reviewed were

developed and published in English, and interpretability is not considered to be a

psychometric property under the COSMIN framework and was therefore not

described in this review. Responsiveness was outside the scope of this review, as it

was deemed not relevant where measures were being used as proxy diagnostic

instruments rather than measures of change over time. Criterion validity was also not

evaluated due to the absence of an agreed 'gold standard measure of PTSD or trauma among children and adolescents.

The first quality assessment step of this review evaluated the methodological quality of the selected studies, whether they were in journal articles or theses. This was performed using the COSMIN taxonomy of measurement properties and definitions for health-related patient-reported outcomes (Mokkink et al., 2018) The COSMIN checklist is a standardised tool for assessing the methodological quality of studies on the identified measurement properties. It evaluates nine domains relevant to measurement properties and for the purpose of this study five of those domains were applicable and able to be evaluated: 'structural validity', 'internal consistency', 'reliability', 'measurement error' and 'hypotheses testing for construct validity'.

A definition of each psychometric property, as guided by the COSMIN statement, and in the COSMIN Risk of Bias Checklist (Mokkink et al., 2018) is provided in Appendix 4. The measurement properties evaluated in a study determine which boxes should be completed. Each of the measurement properties has a range of standards that are rated using a four-point rating system. Each standard was rated on a five-point scale 'Very Good', 'Adequate', 'Doubtful' or 'Inadequate'. The response option 'NA' for some standards is available. The overall rating of the quality of the study is based on the lowest rating of any standard, i.e., if any item is scored 'inadequate' then the worst score counts (Mokkink et al., 2018). The items rate the quality of study design and the robustness of statistical analyses conducted in each of the studies.

2.3.8 Quality Assessment of Psychometric Properties: Step Two

Following the assessment of methodological quality of each study, the quality of the psychometric properties of the 12 measures themselves was then rated in step two. This gave an overall methodological quality score to each study, based on the quality of the psychometric properties in that study, and following an alternative, later approach to that proposed by the authors of COSMIN. The certainty of the evidence was classified using the method specified by Terwee et al., (2018) who suggested taking the lowest rating of any item in a checklist domain as the final quality rating for that domain. Cordier et al., (2017) however noted that subtle differences in the methodological quality between studies are difficult to detect via this method of scoring, so their revised scoring procedure was used in this systematic review. In brief, for each of the seven measurement properties at this step (not including 'cross-cultural validity' or 'responsiveness' from the COSMIN Risk of Bias Checklist), a criterion was defined for a positive, negative, or indeterminate rating, depending on the design, methods, and outcomes of the validation study. The results of each study were evaluated by the author using the criteria described in Cordier et al., (2017) and Terwee et al., (2007). Appendix 5 provides a summary of these criteria and the levels of evidence used to report when there was more than one study, of a particular quality reporting findings about a measure.

2.3.9 Overall Quality of Psychometric Properties: Step Three

To create an overall quality rating, the measurement property for each measure was given an overall quality score using the criteria in Schellingerhout et al., (2012). This approach combined the scores of study quality with the psychometric quality

ratings to give the overall rating. A description of this process is in Appendix 6, but in brief is a combination of the ratings of both the methodological quality of the studies judged by the COSMIN checklist, plus the quality criteria for the psychometric properties of assessments, with an overall criterion given that was based on Terwee et al., (2007)

2.4 Results

This systematic scoping review retrieved an initial total of 2954 records. Searches in five databases found 2,689 records with the following breakdown: PsycInfo = 2160, PTSDPubs = 224, PsycTests = 13, Cochrane = 45, ProQuest Dissertations and Theses = 224. Further grey literature searching identified an additional 265 records from database, register, citation searching and author contact. The initial search results were reduced to 2,930 after RefWorks was used to remove duplicates. Screening of the title and abstracts of the remaining texts resulted in the removal of 2896 records and full copies of the remaining 34 texts were obtained initially. Following the review of each full text, 20 texts were excluded for the following reasons: five were not about trauma or were about another category of trauma only, e.g., brain injury, three were not reporting on any specific tool for assessing for trauma, six were not specifically about the assessment of trauma, one did not seek to validate the tool in question and one did not include males from the age range targeted. Four texts were excluded at the data extraction stage due to not being able to be evaluated with the COSMIN methodology as they did not fully represent the construct in question, were not solely about trauma or did not have standalone scales.

An additional two records were provided from contact with key authors, and one further record from the Google Scholar citation search with no new texts found from reference mining. The final set of papers which met the inclusion criteria totalled 14 texts included in the current review. The PRISMA flow diagram is in Figure 1 below and illustrates the screening, overall data collection, and results of screening outcomes at the various stages. Appendix 3, the Data Extraction Table contains key information pertaining to the included studies.

PRISMA flow diagram of search strategy

Identification

Records identified from 7 Databases (n = 2,689)

PsycInfo database (n= 2160)
PsychTests database (n= 13)
PTSDPubs database (n= 224)
Cochrane database (n= 45)
ETHoS database (n= 13)
OAlster database (n= 10)
ProQuest Theses database

Records removed *before screening*:

Duplicate records removed

Records identified from:
Websites:
Various health sites (n= 233)
Various government sites (n= 7)
Various professional sites(n=15)
Organisations:
NICE guidelines (n= 7)
Citation searching (n = 1)
Author contact (n = 2)

Screening

Records screened (n = 2665)

Records excluded (n = 0)

Reports sought for retrieval (n = 2665)

Reports not retrieved (n = 0)

Reports sought for retrieval (n = 265)

Reports assessed for eligibility

Reports excluded: (n= 20)
-Not about trauma or were about another category of trauma only, e.g., brain injury, (n = 5)
-Not reporting on specific tool for assessing for trauma (n = 3)
-Not specifically about the assessment of trauma (n = 6)
-Not validating a tool (n= 1)
-Not inclusive of population (n= 1)
-After data extraction (n= 4)

Reports assessed for eligibility (n = 3)

Included

Studies included in review (n = 14)

2.4.1 A Descriptive Summary of the Included Studies

There was a total of 14 studies included in this systematic scoping review, with a range of publication date from 2000 to 2020. All but two of those studies originate from the United States of America and the others from European countries. The studies sampled a total of approximately 1,768 male participants and an age range of 12-18yrs. See Appendix 3, Data Extraction Table for the full details.

2.4.2 A Descriptive Summary of the Trauma Measures

Of the 14 studies in this review, the psychometric evidence of 12 measures of trauma used in the 14-25yrs male offender population was reported. Those measures differed significantly to each other on length (ranging from ten to 478 items).

Nine of the measures were uni-dimensional measures of trauma, some only being validated for the first time in the reporting study. All the other three measures were multi-scale measures with a relevant scale assessing for trauma exposure and/or symptomatology and they were the BASC-2 SRP-A, the MMPI-A and the MAYSI-2. As per the description in 2.3.4, these studies were able to be included as the subscales fully represented the trauma construct or were standalone sub scales.

2.4.3 The Psychometric Properties of Trauma Measures

This stage of the review process involved an assessment of the methodology of each of the accepted empirical studies so that they could then be weighed according to the reliability of the results. The studies included here report on various types of

psychometric evidence and due to the lack of homogeneity a narrative synthesis of these factors was undertaken. Table 3 shows the summary version of the psychometric evidence reported in the studies and then each of the measures is discussed alphabetically. The overall rating of the quality of the study is based on the lowest rating of any standard, i.e., if any item is scored 'inadequate' then the worst score counts (Mokkink et al., 2018). The items rate the quality of study design and the robustness of statistical analyses conducted in each of the studies.

Table 3

A summary of psychometric evidence for the included studies

Measures N=12	Title abbreviation	Tests of factor structure	Tests of internal consistency	Tests of reliability	Tests of validity
The Behavior Assessment System for Children, Second Edition, Adolescent Version-Self Report	BASC-2 SRP-A	No	No	Yes	Yes
The Clinician-Administered PTSD Scale for Children & Adolescents	CAPS	No	Yes	Yes	Yes
Child Report of Posttraumatic Symptoms	CROPS	Yes (Edner et al., 2017, Edner et al., 2020)	Yes	Yes (Edner et al., 2017, Edner et al., 2020)	Yes (Edner et al., 2017, Edner et al., 2020)
The Childhood Trauma Questionnaire-Short Form	CTQ-SF	Yes	Yes (Dudeck et al., 2015)	Yes (Dovran et al., 2013)	No
Dimensions of Violence Exposure Rapid Screen	DVERS	No	Yes	Yes	Yes
Minnesota Multiphasic Personality Inventory-Adolescent	MMPI-A	No	Yes (Cashel, 2000)	Yes (Cashel, 2000)	Yes
The Massachusetts Youth Screening Instrument	MAYSI-2	No	Yes	Yes	Yes
The Structured Trauma-Related Experiences and Symptoms Screener	STRESS	Yes	Yes	Yes	Yes

The Trauma-Related Symptoms and Impairment Rapid Screen	TSIRS	No	Yes	Yes	Yes
Trauma Symptom Checklist for Children	TSCC	No	Yes	No	No
Trauma Scale for Juvenile Offenders	TSJO	No	Yes	No	Yes
The Trauma Checklist	TC	Yes	Yes	Yes	Yes

2.4.3.i The Behavior Assessment System for Children, Second Edition, Adolescent Version-Self Report (BASC-2 SRP-A)

Measure overview: The BASC-2 SRP-A is a widely used tool in adolescents aged 12-18yrs and consists of 176 items that load onto five composite scales and 16 subscales. The subscales divide into two categories of either 'clinical' or 'adaptive' scales that provide cut off scores and is normed on a diverse sample of adolescents (including juvenile offenders). Prior to this study by Zito (2010), evidence was not available on the ability of the BASC-2 SRP-A to specifically identify trauma rather than emotional and behavioural functioning more generally. The BASC-2 SRP-A also contains four validity indices to ensure the reliability and validity of the responses. The BASC does not align to any diagnostic model but was developed to assess the range of emotional and behavioural functioning.

Statistical findings: The Zito (2010) study is the only study in this review reporting on the BASC-2 and was being examined by Zito for its predictive utility in identifying juvenile offenders who endorse trauma symptomatology as measured on the comparator measure. Zito also examined whether the BASC-2 SRP-A clinical scales could predict specific types of trauma symptoms and find any differences between detained and community juvenile offenders on those scales.

To assess the reliability of the measure, a series of bivariate correlations were done to examine the relationship between endorsing trauma symptoms and the BASC-2 clinical scales, and this found significant relationships on several scales. Six stepwise regression with backward elimination analyses were carried out to see if the BASC-2 clinical scales were able to predict specific types of trauma symptoms

and found statistically significant scores here too. There was a small sample total n =63 and male n= 39 but it was not clear how many males were in the subgroup 'detained'. Further reliability analysis was carried out using bivariate correlations to look for any relationship between endorsing trauma symptoms and the BASC-2 clinical scales. This found a significant relationship and found over six different profiles on the BASC-2.

The validity analyses included two independent samples t-tests to examine the mean differences between detained versus community offenders on who endorsed the trauma symptoms on the comparator measure as well as the BASC-2 clinical scales. The results found a contrary finding to previous research, in that there were no significant differences in the presence of trauma symptoms between detained and community youth, but that the community youth endorsed more problematic emotional and behavioural functioning.

Summary: Findings suggested that several of the clinical scales on the BASC-2 were significantly correlated with items measuring specific trauma-related symptomatology on a comparator measure. This supported the stated aim of evaluating trauma with both measures in order to see if just one measure could be administered. The findings also showed that the sample reported experiencing various trauma-related symptomatology, as opposed to only symptoms associated with PTSD. Notably, 'Social Stress' was the most identified BASC-2 predictor of various types of trauma-related symptomatology. Finally, it was also shown that there were mean differences between the detained and the community-based youth

in the sample in that the detained juveniles reported experiencing more emotional and behavioural problems as well as more victimisation.

The Behavior Assessment System for Children Methodological Quality Assessment Summary:

The overall methodological rating for the BASC was 'inadequate'. The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
rating: n/a	*rating: inadequate*	*rating: inadequate*	*rating: n/a*	*rating: very good*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	No information found on internal consistency statistics	No ICCS were reported and not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the BASC were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.ii The Clinician-Administered PTSD Scale for Children & Adolescents (CAPS-CA)

Measure overview: The CAPS-CA is a 30-item diagnostic interview that assesses current and past PTSD and Acute Stress Disorder in the 8-18yrs range. There is previous empirical work on the CAPS-CA, but Harrington (2008) noted the repeat sampling of the same population in previous papers, leading to a query about the

previously reported good internal consistency coefficients. The CAPS-CA is based on specific DSM criteria for PTSD.

Statistical findings: The Harrington (2008) study is the only study in this review reporting on the CAPS-CA and was being examined by Harrington to validate its psychometric properties. A variety of other appropriate measures were used as comparators. The sample total n =60 was calculated to ensure the study was sufficiently powered.

To test the reliability of the measure, inter-rater reliability analysis was done for the total scores reporting Pearson product-moment calculations greater than .50. Further reliability analysis was carried out to determine the internal consistency of the measure. The reported Cronbach alpha value for the total scale was good; α = .90. The validity analyses to compare the CAPS-CA, with other comparator measures for both convergent and divergent validity reported, again using Pearson product-moment calculations with statistically significant results reported.

Summary: The CAPS-CA showed good reliability with regards internal consistency and inter-rater agreement. It also reported good validity results with regards how the CAPS-CA, corresponded to other measures. Notably this was an entirely male and incarcerated sample with a good sample size.

The Clinician-Administered PTSD Scale for Children & Adolescents Methodological Quality Assessment Summary:

The overall methodological rating for the CAPS-CA was 'inadequate'. The methodological rating for each of the COSMIN domains are in the table below, with

the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
rating: n/a	*rating: very good*	*rating: inadequate*	*rating: n/a*	*rating: very good*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were given for the total scale and sub scales, with Cronbach's alpha	Kappa was reported but not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the CAPS-CA were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.iii   The Childhood Trauma Questionnaire-Short Form (CTQ-SF)

Measure overview: The CTQ-SF is widely used to measure childhood abuse of all types. It is a 28-item self-report questionnaire (the original is 70-items) that screens for a history of childhood abuse and neglect across 5 types of maltreatment. Summing the scores of the 25 relevant items results in a total score, and total sub-scale scores (each subscale has 5 items). Previous studies had reported thresholds for description and evaluation of the severity and frequency of the different maltreatments. The CTQ-SF does not align to any diagnostic model as it was developed to screen for types of childhood maltreatment.

Statistical findings: One study (Dovran et al., 2013) sought to validate the psychometric properties of the Norwegian version of the CTQ-SF. Chi-square statistics were reported to test for any gender differences, but again only for the total

sample. No significant differences were found between the males and females. To test the original 5-factor structure of the CTQ-SF, a confirmatory factor analysis was conducted on the total sample (n=517), with reliability coefficients reported for all 5 scales above the .80 threshold. Reliability coefficients for the sub sample of male prisoners in the age range of interest to this review were not reported, with only the gender difference reported to have been not significant.

Summary: Dovran et al's study (2013) reported a reasonable fit of the data to the original 5-factor structure of the CTQ-SF. However, whilst these results include the 18-25yr age range by dint of being 18yrs+, specific data relating to adolescents was not reported.

Statistical findings: A later study (Dudeck et al., 2015) sought to validate the psychometric properties of the German version of the CTQ-SF. In order to test the validity of the original 5-factor structure of the CTQ-SF, a confirmatory factor analysis was conducted on the 'inmate' sample (n=224), with the results indicating a reasonable goodness-of-fit. Good reliability was also reported with good internal consistencies measured by Cronbach's α for four of five of the subscales (estimates from .88 to .96 for those four subscales).

Summary: The results (Dudeck et al., 2015) confirmed the original 5-factor model from the original CTQ-SF version in the English language and reported measurement invariance indications of its applicability across different populations.

The Childhood Trauma Questionnaire-Short Form Methodological Quality Assessment Summary:

The overall methodological rating for the CTQ-SF was 'doubtful' for this study (Dovran et al., 2013) and 'inadequate' for the Dudeck et al., (2015) study. The methodological rating for each of the COSMIN domains are in the tables below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6. In order to create an overall quality rating, the measurement property for each measure is given an overall quality score in step three.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Dovran, (2013) *rating: very good*	*Dovran, (2013)* *rating: very good*	*Dovran, (2013)* *rating: doubtful*	*Dovran, (2013)* *rating: n/a*	*Dovran, (2013)* *rating: n/a*
Confirmatory Factor Analysis performed with a large sample size	ICCS were given for the total scale and sub scales, with Cronbach's alpha	Intra class correlation coefficients reported but not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	Hypothesis testing was not reported by this study
Structural Validity	**Internal consistency**	**Reliability**	**Measurement Error**	**Hypothesis testing (construct validity)**
Dudeck et al., (2015)	*Dudeck et al., (2015)*	*Dudeck et al., (2015)*	*Dudeck et al., (2015)*	*Dudeck et al., (2015)*

rating: very good	rating: inadequate	rating: n/a	rating: n/a	rating: very good
Confirmatory Factor Analysis performed with a large sample size	ICCS were not calculated given for the total scale and sub scales, with Cronbach's alpha	Reliability statistics were not reported by this study	Measurement error was not reported by this study	The constructs for the CTQ-SF were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.iv   Child Report of Posttraumatic Symptoms (CROPS)

Measure overview*:* The CROPS (Greenwald & Rubin, 1999) is a self-report instrument that screens for symptoms of child trauma found in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association Division of Research, 2013). The CROPS is comprised of one scale of 26 items. The CROPS has previously demonstrated good validity and reliability across other settings and populations, is normed on the 7-17yrs age range and is formatted in a 3-point Likert scale. It was the measure examined by 3 of the studies in this review. The CROPS is intended to screen for post traumatic symptoms based on specific DSM criteria for PTSD but does not require an identified trauma.

Statistical findings: The purpose of the study by Flaherty (2017) was to determine the utility of the CROPS in assessing for trauma symptomology among a sample of adjudicated youth. Due to the fairly low sample size, n = 76 and male n = 30, statistical significance and generalisability is limited therefore.

In order to test the reliability of the CROPS in being able to assess symptoms of trauma in those youth endorsing experiences of trauma, discriminant analysis tests were conducted. This found that the CROPS total score was not a predictor of trauma in this cohort. Further reliability analyses were done with a series of one-way ANOVA tests to see if there were any differences on the CROPS and the various offence types. No significant difference in scores was found for total scores on the CROPS and the offence types.

The internal consistency of the CROPS and the degree of the interrelatedness among the items, was reported as $\alpha = .92$. Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency so this is a very good alpha value.

Summary: The Flaherty (2017) study was exploratory in nature due to no previous work having been done on the utility of the CROPS. The findings were tentative and showed the complexity of assessing trauma symptomatology in this cohort, as the nature of the traumatic event and the child's subjective experience of the trauma were influential in the expression of the symptoms of PTSD. The study was limited by its small sample and reliance on self-report measures.

Statistical findings: The aim of the study by Edner et al., (2017) was to determine the utility of the CROPS in identifying previous trauma exposure among adjudicated youth and to examine the baseline accuracy of the CROPS in predicting the presence or absence of trauma histories. The study also sought to examine the factor structure of the CROPS.

In order to test the reliability of the CROPS in being able to assess symptoms of trauma in those youth endorsing experiences of trauma, logistic regression work was done to establish whether the CROPS could predict the absence or presence of trauma history. A small to medium effect size for the males in the sample was found. Validity analyses included exploratory Factor Analysis (EFA) using principal-components analysis (PCA) to determine the underlying factor structure of the scale. PCA loadings of the EFA were provided, with outcomes reporting a three-factor solution which accounted for 47% of the variance and was 65.1% accurate at predicting those who had experienced trauma.

Further Cronbach alpha coefficients were computed for the three factors showing low to high acceptability across the factors: Factor One α = .86, Factor Two α = .76 and Factor Three α = .64. The internal consistency of the CROPS and the degree of the interrelatedness among the items, was reported as .88. Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency so this is a very good alpha value.

Summary: The findings in the study by Edner et al., (2017) provide moderate support for the utility of the CROPS in accurately identifying previous trauma exposure in the cohort, but in particular gave support for a 14-item version of the CROPS for trauma symptom screening.

Edner 2020 - Statistical findings: The purpose of Edner et al's., (2020) study was to determine the validity of a 14-item version of the CROPS in identifying previous trauma exposure among adjudicated youth.

To test the reliability of this 14-item version of the CROPS to assess symptoms of trauma in those youth endorsing experiencing of trauma, an exploratory factor structure took place with a Principal Component Analysis. The internal consistency of the CROPS and the degree of the interrelatedness among the items, was reported as .78 for the 14-item version and .79 for the 12-item version. Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency and whilst this is a good alpha value it should be noted the short scales do give rise to good alpha values as alpha is a function of the number of items.

Further reliability analysis was carried out with 2-tailed Pearson correlations being calculated to examine the relationship between the CROPS and another validated measures of trauma. This found that the CROPS total scores were significantly correlated with the other measure's total scores, and for the males was most strongly correlated with the Dissociation scale ($r = .67$, $p < .001$) and the Anxiety scale ($r = .59$, $p < .001$).

Validity analyses included exploratory Factor Analysis (EFA) using principal-components analysis (PCA) to determine the underlying factor structure of the scale. PCA loadings of the EFA were provided, with outcomes reporting a unitary trauma factor which accounted for 32.8% of the variance for the 14-item version and 36.9% of the variance for the 12-item version. Eigenvalues were given (the sum of squared component loadings across all items for each component), to represent the amount of variance in each factor, i.e., type of trauma. However, it should be noted these are total sample results and were not divided out by gender.

Summary: The findings in this 2020 study (Edner et al.) provides good support for the validity of the 14-item version of the CROPS in accurately identifying previous trauma exposure in the cohort, with strong internal consistency and significant correlations with all scales of a comparator trauma measure. However, results also suggested the 12-item version also performed with commensurate internal consistency.

The Child Report of Posttraumatic Symptoms Methodological Quality Assessment Summary:

The overall methodological rating for the CROPS was 'inadequate' for both the Flaherty (2017) and the Edner et al., (2017) studies. The overall methodological rating for the Edner et al., (2020) study was 'doubtful'. The methodological rating for each study and for each of the COSMIN domains are in the tables below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6. To create an overall quality rating, the measurement property for each measure is given an overall quality score in step three.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Flaherty, (2017) *rating: n/a*	*Flaherty, (2017)* *rating: very good*	*Flaherty, (2017)* *rating: inadequate*	*Flaherty, (2017)* *rating: n/a*	*Flaherty, (2017)* *rating: very good*
Not applicable as study was not seeking to test the structural	ICCS were given for the scale items, with	No correlations reported and not clear if respondents were stable	Measurement error was not reported by this study	The constructs for the CROPS were clear as were the measurement

validity and no such statistics were reported	Cronbach's alpha too	across the time period of the various scale administrations		properties of the comparator instruments in the sample
Structural Validity	**Internal consistency**	**Reliability**	**Measurement Error**	**Hypothesis testing (construct validity)**
Edner et al., (2017) *rating: inadequate*	*Edner et al., (2017)* *rating: very good*	*Edner et al., (2017)* *rating: inadequate*	*Edner et al., (2017)* *rating: n/a*	*Edner et al., (2017)* *rating: n/a*
Exploratory Factor Analysis performed with PCA, but the sample size was small.	ICCS were given for the scale items, with Cronbach's alpha too	No correlation coefficients were reported and not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	Hypothesis testing was not reported by this study
Structural Validity	**Internal consistency**	**Reliability**	**Measurement Error**	**Hypothesis testing (construct validity)**
Edner et al., (2020) *rating: adequate*	*Edner et al., (2020)* *rating: very good*	*Edner et al., (2020)* *rating: doubtful*	*Edner et al., (2020)* *rating: n/a*	*Edner et al., (2020)* *rating: very good*
Exploratory Factor Analysis performed with PCA, with a large sample size	ICCS were given for whole scale version of both 14-item and 12-item scale, with Cronbach's alpha	Pearson's coefficients calculated but not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the CROPS were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.v   Dimensions of Violence Exposure Rapid Screen (DVERS)

Measure overview: Dimensions of Violence Exposure Rapid Screen (DVERS) is a new tool designed to detect traumatic stress symptoms and exposure to high-risk characteristics of trauma exposure. Like the TSIRS below it focuses on the aspects of impairment arising from trauma rather than symptom-based questions. The DVERS refers to interpersonal trauma exposure, including violent experiences of various forms. The DVERS is comprised of 10 yes-or-no questions and can be self-administered or read aloud to respondents. The DVERS is specifically designed to assess for PTSD.

Statistical findings: The Grasso et al., (2019) study is the only study in this review reporting on the DVERS, and limited evidence of the measure's reliability and validity was reported due to the stated aim of the study being to assess the screen against a criterion tool. The DVERS was being examined for its ability to detect probable PTSD, against an existing 56 item self-report instrument, the Structured Trauma-Related Experiences and Symptoms Screener (STRESS) that corresponds to DSM-5 criteria for PTSD.

To prove the reliability of the DVERS internal consistency of the screen, and also describe the degree of the interrelatedness among the items, a Cronbach Alpha value of $\alpha = .83$ was reported, which is greater than the acceptable threshold of .7. Further reliability analysis was carried out with kappa coefficients calculated to measure the inter-rater reliability on the items. However, all 10 kappa values were less than the expected 0.70 cut off.

The validity analyses included were done in depth due to the aim of this study being to prove the diagnostic utility of the screen. Therefore, a range of criterion validity measures were used and reported, although are not in scope for this review due to reasons outlined previously (see 2.3.7).

Summary: This Grasso et al., (2019) study suggests the need for further work to establish the reliability and validity of the DVERS as this was the first such study and its focus was on criterion testing against other comparator instruments.

The Dimensions of Violence Exposure Rapid Screen Methodological Quality Assessment Summary:

The overall methodological rating for the DVERS was 'inadequate' for both studies. The methodological rating for each of the COSMIN domains are in the tables below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: n/a	*Rating: very good*	*Rating: inadequate*	*Rating: n/a*	*Rating: very good*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were given for the whole scale, with Cronbach's alpha too	Low Kappa was reported and not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the DVERS were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.vi Minnesota Multiphasic Personality Inventory-Adolescent (MMPI- A)

Measure overview: The MMPI-A is a 478-true/false item self-report questionnaire that assesses psychopathology in the 14-18yrs range. The MMPI-A has 7 validity scales, 10 clinical scales, 31 clinical subscales, 15 content scales, 31 content component scales and 11 supplementary scales. This adolescent version contains items unique to adolescence, e.g., school problems and negative peer influence. The MMPI-A has previously demonstrated adequate test-retest reliability, adequate internal consistency results with juvenile offender populations. The MMPI-A trauma sub-scale is designed to detect PTSD symptomatology.

Statistical findings: Cashel, Ovaert and Holliman (2000) set out to examine the utility of the MMPI-A identifying PTSD in incarcerated adolescents, focusing on the 'trauma profile' as well as the specific PK supplementary scale intended to discriminate for those with PTSD, but which is not included on the MMPI-A.

Discriminant functional analyses was conducted to address whether the MMPI-A reliably identified those diagnosed with PTSD on the comparator measure, and this found significant group differences. Particularly high scores were found on certain scales, reflecting endorsement of symptoms related to anger, mistrust, obsessive fixation and intrusive recollections. The authors were not able to replicate the MMPI-A 'trauma profile' found for adults, and instead found a code type (scales 4, 6 and 8) consistent with studies into adolescent MMPI-A norms. This suggests a comorbidity of PTSD with other forms of other psychological disturbance. The previously suggested 'trauma profile' of elevated Scale 2 scores (relating to depression) did not

emerge in this study, likely due to a sample who all exhibited externalising behaviours, i.e., conduct problems, by dint of being juvenile delinquents.

To evaluate the utility of the supplementary PK scale an adapted version was developed and raw scores compared to the comparator measure's scores. This gave good results with a good Cronbach alpha and adequate Pearson's r values. Further statistical work was done to identify which of the PK scale items had significantly different endorsement frequencies between the two groups of PTSD or non-PTSD.

Summary: Cashel, Ovaert and Holliman (2000), found the MMPI-A clinical scales were moderately successful at discriminating adjudicated youth with and without posttraumatic stress reactions. The profile of offenders with PTSD demonstrated statistically higher scores on various clinical subscales when compared to those without a PTSD diagnosis.

Statistical findings: The primary research aim in this study by Murray, Glaser and Calhoun, (2013a) was to test whether rather than presenting with a high number of comorbid disorders, juvenile offenders in fact have a more complex reaction to trauma exposure than a PTSD diagnosis captures, and this could be developed into a scale that can reliably differentiate between those who have experienced trauma or not (rather than looking for symptoms of a specific mental health disorder).

Significant differences were found between the 2 groups of trauma vs no trauma in their item level responses on the MMPI-A in particular, 17-items were found to be significantly different between the 2 groups. A logistic regression analysis was conducted on those 17 items, after a screen for any correlations between those 17

items. It proved the 17-item model was a good predictor of trauma group membership with a 75.8% accuracy.

A ROC curve analysis was done to test for a possible scale cut off. A cut off of 5 items (of the 17 items) was reported with a 95% confidence interval in predicting the trauma group of juveniles.

Summary: Murray, Glaser and Calhoun, (2013) examined the MMIP-A to identify specific items to best discriminate between juvenile offenders with and without a reported trauma history. Murray, Glaser and Calhoun, (2013) identified an embedded 17-item scale that demonstrated relatively good utility for predicting which group. This 17-item scale was named the Trauma Scale for Juvenile Offenders (TSJO). It further evidenced how juveniles who have experienced childhood maltreatment do not solely demonstrate symptoms associated with PTSD but often symptoms associated with other comorbid disorders The TSJO is further reviewed in this systematic review by Edner et al., (2020) in 2.4.3.xii below.

The Minnesota Multiphasic Personality Inventory-Adolescent Methodological Quality Assessment Summary:

The overall methodological rating for the MMPI-A was 'inadequate' for both studies. The methodological rating for each of the COSMIN domains are in the tables below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6. In order to create an overall quality rating, the measurement property for each measure is given an overall quality score in step three.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Cashel et al., (2000) *rating: n/a*	*Cashel et al., (2000)* *rating: very good*	*Cashel et al., (2000)* *rating: inadequate*	*Cashel et al., (2000)* *rating: n/a*	*Cashel et al., (2000)* *rating: Very good*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were given for the scale's items, with Cronbach's alpha calculations too	Correlations were reported but not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the MMPI-A were clear as were the measurement properties of the comparator instruments in the sample
Structural Validity	**Internal consistency**	**Reliability**	**Measurement Error**	**Hypothesis testing (construct validity)**
Murray et al., (2013) *rating: n/a*	*Murray et al., (2013)* *rating: inadequate*	*Murray et al., (2013)* *rating: inadequate*	*Murray et al., (2013)* *rating: n/a*	*Murray et al., (2013)* *rating: n/a*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were not calculated and no Cronbach alpha available	No correlations were reported and not clear if respondents were stable across the time period of the various scale administrations	Measurement error was not reported by this study	Hypothesis testing was not reported by this study

2.4.3.vii The Massachusetts Youth Screening Instrument (MAYSI-2)

Measure overview: The Massachusetts Youth Screening Instrument (MAYSI-2) is the most widely used mental health screening instrument in under 18yrs custodial care. It is a brief self-report inventory used to detect trauma and symptoms of

posttraumatic stress disorder (PTSD) with seven scales covering 52 items (one scale for boys only) and each scale containing 5-9 items requiring a "yes" or "no" response. The Traumatic Experiences scale is five items in total. The MAYSI-2 screens for symptoms of PTSD.

Statistical findings: The Kerig et al., (2011) study is the only study in this review reporting on the MAYSI-2 and evidence of the measure's reliability and validity was reported. This tool was being examined by the authors for its sensitivity and specificity to determine which scales better predicted PTSD symptoms and possible cut offs. Unlike the other scales in the MAYSI-2, the Traumatic Experiences scale had not previously been validated through comparison to comparable scales on other well-established inventories, nor did the scale have a cut-off score to identify when a youth's response warranted need for further assessment.

To test the reliability of the Traumatic Experiences scale, internal consistency of the scale and the degree of the interrelatedness among the items, Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency. However, the ICC was reported for the boys in this sample as .60 specifically for the Traumatic Experiences scale, whilst they were higher for all the other scales on the MAYSI-2. Further reliability analysis was carried out with excellent inter-rater reliability at 95%-100% agreement.

Validity analyses included establishing correlations between variables which showed moderate correlations only between the Traumatic Experiences scale and other PTSD variables from the comparator measures. Multiple regression work was done to establish which MAYSI-2 scales contributed to the scores on the comparator

measures, but low percentages were found meaning the variance was not able to be explained.

Summary: This study helpfully demonstrated a lack of validity and reliability in the 'Traumatic Experiences' scale despite perhaps an expectation in practice that this scale more than the other MAYSI-2 scales, would be able to be relied upon to screen for trauma in this cohort. Similarly, it was able to report that many youths do evidence post traumatic symptomatology even when very few items on the 'Traumatic Experiences' scale are endorsed. The limitations of this study were clearly outlined and how future research might take the issues forward also made clear.

The Massachusetts Youth Screening Instrument Methodological Quality Assessment Summary:

The overall methodological rating for the MAYSI-2 was 'inadequate'. The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: inadequate	*Rating: very good*	*Rating: inadequate*	*Rating: inadequate*	*Rating: very good*
No factor analysis was performed, perhaps due to	ICCS were given for the scale's items, with Cronbach's	Correlations were reported but not Spearman or Pearson's. It	Test conditions were not similar – due to eversion of MAYSI-2 versus	The constructs for the MAYSI-2 were clear as were the measurement

low sample size	alpha calculations too	was not clear if respondents were across the time period of the various scale administrations	interviews for others	properties of the comparator instruments in the sample

2.4.3.ix The Structured Trauma-Related Experiences and Symptoms Screener (STRESS)

Measure overview: The STRESS is a self-report instrument with 25 items assessing potentially traumatic events and adverse experiences, 23 items assessing the frequency of PTSD symptoms over the past week on a 4-point rating scale and 6 items assessing aspects of functional impairment. Responses of "2-3 days" on the symptom items serve as the threshold for a positive symptom. Results yield symptom severity scores for each symptom cluster as well as whether respondents meet DMS-5 criteria for probable PTSD. The STRESS seeks to assess for PTSD, particularly aligned with the DSM-5 model.

Statistical findings: The Cruz-Katz (2016) study is the only study in this review reporting on the STRESS and examined it for its construct validity. The STRESS tool (Grasso, Felton, & Reid-Quiñones, 2015) is a self-report measure for those aged 7-17yrs and designed to assess for lifetime potentially traumatic event exposure and current PTSD symptoms consistent with the DSM-5 PTSD diagnostic criteria. It can be scored by criterion as well as total severity scores. The STRESS has had limited peer review and prior to this study not validated previously in a forensic setting.

To test the reliability of the STRESS, internal consistency of the scale and the degree of the interrelatedness among the items, the total STRESS alpha was

reported as α = .91, the new factor one alpha as α = .90 and the new factor two

alpha as α = .89. Cronbach alpha values of 0.7 or higher usually indicate acceptable

internal consistency, therefore these results are good.

Validity analyses included an analysis of whether the factor structure of the

STRESS fitted the DSM-5 4-factor structure model of PTSD (American

Psychological Association, 2013) a confirmatory factor analysis was carried out

which failed to support that model and suggested a 2-factor model as best fit. This

was based on merging the 'intrusive' and 'avoidance' symptoms into one factor and

the 'mood' and 'arousal' into another. The lack of fit with the DSM-5 4-factor model

was interesting and suggested that justice-involved youth may manage intrusive

thoughts with avoidance reactions, and there is no real difference for such youth in

how they manage deregulated mood, thoughts or behaviour. Cruz-Katz also tested

for correlations between variables but there were no significant findings. An

interesting pattern of responding in the boys in the cohort was noted in that their

response patterns were different to the girls, i.e., they significantly under-reported

across the scales. The measure does not have an inbuilt validity scale and so results

were not able to confirm if the boys were suppressing their mental health screening

results.

Summary: Results for the main hypotheses were largely not supported, but

supplemental analyses combined with the results from the main statistical work did

show how respondents who met the criteria for PTSD endorsed significantly more

traumatic event exposures and greater levels of functional impairment than those

youth who did not meet the PTSD criteria. The lack of fit for the DSM-5 factor

structure is of concern, especially without other robust findings to support the validity of the STRESS as opposed to the DSM-5 model.

The Structured Trauma-Related Experiences and Symptoms Screener Methodological Quality Assessment Summary:

The overall methodological rating for the STRESS was 'doubtful'. The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: very good	*Rating: very good*	*Rating: doubtful*	*Rating: n/a*	*Rating: adequate*
Confirmatory Factor Analysis was performed with a large sample size.	ICCS were given for the scale's items, with Cronbach's alpha calculations too.	ICCs were reported but it was not clear if respondents were across the time period of the various scale administrations.	Measurement error was not reported by this study	The constructs for the STRESS were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.x The Trauma-Related Symptoms and Impairment Rapid Screen (TSIRS)

Measure overview: The Trauma-Related Symptoms and Impairment Rapid Screen (TSIRS) is a new tool designed to detect traumatic stress symptoms and exposure to high-risk characteristics of trauma exposure. The TSIRS does not screen for trauma

exposure but rather acknowledges in the instructions that most people experience one or more traumatic events in their lifetime and to avoid relying on a small number of items to screen for trauma exposure as a condition of PTSD risks yielding false negatives for youth who either tend to deny certain trauma exposures or fail to connect their unique experiences to the more general exposures described in the questions. The TSIRS is specifically designed to assess for PTSD.

The TSIRS is comprised of 10 yes-or-no questions and can be self-administered or read aloud to respondents. The first five TSIRS items map onto the four DSM-5 PTSD symptoms clusters with Criterion E represented twice. The other five items assess aspects of functional impairment, e.g. "I do not get along with family, friends or other people".

Statistical findings: The Grasso et al., (2019) study is the only study in this review reporting on the TSIRS, and limited evidence of the measure's reliability and validity was reported due to assessing the screen against a criterion tool being the stated aim of the study. This tool was being examined by the authors for its predictive utility in detecting probable violence exposure, against an existing 56 item self-report instrument, the Structured Trauma-Related Experiences and Symptoms Screener (STRESS) that corresponds to the DSM-5 criteria for PTSD.

In order to prove the reliability of the TSIRS internal consistency of the screen and describe the degree of the interrelatedness among the items, Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency. An Alpha value of $\alpha = .81$ was reported. Further reliability analysis was carried out with kappa

coefficient calculated to measure the inter-rater reliability on the items. However, all the kappa values were less than the expected 0.70 cut off.

The validity analyses included were done in depth due to the aim of this study being to prove the diagnostic utility of the screen. Therefore, a range of criterion validity measures were used and reported, although are not in scope for this review due to reasons outlined previously (see 2.3.7).

Summary: This study points the way for further work to establish the reliability and validity of the TSIRS as test-retest reliability is not yet available, as well as criterion testing against comparator instruments. Interestingly it appeared that having impairment items on a screen did not add any value to the findings above having items asking about symptoms.

The Trauma-Related Symptoms and Impairment Rapid Screen Methodological Quality Assessment Summary:

The overall methodological rating for the TSIRS was 'inadequate'. The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: n/a	*Rating: very good*	*Rating: inadequate*	*Rating: n/a*	*Rating: very good*
Not applicable as study was not seeking to	ICCS were given for the scale's items,	No correlation coefficients reported and K	Measurement error was not	The constructs for the TSIRS were clear as

test the structural validity and no such statistics were reported	with Cronbach's alpha calculations too	values were reported but all lower than 0.70	reported by this study	were the measurement properties of the comparator instruments in the sample

2.4.3.xi Trauma Symptom Checklist for Children (TSCC)

Measure overview*:* The TSCC (Briere, 1996) a self-report instrument used to assess for symptomatology related to posttraumatic distress in children and adolescents. The TSCC is comprised of six clinical scales associated with trauma exposure, four clinical subscales and two validity scales. The TSCC has been normed on a large sample of nonclinical populations with appropriate reliability and validity. The TSCC evaluates the impact of trauma as a manifestation of PTSD and related psychological symptomatology.

Statistical findings: The purpose of this study by Briere (1996), was to determine the utility of the TSCC in assessing for trauma symptomology among a sample of adjudicated youth. Due to the low sample size, n = 76 and male n = 30, statistical significance and generalisability is ,therefore, limited.

In order to test the reliability of the TSCC in being able to assess symptoms of trauma in those youth endorsing experiencing of trauma, a discriminant analysis test was conducted. This found the 'Anxiety' Scale had the greatest impact on the loading structure of the TSCC. A logistic regression was also carried out to predict trauma or no-trauma groups using the TSCC 'Anxiety' Scale. This reported statistically significant findings, indicating that the Anxiety Scale reliably distinguished between trauma and no-trauma.

Further reliability analyses were done with a series of one-way ANOVA tests to see if there were any differences on the TSCC profiles and the various offence types. A significant finding was reported for the 'Dissociation Fantasy' subscales across different groups of offence types. The internal consistency of the TSCC and the degree of the interrelatedness among the items, was reported as .88 for the clinical scales and .79 for the subscales. Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency.

Summary: This study was exploratory in nature due to no previous work having been done on the utility of the TSCC. The findings were tentative showing the complexity of assessing trauma symptomatology in this cohort, as the nature of the traumatic event and the child's experience of the trauma were influential in the expression of the symptoms of PTSD. The study was limited by its small sample and reliance on self-report measures.

The Trauma Symptom Checklist for Children Methodological Quality Assessment Summary:

The overall methodological rating for The TSCC was 'inadequate'. The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: n/a	*Rating: very good*	*Rating: inadequate*	*Rating: n/a*	*Rating: very good*

Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were given for the scale's items, with Cronbach's alpha calculations too	No correlation coefficients reported, and it was not clear if respondents were stable or in similar test conditions across the time period of the various scale administrations	Measurement error was not reported by this study	The constructs for the TSCC were clear as were the measurement properties of the comparator instruments in the sample

2.4.3.xii Trauma Scale for Juvenile Offenders (TSJO)

Measure overview: The TSJO was developed by Murray et al., (2013b) and the items are all based on trauma-related stress reactions. Due to its lack of validation so far, this study by Edner et al., (2020) sought to cross-validate the efficacy of the TSJO in detecting trauma exposure in the juvenile offender cohort. Whilst the development of the TSJO arose from MMPI-A validation work, the scale is not based on a particular diagnostic model as it seeks more to detect those young offenders who may deny having experienced childhood maltreatment, and so trauma related symptomatology.

Statistical findings: This Edner et al., (2020) study is the only study in this review reporting on the TSJO, and it was being examined to provide preliminary validation for its use with juvenile offenders.

The hierarchical logistic regression showed that the TSJO total score was the only predictor in the study that significantly contributed to the prediction of whether there was a reported trauma history. It predicted with 67.6% accuracy with an odds ratio of 1.42 indicating the sample were 1.42 items more likely to have a reported

trauma history for every one-point increase in total TSJO score. Chi-square tests of independence for the TSJO cut off score were statistically significant, indicating youth that exceeded a score of five (out of a total 17 points) were 1.83 times more likely to report previous trauma. Cronbach's alpha was reported at .67 which is just below the COSMIN threshold of α = .70 for adequate internal consistency.

Summary: Taken together, the results indicate the TSJO demonstrated adequate reliability and provided some diagnostic and clinical utility for classifying juvenile offenders by trauma.

The Trauma Scale for Juvenile Offenders Methodological Quality Assessment Summary:

The overall methodological rating for The TSJO was 'inadequate.' The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Full details of all the ratings for each COSMIN box rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: n/a	*Rating: very good*	*Rating: inadequate*	*Rating: n/a*	*Rating: very good*
Not applicable as study was not seeking to test the structural validity and no such statistics were reported	ICCS were given for the scale's items, with Cronbach's alpha calculations too	No correlation coefficients reported, and it was not clear if respondents were stable or in similar test conditions across the time	Measurement error was not reported by this study	The constructs for the TSJO were clear as were the measurement properties of the comparator instruments in the sample

		period of the various scale administrations		

2.4.3.xiii The Trauma Checklist (Dargis et al., 2019)

Measure overview: The Trauma Checklist was developed by Dargis et al., (2019) in this initial validation study aimed to provide a more accurate measurement of childhood trauma in incarcerated juveniles Other comparator measures used to assess the validity of The Trauma Checklist were the PCL-YV; (Forth, Kosson, & Hare, 2003) the MAYSI-2 (Grisso & Barnum, 2006) The Childhood Trauma Questionnaire (Bernstein, Fink, Handelsman, & Foote, 1998) and the Trauma Checklist (Dargis et al., 2019) as well as file information, e.g., psychiatric reports, risk assessment, social services reports, education reports etc. The Trauma Checklist (TC) consists of a seven-item scale based on seven specific forms of abuse (four typical of other well-validated measures and three added to better capture trauma experiences endured by this cohort of young males) and coded on a 0-2 scale. The TC is not particularly aligned to a diagnostic model, as the study sought to validate a clinical rated scale which integrates self-report, with file information and other correlates of trauma.

Statistical findings: The Dargis et al., (2019) study is the only study in this review reporting on the TC, and evidence of the measure's reliability and validity was reported. This tool was being examined by the authors for its structural validity.

In order to prove the reliability of the TC, internal consistency of the scale and describe the degree of the interrelatedness among the items, Cronbach alpha values of 0.7 or higher usually indicate acceptable internal consistency. Dargis et al., (2019)

used ICC guidelines to set a range of .5-.75 instead to reflect 'moderate' reliability. It reported evidence on the reliability of the TCC, calculating an ICC of 'moderate' internal consistency of $r=.69$. It should be noted this is less than the usual range of $0.7 \leq \alpha < 0.9$. However as there were only 7 items on the scale this may well have brought down the reliability score as alpha is a function of the number of items.

Dargis et al., (2019) reported a 'moderate to high' level of agreement between raters ($r= .88$), with ICCs for all seven TC items given (ranging from $r=.60$ to $r=.84$), evidencing another significant level of reliability. Further reliability analysis was carried out with Pearson correlations being calculated to examine the relationship between the TC and other validated measures of trauma and found that the TC total scores were significantly correlated with the CTQ total scores, significantly associated with the PCL-YV total scores, and significantly associated with PTSD as a clinical variable.

Validity analyses included exploratory Factor Analysis (EFA) using principal-components analysis (PCA) to determine the underlying factor structure of the scale. PCA loadings of the EFA were provided, with outcomes reporting a three-factor model which accounted for 63% of the variance. Dargis et al., (2019) reported the seven different types of trauma from the TC and which were most strongly correlated with each of the three-factors yielded by the PCA. Eigenvalues were given too (the sum of squared component loadings across all items for each component), to represent the amount of variance in each factor, i.e., type of trauma. No conclusive findings were presented for the ability to reliably use the factor scores as opposed to just the TC's total score.

Summary: This scoping study found evidence for the reliability and validity of integrating self-report and file information to assess the experience of trauma. The TC assessed both severity and chronicity of traumatic experiences and established a method for integration. It also offered a measurement of exposure to community trauma and traumatic loss. It does of course though describe a method that require resources to both source file information, carry out interviews and independently rate the TC. This may limit its value in clinical settings.

The Trauma Checklist Methodological Quality Assessment Summary: The overall methodological rating for The TC was 'inadequate.' The methodological rating for each of the COSMIN domains are in the table below, with the reason for that lowest score given. Details of the ratings for each COSMIN rating are in Appendix 6.

Structural Validity	Internal consistency	Reliability	Measurement Error	Hypothesis testing (construct validity)
Rating: adequate	*Rating: very good*	*Rating: doubtful*	*Rating: n/a*	*Rating: inadequate*
Exploratory Factor Analysis was performed with PCA with a large sample size	ICCS were given for the scale's items, with Cronbach's alpha calculations too	It was not clear if respondents were stable or in similar test conditions across the time period of the various scale administrations	Not able to be rated as measurement error was not reported by this study	While the constructs for the TC were clear, the measurement properties of the comparator instruments were not.

2.4.4 Methodological Quality Assessment: Step One

After the data extraction phase, the methodological quality ratings of the studies were reviewed using the 'worst score counts' principle (see Appendix 4 for the

measurement property criteria). Of the 16 studies included for review (two texts undertook two studies each, the rest were single studies) 13 were assessed as 'Inadequate' and three as 'doubtful'. Reflecting the exploratory nature of many of these studies, they were often robust in hypothesis testing and use of comparator instruments were applicable. Analysis was often done to test the internal consistency of the scales in question, with reliability and validity work done too, although the latter did not often meet the standard of the COSMIN benchmark. Table 4 below summarises the ratings for each COSMIN category.

Table 4

The Methodological Quality Assessment Summary

Measures N=12	Structural Validity Methodological Rating:	Internal consistency Methodological Rating:	Reliability Methodological Rating:	Measurement Error Methodological Rating:	Hypothesis testing for construct validity Methodological Rating:
BASC-2 SRP-A Zito, (2016) Overall methodological rating: Inadequate	n/a	inadequate	inadequate	n/a	very good
CAPS-CA Harrington, (2008) Overall methodological rating: Inadequate	n/a	very good	inadequate	n/a	very good
CROPS Flaherty, (2017) Overall methodological rating: Inadequate	n/a	very good	inadequate	n/a	very good
CROPS Edner et al., (2017) Overall methodological rating: Inadequate	inadequate	very good	inadequate	n/a	n/a
CROPS Edner et al., (2020) Overall methodological rating: doubtful	adequate	very good	doubtful	n/a	very good
CTQ-SF Dovran, (2013) Overall methodological rating: doubtful	very good	very good	doubtful	n/a	n/a

CTQ-SF Dudeck et al., (2015) Overall methodological rating: Inadequate	very good	inadequate	n/a	n/a	very good
DVERS Grasso et al., (2019) Overall methodological rating: Inadequate	n/a	very good	inadequate	n/a	very good
MMPI-A Cashel et al., (2000) Overall methodological rating: inadequate	n/a	very good	inadequate	n/a	very good
MMPI-A Murray et al., (2013) Overall methodological rating: Inadequate	n/a	inadequate	*:* inadequate	n/a	n/a
MAYSI-2 Kerig et al., (2011) Overall methodological rating: Inadequate	inadequate	very good	inadequate	inadequate	very good
STRESS Cruz-Katz, (2016) Overall methodological rating: doubtful	very good	very good	doubtful	n/a	adequate
TC Dargis, et al., (2019) Overall methodological rating: Inadequate	adequate	very good	doubtful	n/a	inadequate
TSCC Briere, (1996) Overall methodological rating: Inadequate	n/a	very good	inadequate	n/a	very good
TSIRS Flaherty, (2017) Overall methodological rating: Inadequate	n/a	very good	inadequate	n/a	very good

TSJO Grasso et al., (2019) Overall methodological rating: inadequate	n/a	very good	inadequate	n/a	very good

2.4.5 Psychometric Quality Assessment: Step Two

In this next step, the measures themselves were evaluated. This was conducted by assessing the quality of the psychometric properties of each of the twelve measures (see Table 5) using the criteria set out in Cordier et al., (2017) and Terwee et al., (2007) (see Appendix 5).

Table 5

The Psychometric Quality of the Measures of Trauma based on Terwee et al., (2007) and Cordier et al., (2017).

Measures N=12	Internal Consistency	Reliability	Content Validity	Construct Validity
BASC-2	NE	NE	?	NE
CAPS	-	+	+	+
CTQ-SF	+	+	-	+
CROPS	±	NE	±	NE
DVERS	?	±	+	0
MMPI-A	±	-	+	+
MAYSI-2	-	-	+	-
TSIRS	?	±	+	0
TSCC	?	NE	+	NE
TSJO	-	NE	NE	NE
TC	-	-	?	?
STRESS	+	-	+	-

+ = positive rating; ? = Indeterminate rating; - = negative rating; ±= conflicting data; NR = Not reported; NE = Not evaluated.

Internal consistency

Internal consistency was rated for 11 of the 12 measures with the BASC-2 not evaluated on this property in the study by Zito, (2010). Conflicting results were rated for three measures: the TSCC, the CROPS and the MMPI-A. The CROPS had a variety of different ratings in methodological ratings for some studies reporting an EFA along with acceptable Cronbach values in two studies by Edner et al., (2017) and Edner et al., (2020), and a combination of good alpha values, but a lack of factor analysis in another study (Flaherty, 2017). Similarly, the MMPI-A was reported by Cashel et al., (2000) to have a good Cronbach alpha for the PK subscale but no available factor analysis and Murray et al., (2013) also reported no factor analysis.

Six measures; the TC, TSIRS, DVERS, MAYSI-2, the CAPS-CA, TSJO, were all rated as 'negative' as factor analysis was not performed (due to structural validity not being the stated aim of the study). Internal consistency was rated as 'positive' for two measures; the STRESS and the CTQ-SF which rated 'positive' for having a confirmatory factor analysis reported along with acceptable Cronbach alphas on an appropriately sized sample.

Reliability

The psychometric concept of reliability at this stage is defined by COSMIN as 'the extent to which patients can be distinguished from each other, despite measurement errors' and so also includes inter-rater reliability. Test-retest reliability was not a feature of these studies; which reflects the typical practice of the early stages of test development, where resources are limited and therefore tend to be

focused on validation in the first instance. Reliability was rated for 10 of the 12 measures with the BASC-2 and the TSJO not evaluated on this property in the reporting studies. Conflicting results were reported for the TSIRS and the DIVERS with good ICCs reported but low kappa coefficient results.

Reliability was rated as 'negative' for six of the 12 measures. Four of those six were rated 'negative' due to a low reported ICC and those measures were: the TC, the MAYSI-2, the STRESS and the MMPI-A. The CROPS and the TSCC were rated as 'negative' as no statistical information was reported for reliability as evaluated by the COSMIN criteria. Reliability was rated as 'positive' for two measures, the CAPC-CA which had a good kappa value and the CTQ-SF as the reported reliability coefficients were all greater than .70.

Content validity

Content validity was rated for 10 of the 12 measures with the TSJO not evaluated according to COSMIN criteria (a glossary of scale abbreviations is available at Appendix 7). The TC was rated as 'indeterminate' as whilst there was clear description of the measurement aims, target population, and concepts being measured; only some participants completed all the measures (some did not complete the CTQ) which was not explained.

Content validity was only rated 'negative' for the CTQ-SF as although there were clear aims, the target population for this systematic review was not clearly delineated. Content validity was rated as 'positive' for eight of the 12 measures with all the following deemed to have sufficiently clear measurements aims, concept

descriptions and target population and clear item selection: the TSIRS, the DVERS, the MAYSI-2, the MMPI-A, the TSCC, the CROPS (for all three reporting studies), the STRESS and the CAPS-CA.

Construct validity

Construct validity was rated for only four of the 12 measures with the BASC-2 and the TSJO not able to be evaluated according to COSMIN criteria. Three measures were not able to be assessed as no information was found on this property for them: the TSIRS, the DVERS, and the TSCC. There were indeterminate ratings for three other measures as in all cases there were differently reported results: the CROPS, the CTQ-SF and the MMPI-A. In all cases it was due to having one study report no results for construct validity and another report positive results explaining more than 50% of the variance. The TC was again rated as 'indeterminate' due to the many measures cited in the articles being used as proxies for clinical variables rather than the TC being validated against them. Data is reported for a correlation with one measure, but that was only for a much smaller section of the original sample, for reasons not clear.

Construct validity was rated as 'negative' for two of the measures, i.e., the STRESS and the MAYSI-2 as the former confirmed less than 75% of the study's hypothesis and the latter's multiple regressions proved less than 75% of the variance. Construct validity was rated as 'positive' for the CAPS-CA as there were clear hypotheses and the results explained more than 50% of the variance.

2.4.6 Overall Psychometric Quality

The overall psychometric quality for each of the measures is presented in Table 6 below. The process adopted to reach a conclusion about the overall psychometric quality follows the process and criteria set out in Schellingerhout et al., (2012) and Cordier et al., (2017). The judgement was reached by combining the ratings of both the methodological quality of the studies using the COSMIN checklist (see Table 4) and the quality criteria for the psychometric properties of assessments (see Table 6). To assess whether the results of the measurement properties were positive, negative or indeterminate, criteria based on Terwee et al., (2017) was used (see Appendix 5).

Table 6

Overall Psychometric Quality of the Measures of Trauma

Measures N=12	Reliability property: Internal Consistency	Reliability property: Measurement Error	Reliability property: Reliability[3]	Validity property: Construct Validity	Validity property: Hypothesis Testing[4]
BASC-2 SRP-A	evidence NR	evidence NR	evidence NR	evidence NR	Indeterminate evidence
CAPS	Limited positive evidence	Indeterminate evidence	Limited positive evidence	Limited positive evidence	Limited positive evidence
CTQ-SF	Limited positive evidence	evidence NR	Limited positive evidence	Limited positive evidence	evidence NR

[3] Definition of Reliability here: the proportion of the total variance in the measurements which is because of 'true' differences among patients.
[4] Definition of Hypothesis Testing here: where pre-defined questions about expected correlations exist and at least 75% of the results were in accordance with the hypotheses.

CROPS	Limited positive evidence	evidence NR	Indeterminate evidence	Limited negative evidence	Limited positive evidence
DVERS	Limited positive evidence	Indeterminate evidence	Indeterminate evidence	Indeterminate evidence	Indeterminate evidence
MMPI-A	Limited positive evidence	evidence NR	Limited negative evidence	Limited positive evidence	Limited negative evidence
MAYSI-2	Indeterminate evidence	Indeterminate evidence	Limited negative evidence	Limited negative evidence	Limited negative evidence
TSIRS	Limited positive evidence	Indeterminate evidence	Indeterminate evidence	Indeterminate evidence	Indeterminate evidence
TSCC	Limited positive evidence	evidence NR	Indeterminate evidence	Indeterminate evidence	evidence NR
TSJO	Limited negative evidence	evidence NR	evidence NR	evidence NR	Limited positive evidence
TC	Indeterminate evidence	evidence NR	Indeterminate evidence	Indeterminate evidence	evidence NR
STRESS	Limited positive evidence	evidence NR	Limited negative evidence	Limited negative evidence	Limited positive evidence

When judging the overall psychometric quality of the twelve measures of trauma, no measure was rated as 'moderate' or strong evidence for either 'negative' or 'positive' results. This indicates the low methodological ratings achieved according to the COSMIN quality assessment in step one (see para 2.4.4) combined with the low psychometric quality ratings achieved in step two using the criteria described by Terwee et al., (2007) and Cordier et al., (2017).

Sixty ratings were reported using the five psychometric properties relevant to this review from Schellingerhout et al., (2012) and Cordier et al., (2017), and judged for each of the 12 measures.

When judging the overall psychometric quality of the measures;

- 16 of the 60 ratings were classified as 'Not Reported'.
- 17 of the 60 ratings were classified as 'indeterminate'.
- 17 of the 60 ratings were classified as 'limited positive', which was the highest rating achieved in this study.
- Eight of the 60 ratings were classified as 'limited negative'.

When judging the overall quality of internal consistency eight measures were rated as 'limited positive' due to the reported good alpha values and the scales being uni-dimensional. Only three of those same measures rated as 'limited positive evidence' for overall construct validity, as so few studies were able to explain the reported variance found in their results. Only two of those same measures were also able to be rated as having 'limited positive evidence' for reliability overall. The only measure with a majority of 'positive' ratings (albeit limited due to being only one study) was the CAPS. That study by Harrington (2008) reported good reliability with regards internal consistency and inter-rater agreement. It also reported good validity results with regards how the CAPS-CA, corresponded to other measures. Notably this was an entirely male and incarcerated sample with a good sample size.

2.5 Discussion

Application of the inclusion criteria to the results of the various searches identified 14 empirical studies for inclusion in this review. The pilot stages of the search strategy, with additional hand searching and reference mining of the included papers, along with author contact, allows confidence in concluding that all relevant research was included in this systematic review. Therefore, the conclusions below are based on a synthesis of all available evidence.

A mixed picture emerged from the findings, with the measures taking a different theoretical approach to the evaluation of trauma in this age group, and the studies taking different approaches to reporting the psychometric quality of them. Many of the measures were studied only once in this review, and the lack of replication studies and study quality issues for a number of tools limit conclusions regarding their application. With regard to how the reported findings fit with the research outlined in the Introduction (section 2.2), the data suggests that as per the overview of the limited research in this field, the empirical picture is still limited. However, it is clear from the very recent nature of many of the studies, that this work is developing at pace and although caution is needed in drawing any firm conclusions about measures at this point, findings are beginning to emerge about how some tools could be used in a custodial context with this age group.

As the findings reported in Table 5 indicate, no measure was able to be rated by the quality assessment method as any higher than having limited 'positive' or 'negative' evidence. This is due in part to the number of single studies looking at different measures, as well as the low methodological and psychometric quality ratings achieved in the previous steps of the quality assessment process. The only measure with a majority of positive ratings was the CAPS, which was an unpublished thesis by Harrington (2008) and so not peer reviewed. However, it used a robust psychometric approach, and a large, male, custodial sample to evaluate the tool and so was able to report good reliability with regards to internal consistency and inter-rater agreement, and good validity results with regards to how the CAPS-CA, corresponded to other measures.

2.5.1   Overview of quality assessment findings

A total of 14 texts met this review's inclusion criteria and reported on the psychometric properties of 12 measures of trauma for use with young males in a custodial setting. Three measures were evaluated in more than one study; the MMPI-A, the CROPS and the CTQ-SF, but this did not lead to any consistent findings of reliability or validity for these measures. For the other nine measures, only single studies were identified reporting on one or more of the psychometric properties. Furthermore, most studies only addressed a few of the various measurement properties being evaluated in this review with a range of one to five.

Using the COSMIN methodology to assess the methodological quality ratings of the 16 studies contained in the 14 texts (Appendix 4), resulted in the methodology of 13 studies being assessed as 'inadequate' and three studies as 'doubtful' (Mokkink et al., 2018). In the final step of determining the overall psychometric quality of the measures of trauma, many ratings were not able to be determined due to the poor methodological or psychometric quality ratings. This insufficient evidence should be interpreted with caution by the reader, especially if making clinical decisions about trauma screening with this cohort. The mixed evidence reflects how some studies did not conduct sufficient psychometric evaluation that could be assessed for its quality. For example, the lack of factor analysis to establish internal consistency, does not necessarily mean that those tools should be discounted from use. It does however suggest the psychometric qualities that warrant further and more rigorous analysis. Whilst understandable as it is an underdeveloped field at the point of review, studies have often focused on establishing criterion validity, cut off points, or inter-rater

reliability. Future studies will want to consider developing the evidence base with a focus then on establishing reliability in the form of internal consistency and possible measurement error and validity in the form of construct and content validity to ensure evaluation of the construct being measured.

2.5.2 Reliability evaluation

Evaluation of the reliability of the measures was reported in 10 of the 16 studies. Internal consistency was the most frequently reported psychometric domain for 11 of the 12 measures, with 11 of the studies achieving a 'very good' rating at this final step (only the BASC-2 measure did not report internal consistency). Evaluation of the factor structure was conducted in six studies for four of the measures, with the CTQ-SF and the STRESS achieving a 'very good' rating, the TC achieving an 'adequate' rating and the CROPS achieving an 'inadequate' rating.

When judging the psychometric quality of the internal consistency of the measures, there was a mixed picture with three measures rated as 'indeterminate', two as 'conflicting results' and four as 'negative', all affected by the lack of factor analysis attempted in these studies (see Table 5). Only two measures had 'positive' internal consistency ratings: the CTQ-SF and the STRESS. However, when judging the overall quality of internal consistency (see Table 6), eight measures were rated as 'limited positive' due to the reported good alpha values and the scales being uni-dimensional. These findings suggest that the evidence base is not yet strong enough to reach firm conclusions about the overall reliability of the measures in question. Whilst many studies had reported some evaluation of reliability, they tended to rely on Pearson's correlation (which perhaps is less relevant to clinical samples where

normal distribution is not expected), or Cronbach's Alpha which is a function of the number of items in the measure, meaning that high values cannot be assumed to be indicative necessarily of high internal consistency. As the measures were not sufficiently robust according to the COSMIN criteria, the researcher or practitioner seeking evidence on trauma measures for this group of people, should exercise caution in using tools currently in use for the wider age group, rather than for this custodial cohort.

2.5.3   Validity evaluation

Evaluation of the validity of the measures with regards to hypothesis testing was carried out in most of the studies (12 of the 16 studies) and for all the 12 measures. Ten of the 12 measures were judged to have 'very good' properties with regards 'hypothesis testing' (see Table 4). With regards to construct validity only four of the 12 measures had conducted factor analysis, with a 'very good' rating achieved for the CTQ-SF and the STRESS, and an 'adequate' rating for the CROPS and TC.

When judging the psychometric quality of the validity of the measures, both the CAPS and the MMPI-A achieved 'positive' ratings for both content and construct validity (see Table 5). All the others were either a mixed picture of 'indeterminate' ratings or 'negative' ratings. One measure, the TSJO had neither content nor construct validity reported, due to the aim of that study being to examine the predictive utility of the newly developed measure.

Finally, when judging the overall quality of each psychometric property per measure (see Table 6), 16 of the 60 ratings were classified as 'not reported' and 17

of the 60 ratings were classified as 'indeterminate'. This then contributed to an inconclusive outcome for being able to judge the measures. Due to the field of trauma assessment with young males in custody being nascent at this time, many of the studies in this review focused their statistical work on demonstrating a level of criterion-related validity or more precisely, predictive validity and often in terms of sensitivity and specificity or in reporting receiver operating characteristics. The availability of validated instruments is paramount to research and practice work in this field. Whilst this work is necessary to correctly classify those with trauma exposure and associated symptomatology, it is arguably not so important to a practitioner in such settings where trauma exposure in this cohort can often be safely assumed. However, without the empirical support for particular tools, any clinician runs the risk of sub-standard assessment and intervention, which in a criminal justice context has implications for legal challenge and misguided risk reduction work.

2.5.4   Trauma assessment with young males in custody

To date, the majority of research on trauma and juvenile offenders focuses on assessing whether or not juvenile offenders meet the criteria for PTSD (Ford, Chapman, Pearson, Borum, & Wolpaw, 2008; Kerig, Ward, Vanderzee, & Moeddel, 2009; Kerig, Bennett, Thompson, & Becker, 2012; Perkins, Calhoun, Glaser, & Kunemund, 2016). While the prevalence of PTSD is higher than community samples (Wolpaw & Ford, 2004), assessing for trauma using measures with a PTSD lens can limit the breadth of the trauma symptoms that would be reported otherwise. Of the 12 measures in this systematic review, eight were aligned with a PTSD model of trauma, and the other four were not aligned with any diagnostic model.

In addition to the potential difficulty of measures being predicated on particular diagnostic models, some instruments fail to capture both the range of traumatic events as well as the range of symptoms that would be reported. For example, there are some that only measure dissociation and depersonalisation symptoms rather than assess for all trauma symptomatology. Given the need to screen for the range of symptoms arising from trauma in this population, and to ensure an accurate understanding of the impact on the boy or young man that is not hinged solely on an adult understanding of PTSD, it is imperative that practitioners are equipped with measures that are valid, reliable, easy to use, and appropriate for their setting and population of interest. Considering the high prevalence of intellectual difficulty and acquired brain injury experienced by this group, tools must also be able to be easily accessible for them too.

2.5.5   Strengths and Limitation of the Review

This systematic scoping review appears to be the first such review to collate and synthesise the available literature regarding appropriate measures of trauma for this cohort, and to do so with a robust risk of bias checklist that is relevant to service user reported outcomes. It is likely therefore that this work will be of value to both future research work in this area as well as to practitioners searching the evidence base for guidance in this field. Other strengths also add to the robustness of this review and so the confidence with which others may use it. For example, it is based on a comprehensive search strategy, to ensure that both a variety of databases and non-database options were searched. It also uses the most widespread and comprehensive quality assessment tool to assess measurement properties of health

instruments designed for an evaluative purpose, as part of a three-step quality assessment method. This again offers the researcher or practitioner confidence in the objective benchmark being applied.

There are limitations to the review. The COSMIN methodology meant that any studies that looked at indicative items on sub scales had to be excluded due to not having a sufficiently one-dimensional construct available to be analysed with the COSMIN domains. Those studies tended to be ones that sought to develop or validate a screen for institutions to identify risk of PTSD, rather than a more exploratory understanding of the type and nature and extent of the trauma. Some of the included systematic reviews poorly reported the review process, outcomes and conclusions, and this fact may have led to the loss of some data. So, the strict application of the COSMIN methodology meant that there was a reduction in reporting of the quality criteria according to COSMIN, whereby at the final stage of overall psychometric quality evaluation, only three of the possible seven criteria were evaluated for each study overall. Whilst this reflects the studies in scope, and the early stage of research into such measures, a more robust and inclusive evaluation of all the criteria would have been preferred, although was not possible at this point.

With regards to limitations, a methodological limitation is that a sole researcher undertook the risk of bias quality assessment work. Whilst that is a natural feature of doctorate work, it would have been beneficial to have a second researcher cross check the texts for a more robust quality assessment process. To mitigate against any possible bias introduced because of this, a search strategy and review protocol was agreed before data collection started to reduce the chances of bias, and

discussions were had in supervision to ensure any borderline studies were considered. The inclusion/exclusion screening was also checked with a peer student to ensure inter-rater reliability at that stage too.

2.5.6 **Practice implications**

This review of the available research of trauma measures for this cohort allows for a limited overview of those measures and their psychometric properties. The studies all argue for the need for measures to be developed, normed, validated and standardised for adolescents in custody. There is general agreement now of the dangers of using adult measures to assess for strict diagnostic frameworks of trauma, e.g., PTSD. Whilst the studies in this review do not warrant recommendation yet for use within practice, the direction of travel is clear. Researchers are now seeking to avoid measures simply seeking to establish trauma exposure (as that can be safely assumed for most in this cohort), are seeking to avoid a traditional PTSD model of trauma (as adolescents tend to express their trauma symptomatology in diverse and complex ways) and understand the need to use measures that are developmentally appropriate and suitable for males and females (due to the diversity of trauma expression by the genders). As that work progresses, this will need replicating with young males in custody too, in order to ensure the findings hold true for this cohort. This is particularly important as this cohort continues to change and reflect sentencing practices, e.g., longer sentences at younger ages, a higher representation of males from an ethnic minority in the UK.

When evaluating the overall psychometric quality of the 12 measures of trauma, none could be assessed as demonstrating an overall strong 'positive' or 'negative'

psychometric quality. The highest rating achieved in this review for the measures was only 'limited positive' and then for only 17 of the 60 ratings and 'limited negative' for only eight of the 60 ratings. Suffice to say, these findings evidence that trauma measures for use with young males in custody is not yet sufficiently well validated and so practitioners should be wary of using such measures at this point in time, particularly if considering tools for group level screening or administration. However, the quality assessment undertaken for the tools evaluated by the studies in this review, do offer the practitioner more detail on how to make best use of particular tools. This might either be in combination with others or as part of a wider case formulation approach.

When considering practice implications arising from this review, it is of note that when reviewing the studies, most authors tend to be focused on the conceptual and statistical properties of their measures, and issues of the practicality of the instrument are rarely discussed, e.g., administrative or respondent burden for example. This however is of key importance to readers looking for tools to use in clinical practice. Whilst an overall quality score is helpful but not necessary (as it assumes all measurement properties are equal) detailed examination of each tool's particular psychometric features as reported in 2.4.3 will be helpful to the practitioner in this regard.

2.5.7   Research implications

Ongoing research is needed to take forward the problem of a lack of robust measures to screen for trauma with young males in custody. This will need to be informed by the ongoing empirical studies which are updating our understanding of

how trauma is experienced and then expressed in the various developmental stages in the under 25yrs age range. This should also be informed by how cumulative trauma is worthy of different assessment and intervention than single incident, post-traumatic stress. Ensuring that such research includes the person centred and phenomenological approach is vital to capturing the nuances in this field.

It will be important to ensure that future research design and methodology is able to explore for the different experiences of all the participants, with particular regard to culture and ethnicity. Whilst some of the studies in this review reported an ethnicity breakdown, this was not always done and when done sometimes used ethnic breakdowns specific to the country of origin. As the evidence continues to demonstrate the overrepresentation of young men from black and minority ethnic backgrounds in the UK criminal justice system, measures assessing for trauma exposure and symptoms must evidence their ability to account for how different groups of people respond to such measures. Whilst gender is already determined to play its part in how people report previous trauma or current symptoms, it remains to be determined to what extent cultural factors also play their part. Measures that do not take account of collective racial trauma may well also fall short of fully describing how this cohort experience both single traumatic incidents and intersecting traumas.

Moreover, the measures also now need to account for the other types of categories of what can be experienced as traumatic, that pushes the frontier beyond the usual ACE10 approach (Felliti et al., 1988). As this cohort of boys and young men in custody are identified as more likely to have committed serious offences, more likely to be sentenced to lengthy sentences of 20 years or more, and to be

sentenced as part of joint enterprise legislation; this all points to the need for measures to be able to account not just for previous trauma but for ongoing trauma exposure by dint of custody and length of sentence.

2.6 Conclusion

This review synthesised the extant research regarding the psychometric properties of measures available for use to assess for trauma exposure and symptomatology with adolescent males in custody. This systematic scoping review reported evidence of the quality of psychometric properties of the twelve instruments used to measure trauma with the targeted population. The COSMIN taxonomy, (Mokkink et al., 2018) was used to rate the reliability and validity information reported about the instruments.

A varying degree of evidence was reported for the psychometric properties of the trauma measures which led to an inability to recommend any measure for use in practice. As trauma measures for this cohort are not yet well validated, there is scope for further empirical work to inform this field. Such measures will need to adapt to the changing type of trauma exposure experience by the boys and young men in this sample, as well as the complexity of expression of that trauma at various developmental stages.

Chapter 3 Young male prisoner's experiences of trauma using IPA: 'Trauma is every day'

3.1 Abstract

Introduction

This study explores the impact of trauma as experienced by 18-25-year-old men in prison, serving long sentences of more than 10 years, and whether and how the experience of their offence and sentence length was part of that. Coping responses were explored too.

Method

An IPA methodology was used to analyse the results and produce themes. These methods suited the exploration of how young men experience and process trauma and for offering an encounter where they could discuss their experiences in their own terms.

Findings

Participants discussed their experiences across three overarching themes, 1. 'Conceptual Confusion', 2. The 'Impact Now of Trauma' and 3. 'Settling'. The study demonstrated that it is possible to discuss the concept of difficult life events with young adult male prisoners, although this was more difficult for some participants than others.

Discussion

The study provides a greater understanding of the experience of past and present trauma for young men in prison, offering a phenomenological lens on those who have been harmed, have harmed others and are harmed now by being in prison. The study provided support for the existing literature around the experience of trauma in young men but added further insight into the challenge to assessment and intervention work with this cohort. The study offers practitioners and policymakers insights into the need to avoid assumptions of homogeneity due to age, and ideas for what might be helpful to these men whilst in prison.

3.2   Study Rationale

Young adults account for approximately 21% of the total adult male prison population and are likely to have recently experienced more adverse life experiences (ACEs) of abuse, neglect, bereavement, violence and having been in care than young men in the community (Blades, Hart, Lea, & Willmott, 2011; Her Majesty's Chief Inspector of Prisons, 2011; Lader, Singleton, & Meltzer, 2000). Therefore, understanding the prevalence, nature and meaning of the experiences of this vulnerable group and how they continue to be affected is significant for those charged with holding them safely in custody. Research work is needed to explore the phenomena of trauma as it is experienced by this particular group and to develop psychologically informed models of understanding that include the phenomenological perspective.

3.2.1   The impact of trauma

Recently, a large amount of research has indicated that young people exposed to multiple forms of adversity are more likely to evidence higher levels of delinquent behaviour and externalising of distress than those exposed to less adversity (Kretschmar, Tossone, Butcher, & Flannery, 2017; Connolly, & Kavish, 2019). As a result, many researchers argue that childhood adversity wields a long-term influence on patterns of offending across adolescent development (Bonner, DeLisi, Jones-Johnson, Caudill, & Trulson, 2020; Farrell and Zimmerman, 2017). Studies have also demonstrated what appears to be a 'dose–response' relationship between the number of times a young person was exposed to trauma and the number of later difficulties (Copeland, Keeler, Angold, & Costello, 2007; Hodges, Godbout, Briere,

Lanktree, Gilbert, & Kletzka 2013). Therefore, there is evidence to support the expectation that the negative effects of trauma may increase in the context of multiple traumas. A recent study by Daniunaite et al, (2021) however, showed that was not always the case and that it is the type of trauma, e.g., interpersonal trauma that is most likely to leave its mark, and indeed most studies examine the impact of child maltreatment ACEs on adult outcomes. However, less is known about the impact of other types of childhood maltreatment, e.g., emotional neglect linked to violence in later life.

Research continues to develop, but it is now better understood how exposure to early adversity affects developing brains and bodies, affecting the brain's reward centre, and inhibiting the prefrontal cortex, which is necessary for impulse control and executive function. Studies to date suggest that trauma during sensitive neurodevelopmental periods like adolescence, for example exposure to violence, can exert maximal effects on the development of specific brain regions (Andersen & Teicher, 2008; Bale & Epperson, 2015; Curley & Champagne, 2016; Pechtel, Lyons-Ruth, Anderson & Teicher, 2014; Tomoda, Polcari, Anderson & Teicher, 2012). Koenigs and Grafman, (2009), found physical changes to the neurological pathways of the brain, centring on the amygdala and ventromedial prefrontal cortex of the brain; areas which help process fear and the regulation of negative emotions.

There are still gaps in the literature despite the evidence base linking childhood adversity and adolescent delinquency. It is still not known if any correlations are direct effects or because children who are more likely to report multiple forms of adversity are also more likely to engage in higher levels of delinquency because of

some other variable. Possible co-founding variables might be genetic vulnerabilities, pre-natal factors, familial confounds, (Ball, Arseneault, Taylor, Maughan, Caspi, & Moffitt, 2008; Connolly & Beaver 2016; Schaefer, Moffitt, Arseneault, Danese, Fisher, Houts, & Caspi, 2018; Kavish, Connolly, & Boutwell, 2019) or developing hormonal systems (Bilbo & Schwarz, 2012).

Not all those exposed to childhood adversity are at an equal risk for problematic developmental trajectories according to Masten, (2001). Many young people exposed to an adverse environment have been shown to demonstrate resilience and an ability to thrive (Cicchetti, 2010; Luthar, Cicchetti, & Becker, 2000). The traditional view assumed that development evolves through predetermined stages that are based on the adult's history. Epigenetics research however, is instead indicating how environmental conditions can interact with genetic expression during development, which helps explain adaptive processes (Von Bertalanffy, 1968; Cicchetti & Rogosch, (1996).

With regard to the factors at play in the impact of offending, generally the research field tends to focus on amnesia for crime and to suggest dissociation as the cause of that amnesia. Brewin et al.,(1996), suggested that the overwhelming nature of traumatic events disrupts cognitive processing, which in turn means a person has poor memory for those events (Ehlers & Clark 2000, Horowitz, 1976). Problems in the way the trauma is laid down in memory are said to lead to typical difficulties such as intrusive memories and poor intentional recall. More research is needed into the psychological consequences of offending, not only to capture the experiences of long sentenced prisoners, but particularly the younger cohort.

3.2.2   The link between trauma and offending behaviour

Young men involved in the CJS, represent one of the most pervasively traumatised populations. The physical and emotional consequences of childhood abuse and neglect continues to affect development through childhood, adolescence and adulthood, with later outcomes which go some way to explain justice-involvement for many. Many young adults in the CJS are more likely to have experienced victimisation at the hands of caregivers, which then impacts upon their physiological and behavioural development and predicts the presentation of heightened threat perception (Herman, & Harvey, 1997; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005; Wojciechowski, 2021).

Research evidence has demonstrated effects on emotional regulation, unpredictable behaviour and a lack of trust and connection within relationships (Webermann, & Murphy, 2019). Wright and Liddle's review of the key research (2014) also showed how early child maltreatment affects emotional control, finding key developmental differences for those young adults with a trauma history, for example behaving recklessly and reacting aggressively to provocation. Studies report other effects too such as emotional numbing, a persistent low level fear state, behavioural impulsivity, being hyper vigilant, hyperactive, withdrawn and depressed (Kerig, Bennett, Thompson, & Becker, 2012; Kerig, 2019). Research has also found high level of cognitive difficulties such as limited planning skills and difficulties responding flexibly to challenging situations (Anderson et al., 2006; Pontifex et al., 2009), difficulties associated with brain development such as working memory and attention (Tonks et al., 2008). In summary, the literature suggests that young adult

prisoners are more disinhibited and make poorer social judgements, especially in hostile situations (Williams, 2013; Milders, Fuchs & Crawford, 2003).

A number of studies have looked at the impact of ACEs on offending behaviour (see review by Mulcahy, 2018), and this is supported by findings in both UK and US samples which again suggested that ACEs may lead to a heightened risk of antisocial behaviour (Boswell & Wedge, 2002; Craig, Piquero, Farrington, & Ttofi, 2017; Fox, Perez, Cass, Baglivio, & Epps, 2015). Although most of the prevalence research has focused on non-UK or female only prison samples, UK prison surveys of adult male prisoners have also reported high rates of childhood abuse and family violence. For example, in research by Williams, (2012), 27% of male prisoners reported experiencing abuse and 40% reported observing violence in the home as a child. These findings suggest high numbers of prisoners with trauma histories which may impact on their functioning, behaviour and daily interactions with others. Further to this, when considering the possible effects of trauma on offending, research on youth who had committed more serious offences suggests there may be a correlation between serious offending and serious, ongoing abuse (Fox, et al, 2015). Research findings relating to young violent offenders (murder or other serious offences which would gain a 14 year sentence if an adult) show that up to 90% of the sample population (Section 53 offenders are those sentenced under the Children and Young Persons Act 1933, which pertains to the criminal justice processing and management of juveniles charged with serious crimes) had experienced abuse and/ or loss (Boswell, 1996).

In summary, childhood physical abuse and neglect increases the likelihood of committing a violent crime as an adult (Cuadra et al., 2014; Wang et al., 2012; Widom & Maxfield, 2001). It also appears that it is emotional abuse rather than neglect which is related to adulthood criminality (Cuadra et al., 2014; Edalati et al., 2017). This empirical study is not designed to prove causal links between trauma and adolescent delinquency, or between certain types of trauma and types of offending. Instead, it takes as a given that there are high rates and types of trauma evidenced in this cohort, and that the ongoing experience of events such as committing violent offences and receiving very long custodial sentences are likely also impactful. The study rationale therefore is to better understand the meaning of those experiences from the perspective of the young man himself, post offence and sentencing.

3.2.3   The trauma of offending

There is limited research regarding trauma from having perpetrated a crime, and that which exists has mainly been conducted with white males in the UK, in either male forensic psychiatric settings (Pollock, 1999), with adult male, violent offender populations (Badenes-Ribera, Molla-Esparza, Longobardi, Sánchez-Meca, & Fabris, 2020) or under 18 year olds (Bailey, 1996; Bailey, Smith, & Dolan, 2001). The latter meta-analysis, reported the difficulty in reviewing such a nascent field, with the problem of differing measures of trauma and adversity, scoring protocols and iterations of psychiatric classifications, all likely leading to different prevalence rates. The impact is clear though, in the reports by young, violent perpetrators of hyperarousal, intrusive thoughts, anger, nightmares and images of the events that

led to the offence (Caffo & Belaise, 2003; Dolan & Smith, 2001; Eitle & Turner 2002; Hagan, 1997; Nader, 2004; Overstreet & Braun, 2000).

Welfare & Hollin (2012) reviewed involvement in extreme violence and violence-related trauma for young people. They noted how there were two bodies of literature; firstly, that which reviewed the association between childhood abuse and the development of violent conduct and secondly that which reviewed the effects of involvement in perpetrating acts of violence. They found sufficient evidence to indicate that childhood abuse is associated with later violence. Glimpses of the impact of violent offending is evident also in prevalence studies such as Boswell, Wedge, and Price (2003), which explored trauma in Section 53 offenders and found their sample also reported impact from their own offending. In an effort to provide psychological explanation for the trauma-offending trajectory, Evans, Eherls, Mezey and Clark (2007), conducted interviews with a large UK sample of young offenders convicted of serious violence. This and the following study aimed to investigate the specific relationship between recall and emotional and cognitive factors for this cohort, aiming to gauge PTSD symptom severity. Their participants reported significant intrusive memories of the offence and ruminations relating to the same. Further to this, Evans et al, (Evans, Ehlers, Mezey &Clark, (2007) reviewed studies of distressing memories relating to the commission of violence, and found a focus on intrusive memories in violent offenders (albeit those detained in hospital not prison settings). In particular, the most distressing intrusive memory was when the perpetrator realised they had hurt the victim more than intended. This group also had significantly higher reports of feeling helpless and fearful at the time of the assault. This finding has been replicated with evidence that excessively negative cognitive

appraisals about the event are associated with the persistence of intrusive memories of trauma in victim samples (Mossière & Marche, 2020).

3.2.4   The trauma of prison

Further to the possible impact of the perpetration of offences, is the possible impact of sentencing and incarceration on young men. The custodial environment itself can exacerbate underlying traumatic related difficulties. Previous psychological research describes Post-Incarceration Syndrome and institutionalisation among life and long sentenced prisoners (Liem, & Kunst, 2013). This work evidenced the cluster of mental health difficulties associated with long sentences and specific personality impact, for example not being able to trust others, impaired decision making, difficulty in social interactions, and feelings of not belonging in social settings. A later systematic review by Piper and Berle (2019) found high rates of traumatic events during time in custody in the studies reviewed and it appeared that any individual could be impacted detrimentally regardless of previous mental health concerns or length of time in prison. The early period of long sentences appear to be particularly difficult for convicted prisoners as they are dealing with the shock of entry to custody, uncertainty about their surroundings, dehumanisation, and the loss of safety (Gibbs, 1982; Goffman, 1968). Prisoners in the early years of their sentence reported experiencing trauma on three levels (Crewe et al., 2020); the shock of receiving the long sentence, needing to re-consider their identity in light of their offence, and then reconsidering their futures. This kind of criminological and ethnographic research method is a useful framework to consider the challenges to identity and survival for this cohort (Crewe, 2011). In addition, this work maps onto

the psychological pains as described by Warr (2016) and Cox (2011) in how young

men respond to the perceived challenge to their agency of being in custody.

Imprisonment is undoubtedly also traumatic for young adults and coercive

practices that are common in custodial facilities may continue to expose the

individual to trauma (LeBel & Goldstein, 2006). However, despite the amount of

research examining the association of trauma with aggression and violence; few

studies have focussed on a UK prison population, which is needed to ensure that

legal, institutional and cultural based differences are taken account of. That which

has been done throws up interesting and related findings. An important study by

McCallum (2018) explored the association between PTSD and violence against the

person, in a UK Young Offenders Institute, and found that indicators of PTSD were

significantly associated with violence in prison, although such indicators were not

found to be significantly associated with having a violent conviction. Other studies

have explored adaption in custody for these young men and the factors relevant to

that experience. Murray (2020) focused on young male prisoners' experience of time

in prison and described a "gendered discourse" around survival in custody where the

masculine identity was key to adaptation. Similarly, Jarman (2020) found a varying

pattern of adaptation depending on age as well as other variables such as offence

type and sentence length. Likewise Tynan (2019) described a process of struggling

with a loss of identity in prison, perhaps felt more powerfully by those adolescents in

the midst of an insecure transition (see also McDonald, 2016, for a study with

adolescent asylum seekers). More focused research with this age group and in this

setting by psychologist researchers would add greatly to our understanding of the

psychological processes pertinent to this process of adaptation.

3.2.5   Understanding what trauma means to young men serving long sentences

HMPPS has seen a growing population of young men receiving very long sentences for violent and/or sexual offences. Whilst the overall number of young men being sentenced is decreasing, the length of sentence is increasing for violent and sexual offences. Research by Hulley et al, (2016) reported a growth in average sentence length in the long-term population over recent decades, from 12.5yrs in 2003 to 21.1yrs in 2013. There is an increased understanding of how long, custodial sentences have a significant psychological and social impact on the individuals receiving them. Research suggests this affects psychological well-being and custodial behaviour, and may be more difficult for those young men early on in their sentence, as they have yet to develop strategies to support them in adapting to life in custody and may be more likely to have limited emotional and behavioural controls anyway (Jewkes et al, 2005; Tynan, 2019).

The body of evidence demonstrates that the current cohort of boys and young men in custody are more likely to have experienced prolonged and multiple types of trauma, have committed very serious offences, be more likely to be sentenced to lengthy sentences of 20 years or more, and be sentenced as part of joint enterprise legislation (which allows multiple defendants for the same crime to share culpability). Therefore, this points to the need for services and practitioners to be able to respond to the needs and risks posed by this cohort. It appears that research in this area is limited so far as studies that offer an exploratory and interpretative account of the young men's experiences. This may be due in part to the UK being one of only three

states that sentences young people indeterminately, with the other two rarely making use of the sentence. There is arguably a limitation in the quantitative approach in offering only indications of the amount of trauma experienced, without clinical information about the nature or impact of those experiences. Whilst the ACEs research has provided a significant foundation for understanding negative childhood events, the next steps are to take more account of the key factors in what it is that makes an event negative for any one individual. Similarly, the current trend in research to better understand the impact of co-occurring adversities and how different adversities are likely to have differing mechanisms through which they affect outcomes, will benefit the field accordingly.

What is still largely absent from the evidence base, is a wider read of the findings in the context of the political, social, and cultural context, e.g., trauma such as violent racism or socio-economic related trauma. Whilst studies have informed our understanding of how those from minority backgrounds may be at greater risk for trauma exposure and mental health difficulties, racial differences are not often studied in the context of trauma. Recent work (Wamser-Nanney, Cherry, Campbell, & Trombetta, 2021), with an under 18-year-old sample found that Black children endorsed a greater number of trauma types and were more likely to have experienced community violence than White children. Further research would be helpful in this field to explore the impact of racial discrimination relative to other ACEs, helping determine how complex trauma may have a differential impact by ethnicity, in order to understand how to use the most appropriate screening and intervention options.

3.2.6 Summary of study rationale

The relevant academic literature underpinning this study encompasses a number of academic domains and disciplines. It is informed by empirical work examining the prevalence, type and impact of trauma found in this particular cohort as well as the links with offending. It is also strengthened by the recent research and commentary around the difficulties in diagnostic approaches and definitions. There is no unifying theory that brings all those aspects together, with researchers and practitioners instead considering the mediating effects of trauma for each aspect of their particular study. Clearly though, trauma is an insufficient term to describe the complexity of the range and type of experiences it refers to.

Much of the empirical work is psychologically informed and theoretically driven, including the associated research work into coping and adaptation. However, the majority of the research endeavour into understanding the possible traumatic impact of both perpetrating a serious offence and receiving a very long custodial sentence has been criminological and ethnographic in discipline and method. This brings about differing but equally useful conceptual frameworks of understanding. Whilst the psychological work has focused on factors at the individual level that explain how groups of people experience and adapt to adversity, the criminological work has focused on wider concepts such as the 'pains of imprisonment' (Sykes, 1958) to elucidate the key deprivations of prison life. This multi-faceted approach is useful nevertheless to the forensic practitioner, seeking to understand the wider context to individual assessment and intervention work in custodial settings (Haney, 2013) where trauma can be a key responsivity barrier.

3.2.7   The current study and specific aims

This empirical study aimed to explore how young men in prison understand their experience of traumatic events, and whether and how the experience of their offence and sentence length was part of that. Whilst much of the research has been to identify cohort-level risk factors, this is not sufficient to understand the individual differences and presentations common in forensic practice. This study aimed to better understand the meaning of those experiences from the perspective of the young man himself, post offence and sentencing, to take forward the limited state of research in this field but not seek to test theory at this point. The explorative and sensitive nature of living through trauma requires methods that offer participants the possibility to recall and tell about their experiences in their own terms. In order to explore this as fully as possible the terminology was used in all interviews of 'difficult life events' in order to not offer any judgement about whether such events might have been experienced as traumatic. The specific aims and objectives are therefore as follows below.

Aims

1. To explore the impact of trauma as experienced by a cohort of 18-25-year-old men in custody serving long sentences of more than 10 years.
2. To explore and further understand the interface between understanding of trauma and offending behaviour for this cohort.

Objectives

1. To explore whether participants identify differential impacts of differing trauma types.
2. To explore whether the frequency of traumatic event is of importance.

3. To explore whether the 'dependency' of the traumatic experience makes any difference to the experience of trauma, i.e. if feeling responsible for the trauma (e.g., leaving home and being homeless) leads to different coping responses.
4. To inquire whether the participants include the impact of their offence as traumatic.
5. To outline and explore whether the participants include the impact of sentence length in their perspective.
6. To explore with participants their coping responses to their experience of trauma.

3.3 Method

3.3.1 Ethical approvals and specific considerations related to risk

Research approvals for this study were obtained from Her Majesty's Prison and Probation Service (HMPPS) National Research Committee, Nottingham Trent University Research Ethics Committee, and from relevant Prison Governors. Considerations of being an insider-researcher informed all applications (Costley & Elliott, 2010) with regard to how perceived power might affect participation and results, as well as ongoing boundary management in professional relationships with each participant and associated professionals (see Warr 2018 for views on the way relationships between psychologists and prisoners are affected by the power and authority their role entails).

The researcher for this study was governed both by their regulatory body the Health Professions Council and their professional body The British Psychological Society. The latter and it's Code of Human Research Ethics (2014) was adhered to at all times. In terms of GDPR (EU law, 2016) and Prison Service policy requirements, all sensitive personal information was kept confidential, and subject to

the seven key principles of requirements under the legislation. Full consideration was given to how discussions around consent and confidentiality were had with all participants as part of an ongoing process (Allmark et al, 2009). Steps were also taken to mitigate the risks of interviewing people who may be unable to give informed consent or for whom it would have been inadvisable to interview at that time. All work undertaken as part of this research study was informed by an understanding of the need to be attentive to the risks of safety and confidentiality for all participants while at the same time promoting well-being, dignity, and autonomy (Seedat, 2004). Seedat argued that some distress or discomfort is arguably inevitable in trauma-focused studies and should be allowed, although it is rare for post interview distress to be reported. However, what constitutes acceptable discomfort or risk needed to be balanced with the value of conducting the study and for that to be fully explained to participants beforehand. Becker-Blease (2006) argued that researchers tended to overstate survivors' vulnerability and studies in various populations have also found that the majority see research participation as beneficial, e.g. able to talk without being counselled (see Newman & Risch, 2006), and of more benefit than simply answering a survey (see Ruzek & Zatzick 2000).

3.3.2   Participant recruitment

The participant recruitment process was designed to add confidence to the ongoing care and protection required for the participants due to the nature of the research. Purposive sampling was required to ensure the particular cohort could be targeted, i.e. the particular age range and the sentence length being targeted. To ensure that participation in this research endeavour was rewarded and not taken for

granted by dint of being vulnerable by captivity, a small reward was offered to those participating. This was in line with HMPPS policy and Hanson et al's., (2012), review of the ethical and practical concerns with providing incentives to prisoners. All potential participants were given sufficient information about the research, i.e. a research information sheet and a research consent form (see Appendix 9 and Appendix 10). This was in an accessible format which had been piloted with two young adult prisoners and their interviews used as part of the final analysis.

In all cases, as the study was limited to one site due to the global pandemic, restrictions were put in in place to protect the health and safety of all parties and where the researcher could be contactable and access the HMPPS electronic notes for each participant. This led to an updating of the consent form (see Appendix 15) to ensure participants understood steps being taken to mitigate any risks of infection or periods of isolation. It is important to view consent as a process to better take account of how interviews sometimes stray into areas a participant was not anticipating, or who might use a compromising anecdote. Therefore, there was an ongoing need to be alert to potential problems and ensure participants were protected where possible from any adverse consequences. Participants were given ample time to make their decision, supported by accessible consent and information sheets (see Appendix 10). To acknowledge the possible impact of the interview discussions, the researcher made a clear demarcation at the end of each interview to bring the interview to an end, with a change in tone and content to the debriefing conversation. Each participant was also reminded of the usual prison arrangements for speaking with a Listener (a Samaritan trained peer), access to the Samaritans phone, and their wing officer or key worker.

3.3.3   Sample size

Nine young adult males engaged in this study, which is sufficient to provide for robust qualitative data analysis (Guest et al., 2006). In determining an adequate sample size for this study, the work of Guest et al., (2006) found that the majority of analytical codes supporting the range of overall themes were apparent within the first six interview data sets. Review papers suggest varying ranges for reaching sufficiency in qualitative studies, with six being the minimum amount (e.g. Morse, 2000) and a range of six to eight when homogeneity within the sample is achieved (Kuzel, 1992). It is suggested that the greater the homogeneity, the sooner data saturation is reached, although the guiding principle is to construct a study that will yield rich data. With the IPA method, importance is placed on small sampling, and using purposive sampling to ensure the homogeneity of the study sample (Smith et al., 2009). Homogeneity was achieved in this study by recruiting those who were being held in prison custody, all within one YOI and serving sentences longer than 10 years.

3.3.4   Procedure

The researcher conducted a brief literature review to inform an interview schedule. A semi-structured, interview based research design was adopted for this study (Appendix 11) and designed following guidelines by Smith et al. (2009), to ask questions about the participant's interpretation of the impact of trauma, including custodial adjustment and post offence impact. The schedule asked open questions around the six research objectives in para 3.2.10 and was piloted with the academic supervisor to check for timing and content. The design of the interview took account

of usual IPA protocols about using open questions to elicit discussion around the subject area, allowed exploration of the significant areas, as well as drawing the participant's attention to possible other experiences, e.g., the impact of a long custodial sentence.

The interview schedule included questions exploring not just why, but 'how?' to elicit responses from participants that focused on activities and processes they engaged in. This method aims to avoid assuming typologies of people, and possible defensive reactions provoked by repeated 'why' questions. As Becker (1998) argued, thinking with research participants about processes can be another way to think about causes and can encourage creative and multi-dimensional ways of thinking about the thing being studied. Interviews ranged in length from 50 minutes to one hour and 30 minutes. The concentration span of most young men being interviewed in a noisy, prison environment does not usually lend itself to any longer. Each participant was interviewed separately for the consent process, again on at least two occasions to go through the interview schedule and then again for participant verification where possible. The interviews were audio-recorded in full using an encrypted Dictaphone and transcribed the same day, assuring anonymity of records and contemporaneous transcription. Following 12 interviews (not including the separate consent interviews), all were successfully transcribed, totalling nearly 20 hours of interview data. Transcription focussed on the words used, and any laughs, sighs, pauses or other verbal sounds that signified unspoken meaning (orthographic transcription), with identifiers removed at this point.

3.3.5   Participant verification

To ensure the credibility of the use of IPA in any research work it must show sensitivity to context; analytical rigour and coherent narrative. Therefore, various strategies have evolved to establish trust and credibility in IPA including participant verification where the participants are invited to comment on the researchers' interpretation of the data. Methodological techniques such as participant verification, prolong engagement with participants and have been proposed to ensure dependability, credibility, and transferability in qualitative studies (Hadi & Closs, 2016).

Smith et al., (2009) cautioned against member checking as arguably it could undermine the quality of results and is just as prone to being biased by personal preferences or needs as is researcher interpretation; where there can be a tendency on the part of participants to de-emphasise or deny unflattering or less desirable findings. However, the experience of having participants who offer additional insightful points after the formal conclusion of the interview appears to be more common now (Hadi, 2016), and was carried out in this study, with most of the participants taking up the offer of a final discussion. It was agreed to adopt this phase of meaning making for this study, with the ambition of a more layered analysis of the phenomenon.

3.3.6   Methodology

This section explains the rationale for the study design and underlying phenomenological perspective aligned with the original research aims. As choosing a methodology is a "reality shaping" choice (Gubrium & Holstein 1997, p. 98) affecting both the data gathered and how it is interpreted; methodology rationale is significant. Crotty and Crotty (1998) and Grix (2018) described the ontological (study of knowledge), epistemological (theory of knowledge) and phenomenological aspects of research work, and this study picks up on the latter two positions in order to take up an inductive and exploratory approach to the experiences of the participants.

This empirical study is embedded in a social constructivist context due to the researcher's decision making around the ontological positioning for this work. In the initial reflections and literature review work on the 'nature of knowledge' in the evidence base for what was known about trauma in young men in prison, it was clear that the phenomenological evidence was lacking. It was agreed that this would be both a useful addition to the evidence base as well as a feasible perspective for this doctoral work. The ontological considerations developed the theoretical considerations, and led to the adopting of a phenomenological framework in order to explore the meaning, experience and language of trauma with this cohort, and to provide an appropriate framework for regarding each participants' reality as subjective and valid. Preference was also given to this framework as it was able to clearly allow for the positioning of the researcher as an involved participant, as this fitted well with being an insider-researcher for this study. Having established the

theoretical perspective as the guiding position for this empirical study, the various methodological options were then considered. Grounded Theory, Thematic Analysis, and the Narrative Approach were all considered, and IPA was chosen as it both flowed from the phenomenological framework, used an explicit hermeneutic approach and was a good fit for the identified knowledge gaps. Whilst Thematic Analysis was useful for identifying patterns of meaning, the IPA method had the advantage of being able to identify more detail in each case, and was preferred to Grounded Theory as it addresses differences as well as the universal model that GT seeks to find. The concern with adopting the Narrative Approach was in needing to use a timeline method with participants who may not have been able to work with this due to cognitive, intellectual or emotional difficulties.

Therefore the description above of how the ontological position adopted informed the conceptual and theoretical perspective led in turn to a phenomenological framework of social constructivism. In being explicitly idiographic, it sees each person as an active interpreter of their internal world and assumes there is no objective reality or truth (Lyons & Coyle 2007). The advantage of this in research work is that it enables the researcher to question what the experience means to the person and what sense the person makes of what is happening to them (Smith & Shinebourne, 2012). This phenomenological position in social constructivism is made explicit in this thesis so as to recognise the impact it has on meaning making in the method used. For example, as social constructivism assumes that knowledge is constructed through activity and people create meanings through their interactions, the researcher paid close attention to those aspects of each transcript. The method chosen, (as opposed to other phenomenological methods) seeks to

capture the individual experience both as it is described and then through analysis and explicit interpretation on the part of both the researcher and participant, as their discussion attempts to draw out what is being said and meant.

The social constructivist framework linked directly to the choice of research questions for this study. As outlined in section 3.2.7, the study aims were to explore with young men in prison how they made meaning of past and current traumatic events. This was in line with the social constructivist framework and the IPA method's participant verification technique, which emphasises the commitment in this study to the meaning making derived also from interaction with others (Creswell, 2013). Specific research questions evolved from this background work and sought to achieve findings and data related to the nature of living through trauma for this cohort.

3.3.7 Interpretative Phenomenological Analysis (IPA)

Qualitative methods are suited to discovering how young men experience and process trauma. IPA is phenomenological in that it is concerned with exploring and capturing the lived experience of a specified phenomenon and how someone has made sense of and given meaning to these experiences (Smith, 2004). It involves the detailed consideration of participants' 'lifeworlds'; the subjective and the direct experience of one's physical surroundings and direct activities (Husserl, 1970). This methodological starting point allows for the interview data to be seen as textual, in that it makes claims rather than seeks to own the truth and as Silverman (2015, chapter 9) noted; "the phenomenon always escapes" anyway.

Sense-making research work requires interpretative activity; and Heidegger's theory of hermeneutics in phenomenology is the standard for such work in IPA (Heidegger, 2010). It recommends the exploration and understanding of experiences as the subjective goal, moving between what is specific to each participant to what is shared, and between what is description to what can be interpreted in order to fully understand the phenomenology. The stepwise approach taken by IPA, scaffolds this process of interpretation, where the researcher determines how the steps are applied in their research context (Goldspink & Engward, 2018). The APA publication regarding standards for reporting qualitative research, focuses clearly on how methodological integrity is judged in terms of fidelity to the subject matter and efficacy in research goals (Levitt, Bamberg, Creswell, Frost, Josselson, & Suárez-Orozco, 2018). As Levitt et al., (2018) describe it, qualitative researchers are often concerned with how their expectations and assumptions influence the research process. Therefore, transparency is valued in the reporting of data-collection and data-analytic strategies as well as would be expected in a study's ethical procedure. Researchers therefore seek to communicate both their perspectives and their influence upon the research process (Morrow, 2005; Rennie, 1995), as described above in section 3.2.8.

3.3.8   Analytical method

Once the data was gathered, an IPA methodology was used to analyse the results and produce themes. To strengthen analytical findings the guidance on IPA analytical processes provided by Smith et al., (2009) was followed to remain consistent with its assumptions. IPA revolves, in the first stage of analysis, around

the sequence of close reading and re-reading of the text (Smith et al., 1999). At this stage, the researcher noted any thoughts, observations and reflections that occurred while reading the transcript including any recurring phrases, the researcher's questions, own emotions, and descriptions of, or comments on, the language used. The notes were used to document points that the researcher observed while engaging with the text and recorded in one margin of the transcript (Smith et al., 1999). While initially reading the text for content, this also allowed for 'bracketing' to take place (Giorgi, 1994) but gives way to a more interpretative process as analysis proceeds. This is seen as a helpful process to highlight researcher preconceptions of the data, in order to prevent early dilution and bias of the interpretations (Pietkiewicz & Smith, 2014).

At the second stage the researcher re-read the text and identified themes that best captured the essential qualities of that interview. Willig suggests that it is here that psychological concepts and terms may be used in an IPA analysis (Willig, 2001). Experiential statements were identified within each section of the transcript, as well as possible connections between themes. Coding was then undertaken systematically on three pre-reflective to reflective levels (descriptive, linguistic and conceptual: see Smith et al., 2009), whilst listening to the audio-recordings of the interview in order to better capture context, tone and the feel of the interview and participant. Coding creates a process for reducing the transcripts, interpreting the data, yet maintaining an overall focus on the idiographic experience (Smith et al., 2009). A student peer read the transcripts for each participant once the experiential statements had been identified for each case, and gave feedback regarding coherence and consistency.

The third stage is where the initial codes were repeatedly reviewed to allow for patterns of meaning to be interpreted by the researcher in identifying common and divergent themes (Larkin & Thompson, 2012). This was done initially with each case in order to view each experience and transcript individually as opposed to searching for similar or divergent across case (Biggerstaff & Thompson, 2008). Visual groupings of codes around untitled themes helped shape the initial stages of identifying clusters of codes and concepts. As is usual in qualitative analysis, some material emerged that seemed not to fit the developing picture. In line with guidance to reduce and strengthen the data, divergent codes such as those deemed isolate were pruned (Pietkiewicz & Smith, 2014). This third stage concluded with attempting to provide an overall structure to the analysis by categorising the identified themes into 'clusters' or concepts so as to arrive at a group of themes, and to identify super-ordinate categories that suggested a hierarchical relationship between them.

The final, fourth stage summarised the themes in a table, that identified the main features of each participant's narrative with quotes that were the best example of each. Personal Experiential Themes were all representative of a high degree of recurrence across the sample (a step recommended by Smith et al., 2009 to enhance validity). Smith et al., (2009) also recommended that psychological theory and concepts were introduced within the reporting of themes to offer a theory based explanation of participant's interpretations of experiences (Larkin & Thompson, 2012). This double hermeneutic combines each participants' experience and described meaning, with the researcher-led code and theme identification and with psychological knowledge. Without doubt, the researcher comes with assumptions based on their own lived experience, and their professional knowledge of the

phenomena. Therefore, the final interview discussed the experiential statements with the participant. In line with the usual use of IPA, and to support an ongoing reflection on the researcher's own framework of understanding, a reflexive log was kept and academic supervision used to monitor the researcher's interpretations and ideas. The themes from both the original and revisited analysis were discussed in detail with the lead supervisor and amendments made based on those discussions.

3.3.9   Reflections on the researcher's bracketing process

The IPA position therefore, regards the researcher as an involved participant who seeks to give voice to the experiences and participants of the other participants. As an insider-researcher this fitted well and allowed for an approach that favoured dialogue and hermeneutics in a cycle of interpretation. Foregrounding the researcher's subjectivity is important to then ensure a deliberate process of 'bracketing' (Giorgi, 1994) throughout the study to help establish the research validity, where the researcher works to 'bracket out' both the theory and their own ideas and beliefs.

Svenaeus (2000) wrote about the importance of hermeneutics in clinical practice and how the concept of 'life-world knowledge' linked to social constructionism and IPA. The 'life-world' here is seen as something that is every day and familiar incorporating 'horizons of understanding'. Gadamer (2008) drew on the technical sense of 'horizon' found in Heidegger's (2010) and Husserl's (2012) phenomenologies and evolved the idea to become a "fusion of horizons" where both researcher and participant could share understandings, ensure consideration of all perspectives and so be useful in resolving dialogue understandings. The double

hermeneutic involved in this study was complex at times. In the process of trying to make sense of the participant's responses to the questions, it raised questions about how difficult the task was, of using an IPA method with interviewees experiencing problems with relating to themselves and others. This meant a struggle sometimes in describing the experience and hence the researcher's understanding of what was being said. This experience was not just played out in the interview room, but also in the time spent afterwards making sense of the text and noticing new interpretations not made when sat with the person at the same time.

In reflecting on the primary form of reflexivity i.e., the personal meaning (see Willig, 2008 for the two forms of reflexivity), it was noted that the author had been involved in working with trauma at a service, personal and at professional level. The research design was similar to clinical practice in hoping to listen and explore a person's experience with them and reach a better understanding from doing so. The research log kept alongside this course of study indicated a changing frame of reflection as the empirical study progressed. Initially the entries focused on considerations of personal reflection on the research question and IPA as a methodology, and potential assumptions and bias that might be pertinent to being an insider-researcher. As the research interviews progressed, this frame dwelled on the impact of the interviews on both researcher and participant, containing as they did significant personal and impactful detail of trauma experienced; past and present. As Liebling (1999) noted, research in any human environment without subjective feeling is almost impossible, particularly in a prison. The undoubted capacity for survival and thriving evidenced by the young men was of note and impact for the researcher. The first stages of analysis of the transcripts were often surprising to the researcher, in

discovering more ambiguous meanings than noticed at the time, and surprise that there was more nuance, detail and candour than originally thought. Finally, reflections on the author's own surprise, for what 'pre-understandings' lay beneath the surface and influenced expectations and so flagged the 'fore structures' at play.

Generally speaking, the experience of the interviews for the researcher was humbling and exhausting. Fully listening to a young man's account of unending trauma and adversity required full engagement with the material, both during the interviews and afterwards. The sincerity of their narrative, told with emotional authenticity, were rich in detail and meaning. Sometimes, powerful emotions not named by the man felt left with the researcher, and needed debriefing with colleagues to rebalance; such research is without doubt "punishing field work" as described by Gibson-Light (2020).

The member checking interviews carried out with all but one participant, confirmed that for the participants there had been value in thinking and talking about their experiences. As the data analysis phase was worked through, so were reflections on the noted dynamics of the research interview and in particular the motivation of some of the men for participating in an exchange about a subject they spoke of avoiding for some time. The writings of researchers such as Warr (2021) indicates the value of research discussions to prisoners, who often had little other opportunity for an interaction without judgement, assessment or coercion. That resonated with the complexity of some of the interview discussions, to men seemingly wishing to engage for the first time in a candid dialogue about their experiences. The responsibility then weighed heavy for the writing up of the findings,

to ensure due weight and heft was placed where necessary to reflect the
researcher's experience and interpretation of those dialogues. Particular
accountability was reflected on when considering how to interpret and report the
dialogues around race and ethnicity. The likely limitations arising are described in the
Limitations Section 3.5.6.

3.3.10   Participant Characteristics

Nine young adult males engaged in this study (see Tables 1 and 2 below for
participant and sample characteristics). Demographic information illustrated a good
level of homogeneity and some divergence.

Table 3 *Participant Characteristics*

Name	Age	HMPPS ethnicity code	Offence	Sentence type
1. Abdylla	19	Black British: African	Murder	Detention during Her Majesty's Pleasure
2. Shan	20	Black British: Caribbean	Murder	Detention during Her Majesty's Pleasure
3. Jawan	19	Asian British: Pakistani	Murder	Custody For Life Under 21 (CJA03)
4. Carter	19	Black British: Caribbean	Murder	Custody For Life Under 21 (CJA03)
5. Mac	18	White	Murder	Detention during Her Majesty's Pleasure
6. Ciaran	20	White	Conspire To Commit Robbery	CJA2003-Standard Determinate Sentence
7. Kai	20	Black/Black British: African	Wounding With Intent	Extended Determinate Sentence (LASPOA12)
8. Liam	20	White	Attempt murder	Custody For Life Under 21 (CJA03)
9. Devon	18	Black/Black British	Murder	Detention during Her Majesty's Pleasure

Table 4

Sample Characteristics

Age	Ethnicity	Offence Types	Sentence Length	Legal Status	Previous custodial experience
18 year olds: n=2	Asian British: Pakistani: n=1	Murder: n=6	11 years: n=1	Custody For Life: n=2	First time in custody: n=8
19 year olds: n-3	Black/Black British: n=1	Attempt Murder: n=1	13 years: n=1	Detention During Her Majesty's Pleasure n=4	Previously in under 18 years prison: n=5
20 year olds: n=4	Black/Black British: African: n=2	Conspire To Commit Robbery: n=1	14 years: n=1	Standard Determinate Sentence: n=1	
	Black British: Caribbean: n=2	Wounding With Intent: n=1	15 years: n=4	Detention In Young Offender Institution n=1	
	White: n=3		16 years: n=1	Extended Discretionary Sentence n=1	
			26 years: n=1		

3.4 Findings

Two phases of analysis were completed for this thesis. The first was the most comprehensive and inductive as per usual IPA procedure. This produced a wealth of rich detail and five Personal Experiential Themes (PETs), with 23 sub-themes. The

second phase of analysis reviewed the data and focused on areas most relevant to the research aims, therefore some of the data is not included at this time. In this final analysis the participant's accounts were organised into three PETs, each with sub-themes and also with recognition of some overlap between themes. The main areas of difference between the PETs in each phase of analysis was that the PET 'Dealing with the impact' was split to keep only that data giving focus to the most recent, difficult life events being experienced by the sample. Also that the 'Atypical difficult life events' PET from the original analysis was merged with other sub-themes to produce the new 'Conceptual Confusion' PET. The 'Not talking about trauma' PET above was split into across the 'Conceptual Confusion' and 'Impact Now' PETs, as the sub-themes in 'Not talking about trauma' better fitted that organisation of themes. The difficulties the participants had in speaking about trauma in the research interviews was covered in the Discussion Section. The themes most relevant to the project aims are reported next, with example quotes which most clearly represent the theme being provided.

Table 3

Final Analysis: Group Experiential Themes

Personal Experiential Theme	*4 Sub-themes*
1 'Conceptual Confusion'	1. Typical Adversity
	2. Atypical Adversity
	3. Different definition of trauma
	4. Hard to talk about trauma
	5 Sub-themes

Personal Experiential Theme	1. Making sense of it now
2 'Impact now'	2. Impact of offence as traumatic
	3. Impact of sentence as traumatic
	4. Impact of custody as new trauma
	5. Dealing with trauma
Personal Experiential Theme	3 Sub-themes
3 'Settling'	1. Stabilising
	2. Adapting yourself
	3. Adapting your view of others

3.4.1   'Conceptual Confusion'

This first PET derived from the participants' accounts relating to their understanding of difficult life events, which indicated a particular interpretation of how to define and categorise such experiences. This theme refers to the participant's description of their experience of typical adversities such as familial or neighbourhood dysfunction. This was described by them as ordinary and typical and therefore not traumatic. Their focus instead was on their highly atypical experiences, but in which they prioritised the effects of custody as the most impactful. The naming of this PET arose from the obvious confusion and difficulty experienced in most interviews, as well as the link back to the evidence base about the difficulties this age group often have with mental health discussions (Leighton, 2012).

3.4.1.i 'Typical Adversity'

The 'Conceptual Confusion' PET was split into four sub-themes, the first of which 'Typical Adversity', was where participants described the range of typical experiences found in the characteristic definition of trauma focused on abuse, neglect and household dysfunction. Some, but not many of the participants spoke about physical abuse by a caregiver when they were a child. Abdylla for example spoke of being punched and hit with a stick by his uncle. Carter, had also suffered severe physical abuse.

> R: and how long was your Mum in jail for? Carter: so for a few years I think. For drugs and child abuse shit like that. More on the physical side. I've got a Jamaican background and physical punishment is the thing over there. And school saw some marks on my body and that [yawns]… hit with a belt, and flannels. Like a big wide belt with metal circles on it. That was a bitch. And in school they saw marks on me. Loads of bruises and marks and a couple of 'oh my gods' and they called the police and I was taken in care. (Carter, line 302)

In speaking about emotional abuse or neglect, clarification was often needed to ensure the men knew what this might refer to. Once clarified it seemed a common feature of participant's responses, with a focus on feeling angry about their experience, but explicitly not wanting to blame any family members for that. Other types of typical childhood adversity was reported in the form of maternal physical or mental ill health. Parental substance use was frequently reported, and not just knowing that it was affecting their parent but the impact on their own daily life and moods as a result.

> R: so then what was going on between your mum and step dad that led to the on/off relationship? Shan: violence basically, sometimes police come to the house. Sometimes Mum would get violent and he'd get cuts and that. My little

brothers witnessed it as well. I never seen him hit her but I think he has. But I seen my Mum hit him. (Shan, line 367)

Early family life was difficult for most of the sample as shown in this extract above, some participants had witnessed violence between their parents and caregivers, often with very clear memory for the events and the impact on them. Jawan was able to link his needing to maintain close family contact and the level of worry he had about his parents now, to having experienced such events. Other losses experienced were bereavements, but often in violent incidents such as stabbings and car crashes, both before and since being in prison. Many participants spoke of parents and siblings being involved in crime and/or being in prison as a result. An example of this was that Carter's mother had been imprisoned for various crimes including her maltreatment of Carter, but Carter's wider family had also attempted to kidnap him to remove him from local authority care.

Every participant spoke of inconsistent schooling, often starting on entry to secondary school. For some, this was in the context of having no particular problems in life before then, but which resulted in a lack of achievement and loss of friends. Such difficulties were being experienced alongside multiple other adversities such as multiple foster care moves, out of county placements, and dislocation in the households they lived in. What was clear though was that most participants did not describe or label those experiences as traumatic or even unusual compared to their peers experiences or for their neighbourhood. It appeared that when the experience is an everyday one for either oneself or others, then it may not appear unusual to the individual.

As stated earlier, the participants often experienced other childhood adversity, such as living in a high crime neighbourhood. Abdylla said "Home. Home is where the heart is. R: Was it a place where there's lots of crime? Abdylla: Everything is crime". This statement by Abdylla in the context of the discussion being had was taken to mean that his universal experience was of crime, of it being part of society, his neighbourhood, his schooling, and his home. In discussion with Ciaran who was serving 15 years for armed robberies and was asked about the jump from being a fairly settled teenager to serious crime, he put this down to his environment, as did many others. Shan's experience was also extreme and unusual and demonstrated how the typical way of conceiving of 'household dislocation' as a more obvious traumatic event, becomes more impactful if this is due to being shot and with an ongoing threat to life. This meant that in other parts of the research interview when the more typical aspects of adversity were explored for impact on these young men, they were often keen to downplay the significance and potentially lasting impact. Crime and adversity seemed to be a fact of life and a life lived with limited choices.

3.4.1.ii 'Atypical Adversity'

The second sub-theme focused on those atypical experiences of traumatic events many of the participants had experienced. The events described are not found in standard definitions of ACEs, and ranged from the experiences captured by an ACEs approach, as well as uncommon childhood experiences. The majority of the participants had experienced significant violent crime as teenagers, both being stabbed or shot themselves and/or witnessing this happen to others on multiple

occasions, leading to significant injury and sometimes death. In the extract below, these are Devon's opening words to his interview.

> R: what kind of traumatic things that you have heard people refer to? Devon: witnessing murders and that? R: sorry say that again? Devon: witnessing murders. (Devon, line 7)

The reporting of this in interview was not always in response to direct questions about difficult life events, but sometimes in oblique answers to questions about impact such as sleep issues. It suggested both that this sample had habituated to regular as well as extreme violence and so were not able to conceive of or report it as traumatic or impactful, without careful questioning and timely prompts. Abdylla described experiencing robberies, murders, and stabbings as "candyfloss" compared to living in a civil war zone and seeing his friend be shot dead. This led to a denial of the impact of the former events due to the atypicality of other experiences.

For many of the participants, their teenage years and offending were linked to having been a child drug dealer and being gang-involved, which brought them close to extreme and regular violence from a young age. This was summed up by Mac as "that's the life I lived as a gang member. We were proper out there, every single day, every one of us had drugs on them and had a knife on them from early till late". Kai however, was an unusual example of a participant who had done well in school, not lived the life of a child drug dealer but instead had had realistic chances of a professional sporting career. The impact on him of no longer having that as his goal and daily routine was highly significant for him, and his loss of hope was linked to his spiral into anti-social activity. Uniting all the sample though was the clear loss of hope and pro-social life goals at an early age, often due to what would be

categorised as trauma, but conceived of by this sample as nothing out of the ordinary.

In this unique sample of young men in custody, serving long sentences for violent offences, the impact of sentence length was discussed with each, and all participants spoke of the highly significant impact the long sentence had on them. For some of those interviewed, the long sentence awarded to them was the most significant event in their lives so far, even in comparison to the chronic adversity many had experienced. With Ciaran's characteristically indirect way of speaking about the impact, he laughed when he described thinking he was going to get a light sentence due to age but being sentenced to 15 years instead and he described the impact as "it gets you later". Indeed, many in the sample had thought either they would not be convicted at all or would get far less jail time, but for those affected by the joint enterprise legislation, the outcome was always a significantly lengthy sentence. This was compounded for those men by a struggle to understand how they could be convicted by association and how to accept their situation with such a felt injustice. The Discussion section offers more interpretation of the impact of the joint enterprise legalisation for this cohort of prisoners.

The final less typical way in which many of the participants conceived of trauma was to speak to their experience of racial trauma, either in the community, at school, from the police, social services, courts or now in prison.

> Yeah. 100%. I had that all the time growing up (…) and here some of the Govs are racists too – not the black ones but yeah. Even the prime minister is racist! Probably because of Brexit I suppose. To be honest the whole world is racist and the criminal justice is racist too (…) I haven't gone there with the intention of trying to kill him but he was racist to me and I had a serious mental breakdown and he

beat me up beforehand and stabbed my friend! But saying that in court to 11 white people who've never had anything racist said to them in their life…? (Carter, line 683)

Carter's experiences described above, indicate the way early and ongoing racism had continued into his offence situation "he knocked me out with a pool cue and called me nigger this and nigger that (god that was awful) if you are going to beat someone up just do it you don't have to call them names". When this aspect was discussed with the relevant men in the member checking interviews, they spoke of being willing to talk about this due to the felt impact of the killing of George Floyd in the USA which happened only months earlier as well as the increased focus on this in the lyrics of the music they listened to. Indeed, the lyrics used more often in drill music now, relating to the effects of gang life and subsequent trauma was a reason one man gave for being able to now speak openly about this and be prepared to call it trauma and impactful.

3.4.1.iii 'Different definition of trauma'

The third sub-theme related to how all participants took a unique view of how to conceive of trauma, based on their atypical experiences of difficult life events as a child and adult. The types of difficult life events the cohort had all experienced were highly significant events and appeared to impact on how they defined adversity or trauma.

Abdylla's refused to consider his custodial experience as traumatic in the first interview's discussion of it, and this appeared linked to his coping strategy of comparing both to his life in a civil war zone as well to others who might be worse off.

Kai: Just a punctured lung – wasn't even, just small yeah. R: a punctured lung? By most people's standards that's a serious injury? Kai: I seen people that's been stabbed, not seen but like they can't walk no more and go to the toilet the same so I'm lucky. I know it's a weird thing to say it's not a big thing but I know it could be way worse. You know what I'm saying? (Kai, line 427)

Kai's words here indicate the recurring? theme of how men in the sample were not likely to accept their experiences as impactful, for fear of it possibly undermining their ability to cope with it. All participants sought to explain events that by other people's standards might be thought of as traumatic and were compared to others experiences when considering whether an event was traumatic for them. All the participants reported exposure to serious violent crime as a child and /or adolescent, either in the home, the community or as part of their offending behaviour. Despite this they tended to not define those events themselves as traumatic and so they were sometimes only captured in a check through with Appendix 12. It appeared that the comparison with others, acted to reduce the significance of the possible impact of their own difficulties. Many participants struggled to speak about their experience of difficult life events or trauma.

I don't know. Like I said from the beginning , I don't think none of the things that happened to me in my life has impacted on what I'm in prison for now. So I wouldn't, but maybe, but that's what I think. Like for example, what happened in Y, that's what I have to get used to. I see someone just get shot for trying to get bread and he got shot by police. (Abdylla, line 413)

Abdylla's emphasis here is on the need to get used to potentially traumatic events so as to reduce the impact on himself, "but maybe" indicating a confusion about whether the original events could be defined as potentially traumatic or not. Significant too is the reference above to getting used to violent events, in the context of lives lived in the shadow of an ongoing expectation of significant violence to

selves and others. For many of the participants, their understanding of what could be considered a traumatic event appeared linked also to a lifelong experience of such events. Mac had described a particularly violent offence scenario involving threat to himself as simply "being in the wrong place at the wrong time, I wouldn't call it traumatic". Similarly for Carter this was expressed as "all that shit – just like a Sunday for me but was my whole life".

> R: … Then the next one is have you been a victim of crime? Ciaran: I have once to be honest yeah. R: so what happened to you? Ciaran: I had a big bracelet and a big necklace and someone robbed me of that yeah?(R: oh okay) someone took the opportunity because I was drunk, I think I'd had a few beers, but for it to happen to me it was just karma you know what I mean just karma. R: okay. Did it make any difference to what you did to other people after or…? Ciaran: I didn't know who it was so I just had to accept it. (Ciaran, line 427)

Here Ciaran highlighted the sense of ennui and inevitability of such events, especially for those who are often both perpetrators and victims throughout their lives. A tone of ambivalence and flippancy was common in the interviews, with Mac describing it with a sense of unavoidability as "this was the life I was meant to live".

The definition confusion sits in contrast to the literature review and professional approaches, which expects to be able to define specific events as traumatic on their own account. This suggests a likely under reporting and avoidance in trauma evaluation of young male prisoners, but is clearly linked to the highly unusual experiences of this sample, as well as their difficulties in thinking and speaking about those experiences.

3.4.1.iv 'Hard to talk about trauma'

The final sub-theme related to where the participants spoke repeatedly and in various ways about why it was 'Hard to talk about trauma', meaning both that it was difficult for the sample to define trauma or adversity as well as hard for them to speak clearly about their experiences without significant time, support and careful questioning techniques.

> R: so let's start then with making sure we understand what we are talking about. If I was to talk to you about difficult life events what would you think I meant by that? Kai: like touchy subjects, things that actually, you know what am saying right, things that are not so open that you can't speak about. I know what you mean? (Kai, line 2)

In this extract Kai uses a common phrase "touchy subjects" instead of the word trauma and then emphasises how such events cannot be spoken about. Like Kai, many of the participants sought further explanation from the researcher to either better understand what the word trauma could mean, or to refute any idea that an event might be described as traumatic for them. It was frequently noted by participants that it was not accurate in their view to describe an event as traumatic simply because it occurred, unless there was a perceived impact on their functioning. It was important for them to describe a separation of that which was potentially traumatic from whether the difficult life event had been resolved by the person psychologically. As Jawan said: "I think something like what you can't deal with, something that never goes for a long time, when you can't move on".

The participants who struggled the most to articulate their own definition of trauma also tended to use language that indicated that the difficult life events

themselves were hard to understand. Whilst all the participants struggled to some degree with articulating their experiences, an extreme example was that of Ciaran, who was often limited in his range of vocabulary, as seen in the repetition of only a few descriptors to both define trauma, "people who've had mad things happen to them in the past you know?" or the area he grew up in as "mad". The repetition of "mad" was heard as a way of expressing the unpredictability of life and also the difficulty of understanding it. This difficulty articulating trauma was also the case when the event was experienced as a young child. Mac talked about the duality of knowing but not knowing; "so I knew what was happening but also didn't really." The age at which the participant experienced the trauma being spoken about had an impact for all participants in the quality of recall and detail.

They said I was talking about things I shouldn't have been talking about things I shouldn't have been talking about at that age innit, drawing pictures about blood and killing innit? I don't know what it means personally yeah. I don't find a reason to talk about that.

R: So you're saying you don't remember talking about that? Abdylla: Yeah – I don't remember doing none of that. So then that's when they thought this kid has got a problem. (Abdylla, line 154)

Abdylla describes here using drawing at a young age to communicate his experience of extreme events, pointing out that he still does not know the meaning of his drawings but knew that as a child he did not want to talk about it. He switches between this reference to his behaviour as a child and present tense language referring to his difficulties talking at present, potentially indicating an understanding of the link between the emotions of childhood and now. Additionally, he appears to

have internalised a recognition that this struggle with emotional language identified

him as having a problem. Such communicative issues in other participants appeared

to also be greatly impacted by poor and fragmented memory for those events.

> Carter: so after that bull shit then I went back to N…or did I? I think I am missing
> something – oh think there was 2 more houses I went to.
>
> Liam: I was young and hard to remember it at the time but I wasn't surprised.

These struggles with memory, including the ability to remember events at all, are

consistent with the theoretical understanding of trauma's impact upon memory

processing and hence the narrative understanding participants hold. This lack of

verbal clarity, appeared to also be linked to various non-verbal means that

participants had of expressing themselves, both in the interviews as well as in daily

life. Ciaran's interviews were full of non-verbal means of both communicating ideas

without speaking of them specifically, including incongruous laughing and smiling in

response to questions about trauma experienced. For Devon, use of non-verbal

methods was a very conscious strategy to express himself, "music is like the only

thing that keeps me the way I am now…music is like my way of expressing myself".

Analysis of the way language was used by participants to describe their

experience of extreme events revealed a frequent use of concrete and quotidian

phrasing.

> R: and are you able to tell me a little about this offence? Liam: yeah that
> happened about, well I had issues with them about drugs and it was basically that
> sort of thing, in our area. And then yeah I got someone told me where he was and
> then yeah, it was just, went down to him and stabbed him, and stabbed him like
> nine times I think. (Liam, line 298)

Many accounts were similarly specific and detailed, but focused largely on the facts of the event with no inclusion of any language describing emotions experienced at the time. Despite the highly significant nature of the events they focused instead on the concrete nature of these events. It suggested that this device was deployed so as to not have to speak to any emotional impact, which was denied either when giving a free narrative of experiences or when specifically asked. However, all the men generally identified other effects such as sleep problems or hyper vigilance when asked if it was relevant to them. Of significance also is that such accounts related to extremely violent account of harm done to others, resulting in either serious injury or death to the victim. Some participants were able to explain when asked why their account did not reference the impact of their own offence, and how this might be seen as denying the harm done to others or to expect pity for themselves. It appeared that only those participants a few years into their sentence were able to speak to the reasons for denying offence impact, compared to the early sentence participants who often were simply unable to answer such questions.

3.4.2   'Impact now'

The second PET was 'Impact now', where the young men spoke to their experience of recent and current experiences of dealing with the consequences of having committed serious violent offences. These accounts related to the events, attitudes, thought and behaviours, thoughts which happened directly as a result of the experiences. Typically, this included a reflection on what had gone before in their lives, and an internal debate about personal responsibility in the context of new difficulties in coming to terms with the length of sentence and being in prison.

Arriving in custody with needs and vulnerabilities from previous difficult life events,

appeared to place these young men at ongoing risk of re-traumatisation. The naming

of this PET arose from the often asked question back to the researcher in the

interview to clarify if we were discussing 'the impact now?' or when they were a child.

3.4.2.i   'Making sense of it now'

The 'Impact now' PET was split into five sub-themes, the first of which 'Making

sense of it now' related to the need all participants felt to create some meaning from

the experiences. This process of making sense of it, brought an impact of its own, as

the participants described the emotional labour involved. Mac spoke about the effect

of his sentence length, "you don't know how it feels, it's every day. I don't expect

anyone to feel sorry for me but that wasn't my intentions, on the outside I had

something to prove".

> Yeah, like being shot changed things for me. If I had gone in a different direction it
> might not have happened. But I couldn't help it happening to me, but then I blame
> myself and for what happened to my brothers. But if I'd been at home it wouldn't
> have happened and I blame myself. (Shan, line 692)

Shan spoke of trying to make sense daily, of how he was the same person who

had been involved in the killing of another boy and had reached an explanation for

himself that identified the starting point to his problems. Jawan appeared to be

struggling to settle on a way of making sense of the offence and his responsibility for

it.

> And my religion tells me that this was all meant to happen see. God intended for
> me to do this, and that those other people would die. I know other people would
> say why would God let other people die? But when it comes to religion you have

to take it as a whole not just parts of it. R: and you find that helpful to think like that? Jawan: yeah, because it's not easy to accept otherwise. (Jawan, line 595)

On the one hand Jawan said early in the interview that "I know it's all my fault but that's a big thing to deal with. It wasn't worth it at all". However, then later on he used his faith as a lens to think about the meaning of what had happened, in perhaps an attempt to accept what is otherwise unacceptable. Mac also referred to religion as a way of trying to understand his world, "I won't lie miss but some days I stop believing, I think why does God do this and I ask God why is there so much evil in the world?", which interestingly locates evil as an external factor only.

Some men spoke of learning to avoid rumination, and so not all the participants spoke to sense making as an aspect of their experience and some had different ways of thinking about the meaning of it. For Devon it was hard to respond to the question as he said he "didn't know what to think" at the time or four years later and others like Carter spoke pithily to a sense of inevitability about his life "get me though, I would have still been in jail probably for something else". However, Carter was also sure that he would have been killed himself, "I 100% believed I had to protect myself anyway and emotionally detach and then I ended up killing".

For some like Abdylla it was about living with the impact despite not knowing "what to feel" and Abdylla's exposure to civil war violence seemed to be linked for him to denying the impact of any less significant life experience. However, later on in the interviews Abdylla also suggested that he had consciously resisted any impact "it's difficult but (pause) I just think that I got myself in this situation so it's my fault, I take responsibility so I can't have self-pity". This experience for many of trying to

understand and make sense of their new situation in prison linked to how or even

whether they also perceived the offence as impactful or not.

3.4.2.ii 'Impact of offence as traumatic'

The second sub-theme in this PET, captured the experience of committing a

serious violent offence, which for the majority of participants had led to the death of

their victim. This phenomenological analysis was full of descriptions of a process of

coming to terms with this. For some it was about how their actions had resulted in

someone's death, but for many it also referred to the ongoing effort to not think about

it so as to avoid the possible impact.

> R: did that have any ongoing impact? Shan: well I didn't know he was getting
> stabbed, he got chased from the car to the house. I was on my bike and I left the
> group and later that night I found out what had happened and I was like shocked.
> (Shan, line 136)

Most of the sample gave immediate and undefended responses to interview

questions about their offence and spoke of not knowing at the time that the victim

had been injured or killed.

> Yeah like I've seen people getting stabbed before and they didn't die. I didn't know
> that was going to happen. I didn't think of anything really, just that I hope they
> don't die. When you are aiming for legs and arse cheeks their intention is not to
> kill just to harm. But I didn't know what was going on. I was looking but the guy
> was still moving and getting out of the car so didn't think it was going to be
> serious. But he'd been stabbed 23 times. And when my friend jumped in the car
> he didn't tell me. (Jawan, line 334)

All those who had committed murder spoke of the shock of realising the victim

had died, contributing it seemed to the process of having to make sense of their

whole life and identity now that they had committed a serious offence. As many of

the sample had not previously reflected on their experiences of life before custody, it appeared to be a difficult and sometimes overwhelming challenge for them.

> It's had no impact on me (…) I just don't care about it, I know it sounds bad but I didn't like him. He was doing the same thing, so maybe if it was someone on the road or a civilian then yeah maybe but he was as much involved as I was so that's why I don't care about him. (Liam, line 321)

In this extract above, Liam simply denied any impact at all in the early part of his interviews, which contrasted to his later reference to knowing he would have to deal with it. However, he spoke about that knowledge so obliquely it was only picked up from his non-verbal expressions. The delay or lack of impact of offence was also linked by participants to their lack of knowledge of their victims, which appeared to limit their sense of remorse for the victim, although not necessarily the victim's families. This was especially the case if the offence was committed in a gang-involved context.

For some, the experience of the offence as impactful was resonant of past experiences.

> Oh yeah – I have dreams that are serious blood baths. This guy stabs me and I stab him and he's on the floor and I think he's dead but he gets up and I stab him again and I've gone to the kitchen and my Mum's there and she says yeah, just wash off and come see your sisters. I don't remember a lot of dreams now – but always blood baths. … (Carter, line 556)

This extract chimed with Carter's earlier description of the impact of earlier childhood trauma where he felt always on guard, of sleeping with his eyes open due to being afraid of demons and the dark. The past trauma had started to merge with the latest ones and was demanding a clear cognitive and emotional toll to either suppress it in a prison environment demanding strength and toughness, or to allow it

and seek help. Mac though spoke of an impact only due to being caught for the murder, "I don't have nightmares about it. Some days I don't feel bad for it you know, that makes me sound crazy innit?" The coming to terms with the offence and the making sense of the impact of life experiences was also now being considered by the men, in the context of having been convicted of the offence and sentenced to a long time in prison.

3.4.2.iii 'Impact of sentence as traumatic'

The third sub-theme captured the experiences described by all participants of having to make sense of and then accept the length of sentence imposed on them. The analysis captured the clear effect that most of the sample spoke of when prioritising this sentence length as the most traumatic experience they had ever had.

> When I went down to the cells and I was just crying and crying. My expectations had been that I was going home! I didn't know what to feel, I'd got less than them but I'm not going to be home for 15 years. I was crying and I wasn't thinking, just crying – oh fucks sake! (Jawan, line 443)

Jawan's description of the impact how he felt on his sentencing day was put in the present tense, as though he were still processing the impact. Some had spent their time on remand by not thinking about what might be to come, but others reported that being found guilty and convicted prior to sentencing had already started the psychological process of adaptation to how their life was changing.

A factor which appeared linked to how the participants thought about their personal responsibility and difficulty accepting either conviction or sentence was being convicted under joint enterprise legislation. There was a range of emotions from anger to sadness about having been sentenced as guilty by association and for

those participants in particular there was a struggle to make sense of their situation, particularly a very long sentence of 20 years or more if sentenced as an adult. Even for those not convicted under joint enterprise, a sense of injustice about length of sentence prevailed, leading to appeals and comparison with others.

> Ciaran: (interrupts) I've been in a few jails yeah, and seen people doing my sort of charges and got less than what I've got, and it don't make any sense innit? R: so how have you settled that in your head in order to accept it? Ciaran (pauses) (shakes head) R: is that something that is rankling at you? Ciaran: course I'm not okay with it, but nothing I can do you know?(Ciaran, line 292)

Many of the participants spoke to an impact of their sentence being a worry about the impact on their family, of having let them down and of possibly suffering the death of a close family member whilst in prison. This was often spoken about in the same sense of injustice of the length of sentence and how their family were suffering too due to their own actions; it appeared hard for them to bear to think about that outcome too. This linked also to the next sub-theme and the dominance of the impact of prison as a recognised factor for all.

3.4.2.iv 'Impact of custody as new trauma'

The fourth sub-theme related to the experience described by every participant of their psychological, physical and practical responses to adjusting to life in custody, described by many as life changing. The loss of freedom described by some participants was often put forward as the main impact of having committed the offence, and felt keenly by all.

> First they take away your freedom. There is only so long a man or woman can go with taking their freedom. Cool I can deal with that I took someone's life. That's fair enough…then you keep me in my cell for hours and hours and hours. And I

can't interact with people so you are locking away you are isolating me. So you are basically putting me in a cage and took away my freedom and sunlight. Then you are the people coming to see the animal in the zoo. (Abdylla, line 944)

And then have you ever thought about taking your own life? Carter: yeah of course! I am a lifer! Like every day…but it's selfish. I have a brother and sisters and my Mum and that is horrible to die in jail. It would hurt a family. I think about it a lot. R: do you think about it in a sense to escape thinking about the reality of the length of this sentence? Carter: yeah because like 25 years – oh my god. Under 20 or 15 would be better. You are stopping me from having kids and having sex. People do worse than me and get less than I do. People rape loads of people and get less than I do. People chop up other people and get less than I do. I killed one person! I was pretty much a child. (Carter, line 644)

The everyday reality of the pains of imprisonment are clear in the extracts above and indicate how the participants interpreted the experience as brutalising, unfair and disproportionate. As all the participants had previously experienced multiple childhood adversity, the analysis revealed links made frequently between those past experiences and how they experienced life in custody, with banging doors linked to gun shots, boots on floors to the approach of rival gangs and the authoritarian style of prison officers to teachers who had wanted to use rules to punish and exclude. This re-experiencing of difficult life events fits with the theoretical and professional practice of identifying trauma impact and offering interventions, although legal imprisonment is not often considered in this way.

Abdylla expressed the most extreme view of his situation, "got that paranoidness in my head innit?", but all the participants spoke to a heightened sense of danger, on a daily basis of expecting violence from peers and officers, as Carter put it "everything is fight because of everything I have gone through". The lack of sense of safety and trust appeared linked for many to a frequently reported self-reliance and toughness that linked self-reliance both with strength and a lack of trust and safety.

This metaphor of strength was expressed frequently, and is consistent with the evidence base of the impact of trauma on young men and their sense of vulnerability and masculinity. In the context of an all-male 18-21-year-old prison too, the narrative of resilience and strength as a counter to the impact of custody was loud and clear.

As an example of this, some participants emphasised the way being in custody impacted on their emotionality, notably it was only those participants a few years into their sentence who were able to reflect on that effect, others simply reported feeling nothing and would give no other examples or descriptions. For those who gave examples, it was put forward as a way to explain how emotionless a prisoner needed to be to survive, in order to navigate the significant daily threat from their peers. It was common for all the participants to speak to having to be highly alert to threat from others, including staff, and needing to invest time and understanding in the rules of the environment in order to survive it.

Many participants agreed that being in custody had embedded a self-reliance in them, notable in the context of them having been convicted and imprisoned as children or just of adult age. For many, this was because other people could not be relied on, which Abdylla articulated as a contempt for self-pity or compassion; "can't sit there and be like rah, feel sorry for myself because it's not that. I done it and I knew what I was doing at the time ".

> Nightmares? Yeah of course! (…) I don't get nightmares but I have weird dreams and that. But do you know what it is like…aah, I don't know man, I wouldn't really call it a nightmare I'd call it weird dreams. I can have a dream of me being shot or stabbed. You know what am saying? (Kai, line 325)

Kai's words here are typical of the experience of using tactics to avoid intense emotions, but how this lapsed occasionally, into their feeling lonely or sad, or with a clear impact on sleep and dream life. Sleep problems were linked with rumination, even for those who denied any impact from the offence, reported an impact on sleep due to loneliness and rumination. This is again consistent with the known consequences of traumatic events, but was not reported by the sample in their free narrative of any consequences and only when specifically taken through a check list of possible other outcomes. This neatly links to the next sub-theme of the difficulty the sample had to talk about how they coped with the impact of difficult life events.

3.4.2.v Dealing with trauma'

The final sub-theme in this PET related to the participant's experiences of responding to the impact of the traumatic events. A commonly found theme being the difficulty the men had in talking about how they cope, seemingly for a variety of reasons. For some, they simply had not thought of any ways to cope beyond responding daily to the challenge ahead, for others it was because it was difficult to find the words to describe their coping, but for others it was due to a dislike of talking about coping or using the word as it indicated to them a vulnerability they were protecting against.

For Devon, he appeared unable to find the words and sat in silence when asked to comment. Whilst his response was more extreme than the other participants it was typical of their lack of fluency and vocabulary for such questions. This apparent lack of language was discussed with Ciaran, but due to Ciaran's difficulty expressing himself, it resulted in his only being able to repeat himself, "yeah that's why I don't

how to put those things, I don't talk like that innit?" The difficulty expressing the

experience in the research interview appeared linked to the longstanding difficulties

all the participants reported with speaking about the difficult events experienced at

the time and since that time.

> Don't know about accepting. But every little thing yeah that has happened – it's
> not like I'm traumatised about it and think 'oh this happened to me what can I do?'
> I don't see myself as someone who needs support or needs medication or
> anything. I deal with my own things. R: I get what you don't do but I am not
> hearing what you do do? Abdylla: I don't know – I just do it! (Abdylla, line 863)

For some like Abdylla above, the coping response had become so habitual it was

impossible to articulate for being so much an embedded aspect of their functioning.

Abdylla's final statement on this above, "I don't know – I just do it!" expresses his

frustration in trying to explain something so ingrained in his way of functioning in

daily life. Often, the only strategy easily described was solely not talking about the

difficulties experienced, of "bottling it up" and of not speaking to others for fear of

raising concerns. None of the participants were able to identify that it was not

speaking about the event that was itself an impact of the event. Devon described not

speaking at all after witnessing his friend being killed, and opened his response by

saying it was "really hard to say" what the impact was but then immediately

described it. This interesting phrasing could be understood as Devon indicating what

couldn't be said not just because of the emotional nature of it but also due to the

difficulty anyway in articulating impact.

For many, particularly the early sentenced men, it was considered that talking

about it simply did not help. For some like Abdylla the current impact was whether

the victim's death had changed him at all.

Feels like… I don't want to sound like a dickhead yeah. But it hasn't had an impact (…) it takes a while to sink in (…) I chatted to lifers on the wing (…) why is he more emotion than me and I can't? I don't know. Obviously I feel remorseful about the whole thing you get me. Remorse right. But how has it impacted me…I don't know. Feel like it should have impacted me. Should have changed (…) I force myself to think about it to see if I feel anything. I don't understand. I sit in my cell and think rah, why. (Abdylla, line 863)

In this extract Abdylla is not sure if he has been changed by his offence, and so he revisited it frequently to test his response. When it came to discussing the impact of offence as possibly traumatic, an often confusing narrative followed, with impact often both explained and denied in the same passage of thought. For those participants who were able to articulate themselves in relation to emotional impact, they spoke to knowing that there would be a time when that impact would have to be spoken to and that they had to be ready for it.

yeah it's fine. I'm used to it, it's going to be worse when I have to go to therapy (…) I don't let it get emotionally get to me to be honest. R: right, you do present as someone who is able to just… Carter: yeah push it all to one side, yeah, but I don't think that's good though so (…) yeah but it's gonna build up, if I do have it out like, most people say to have a breakdown is really bad like but I don't think it will get to that. (Carter, line 320)

This extract evidences Carter's knowledge of future help seeking in order to deal with the impact of trauma. Interestingly in this extract both researcher and participant speak in a cautious way about having to talk at all about the experience. It appeared necessary to respect Carter's fear of being so overwhelmed by it, it could lead to his breakdown. This liminal stage links forward to the next Personal Experiential Theme of 'Settling', where the sample all gave details of how they experienced having to adjust to previous difficult life events and then life in prison.

3.4.3   'Settling'

The third PET was 'Settling', and captured the participant's experiences of dealing with the multiple consequences arising from childhood trauma and experiences now of being in custody. Their reflections were threaded through with a narrative of resilience, strength and adaptation, in order to adjust to their new situation, identity and to stay safe. The impact of previous adversity and trauma as understood by either the ACEs model or the atypical experiences described earlier, were all relevant to this sample's ability to adapt psychologically, emotionally and practically. The naming of this PET arose from the interviews with Shan who labelled where he was in the process of psychological accommodation as 'settling'.

3.4.3.i   'Stabilising'

The PET was split into three sub-themes, the first of which 'Stabilising' described the initial processes experienced by all participants of drawing on previous experiences of dealing with trauma to make sense of their situation and a way of psychologically adapting to it. This process seemed to move through stages similar for all, starting with trying to see the whole experience of being convicted and in prison for a long time as a possibly positive experience, a move towards accepting difficult aspects of their situation and then finding a purposeful life in prison.

> Devon no, I don't agree with it but I have to accept it cos (clears throat) cos at end of the day I was there, and there's nothing I could do about it (…) like, when I first got sentenced for like a whole year, a year and a half like, it didn't sink in properly. So I was just thinking like, like I just had no emotion. But like after a year and a half I realised that I am actually in jail for 14 years for murder for just being at a scene wrong place wrong time like, I shouldn't be here. Yeah. (Devon, line 539)

This articulation of accepting the sentence, albeit after some time, but not accepting responsibility for the offence, was typical of the sample's responses. They spoke of their confusion and difficulty in trying to understand the conviction and the length of sentence, and were often unable to imagine the length of time, usually the same length of time or more than they were years of age. For those convicted under the joint enterprise legislation, they had also to learn to accept that co-defendants had differing sentences. Shan was unusual in saying "I just forgave that. Some of them didn't forgive. I felt like I am going to get over it, we are all in it together and forgave them", illustrating the need for that framing of the situation in order to settle. A phrase often used to end tracts of speech was simply " it is what it is", which was heard to indicate a form of radical acceptance, which seemed to afford the participants some power over the situation they found themselves in (rather than any reference to the harm done).

> But I don't like to think about it too much, that's when it starts to hurt, I need to stay strong and not feel as sorry as I should, I have to do this to stay strong otherwise I'd lose it (…) Don't get me wrong you have your days where you feel pissed off, when you talk to your friends and they're going to parties yeah. But otherwise you try not to think about it, laugh with people - if you don't take yourself out of it then you get stuck in it. (Mac, line 47)

This extract above typified the ways in which the participants spoke about this. This psychological process of acceptance appeared to lead on to a helpful way of dealing with being in prison for a long time, including seeing prison as their new home. Linked to the earlier Personal Experiential Theme of 'Impact now', the metaphor of strength was often deployed here to indicate how avoiding intense emotions was helpful and the focus instead was on wanting to try to see the situation as positive, once an understanding had been reached of needing to accept it. A

variety of tactics were used in order to do this, as participants spoke of thinking of the positives which included how much worse it could have been in terms of sentence or tariff length or how they escaped being killed themselves. Other tactics were reminding themselves that at least they now knew what the outcome of the trial was, rather than the pain of not knowing and the possibility of hope being dashed. Hope was significant to all.

> I'm not in for 25 or 30 years. I have nothing to complain about! Other people are worse off. What am I stressing about as I am going to see my parents when I get out, my Mum is only 40. I got nothing to worry about. You got to flip it on its head and you feel better about it. (Jawan, line 649)

Generally, as this was a young sample, they were united in speaking to how they would still be fairly young men when they were released and so there was reason for hope for the future, even if their current situation felt unbearable or unfair.

To conclude this sub-theme's analysis of 'stabilising', the analysis showed a theme of how finding meaning and purpose appeared to be a key part to the initial finding of stability. As Shan said, "maybe at the start I didn't care but as it went on I just thought I have to plan and do something because I am going to come out when I'm young and have my life to live". Some in the sample spoke to having renewed their faith and the value that brought them, which was true for all those with a practising faith. It was also true for those who had any clear goals. Educational goals were particularly relevant to this aged sample, as well as a number of statements about needing to make use of the length of sentence in order to avoid feeling as though the time was wasted and not useful in some way. The overall narrative about the process of finding stability in prison was run through with an age related

understanding of how long time was, of hope despite the current situation and the flexibility to adapt both themselves and their view of others.

3.4.3.ii   'Adapting yourself'

The second sub-theme in 'Settling' was the young men's experiences of adaptation and habituation to responding to previous and current difficulties. This sub-theme focused on the ways in which the men had to learn to adapt and settle both practically and psychologically. There were various aspects to the adaptation process, and it seemed that it started only once stabilisation had occurred, and this allowed then for an ability to learn how to deal with the situation. Each participant found their own way of coping, depending on various factors related to personality, background and available support.

In discussing with Shan how much he had learned in order to deal well with being in prison he used the word adaptive. Abdylla also spoke of adaptation "gotta get used to it…and you know like get used to fitting in? Adapting". As previously described in the impact section, many participants had struggled initially to accept the length of sentence imposed on them. Many spoke later on in their interviews of how they adapted their view of it over time, often breaking the sentence into chunks relating to each progressive prison move, and parole reviews.

> Everyone deals with things differently…that's what I feel like. Like see me, I could give you a whole explanation of how like I can, but that's just me the kind of person I am you see? All depends on the kind of person you are. (Kai, line 12)

Kai had been thinking about what helped him to stabilise and for him it was dependent on personality and being able to be flexible. The analysis showed that

most participants referred to an adaptation taking place over time that allowed them to see themselves differently. Most of the participants spoke to wanting to develop themselves, to knowing they were not a "good person" as Shan put it, and this knowledge of needing to change was often balanced against feeling less angry about the perceived injustice.

When the participants were asked specifically about what they were doing to adapt, references were often made to learning, both about themselves personally as well as how to deal with being in prison. Kai spoke of how "the more you get into it, you learn about yourself and what a prison is?" Phrases often used were 'coming to terms with' and 'just get on with it' as well as the repeated use of 'it is what it is'. This kind of self-talk seemed highly important to the mental agility required to cope with the daily grind of prison life, in the context of many years of the same.

Another frequently found experience was that of learning the importance of keeping busy and doing anything to pass the time, to stay occupied, to be able to avoid dwelling on the situation or problems outside and to have some relief from the pressure of the pains of imprisonment. For many participants it involved practicing their faith and religious coping was described as an important coping strategy for living in extreme circumstances. The daily routine and practice of their faith and the fellowship with others seemed important aspects of this, and similar to findings in work such as Walker (2021) and how religious faith gave meaning and hope to those who had suffered trauma.

The experiences of many participants was summed up by Carter in this colourful description of how he wanted a tattoo to indicate how he had survived his life so far.

I am having stars on here [points to collarbones] like in the army or navy? And then on this arm am going to have a whole arm of roman armour on there. R: oh okay – why are you choosing that then? Carter: it's about how I've survived, it's armour because of what I have been through. Do you know what I mean? (Carter, line 728)

For many in the sample, the gradual adaptation of their view of themselves led onto an adapting view of others. Whilst not all the sample were at that stage of the process, the ones who were, had not started to be able to change how they related to others in the world without having changed their view of themselves prior to that.

3.4.3.iii 'Adapting your view of others'

The third and final sub-theme in this section relates to how the men had to adapt their previously held view of people in authority and their peers to be able then to make use of those people in their settling into custody. This critical skill to surviving life in prison, when dependent on others every day to achieve even small goals, was clearly of value to all.

Many participants spoke of learning to talk to others in order to manage their difficulties better, as Carter described it; "I need help with that to control my problems so I don't have to keep it inside me anymore".

Just like (clears throat) you can't always just, I was just thinking to myself like, you can't always just be sitting in jail for all these years bottling up your feelings, it's not gonna do anything for you. It's better for you to talk to someone that you can trust (clears throat) that can give you help make your life more easier. Especially in a situation like this. (Devon, line 575)

For Devon this of course was hugely significant, as speaking at all had been so difficult for him previously and he felt it had been key to him being able to start to accept his being in custody. Alongside talking to trusted professionals, many

participants spoke of the value of speaking with trusted peers, which brought help and encouragement when needed, as well as practical learning about how to get things done for themselves in prison, or how to get on with officers. Mac described his learning about this as important to him learning how to settle down, "before I got found guilty someone said to me. When you get found guilty you'd be surprised how people in the jail show you love, cos no one else in the prison does, just them and your family and friends".

For those with close family members, participants relied significantly on their support, as Shan advised "if you can stay in contact with your family and if not, well it's just best to", hinting at the difficulty of family contact, if family members were even around, but the value for him had been so as to not have to go through it by himself. Even those with a difficult family dynamic to deal with had made a conscious effort to keep communication open, and this seemed linked to needing to not feel alone in prison and unsupported at a time of great need of encouragement, support and hope. It was riven with sadness and potentially difficult emotions though, as Mac advised "I'd say not look at pictures of your family so much". Many of the participants had experienced multiple childhood adversity, so the reliance on family support was fraught with difficulty and tension, yet had become their main source of support. When asked about this balance, some spoke of discussing with their family about putting the past behind them in order to focus on the situation now. Some were only able to want to avoid making a difficult situation worse, whilst others were simply very grateful to have any kind of support from their family or significant others, and spoke of often expressing this gratitude to those people, bringing about a positive change in those relationships.

3.5 Discussion

The aim of this study was to explore how young men in custody understood their experience of traumatic and difficult life events, and whether and how the experience of their offence and sentence length was part of that. The participants discussed their experiences across three overarching themes: 1.'Conceptual Confusion', 2.'Impact Now' and 3.'Settling'. In order to contextualise the findings, this section considers the dialogue between the analytic findings and the previously discussed theoretical context. As IPA is an inductive approach, this discussion does not root the findings in any existing theory, nor test theoretical knowledge as it prioritises experience as the feature of interest (Smith, 2019).

3.5.1   The impact of the restricted language of participants

The reported difficulty or strategy in not speaking about difficult life events, meant that the participants struggled to define or describe their experience of trauma. This fits with the theoretical understanding of how the effect of trauma can inhibit an understanding and expression of it. A few participants were motivated to engage in the interviews so as to better understand their experiences or to pass on their learning of it to help others. However, it often led to confusing exchanges in the interview, with assumptions and definitions needing clarification, and deployment of cautious metaphor and phraseology to avoid further pain and withdrawal. Clearly, the language of 'trauma' was an insufficient term to describe the complexity of the range and type of experiences it referred to.

The use of metaphor and idiom was significant in the experiences described. The most frequent finding was that there was an absence of such language in the narratives of many of the participants, with a reliance on concrete and matter of fact descriptions of experiences, even those resulting in serious injury or death. In common with findings in work such as Rechsteiner et al, (2020) where metaphors were used they used concepts of trauma related to bodily processes, such as shock, burden, and hurt. If it is accepted that metaphors are important organising devices in thinking and talking about complex phenomena, and the dominant metaphors in this study were those of "touchy subjects", "hard times" and "mad things", then that shapes how participants experience trauma and form their responses. This helpfully provided a framework for discussion for some participants, in speaking to experiences that were difficult and had not been explored in depth either at all or not for a long time.

The findings pointed to a contempt for a way of speaking about trauma that might imply weakness and some saw it as possibly endangering their ability to survive. A feasible hypothesis is that this is linked to having been a longstanding response with many men referring to having rarely spoken about it at all, of not knowing how to talk about it or of not seeing any value in talking about it. Despite 'blocking it out' (Paton, 2009), being a frequently reported finding of trauma impact, and to prevent ruminations about difficult events, this factor warrants greater reference in the academic literature on appropriate assessment, use of psychometric tools and interventions offered to this cohort. Gray (2015) conducted a study with under 18-year-olds, and found an investment in bravado and toughness that prevented talking about trauma. This is a significant challenge for practitioners working with those who

have experienced the most extreme poly-victimisation as well as having perpetrated similar. A reliance on trauma evaluation measures or trauma focused interviews is likely unhelpful with young men in custody who have adopted a functional coping response to trauma of not talking about it. This meant that not speaking about trauma as a coping strategy was carried through into a strategy for survival in prison, both in adapting to prison life as well as coping with peer and professional scrutiny of one's stability.

3.5.2   The 'Conceptual Confusion' PET in context

The significance of the finding of differences in defining adversity and the preferred language for it, relates to the aim of exploring the impact of trauma as experienced by this cohort. Of particular relevance is the finding of a lack of common language and understanding of what 'counts' as trauma, compounded by not speaking about trauma.

The multiplicity of definitions, wide and narrow conception of trauma and uncommon frequency and severity of experiences had by the participants, linked to a reluctance to accept diagnostic or other professional nomenclature. Participants were more likely to define their being in prison and sentence length as more traumatic than previous serious injury due to violent crime, having witnessed others being seriously injured or killed, or of having inflicted that on others themselves. The implications for assessment and intervention work suggest that methods which rely on psychiatric labels are likely to be denied as relevant, and avoided due to the labelling of identity and hence judgement of risk. It speaks to the usual tension in a

forensic setting between seeking help but also needing to present as without risk of harm to self or others.

Practitioners need specific training and development for working with this cohort. They would be aided by assessment tools which are validated for use with this population, and which are able to respect the conceptual and linguistic confusion in both the professional and prisoner community. The usual trauma and risk assessment tools do not usually include the impact of offence, custody or sentence length, despite that being the dominant experience for the people being assessed. The findings point to the need for a lifespan perspective to all such assessment work, to pay attention to what has happened and is still happening to a prisoner, and to include the experience of racial trauma. Homogeneity cannot be assumed because of age, and the intersection with other protected characteristics is vital to understanding the nature of each young man's experiences. There is a limited evidence base for understanding the link between trauma in young adult men who offend, and their prior experiences of violent racism or socio-economic related trauma. However, this study found that both were an important part of that experience for many of the participants. It has implications in terms of professional services, which need to ensure barriers to their services are clearly understood. It also suggests that the wider prison management of those perceiving a legal injustice from the joint enterprise legislation, which affects groups of young, black co-defendants in particular, has to be sensitive to the need for procedural fairness in processes, systems and staff-prisoner relationships (see Yasrebi-De Kom et al., 2021, on how the deterrent effect of sanction severity was dependent on whether treatment was perceived as procedurally neutral).

All of the participants had experienced many of the traditional aspects of the Felitti et al, (1998) definition of ACEs. In keeping with the evidence base from UK prison surveys of adult male prisoners who have reported high rates of childhood abuse and family violence (Williams, 2012), this sample also described frequent and cumulative abuse and dysfunction, and all witnessed significant physical injury and/or death. Of particular note though, was the frequency of loss and bereavement that the young men had dealt with both prior to custody and since (see also Boswell, 1996). Due however to the particular sample of young men serving long sentences, all had also experienced atypical traumatic events, not found in standard definitions of ACEs. It is hypothesised that it is the atypicality of experience that led to the participants taking a unique view of how to conceive of and define adversity or trauma. The findings in this study were in line with those in Leighton (2012), who found conceptual confusion to be prevalent in adolescents understanding of mental health concepts as well as a different understanding (compared to older adults) of what is a normal reaction to a difficult life event. This has implications for how assessment tools are used to evaluate the prevalence of trauma in research or clinical samples. If prison based youth samples are likely to under-report on measures due to a different way of categorising experiences, or due to a misunderstanding or reluctance to use the usual professional vocabulary used in such measures, then such measures can only form part of any assessment process and not be a sole part of such.

Overall, it was clear that participants often conceived of childhood adversity as not traumatic or impactful for them. Such appraisals, likely linked to a survival response underpinning current psychological adaptation, are at odds with the

possible benefits of broadening definitions to be more inclusive and needs led (Afifi, 2020). The main point of difference being that if the definition of trauma is that which is overwhelming, then many of the sample had survived cumulative trauma, and in not necessarily experiencing feeling overwhelmed (apart from perhaps Carter and Devon), they did not then define it as trauma. This may of course be due in part to the gendered discourse described in more detail later in this section, or due to the experience of cumulative rather than single incident based trauma. This was particularly the case for those who were gang-involved, and despite having experienced and witnessed significant physical injury and/or death as part of that lifestyle, none made the explicit link to this being a trauma on its own.

3.5.3   The 'Impact Now' PET in context

The second PET 'Impact Now', found the young men speaking to their experience of dealing with the impact of having committed a serious violent offence, in the context of difficulties in coming to terms with being in prison and length of sentence. The finding of significant impact from offence perpetration, of sentencing and of custody revealed that for many participants they had yet to allow for an exploration of the impact of their offence on them. Many in the sample were engaged in an ongoing dialogue with themselves similar to the study by Ericson (1975), which described a process of meaning-making, and alertness to how others now perceived them.

The descriptions given by the participants of how they adopted previous distress response strategies to cope with the prison environment suggested that for some, being in prison was exacerbating underlying traumatic related difficulties. Even for

those with no clearly described previous mental health concerns, the early period of long sentences appeared to be particularly difficult. This is similar to other findings (Gibbs, 1982; Goffman, 1968; Piper & Berle, 2019), where men spoke of dealing with the shock of entry to custody, uncertainty about their surroundings, and the loss of safety. The fear of assaults from peers or staff, of reprisals for violence committed prior to custody, or of needing to 'have the back' of friends in prison; all culminated in a heightened state of vigilance. This linked back to research findings from Wright and Liddle's review (2014), which found key developmental differences in young adults with a trauma history.

Of note was the daily struggle to make sense of the impact of offence, sentence and being in prison. This resulted in an emotional labour which led to a shutting off from thinking about it, driven by the need to avoid any emotional reaction and to enable adjustment to life in prison. It is not usual forensic practice though to assess for custodial adjustment, despite the impact of it and the need to identify any effect it is having on other mental health issues. The finding of not speaking about trauma in order to survive it, also suggests the limited value of some risk assessment tools or approaches, which do not necessarily take account of this, with it being framed possibly as denial or avoidance of responsibility instead. There are some feasible hypotheses for the difficulty in talking about impact of trauma. Firstly, is the possible impact of guilt and shame on the young men. Many spoke of a lack of impact from injury or death inflicted on others due to not knowing the victim very well and of the victim being gang-involved too. If guilt is accepting that you are the source of the distress, it can be overwhelming to accept that guilt and so preferable to avoid intense emotional response. A second hypothesis is indicated in the finding that

many of the men had experienced victimisation at the hands of caregivers, a frequent finding in the evidence base (Herman, & Harvey, 1997; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005; Wojciechowski, 2021). These same caregivers were often still present and important to the participants, and a key source of support to them in custody. It was only Carter who implied any judgement of his mother's behaviour, and even then he was seeking to repair that relationship and use her support now he was in custody. Therefore, naming such events and their effects brought possible shame and regret, and threatened the source of support at a time of need. However, the usual trauma evaluation tools and methods which expect open responses often do not take account of this, and the usual time available to forensic practitioners even less so.

The study findings relating to the impact of the perpetrated offence, are consistent with those reported by Boswell, Wedge, and Price (2003), and Evans, Mezey and Clark (2007), whose participants also reported intrusive memories of the offence and ruminations relating to the same. Of significance was how the three participants who reported the most extreme experiences of trauma also reported the most impact from their offence. Many of the men spoke about sleep impact too, with a link between the content of nightmares and their offence or gang involvement prior to custody. Only one participant was receiving any support with this, the rest appeared to simply live with it. There is a growing body of literature on the diagnosis of PTSD after committing homicide that has examined this phenomenon, but it is hard to separate out the impact of previous trauma in this cohort (see a meta-analysis by Badenes-Ribera, 2020). Whilst the empirical evidence is agreed that men involved in gangs disproportionately participate in violence as both victims and

perpetrators (Gaston, 2021), much remains unknown about the prevalence and physiological and/or psychological consequences of violence exposure among young adult gang members, particularly among those who have been incarcerated. This phenomenon is rarely assessed for in forensic settings and yet this study suggests the need for explicit evaluation of these experiences, both for impact on their own account as well as the effect they may be having on risk presentation, e.g. apparent lack of remorse or guilt.

The findings of impact related to the length of sentence, aligned with those in Crewe et al., (2020) that men in the early years of their sentence reported experiencing trauma on three levels; the shock of receiving the long sentence, needing to re-consider their identity in light of their offence, and then reconsidering their futures. All participants were able to speak about the need to survive in prison and a contempt for self-pity as a threat to that survival, with a linked perception by some of how self-change was also a threat to stability and survival. Ireland's study (2001) linked emotional and avoidance coping with better levels of psychological health later in the sentence, which resonated with the observed stability of certain participants in this study who had adopted this coping style. This contrasts with traditional coping theory, which regards emotional and avoidance coping as hindering effective management of the stressor (Zeinder & Endler, 1996; Menaghan, 1982). The overall meaning making work appeared to be an important part of the move towards acceptance and settling.

The study findings bring forward an improved understanding of the experience and impact of long-term imprisonment for young men, particularly with regard their

experiences of helpful survival and coping mechanisms. This implies a need for practitioners to ensure that they understand the impact on this cohort of previous and current trauma, making use of the evidence relating to helpful coping strategies in this unique cohort, rather than the general approach to coping strategies used in psychological and health services.

3.5.4   The 'Settling' PET in context

The previously reported findings of a difficulty or strategy in not speaking about difficult life events, a difference in defining adversity and the preferred language for it, and an articulation of the impact of trauma unique to a sample incarcerated for serious offences; were all brought to bear on the final PET of 'Settling'. The findings also highlighted interesting aspects which informs assessment and intervention work with this cohort. For example, the importance of understanding the process of acceptance and therefore the sequencing of intervention offers, to ensure that responsivity and readiness to engage is fully explored with each man.

A process of stabilisation was described by some, underpinned by a radical acceptance of their situation. Many spoke of an optimism that worked by comparing to others in worse situations, framing their situation positively, and finding a purpose, e.g. access to education. The evidence base points to how young men in prison are often found to be more disinhibited, make poorer social judgements (Williams, 2013), and lack the communication skills needed to negotiate conflict situations (Milders, Fuchs & Crawford, 2003). Despite that being a difficulty for many of the participants, they were still also able to respond to their new challenge and spoke of resilience or strength as their main strategy, albeit with an emotional toil.

For those participants who had already achieved a sufficient level of stability in everyday life, they moved onto a process of adaptation where they settled in a practical and psychological sense. In this stage they spoke of learning about how to meet their needs, how to deal with the everyday challenges of custodial life, and how to stay psychologically resilient or "strong". There was variability in the styles and methods used, depending on various factors related to personality, background and available support. However, all accounts were consistently flavoured with a stoic yet optimistic outlook. The focus in many interviews was on learning, and this fitted with the findings in similar studies (Canlione, 2021) where learning rules and expectations was key to survival. What was not spoken about, in keeping with the evidence base (Vaswani, 2021), was that of help seeking behaviour to get professional support with problems faced. A preference for self-reliance or peer support was clear. This was despite the possible ongoing impact on their mental health, but potentially as a fillip to their sense of having resisted being subjected to institutional intervention, and being made vulnerable. This ability to adapt and deal with the situation was striking, as all the participants fitted the profile found in the evidence base of how previous childhood trauma left impacts such as emotional numbing, a persistent low level fear state, behavioural impulsivity, being hyper vigilant, hyperactive, withdrawn and depressed (Kerig, Bennett, Thompson, & Becker, 2012; Kerig, 2019). Friendships were also key to many participants' reflections on what helped them adjust and settle. The participants understood what has been well covered in the academic literature (see Nurse, 2021 for a recent overview in this field), that supportive friendships helped them to adjust to the difficulties of custody. The implications of

this is clear for forensic settings, in the adoption of mentoring and peer support networks.

As described in the study rationale (section 3.2), studies have explored adaptation to prison and the factors relevant to that experience (Cesaroni, 2021). Similar to Murray (2020), a gendered discourse in the form of the language of strength and toughness was used by some participants in this study to explain both why they did not speak about trauma and their strategies for survival in prison. As they had been dealing with the impact of trauma for many years, this discourse spoke to a habituated response to dealing with adversity learnt over their childhood. Similar to how Gooch (2019) reported in her study with 15-17-year-olds in prison, the participants in this study also hinted at a "performance of masculinity", that was a mask for the challenges all were facing in adjusting to prison life and a contrast to the premature adulthood they found themselves in. Clearly, the experience of adaptation described by the participants in this sample is not a generic one, but adaptation being made by young men in a prison for young men where strength, courage, and independence are prized traits. These experiences fit well also with Taylor's (1983) theory of cognitive adaptations and pragmatic coping, suggesting that self-enhancing biases can buffer current threats and possible future setbacks by helping to restore self-esteem, develop an optimistic outlook, and regain a sense of mastery over the event.

The cognitive, psychological and emotional effects of trauma underpinned the ways the participants adapted to imprisonment. Comparing the findings around coping, adaptation and settling with similar empirical work, there is an alignment with

the work by Harvey (2007) on survival and adaptation by young males in prison. Harvey's work highlighted how this required an emotional reflexivity which in turn affected practical and social adaptation. The fit with the findings here is that what is experienced as 'coming to terms with it', and 'settling down' appears to be psychological and emotional reflexivity at work. For the participants in this sample, it appeared that Harvey's adaptation types might be hierarchical with the psychological aspects needed in order to achieve the others. However, positive adaptation manifested differently for different participants, with only some homogeny found between them. The findings are entirely specific to young adult males, many of whom had been in prison since childhood. A risk of adaptation is institutionalisation and this risk is potentially greater for young men who are still developing. Many of the sample appeared to understand this, and rejected any over-reliance on the institution or staff as a way to resist both institutionalisation and the institution itself. The "rational despair" noted in Jewkes' (2013), sample of adult male life sentenced men was not so marked in this sample, balanced as it was with youthful optimism about re-entering society whilst still a young age. Similarly, the loss of work and daily routine referenced in Jewkes' adult participants was not the focus for this adolescent sample. Further research to explore young prisoner's adaptive strategies in different types of prison institutions would be valuable to understanding how staff-prisoner relationships can be supportive (Hearn, 20201), if peer support is always beneficial and if cultural variations apply.

Resilience as a concept and practice was referred to by many participants, and seemed to be worn as a badge of honour and perhaps masculinity. The academic literature is full of inconsistencies about how to conceptualise and assess resilience,

despite growing interest in the topic (Yoon, 2021). This may be due in part to a lack of consideration so far of the individual's life stage in such work. If resilience is about growth and bouncing back from adversity, becoming stronger, more effective and successful, then that does not fit with the findings in this study. One of the themes was a definition of resilience as being the same as grit, distancing from past difficulties and a sense of agency. All also alluded to the importance of either faith, hope, and of finding meaning and purpose to life in prison. Resilience for this sample seemed to mean the process of adapting in a pragmatic way to previous and current experiences of adversity. The participants all appeared able to draw on previous techniques used for surviving trauma, using familiar coping strategies such as hyper vigilance and social withdrawal that limited their ability to adapt well in prison, masked vulnerability and possibly increased risk to selves and others. If resilience is the capacity to sustain and respond to life stress, setback and difficulty, then only some of the sample were reaching that benchmark, others were describing themselves as resilient in a way that was more akin to survival. The discourse on resilience (Mahdiani, 2021) has tended to suggest that there is a right way to adapt which may not fit for the very unique circumstances of adapting to having committed a serious violent offence and serving a long prison sentence. Arguably a more context specific understanding of what resilience looks like for this population would be helpful, as the process appears more akin to habituation.

Although not all the participants had found stability, those that did described a process similar to Wright, Hulley and Crewe, (2021) and were more engaged in opportunities offered and more able to maintain positive and supportive relationships. This bodes well for their long term stability according to Crewe's

findings. The evidence base suggests there is a normal pattern of adaptation to survive or even thrive in the face of decades in custody. Whilst short term thinking, a narrow focus and a difficulty setting goals looks similar to that often labelled as immature or anti-social thinking, it may actually be the necessary coping strategy for young people in this situation. More could be done in this field to explore how resilience factors impact on mediating the effects of traumatic experiences in custodial samples of young males. This should also consider the different resilience factors e.g. the possible impact of role models, social capital etc.

3.5.5   Limitations

Whilst a restricted range of language can be an expected impact of significant adversity, it may have impacted on the findings. Due in large part to the difficulties which many participants had in talking about the range of impact of difficult events on them, as well as a distinctive way of conceiving of trauma, not all the original study objectives were able to be explored. First of all it was not possible to fully explore whether participants identified differential impacts of various trauma types, to determine if the frequency of traumatic events was of importance or if the 'dependency' of the traumatic experience made a difference to the experience of trauma (rather than just the definition of it). This was due to most of the participants initially denying any impact at all from previous difficulties. Appendix 13 was used to prompt for specific impacts such as sleep problems, anger control or withdrawal, which was then useful in opening up a discussion about such problems. This mix of closed and open question structure should be favoured in future similar research with this type of sample.

A specific limitation relates to the impact of gender, race, ethnicity on the interviews and the possibility of bias and uninformed perception affecting both the interview dynamics as well as the interpretation of the findings. As a considerably older, white, female researcher, I never shared common demographics with the interviewees, and whilst consideration was given to that throughout, and the clinical experience gained from decades of working with this cohort offered some framework of understanding, it cannot be assumed that this did not limit the interviews in some way.

3.5.6 Research Implications

Ongoing research is needed to take forward the challenge of a growing cohort of young adult male prisoners serving long sentences, who have experienced cumulative trauma and through impact of offence perpetration and then sentence length are likely continuing to function in a traumatised state. Future research should be deliberate in seeking to understand the experiences of young men from different ethnicities, both to inform our understanding of the heterogeneity of experience, as well as how to tailor assessments and interventions for different groups of people. Such work would also improve our understanding of the intersection of the trauma experienced by young men in prison with other characteristics such as ethnicity, disability, or socio-economic status (see Bird, 2021 and Mendez, 2020). Additional work is needed to develop the creation of trauma responsive custodial practices. Whilst masculinity, power and adaptation has been suggested by Crewe et al, (2007) as significant factors at play for young men in prison, ethnicity and racial trauma are also likely significant factors. We know for instance from work by Wilson (2003), that

the young black men in that sample used specific strategies to cope with prison, and this was based on their previous experiences of policing and decision making about when to resist, 'go nuts', or 'be quiet'. Without a full understanding of how the experience of racial trauma intersects with previous and current trauma, any assessment is limited and services likely to be irrelevant. However, when racial trauma is so ordinary as to not always warrant comment, focused research work with this cohort requires careful planning and implementation.

Another pointer for future research, is the need for ongoing work to explore the prevalence and physiological and/or psychological consequences of violence exposure among gang-involved youth in prison. Arguably, gang-informed assessment should be central to evaluation with this cohort, and increased research work in this field would support that .As both exploited victims and later perpetrators of serious harm to others and vicariously to themselves, the implication of this for forensic practice is significant. Findings from studies such as Williams and Clarke (2016) point to the sensitivity of these young men to collective punishment and to the legitimacy of the institution, all highly relevant to those seeking to develop trauma informed services in prison.

3.5.7 Theoretical implications

As is fitting for a study using IPA methodology, considerations of theoretical fit are not appropriate (beyond the reflections in section 4.3 about a fit with the IPA theoretical foundations and phenomenology), and so there will be no attempt to test or generate theory. It is feasible though to note the points arising from the empirical findings which link to the key theoretical frameworks upon which this study rests.

Suffice to say there were no findings that did not fit with contemporary trauma theory as outlined in section 1.2, with a repeated finding of individuals overwhelmed by negative events, learning to adjust and to cope with the impact of those events, with often maladaptive responses becoming habitual over time, e.g. fragmented memory, hypervigilance, paranoia about other's intentions to harm, a lack of trust in expectations of safety in every day life etc.

As the key narrative in the findings was the overarching developmental influence on the understanding, impact and response to trauma, then future research to test theory about how the stages of development affects those aspects would be valuable. For example, the findings are likely to be of value if compared and contrasted to current theoretical models such as that by Van Wesel et al., (2012). This hierarchical theoretical model suggested a number of domains relevant to a trauma framework, and the findings from this study fit with its focus on the impact of trauma, the phases of impact due to development, a lifespan perspective, meaning-making, dealing with the impact, and resilience. Other stage based frameworks such as that in Harvey (2013) regarding stages of adaptation, were echoed in the findings here and further research on bringing such models together to test for fit with this particular cohort would be welcome. This is multi-faceted work of course, but for example work to explicate the cognitive, psychological and emotional processes relevant to custodial adaptation in this cohort and the mediating influence of previous and current trauma as part of that would be one aspect, as well as whether particular individual characteristics such as ethnicity and disability play a part. Other facets would be more work to build on these findings to explore the prevalence as well as

physiological and/or psychological consequences of violence exposure (as victims and perpetrators) among gang-involved youth.

A final comment on the implications for theory arising from this thesis, is a proposal for a theory of change to be developed around what would constitute meaningful change in trauma informed custody. The field currently lacks this higher-order understanding of how such programmes of work can reach their goals, and what are the necessary factors relating to staff development, culture and climate and wider custodial systems and practices for example. A theory of change in this field would need to also be able to encompass the different cohorts in prisons, to ensure that homogeneity is not assumed for both prisoners and staff groups

3.5.8 Practice implications

It is critical to understand the ways in which youth deal with the impact of current and past trauma, to aid their rehabilitation. Therefore, a trauma informed lens on assessment and intervention work would ensure adaptations allow for the necessary time, and choice of method for each young man to speak about his difficulties. Agreeing a man's preferred language and phrasing for talking about his experience, to avoid misunderstanding and implicit judgement, is important in any offer of support. The perceived threat to resilience from speaking about trauma, suggest that there is need for cautious timing and methods for such conversations, and ongoing engagement to understand the barriers to their engagement and take up of services. Meaningful assessment would ensure that impact of trauma was understood as a responsivity factor in its own right, and so routine assessment and expectation of young prisoners to disclose trauma should be avoided. This is vital at a time of

heightened risk of trauma from being in custody, with fewer options for avoiding any emotional reaction to the impact of such discussions. A readiness to engage with professional workers hinges on a process of acceptance, adaptation and settling which then allows capacity for therapeutic work.

The findings around successful adaptation, suggests that routine use of a strengths-based approach is likely to be successful. As is seeking to maximise current useful coping strategies, building new ones appropriate to the man and his stage of acceptance. Simply identifying imprisonment or offence perpetration as being traumatic and offering talking therapies is unlikely to be helpful. Instead, careful evaluation of specific difficulties such as problems with sleep and appetite and timely discussions about the origin of these are more likely to be taken up by the young men, leading hopefully to a trusted relationship within which emotional safety can be built. Therapeutic and rehabilitative input to exploring the offence behaviour must also recognise the impact of the same on each prisoner, in order to ensure the psychological effects are worked through alongside the impact of the offence on others. Studies such as Jenkins, et al., (2021) suggest the value of improving emotional awareness and reducing anxiety to help normalise sleep patterns and quality. Other initial therapeutic activity could focus on the lack of self-compassion often seen in those who have experienced childhood maltreatment (see Zhang et al., 2021 for systematic review of this area). Clearly, justice-involved youth are not a homogeneous group, and this study highlights the diverse backgrounds and treatment needs of gang-involved young prisoners. The findings of multiple issues of behavioural health, traumatic grief and loss, against a background of a high

exposure to community violence, directs the need for access to trauma-focused treatment, with an emphasis on grief and loss.

The findings highlight the importance of a bespoke organisational approach to workforce development for those working with this cohort. Such training should be appropriate to the age of the men in that prison and be relevant to the tasks that particular staff groups carry out with those men, e.g. key working, physical exercise, workshop management, assessment or intervention. There is nuance and challenge in every aspect of the daily routine and engagement work in prisons, and to better understand, respond to and avoid further trauma, few commonalities can be assumed beyond how most of the men are likely suffering the impact of trauma. Vaswani's (2019) survey of over 200 operational staff on the adoption of a trauma-informed approach for young people in custody showed the need for staff time, consistent staffing and regime, and staff supervision.

3.5.9 Final words

This specific cohort of young men with long sentences are a fast growing group about which more needs to be known. This study's findings offers insights into how they define difficult life events and how they respond to them, which has relevance for both practitioners, researchers and organisational approach, with implications for the engagement, assessment, intervention and management considerations, of young men who have harmed others and suffered harm themselves.

Chapter 4 Thesis discussion

4.1   Overview of the thesis

This chapter provides an overview of the aims of the thesis and the outcomes achieved. The aims of the systematic review were to provide a full review of the empirical literature on measures of trauma with young males in custody, provide an evaluation of the quality of the psychometric properties of the identified measures, and to identify any best practice measures available for use with this population. The empirical study aimed to explore the meaning of trauma and interpretation of the impact of it as experienced by 18-25-year-old men serving more than 10 years in custody, and whether and how the experience of their offence and sentence length was part of that. This chapter pulls together the findings of both studies to consider the implications for practice, research, and organisational approach.

This thesis provides an overarching exploration of the challenges with assessment and support for this cohort. The narrative tells of a lack of agency and power both before and during custody and a theme of hyper vigilance and perceived threat. The ordinariness of this as a daily experience, means both that assessment may be flawed if it relies on a perception of trauma as unusual, and offers of support may be denied due to lack of relevance. The research interviews were replete with an explanation of behaviour as underpinned by environmental or contextual causes of crime as a fact of their life, putting the young men at odds with psychological approaches which can be focused on internal causation.

The literature reviews completed for both the systematic review and the empirical study attended to how little was known about the trauma of incarcerated young men,

both before custody and as a consequence of both imprisonment and long sentencing. The evidence base was limited in that both the available measures and the empirical work conducted does not separate out this age group on account of its distinct developmental needs. The lack of academic and policy attention on these experiences may of course simply reflect the public perception that prisons have been designed for men, who are also often the cause of much of the violence, dominance and oppression in society (Sloan, 2018). However, the prison management and rehabilitation of this group is still required in order to reduce their risk of harm on re-entry to society. As the findings in this thesis indicate, this is likely best done with a trauma lens that understands the interactions between age, trauma, masculinity and ethnicity.

Arguably what was needed is a phenomenology of youth imprisonment to fully understand the psychological processes relevant to custodial adaptation, and for this growing cohort in particular. This work would usefully build on Harvey's (2013) work on stages of adaptation but be informed by the ethnographic work conducted by others in this area (Tynan, 2019; Crewe, Hulley & Wright, 2017). This would bring greater insight into which adaptations are an inevitable response to the pains of imprisonment, as well as the range of differential responses to confinement, including individual manifestations of power and resistance. However, it is the interplay between these two fields of work that will bring the benefit to practitioners and policy makers, as it is evident that trauma is a key factor that mediates the young prisoner's experience of imprisonment.

4.2   Reflections on the findings of the systematic review

This thesis offers a challenge for definitions of trauma to be made relevant to the cohort of longer sentenced, and previously traumatised young men in prison. The findings from the literature review for the systematic review and the finding of a lack of available tools, has implications for theory in that there is little agreed definition of trauma. Both the term trauma and many of the alternatives, e.g. ACEs, negative life events, adversity, all are a poor fit for this cohort in particular as the findings in Chapter 3 speak to the clear preference for choosing themselves to define what has been traumatic, a pervasive difficulty in finding the language or ability to speak about trauma, as well as preferring to focus on the current difficulties, separation and isolation at the start of long sentences

These findings fit with general theory about the impact of trauma on young people but indicates the need for further theoretical work to ensure a clarity about the terminology being used, and to use the findings from this work about the significance of language and labels for this cohort. Without such a focus, theory and research work risks an under-reporting of the difficult life events being asked about, as this cohort are not likely to find the professional terminology relevant or helpful.

This thesis highlights the importance of using only validated and reliable instruments to measure trauma in this cohort. The systematic review was the first of its kind, and concluded that existing measures did not meet the benchmark for the psychometric properties of reliability and validity. Therefore, no measures were recommended, and further empirical work is required to validate measures in this field. Without robust measures, we may be underestimating the prevalence and

misunderstanding the impact of trauma. The systematic review identified that this was a developing field with many new measures seeking to test for predictive validity. The review recommended that new measures are able to take account of the difficulties young men have in talking about trauma, a finding that was supported by the analysis of the subsequent empirical study. They should also give regard to the impact of trauma such as hyper vigilance and mistrust of others, which affects how young men respond to assessment and intervention. Assessment must also take account of the intersecting adversities experience by this cohort, and ensure assessment outcomes are placed in the broader context of multiple adversities such as poverty, racism, family violence, community violence etc. The assessment of trauma is highly significant for both practitioners in custodial settings and commissioners responsible for ensuring services are trauma informed in sites holding this cohort.

To advance the field further empirical research would usefully work to robustly prove the reliability and validity of the tools showing the most promise, in particular the CAPS-CA, the CROPs, DVERS, STRESS, TC and CTQ-SF. Such studies should validate those tools specifically with the population of only 18-25-year-olds in custody and seek to compare with control groups and community justice-involved larger samples. Further work in this field should avoid any sole focus or link to particular diagnostic models as this tends to restrict the range of experiences, outcomes and impact. For a cohort of young men who have experienced and committed significantly traumatic events, the tools need flexibility in being able to pick up on what has been experienced, what is still having an impact and ongoing

experiences which are causing new difficulties, e.g., offence impact or custodial adjustment.

Forensic professionals will want to have alternatives to score based measures when working clinically with individuals, to support a person-centred approach. Such scales are critical to being able to establish group level experiences of trauma and comparison with other samples as described above or to have non-clinicians screen for trauma. However, on an individual level, it is likely that only a phenomenological approach is able to take account of the range and severity of the typical and atypical experiences of trauma experienced by this cohort, as reported in Chapter 3. The empirical study's findings indicated the definition confusion evident in the sample, suggesting a likely under reporting in trauma evaluation, despite potential significant impact on the young man. Importantly in a forensic setting where judgements about the impact of past experiences may be used to set intervention goals and be recommended before parole is granted, it is important that such decision making is informed therefore, by the most valid and reliable tools, which are supported by clinical opinion and a higher degree of flexibility and use of clinical material than is typically seen in such measures.

4.3   Reflections on the findings of the empirical study

To date, this was the first psychological study of its kind undertaken with this age group and focused on those who have received long sentences. It highlighted the high rates and types of trauma in this cohort, and how the experience of events such as committing violent offences and receiving long custodial sentences was also impactful. The study aimed to better understand the meaning of those experiences

from the perspective of the young man himself, post offence and sentencing. One notable finding was the struggle which many had in talking about the range of impact of difficult childhood events on them, as well as a distinctive way of conceiving of trauma and its impact on them, both before custody and since. There was an ambivalence and flippancy in how significant past events were described, and a lack of spontaneous narrative around those unless specifically prompted. This suggests a need for practitioners to ensure they have a good understanding and level of skill in the range of experiences which need asking about and a need for rapport and careful interviewing skills to discuss them.

Despite the cumulative effects of trauma since a young age, and now at the start of a long prison sentence, the participants in this study were able to speak to hope, strength and adaptation. Their ability to consider their new world and life trajectory with insight and wisdom was remarkable, and they all reported a life interrupted but not halted by the impact of either their experience of trauma or the impact of their offence on themselves or others. This all points to the need for those working in the CJS to develop informed, flexible and bespoke services, which whilst not adopting a single model for all, does adopt the universal precaution of assuming trauma in all. Such service development needs to consider the offer available to young prisoners at the start of long sentences. There is currently a real lack of both discussion and appropriate materials available to work with these men individually or in groups to start the process of settling and acceptance; which is significant to their ability to rehabilitate and work towards timely release. Such work should be relevant to the stage of the sentence the man is in, working towards applicable goals for that stage of the custodial journey.

The empirical study evidenced the unique way long sentenced young male prisoners conceive of and talk or not about trauma, and so provides a significant challenge to psychometric tool developers. Therefore, developing tools need to be able to capture the range and language of traumatic experiences that is recognisable to the young man as resonant of his individual experience and can capture both being a victim and perpetrator of trauma. The findings from the empirical study indicated the struggle many participants had in articulating the nature and impact of traumatic events, compounded sometimes by a generally impoverished verbal clarity. For those exposed to trauma at a young age, they had difficulty deciding if they were remembering correctly, both the details of the events and the impact on them. They often erred on the side of dismissing their relevance and reported a lack of feeling and thinking about such experiences. There was also a difficulty in defining the impact of their own violent offending, sentence length or custody as traumatic, despite their confirmation of various ongoing mental health or wellbeing difficulties as a result. The need to avoid thinking about such impact, as well as the lack of general consideration by professionals about the impact of perpetration of offending likely perpetuates such difficulties.

No existing scales are able to take in the range and nature of the events experienced by this sample and yet this growing cohort and the professionals working with them are in need of such tools to provide the evidence base and to support clinical decision making. As the clinical encounter might be the first time the young men have been invited to think about the events in a way that defines them and their impact, there is a need for tools that can capture both baseline and repeat evaluations. Clearly though, any research or empirical work should not rely on the

ACEs framework as if it were a validated screening tool for trauma or capable of evaluating the range and impact of such experiences. What would be helpful to forensic practitioners are tools or interview schedules that make a timely enquiry about the range of difficulties arising from traumatic experiences, such as sleep issues, rumination, irritability and hopelessness. In similar cohorts to that in the empirical study, it is likely to be beneficial to have that aspect in the evaluation to ensure that misunderstanding of poor memory for events defined as traumatic does not ignore the ongoing impact of them. Ultimately, this also needs to be conducted in a way that does not seek to label and diagnose which likely brings service user concerns about identity damage and possible risk assessment affecting likelihood of release.

4.4   Consideration of the implications for forensic psychology practice

Forensic practitioners need ongoing training and development for working with this cohort. This might include both the type of assessment tools and methods which are validated and most likely useful with this cohort, as well as the general knowledge and awareness of the nature and range of trauma in this cohort, including both past and present experiences. This would put the practitioner in a strong position to train other prison staff in the same, a role often adopted by forensic psychologists, and of particular use to those sites with growing young adult cohorts. Working collaboratively in the multi-disciplinary team to routinely evaluate the custodial adjustment of each young man is recommended as a beneficial first step as it would help identify ongoing impact and difficulties without diagnosis and labelling.

General forensic practice tends to rely on a knowledge of trauma impact which is adult-centric, and at best presents young people as passive recipients of, rather than active agents responding to or causing, harm. This thesis points to the need to work with a wide range of trauma and adversity related processes which contribute to offending behaviour and so are critical in delivering forensic trauma informed care (TIC). Chapter 3 provided an understanding of the experience of past and present trauma for young men in prison, offering a phenomenological lens on those who have been harmed, have harmed others and are now being harmed by being in prison. This is particularly relevant as there is a move in the UK Prison Service towards TIC. This development is welcome, and as the findings from Chapter 2 indicate, relying on evaluating which prisoners are the most traumatised is an unhelpful direction of travel, and instead assuming most are and all would benefit is best.

This thesis offers a challenge for definitions of trauma to be made relevant to this cohort. Findings from Chapter 3 raised an important point, around the sensitivity of this cohort to the professional language of 'trauma', 'adversity' and 'coping' and showed an overlap with the Power Threat Meaning Framework (PTMF), (Johnstone & Boyle, 2018) in terms of characteristic threat responses and survival strategies. The varying definitions and terms in this field are confusing and often correspond the event with the sequalae, compounding the resistance and reluctance to engage for some groups of people who wish to speak to the nuance of their own experience and resilience rather than be labelled. The PTMF offers an alternative language to the traditional one of classification and diagnosis and indeed the empirical data analysis for this study validated the conception of threat and threat responses in this group..

As well as adopting the 'what has happened to you?' approach from PTMF, an important question is also 'what is still happening to you?' to capture the impact of offence, prison and sentencing. In that evaluation, the forensic practitioner needs to be able to respect the early stage of pragmatic coping and adjustment to custody. There is though a likely movement over time for these young men, towards a mind-frame of acceptance and settling, when they are able to begin to accept the harm done to others and themselves. Forensic practitioners will want to be alert to any premature judgment of risk and need, as this is likely to be affected by the early coping style adopted by many, which can often deny both risk and harm as part of that pragmatic coping.

Future work to validate the PTMF with this cohort would be useful. For example, to unpick which of the 'General Patterns' and 'Threat Responses' might be context, gender and/or age sensitive, as well as how particular patterns and responses are relevant for a custodial sample. Added to this is the critical lens of ethnicity, particularly to take account of the differences in the way that Black and Asian prisoners experience social and power relations in prison. A critical finding from the empirical study was the impact of racial trauma for many, in keeping with other studies exploring the impact on those who have experienced systems of oppression (Allwood et al., 2021) or microaggressions (Auguste et al., 2021). Overarching all is the context and pressure of a hegemonic masculinity, that seeks to prohibit any expression of vulnerability and which greatly influences these young men as they transition to adulthood in the carceral space.

4.5   Organisational implications

This thesis challenges developments in the field by asking practitioners to pay attention to the developmental needs of young people who have faced and continue to face adversity. Therefore, work to introduce aspects of TIC into prisons should conduct robust consultation and a review of the evidence base to inform any such work. There is a danger in any service modelling which assumes homogeneity based on the predominance of adult males in the CJS, or relies solely on staff training as a solution to it's aims. Therefore, organisations need to consider what else we need to know about how to introduce effective TIC for this cohort, who are held most often in mixed age populations.

Based on the findings from this thesis, prisons holding young adult men need to be not just trauma informed and responsive, but gender and age sensitive in a way that meets the rehabilitation needs of this group, and the training needs of the staff working with them. Ignoring the separation, isolation and stigmatisation inherent in incarceration misses the key experience of this group of people, so organisational developments should recognise that prison is itself home to ongoing trauma and re-traumatisation. Forensic practice should also understand and recognise the impact of custodial adaptation on individual prisoners, and reference this alongside use of standard ability, risk and strength assessments when used to inform processes such as Parole Board hearings and sentence planning.

This thesis suggests a focus on agreeing a shared language, and TIC that does not ignore custody and sentencing as part of the ongoing trauma. The study findings indicate the need to attend to the interplay between youth, trauma, masculinity and

custody. Ultimately, TIC still has to offer choice to the individual about when and how to engage.

The usual recommendations of TIC focuses on staff training, and relationship based interventions (Griffin et al., 2012; Miller & Najavits, 2012) and these need to be sufficiently nuanced to enable a prison wide understanding of the differential conception of and response to trauma for this cohort. As traditional TIC staff training and operational focus seems to mainly be on how the impact of past trauma affects current life struggles, it contrasts with the findings from this work about the dominance of the current adversities being experienced. It suggests the need for staff development work around TIC to be able to take into account that at least alongside, if not primarily in order to fully realise it's ambition.

Linking the usual TIC principles back to the findings in this thesis, further work is needed to understand the 'meaning-in-practice' of such principles as safety, hope, autonomy, respect, and empathy with those who are young, are from minoritised backgrounds or have legally protected characteristics such as learning disability. The language of those principles appear to have different meanings for people and therefore different expectations of what successful TIC means when evaluated independently. Chapter 3 brings attention to how necessary it is to focus on current adversity such as the impact of offence perpetration, sentencing impact, and custodial trauma, and focusing only on childhood trauma ignores the daily reality for many prisoners. Similarly, failing to take account of identity based violence such as racial trauma, ignores the impact of violence or deprivation of resources for some groups, and how central this is to their responsivity to initiatives such as TIC.

4.6   Summary

This thesis reported several challenges and learning points for future consideration of the experience of trauma in young adult men in custody, particularly on the needs for gender, age and ethnicity sensitive evaluation methods and services. HMPPS incorporates decency and safety as an outcome in its business strategy, therefore implementing and benefiting from trauma informed assessment, support and management is realistic even if difficult. The considerations and recommendations outlined in this thesis point to a way forward for thinking about trauma with young adult men in custody. It offers new insights for application to the assessment, support and management of these young men that better addresses their criminogenic and responsivity needs and risks.

Chapter 5 Individual Learning Plan

Reflective summary on being a researching practitioner

This chapter summarises the full learning journey contained in the Individual Learning Plan. It picks out key reflections on my development as a researcher-practitioner across the four domains of the Researcher Development Framework.

5.1 Domain A: 'Knowledge and Intellectual Abilities'

At the start of this journey, I had to work to develop an academic writing style, different in tone and pitch to my usual work practice. It was an early reminder of the difference between research and practice work, and the importance of respecting the protocols of each. However, the necessary reading phase required close reading of the literature and immersion in other authors' arguments, and this naturally developed skill in this regard. The most challenging sub-domain for me was 'Creativity'; as it asks not just for intellectual rigour and argument construction but also innovation and intellectual risk, something which became easier only with time and confidence. In my usual practitioner role I have had to develop my creative side, and this grew in step with how my role and grade changed over time. I learnt to lean into the interest I have in cross-discipline learning, and practical application of research findings. I continued to develop this with regard to my research work, to maintain a broad, curious approach to my learning, which naturally brings a creative aspect to gathering and making use of knowledge.

The systematic review was a new challenge for my knowledge and skills, being new to this method but keen to adopt a rigorous approach. The learning curve was steep as I used new tools and methods and researched my understanding of each, e.g., having to learn how different database algorithms and search engines functioned in order to be able to develop a robust search strategy. The empirical study and systematic review required a depth and reach of knowledge I had not previously worked at, and it was both a challenge and a luxury not normally afforded to me in my practitioner role. However, it resulted in a clear development and confidence in my literature review and evaluation skills.

The final year has focused specifically on the research skills required for the A2 and A3 sub domains of Domain A, and the sub-units of (A2) synthesising, (A3) critical thinking and (A4) evaluating. At this final stage, I am able to confidently rate the knowledge base, cognitive abilities and creativity aspects of this Domain as functioning at an RDF 2+ level. This reflects the journey taken to work through that required in each sub-domain and the actions set previously to develop where necessary.

5.2 Domain B: 'Personal Effectiveness'

The early phase of the doctorate was busy and multi stranded as I made progress towards a proposal for both the empirical study and systematic review. My progress was likely supported by 20 years' experience as a practitioner, manager and parent, and this foundation of personal efficacy supported the development needed in other areas. However, the usual need for enthusiasm and integrity when studying for a doctorate, was thrown into focus when I needed to also persevere

through a pandemic, as well as difficult personal circumstances in year two. However, my routines and study habits paid off as I made good progress in the final phase and completed the thesis within three years, despite the setbacks.

Whilst as an experienced and late career psychologist I had already established a base line of personal qualities (B1) such as perseverance, integrity and self-reflection, and the necessary skills of self-management (B2) such as time management, responsiveness to change and work-life balance; it was the professional and career (B3) sub-domains of 'networking' and 'reputation and esteem' that I found the most challenging as I developed an identity for myself as a researcher. Whilst I am a key person in my organisation for the field I was researching in, I had both a limited network of colleagues and peers in that regard which was informal and predominantly in the HMPPS psychology community. I was also not known as someone actively undertaking research in this field. I challenged myself to take up this mantle and understood some specific activities to stretch myself in this regard. For example, I set up a Research Group for my prison which will include all those interested and involved in research activity, e.g. Unlocked Graduates, senior leaders and NHS staff. I also presented the findings of the systematic review at an NTU Research Café and the 2020 BPS DFP conference. I am now being approached as someone with expertise in the field of young adult men in custody and personality difficulties, and as someone actively undertaking research in this field.

The final year has focused specifically on the research skills required for the B3 sub domains of Domain B, and at this final stage, I am able to confidently rate my functioning at the required RDF 1+ level. This reflects the work done through the doctorate and the actions taken along the way.

5.3 Domain C: 'Research Governance and Organisation'

As a practitioner I was used to focusing on high standards and professional conduct, but it presented itself differently and more subtly in research work, and at the start of the doctorate I had to gain an improved understanding of both the university and organisational requirements. This meant paying close attention to the ethical issues, GPDR requirements and aspects of confidentiality. Working with this vulnerable population required diligence with regards ensuring informed consent was gained and the ability to withdraw, with no perceived penalties was also understood. The robust permissions process completed with both the organisation and the university picked up on all potential issues of concern and made for a strong governance arrangement.

I learnt also how to manage the doctorate as a mini-project in order to handle the various activities and timelines. I learnt to plan for the inevitable delays when prisons reverted to more restrictive regimes affecting interviewing access, and yet still be able to progress other aspects of the thesis. Even when this meant working at times of personal difficulty and through covid lockdowns, for example I still completed the systematic review with all it's inherent detailed stages of work. My work throughout the pandemic restrictions evidences my ability to set up and manage good research governance and organisation with regards independently managing my project,

managing the problems that have come up and being alert to the risks in my research environment.

Due to the restrictions imposed by the pandemic, the 'Health *&* Safety' sub-unit became critical, and various university and work processes and stakeholders were involved in order to keep progressing the project. The constant attention to the issues involved in planning for possible sickness or absence or outbreaks of Covid, and the attendant paperwork was fatiguing at times. I found that talking the issues and challenges through with local colleagues has been helpful. They were dealing every day with similar problems, albeit for different reasons, and were vital to finding new ways to achieve contact time with participants in difficult circumstances. This meant that I was able to remain dedicated to the participant verification interviews and follow up with all the participants despite the prison level challenges in interviewing men at that time.

The final year has focused specifically on the research skills required for Domain C, and the sub-units of (C1) professional conduct and (C2) research management in particular. At this final stage, I am able to confidently rate my functioning at an RDF 2+ level for those sub-domains and 1+ for the 'finance, funding and resources' dub-domain. This reflects the journey taken to work through the actions for each sub-domain.

5.4 Domain D: 'Engagement, Influence and Impact'

Key to my development in this domain has been a growing confidence in identifying myself as a researcher and taking up the associated responsibilities to

drive a research agenda in my work role and work projects. I found the RDF particularly helpful to being able to consider what skills were necessary to what task, where I needed to develop and how to better assist others in any joint research projects. For example, where previously I have conducted research that has not been successful in the areas of 'Engagement, influence and impact'. Having the RDF explicitly breakdown the necessary stages of work and factors to consider has been helpful to planning the work needed to liaise with all relevant stakeholders, and to think about engagement and impact activities. This meant I developed a range of local and national platforms for joint working around research initiatives as well as presenting at senior level organisational meetings, Research Cafes and the national BPS conference. This likely reflects my position as 'insider-researcher' described in Chapter 3, with a thesis and approach that is clearly active, experience based, keen to link theory to benefit practice and obviously situated in the field of work I am employed in.

The final year has focused specifically on the research skills required for the D1 and D2 sub domains of Domain D, and I have rated myself as functioning at the requisite RDF levels of 1+ and 2+ respectively for those. As my research work concludes and I move into the final stage of thesis preparation, engagement and impact is now being considered and rated at the requisite 1+.

5.5 Final reflections on being a researching practitioner

A key learning point achieved from this doctorate has been a greater understanding of epistemological positions and what can be considered as knowledge. I had not encountered this way of grounding my research work before,

and it helped to better understand what influences I brought to bear on my research questions and chosen methodology. Supported by an ongoing Reflexive Journal, which was useful for reflection and tracking decision making, I read around this field and was keen to avoid the positivist approach, which led to a change of research proposal. When reflecting on the ontology of what there was to be known in my field of interest, it led instead to a focus on the origins of the difficulties experienced by the young men in the cohort of interest, rather than the expression of them. The original proposal led to a field of positivist personality research, which was a contrast to my developing researcher identity as interpretative and phenomenological, which sees knowledge as constructed and interpreted and therefore research questions were developed around that approach. The final write up of the empirical study held close to that position and to the joint acknowledgement of participant and researcher perspectives and prejudices, leading hopefully to a new lens through which to think about trauma for this sample.

Fortunately, I have a practitioner role that directly maps onto my doctoral work, which has supported my doctorate studies and developing researcher skills, as well as now being able to use the learning to contribute more effectively to regional and national Prison Service practice and policy development. I am now planning a number of publications and presentations and understand that timely dissemination and engagement is key to making best use of the resource and effort that has gone into this thesis. I have approached my Head of Profession to raise the issue of continued protected research time for post-doctoral researchers in order to maintain my knowledge and research skills. My hope is for this body of work and any future

work to have a tangible impact and value for both the young men in prison and all

colleagues working with them.

References

Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). *Posttraumatic stress disorder and trauma in youth in juvenile detention.* American Medical Association. doi:10.1001/archpsyc.61.4.403

Afifi, T. O., & Asmundson, G. J. (2020). Current knowledge and future directions for the ACEs field. In *Adverse Childhood Experiences* (pp. 349-355). Academic Press.

Agorastos, A., Pervanidou, P., Chrousos, G. P., & Kolaitis, G. (2018). Early life stress and trauma: Developmental neuroendocrine aspects of prolonged stress system dysregulation. *Hormones, 17*(4), 507-520.

Ahlers, K. P. (2019). *Considering trauma in autism spectrum disorder diagnostic evaluations in children: a qualitative inquiry.* Unpublished doctoral dissertation, University of Montanta. Retrieved from https://scholarworks.umt.edu/etd/11432

Akin, B. A., Strolin-Goltzman, J., & Collins-Camargo, C. (2017). Successes and challenges in developing trauma-informed child welfare systems: A real-world case study of exploration and initial implementation. *Children and Youth Services Review*, *82*, 42-52.

Allmark, P., Boote, J., Chambers, E., Clarke, A., McDonnell, A., Thompson, A., & Tod, A. M. (2009). Ethical issues in the use of in-depth interviews: literature review and discussion. Research Ethics, 5(2), 48-54. doi.org/10.1177/174701610900500203.

Allwood, M. A., Ford, J. D., & Levendosky, A. (2021). Introduction to the Special Issue: Disproportionate trauma, stress, and adversities as a pathway to health disparities among disenfranchised groups globally. *Journal of traumatic stress*, *34*(5), 899-904. doi: 10.1002/jts.22743

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th Ed.). Arlington: American Psychiatric Association.

American Psychiatric Association Division of Research (2013). Highlights of changes from DSM-IV to DSM-5: Somatic symptom and related disorders. *Focus, 11*(4), 525-527.

Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 39(1), 93-98. doi:10.1016/j.amepre.2010.03.015

Anderson, S. W., Barrash, J., Bechara, A., & Tranel, D. (2006). Impairments of emotion and real-world complex behavior following childhood-or adult-onset damage to ventromedial prefrontal cortex. *Journal of the International Neuropsychological Society, 12*(2), 224. Retrieved from https://ntu.idm.oclc.org/login?url=https://www-proquest-com.ntu.idm.oclc.org/scholarly-journals/impairments-emotion-real-world-complex-behavior/docview/218905435/se-2?accountid=14693

Andersen, S. L., & Teicher, M. H. (2008). Stress, sensitive periods and maturational events in adolescent depression. *Trends in neurosciences*, *31*(4), 183-191. doi.org/10.1016/j.tins.2008.01.004

Auguste, E. E., Cruise, K. R., & Jimenez, M. C. (2021). The effects of microaggressions on depression in young adults of color: Investigating the impact of traumatic event exposures and trauma reactions. *Journal of Traumatic Stress*. doi.org/10.1002/jts.22675

Aupperle, R. L., Melrose, A. J., Stein, M. B., & Paulus, M. P. (2012). Executive function and PTSD: Disengaging from trauma. *Neuropharmacology*, 62(2), 686-694. doi:10.1016/j.neuropharm.2011.02.008

Auty, K. M., Liebling, A., Schliehe, A., & Crewe, B. (in press). What is trauma-informed practice? Towards operationalisation of the concept in two prisons for women. *Criminology & Criminal Justice.*

Bailey, S., Smith, C., & Dolan, M. (2001). The social background and nature of "children" who perpetrate violent crimes: A UK perspective. *Journal of Community Psychology,* 29(3), 305-317. doi:10.1002/jcop.1019

Badenes-Ribera, L., Molla-Esparza, C., Longobardi, C., Sánchez-Meca, J., & Fabris, M. A. (2020). Homicide as a Source of Posttraumatic Stress?: A Meta-Analysis of the Prevalence of Posttraumatic Stress Disorder After Committing Homicide. *Journal of Traumatic Stress.* doi.org/10.1002/jts.22630

Baetz, C. L., Surko, M., Moaveni, M., McNair, F., Bart, A., Workman, S., ... & 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.* doi:10.1177/0886260519857163 .

Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2015). The relationship between adverse childhood experiences (ACE) and juvenile offending trajectories in a juvenile offender sample. *Journal of Criminal Justice*, 43(3), 229-241. doi.org/10.1016/j.jcrimjus.2015.04.012

Ball, H. A., Arseneault, L., Taylor, A., Maughan, B., Caspi, A., & Moffitt, T. E. (2008). Genetic and environmental influences on victims, bullies and bully-victims in childhood. *Journal of Child Psychology and Psychiatry*, *49*(1), 104-112. doi.org/10.1111/j.1469-7610.2007.01821.x

Becker, H. S. (1998). *Tricks of the trade.* Chicago, IL: University of Chicago.

Becker-Blease, K. A., & Freyd, J. J. (2006). Research participants telling the truth about their lives: The ethics of asking and not asking about abuse. American Psychologist, 61(3), 218. doi.org/10.1037/0003-066X.61.3.218

Ben-Zion, Z., Fine, N. B., Keynan, N. J., Admon, R., Halpern, P., Liberzon, I., . . . Shalev, A. Y. (2019). Neurobehavioral moderators of post-traumatic stress disorder (PTSD) trajectories: Study protocol of a prospective MRI study of recent trauma survivors. *European Journal of Psychotraumatology*, 10(1), doi.org/10.1080/20008198.2019.1683941

Bernstein, D. P., Fink, L., Handelsman, L., & Foote, J. (1994). *Childhood Trauma Questionnaire.* APA PsycTests. https://psycnet.apa.org/doi/10.1037/t02080-000.

Bertalanffy, L. V. (1968). General systems theory as integrating factor in contemporary science. *Akten des XIV. Internationalen Kongresses für Philosophie*, *2*, 335-340. doi.org/10.5840/wcp1419682120

Biggerstaff, D., & Thompson, A. R. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative research in psychology*, *5*(3), 214-224. doi.org/10.1080/14780880802314304

Bilbo, S. D., & Schwarz, J. M. (2012). The immune system and developmental programming of brain and behavior. *Frontiers in neuroendocrinology*, *33*(3), 267-286. doi.org/10.1016/j.yfrne.2012.08.006

Booth, A., & Fry-Smith, A. (2004). Developing the research question. *Etext on Health Technology Assessment (HTA) Information Resources.*

Bonner, T., DeLisi, M., Jones-Johnson, G., Caudill, J. W., & Trulson, C. (2020). Chaotic homes, adverse childhood experiences, and serious delinquency: Differential effects by race and ethnicity. *Justice Quarterly*, *37*(4), 697-714. doi.org/10.1080/07418825.2019.1688852

Boswell, G., & Wedge, P. (2002). Sexually Abusive Adolescent Males: an evaluation of a residential therapeutic facility. *Community and Criminal Justice Monograph*, *3.*

Boswell, G. R., Wedge, P., & Price, A. (2003). An Evaluation of the Regimes for Section 90/91 Offenders at HM Young Offender Institutions, Feltham and Carlford Unit, Warren Hill. *London: Youth Justice Board.*

Boswell, G. R. (1991). Waiting for change: An exploration of the experiences and needs of section 53 offenders. London: The Prince's Trust, 46.

Boswell, G. (1996). Young and dangerous: The backgrounds and careers of section 53 offenders. Avebury: Aldershot.

Boswell, G., & Wedge, P. (2001). *Imprisoned fathers and their children*. London: Jessica Kingsley Publishers.

Brackenridge, I., & Morrissey, C. (2010). Trauma and post-traumatic stress disorder (PTSD) in a high secure forensic learning disability population: Future directions for practice.

Advances in Mental Health and Intellectual Disabilities, 4(3), 49-56. doi:10.5042/amhid.2010.0544

Briere, J. (1996). Trauma symptom checklist for children. *Journal of Abnormal Psychology.*

Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. *Psychological review*, *103*(4), 670. doi.org/10.1037/0033-295X.103.4.670

British Psychological Society. (2014). Code of human research ethics. British Psychological Society.

Brown, N. M., & Brown, S. N., & Briggs, R. D., & Germán, M., & Belamarich, P. F., & Oyeku, S. O. (2017). Associations between adverse childhood experiences and ADHD diagnosis and severity. *Academic Pediatrics*, 17(4), 349-355. doi:10.1016/j.acap.2016.08.013

Brown, S. L., Wanamaker, K. A., Greiner, L., Scott, T., & Skilling, T. A. (2021). Complex trauma and criminogenic needs in a youth justice sample: A gender-informed latent profile analysis. *Criminal Justice and Behavior*, *48*(2), 175-194.doi.org/10.1177/0093854820964513

Bulman, M. (2018). *Black teenage boys more likely to get maximum jail terms than White children.* The Independent. July 29th 2018. Retrieved from https://www.independent.co.uk/news/uk/home-news/black-boys-discrimination-teenagers-children-white-racial-bias-prison-a8466606.html

Cashel, M. L., Ovaert, L., & Holliman, N. G. (2000). Evaluating PTSD in incarcerated male juveniles with the MMPI-A: An exploratory analysis. *Journal of Clinical Psychology, 56*(12), 1535-1549.

Casswell, M., French, P., & Rogers, A. (2012). Distress, defiance or adaptation? A review paper of at-risk mental health states in young offenders. *Early Intervention in Psychiatry*, 6(3), 219-228. doi:10.1111/j.1751-7893.2012.00344.x

Cauffman, E., Feldman, S., Watherman, J., & Steiner, H. (1998). Posttraumatic stress disorder among female juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*(11), 1209-1216. doi.org/10.1097/00004583-199811000-00022

Cesaroni, C., & Alvi, S. (2010). Masculinity and resistance in adolescent carceral settings. Canadian Journal of Criminology and Criminal Justice, 52(3), 303-320.

Chamberlain, P., & Moore, K. J. (2002). Chaos and trauma in the lives of adolescent females with antisocial behavior and delinquency. *Null*, 6(1), 79-108. doi:10.1300/J146v06n01_05

Champine, R. B., Lang, J. M., Nelson, A. M., Hanson, R. F., & Tebes, J. K. (2019). Systems measures of a trauma-informed approach: A systematic review. *American Journal of Community Psychology*, 64(3-4), 418-437. doi:10.1002/ajcp.12388

Chitsabesan, P., Kroll, L., Bailey, S., Kenning, C., Sneider, S., MacDonald, W., & Theodosiou, L. (2006). Mental health needs of young offenders in custody and in the community. *The British Journal of Psychiatry, 188*(6), 534-540.

Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and psychopathology*, *8*(4), 597-600. doi.org/10.1017/S0954579400007318

Cicchetti, D. (2010). Resilience under conditions of extreme stress: a multilevel perspective. *World Psychiatry*, *9*(3), 145. doi: 10.1002/j.2051-5545.2010.tb00297.x

Cloitre, M. (2015). The "one size fits all" approach to trauma treatment: Should we be satisfied? *European Journal of Psychotraumatology*, 6(1). doi:10.3402/ejpt.v6.27344

Collin-Vézina, D., McNamee, S., Brazeau, C., & Laurier, C. (2019). Initial implementation of the ARC framework in juvenile justice settings. *Journal of Aggression, Maltreatment & Trauma*, 28(5), 631-654. doi.org/10.1080/10926771.2019.1583709

Connolly, E. J., & Kavish, N. (2019). The causal relationship between childhood adversity and developmental trajectories of delinquency: A consideration of genetic and environmental confounds. *Journal of Youth and Adolescence*, *48*(2), 199-211. doi:org/10.1007/s10964-018-0960-0

Cordier, R., Milbourn, B., Martin, R., Buchanan, A., Chung, D., & Speyer, R. (2017). A systematic review evaluating the psychometric properties of measures of social inclusion. *PLoS One, 12*(6), e0179109.

Costley, C., Elliott, G. C., & Gibbs, P. (2010). Doing work based research: Approaches to enquiry for insider-researchers. Sage.

Covington, S. S., Russo, E. M., & Covington, S. S. (2017). Healing trauma: A brief intervention for women. *Changes*, 25(27).

Cox, A. (2011). Doing the programme or doing me? The pains of youth imprisonment. *Punishment & Society*, 13(5), 592-610. doi.org/10.1177/1462474511422173

Cox, A. (2020). The language of incarceration. *Incarceration*, 1(1) doi.org/10.1177/2632666320940859

Craig, J. M., Piquero, A. R., Farrington, D. P., & Ttofi, M. M. (2017). A little early risk goes a long bad way: Adverse childhood experiences and life-course offending in the

Cambridge study. *Journal of Criminal Justice*, *53*, 34-45.
doi.org/10.1016/j.jcrimjus.2017.09.005

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. The Counseling Psychologist, 35(2), 236-264. doi.org/10.1177/0011000006287390

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

Crewe, B. (2011). Depth, weight, tightness: Revisiting the pains of imprisonment. *Punishment & Society*, *13*(5), 509-529. doi.org/10.1177/1462474511422172

Crewe, B., Hulley, S., & Wright, S. (2017). The gendered pains of life imprisonment. *British Journal of Criminology*, *57*(6), 1359-1378. doi.org/10.1093/bjc/azw088

Crewe, B., Hulley, S., & Wright, S. (2020). *Life imprisonment from young adulthood*. London: Palgrave Macmillan UK.

Crotty, M., & Crotty, M. F. (1998). The foundations of social research: Meaning and perspective in the research process. Sage.

Cruz-Katz, S. (2016). *The structured trauma-related experiences and symptoms screener (stress): Psychometric properties with justice-involved youth.* Available from WorldCat.org. Retrieved from https://oaister.on.worldcat.org/oclc/1160178092

Cuadra, L. E., Jaffe, A. E., Thomas, R., & DiLillo, D. (2014). Child maltreatment and adult criminal behavior: does criminal thinking explain the association? *Child Abuse & Neglect*, *38*, 1399–1408. **doi:**10.1016/j.chiabu.2014.02.005

Curley, J. P., & Champagne, F. A. (2016). Influence of maternal care on the developing brain: Mechanisms, temporal dynamics and sensitive periods. *Frontiers in Neuroendocrinology*, *40*, 52-66. doi.org/10.1002/cad.20164

Cudmore, R. M., Cuevas, C. A., & Sabina, C. (2017). The impact of polyvictimization on delinquency among Latino adolescents: A general strain theory perspective. *Journal of Interpersonal Violence*, 32(17), 2647-2667. doi.org/10.1177/0886260515593544

Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of general psychiatry*, *64*(5), 577-584. doi:10.1001/archpsyc.64.5.577

Dalgleish, T. (1999). Cognitive theories of post-traumatic stress disorder. In W. Yule (Ed.), Wiley series in clinical psychology. *Post-traumatic stress disorders: Concepts and therapy* (pp. 193–220). John Wiley & Sons Ltd.

Dalsklev, M., Cunningham, T., Travers, Á, McDonagh, T., Shannon, C., Downes, C., & Hanna, D. (2019). Childhood trauma as a predictor of reoffending in a northern Irish probation sample. *Child Abuse & Neglect*, 97, 104168. doi:10.1016/j.chiabu.2019.104168

Daniunaite, I., Cloitre, M., Karatzias, T., Shevlin, M., Thoresen, S., Zelviene, P., & Kazlauskas, E. (2021). PTSD and complex PTSD in adolescence: discriminating factors in a population-based cross-sectional study. *European Journal of Psychotraumatology*, *12*(1), doi.org/10.1080/20008198.2021.1890937

Dargis, M., Sitney, M., Caldwell, B., Caldwell, M., Edwards, B. G., Harenski, C., . . . Kiehl, K. A. (2019). Development of an expert-rater assessment of trauma history in a high-risk youth forensic sample. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(7), 713.

Day, C., Hibbert, P., & Cadman, S. (2008). *A literature review into children abused and/or neglected prior custody.* London: Youth Justice Board.

Di Blasio, P., Camisasca, E., Miragoli, S., Ionio, C., & Milani, L. (2017). Does maternal parenting stress mediate the association between postpartum PTS symptoms and children's internalizing and externalizing problems? A longitudinal perspective. In *Child & Youth Care Forum* (Vol. 46, No. 5, pp. 685-701). Springer US.

Dovran , A., Winje, D., Øverland, S. N., Breivik, K., Arefjord, K., Dalsbø, A. S., . . . Waage, L. (2013). Psychometric properties of the norwegian version of the childhood trauma questionnaire in high-risk groups. *Scandinavian Journal of Psychology, 54*(4), 286-291. Division of Clinical Psychology (2013). *Division of Clinical Psychology position statement on the classification of behaviour and experience in relation to functional psychiatric diagnoses: Time for a paradigm shift.* Leicester, UK: British Psychological Society.

Dudeck, M., Vasic, N., Otte, S., Streb, J., Wingenfeld, K., Grabe, H. J., . . . Driessen, M. (2015). Factorial validity of the short form of the childhood trauma questionnaire (CTQ—SF) in German psychiatric patients, inmates, and university students. *Psychological Reports, 116*(3), 685-703.

Dunn, D. S., & Andrews, E. E. (2015). Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *American Psychologist,* 70(3), 255. doi:10.1037/a0038636

Durcan, G., & Knowles, K. (2006). *London's prison mental health services: A review.* Sainsbury Centre for Mental Health.

Dworkin, R. H., Burke, L. B., Gewandter, J. S., & Smith, S. M. (2015). Reliability is Necessary but Far from Sufficient: How might the Validity of Pain Ratings be Improved*? The Clinical Journal of Pain,* 31(7), 599-602 doi:10.1097/AJP.0000000000000175.

Edalati, H., Nicholls, T. L., Crocker, A. G., Roy, L., Somers, J. M., & Patterson, M. L. (2017). Adverse childhood experiences and the risk of criminal justice system involvement and victimization among homeless adults with mental illness. *Psychiatric Services*, *68*, 1288–1295. doi:10.1176/appi.ps.201600330

Edner, B. J., Glaser, B. A., & Calhoun, G. B. (2017). Predictive accuracy and factor structure of the child report of posttraumatic symptoms (CROPS) among adjudicated youth. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(6), 706.

Edner, B. J., Glaser, B. A., Calhoun, G. B., Dukes-Murray, H., Khan, Z., & Donaldson, K. (2020). Efficacy of the MMPI-A in detecting trauma among delinquent youth: Cross-validation of the trauma scale for juvenile offenders (TSJO). *The Journal of Forensic Psychiatry & Psychology, 31*(1), 1-16.

Edner, B. J., Piegore, A. L., Glaser, B. A., & Calhoun, G. B. (2020). Preliminary cross-sectional validation of the CROPS 14-item for juvenile offenders. *International Journal of Offender Therapy and Comparative Criminology,* 0306624X20904703.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319-345. doi.org/10.1016/S0005-7967(99)00123-0

Eklund, K., Rossen, E., Koriakin, T., Chafouleas, S. M., & Resnick, C. (2018). A systematic review of trauma screening measures for children and adolescents. *School Psychology Quarterly, 33*(1), 30.

Elklit, A., Hyland, P., & Shevlin, M. (2014). Evidence of symptom profiles consistent with posttraumatic stress disorder and complex posttraumatic stress disorder in different trauma samples. *European Journal of Psychotraumatology, 5*(1), 24221.

Ericson, R. V. (1975). *Young offenders and their social work*. Farnborough: Lexington Books.

Evans, C., Ehlers, A., Mezey, G., & Clark, D. M. (2007). Intrusive memories in perpetrators of violent crime: Emotions and cognitions. *Journal of Consulting and Clinical Psychology*, *75*(1), 134. doi.org/10.1037/0022-006X.75.1.134

Evans, C., Ehlers, A., Mezey, G., & Clark, D. M. (2007). Intrusive memories and ruminations related to violent crime among young offenders: Phenomenological characteristics. *Journal of Traumatic Stress*, *20*(2), 183-196. doi.org/10.1002/jts.20204

Everly, G. S., & Lating, J. M. (2019). The anatomy and physiology of the human stress response. In *'A clinical guide to the treatment of the human stress response'* (pp. 19-56). Springer, New York, NY.

EU General Data Protection Regulation. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504

Farmer, M. (2019). Final report from the Farmer review for women. The importance of strengthening female offenders' family and other relationships to prevent reoffending and reduce intergenerational crime. Retrieved from https://publicinformationonline.com/download/203857

Farrell, C., & Zimmerman, G. M. (2017). Does offending intensify as exposure to violence aggregates? Reconsidering the effects of repeat victimization, types of exposure to violence, and poly-victimization on property crime, violent offending, and substance use. *Journal of Criminal Justice*, 53, 25-33. doi:10.1016/j.jcrimjus.2017.09.004

Felitti, V. J., & Anda, R. F., & Nordenberg, D., & Williamson, D. F., & Spitz, A. M., & Edwards, V., & 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. doi:10.1016/s0749-3797(98)00017-8

Finkelhor, D. (2009). Children's exposure to violence: A comprehensive national survey. Washington DC: Diane Publishing.

Finkelhor, D., Shattuck, A., Turner, H. A., Ormrod, R., & Hamby, S. L. (2011). Polyvictimization in developmental context. *Journal of Child & Adolescent Trauma,* 4(4), 291-300. doi.org/10.1080/19361521.2011.610432

Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative Health Research*, *12*(4), 531-545. doi.org/10.1177/104973202129120052

Flaherty, C. (2017). Assessing trauma in the juvenile offender population: An exploration of the TSCC and the CROPS. Unpublished manuscript.

Fonagy, P., Target, M., Steele, M., Steele, H., Leigh, T., Levinson, A., & Kennedy, R. (1997). Morality, disruptive behavior, borderline personality disorder, crime and their relationship to security of attachment. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and psychopathology* (p. 223–274). Guilford Press.

Fox, B. H., Perez, N., Cass, E., Baglivio, M. T., & Epps, N. (2015). Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders. *Child Abuse & Neglect*, *46*, 163-173. doi.org/10.1016/j.chiabu.2015.01.011

Ford, J. D., Chapman, J. F., Pearson, G., Borum, R., & Wolpaw, J. M. (2008). Psychometric status and clinical utility of the MAYSI-2 with girls and boys in juvenile detention. *Journal of Psychopathology and Behavioral Assessment, 30*(2), 87-99. doi:10.1007/s10862-007-9058-9

Ford, J. D., Chapman, J. F., Hawke, J., & Albert, D. (2007). *Trauma among youth in the juvenile justice system: Critical issues and new directions.* National Center for Mental Health and Juvenile Justice, 1-8.

Ford, J. D., & Hawke, J. (2012). *Trauma affect regulation psychoeducation group and milieu intervention outcomes in juvenile detention facilities*. Taylor & Francis. Retrieved from https://ntu.idm.oclc.org/login?url=https://search.proquest.com/docview/1020054162?account id=14693&bdid=1370&_bd=Derbrd7GChCM5K%2BdzTpnoM1nhlE%3D

Ford, K., Barton, E. R., Newbury, A., Hughes, K., Bezeczky, Z., Roderick, J., & Bellis, M. A. (2019). Understanding the prevalence of adverse childhood experiences (ACEs) in a male offender population in Wales: the prisoner ACE survey.

Ford, K., Di Lemma, L., Gray, B., & Hughes, K. (2020). Responding to adverse childhood experiences: An evidence review of interventions to prevent and address adversity across the life course. Public Health Wales.

Forth, A. E., Kosson, D. S., & Hare, R. D. (2003). *Hare psychopathy checklist: Youth version* Multi-Health Systems.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. Australian & New Zealand Journal of Psychiatry, 36(6), 717-732. doi.org/10.1046/j.1440-1614.2002.01100.x

Gadamer, H. G. (2008). *Philosophical hermeneutics*. University of California Press.

Geisinger, K. F., Bracken, B. A., Carlson, J. F., Hansen, J. C., Kuncel, N. R., Reise, S. P., . . . Rodriguez, M. C. (2013). *APA handbook of testing and assessment in psychology, vol. 2: Testing and assessment in clinical and counseling psychology.* American Psychological Association.

Gibbs, J. J. (1982). First cut is the deepest-psychological breakdown and survival in the detention setting. R. Johnson & H. Toch (Eds) *Pains of Imprisonment*, 97-114.

Gibson, S. (2021). Social climate and hope amongst staff and prisoners in a high security male prison. *The Journal of Forensic Practice.* 23(1) pp. 26-38. doi.org/10.1108/JFP-06-2020-0027

Gilbertson, M. W., & Gurvits, T. V., & Lasko, N. B., & Orr, S. P., & Pitman, R. K. (2001). Multivariate assessment of explicit memory function in combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress,* 14(2), 413-432. doi:10.1023/A:1011181305501

Gilley, R. (2019). Adverse Childhood Experiences in Adolescents Who Have Engaged in Sexually Abusive Behavior: The Impact of Polyvictimization on Relevant Outcomes. Unpublished masters dissertation, East Tennessee State University. Retrieved from https://dc.etsu.edu/etd/3647/

Giorgi, A. (1994). A phenomenological perspective on certain qualitative research methods. *Journal of phenomenological psychology*, *25*(2), 190-220. doi.org/10.1163

Goffman, E. (1968). Asylums: Essays on the social situation of mental patients and other inmates. Aldine Transaction.

Goldspink, S., & Engward, H. (2018). Shedding light on transformational online learning using five practice based tenets: Illuminating the significance of the self. *Asia Pacific Journal of Contemporary Education and Communication Technology*, *4*(2), 10-16. doi.org/10.25275/apjcectv4i2edu2

Graf, G. H., Chihuri, S., Blow, M., & Li, G. (2021). Adverse childhood experiences and justice system contact: A systematic review. *Pediatrics*, 147(1). DOI: doi.org/10.1542/peds.2020-021030

Grasso, D. J., Felton, J. W., & Reid-Quiñones, K. (2015). The structured trauma-related experiences and symptoms screener (STRESS): Development and preliminary psychometrics. *Child Maltreat, 20*(3), 214-220. doi:10.1177/1077559515588131.

Grasso, D. J., Doyle, C., & Koon, R. (2019). Two rapid screens for detecting probable post-traumatic stress disorder and interpersonal violence exposure: Predictive utility in a juvenile justice sample. *Child Maltreatment, 24*(1), 113-120.

Greenwald, R., & Rubin, A. (1999). Child report of post-traumatic symptoms/parent report of post-traumatic symptoms. *Research on Social Work Practice,* 9, 61-75.

Griffin, G., Germain, E. J., & Wilkerson, R. G. (2012). Using a trauma-informed approach in juvenile justice institutions. *Journal of Child & Adolescent Trauma*, *5*(3), 271-283. doi:10.1080/19361521.2012.697100

Grisso, T., & Barnum, R. (2006). Massachusetts youth screening instrument, version 2: MAYSI-2: User's manual and technical report. Sarasota: Professional Resource Press.

Grix, J. (2018). *The foundations of research*. Macmillan International Higher Education.

Grossman, D., & Christensen, L. W. (2007). *On combat: The psychology and physiology of deadly conflict in war and in peace.* Human Factor Research Group Incorporated.

Gubrium, J. F., & Holstein, J. A. (1997). *The new language of qualitative method*. Oxford University Press on Demand.

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). Collecting qualitative data: A field manual for applied research. Sage.

Guyatt, G. H., Oxman, A. D., Schünemann, H. J., Tugwell, P., & Knottnerus, A. (2011). GRADE guidelines: A new series of articles in the journal of clinical epidemiology. *Journal of Clinical Epidemiology, 64*(4), 380-382.

Hadi, M. A., & Closs, S. J. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International journal of clinical pharmacy*, *38*(3), 641-646. doi.org/10.1007/s11096-015-0237-6

Haggerty, K. D., & Bucerius, S. (2020). The proliferating pains of imprisonment. *Incarceration*, *1*(1), doi.org/10.1177/2632666320936432

Haney, C. (2013). The contextual revolution in psychology and the question of prison effects. In A. Liebling, & S. Maruna, (Eds.). (2013). *The effects of imprisonment.* London: Routledge.

Hanson, R. K., Letourneau, E. J., Olver, M. E., Wilson, R. J., & Miner, M. H. (2012). Incentives for offender research participation are both ethical and practical. Criminal Justice and Behavior, 39(11), 1391-1404. doi.org/10.1177/0093854812449217

Harvey, J. (2012). *Young men in prison.* London: Routledge.

Hatton, C., & Emerson, E. (2004). The relationship between life events and psychopathology amongst children with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities,* 17(2), 109-117. doi:10.1111/j.1360-2322.2004.00188.x

Harrington, T. (2008). The clinician administered PTSD scale for children and adolescents: A validation study. Unpublished manuscript.

Heidegger, M. (2010). *Being and time.* New York, Suny Press.

Herman, J. L., & Harvey, M. R. (1997). Adult memories of childhood trauma: A naturalistic clinical study. *Journal of Traumatic Stress*, *10*(4), 557-571. doi.org/10.1023/A:1024889601838

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress,* 5(3), 377-391. doi.org/10.1002/jts.2490050305

Herman, J. L. (2015). Trauma and recovery: The aftermath of violence-from domestic abuse to political terror. London: Basic Books.

Her Majesty's Chief Inspector of Prisons (2011). *HM Chief Inspector of Prisons for England and Wales Annual Report 2010-11.* Retrieved from www.justice.gov.uk/downloads/publications/corporate-reports/hmi-prisons/hm-inspectorate-prisons-annual-report-2011-12.pdf

Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., . . . & Welch, V. A. (2019). *Cochrane handbook for systematic reviews of interventions.* John Wiley & Sons.

Hodges, M., Godbout, N., Briere, J., Lanktree, C., Gilbert, A., & Kletzka, N. T. (2013). Cumulative trauma and symptom complexity in children: A path analysis. *Child Abuse & Neglect, 37*(11), 891-898. doi.org/10.1016/j.chiabu.2013.04.001

Horowitz, M. J. (1976). Diagnosis and treatment of stress response syndromes: General principles. In. H. Parad, H. Resnik, L. Parad, (Eds) *Emergency and disaster management: A mental health sourcebook* (pp. 259-69). Maryland, The Charles Press Publishers.

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., . . . Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), 356-366. doi:10.1016/S2468-2667(17)30118-4

Hulley, S., Crewe, B., & Wright, S. (2016). Re-examining the problems of long-term imprisonment. *British Journal of Criminology*, 56(4), 769-792. doi:10.1093/bjc/azv077

Husserl, E. (1970). Syllabus of a Course of Four Lectures on "Phenomenological Method and Phenomenological Philosophy". *Journal of the British Society for Phenomenology*, *1*(1), 18-23. doi.org/10.1080/00071773.1970.11006095

Husserl, E. (1999). The essential Husserl: Basic writings in transcendental phenomenology. Indiana University Press.

Husserl, E. (2012). Ideas: General introduction to pure phenomenology. Routledge.

Hyland, P., Karatzias, T., Shevlin, M., McElroy, E., Ben-Ezra, M., Cloitre, M., & Brewin, C. R. (2020). Does requiring trauma exposure affect rates of ICD-11 PTSD and complex PTSD? Implications for DSM-5. *Psychological Trauma: Theory, Research, Practice, and Policy.* doi.org/10.1037/tra0000908

Hyman, I. A., Zelikoff, W., & Clarke, J. (1988). Psychological and physical abuse in the schools: A paradigm for understanding post-traumatic stress disorder in children and youth. *Journal of Traumatic Stress*, 1(2), 243-267. doi.org/10.1007/BF00975001

Issakidis, C., Sanderson, K., Corry, J., Andrews, G., & Lapsley, H. (2004). Modelling the population cost-effectiveness of current and evidence-based optimal treatment for anxiety disorders. *Psychological Medicine, 34*(1), 19-35.

Jarman, B. (2020). Only one way to swim? The offence and the life course in accounts of adaptation to life imprisonment. *The British Journal of Criminology*, *60*(6), 1460-1479. doi.org/10.1093/bjc/azaa036

Jewkes, Y. (2005). Men Behind Bars: "Doing" Masculinity as an Adaptation to Imprisonment. *Men and masculinities*, *8*(1), 44-63. doi.org/10.1177/1097184X03257452

Jewkes, Y., Crewe, B., & Bennett, J. (2016). *Handbook on prisons*. London: Routledge.

Jewkes, Y., Jordan, M., Wright, S., & Bendelow, G. (2019). Designing 'healthy'prisons for women: incorporating trauma-informed care and practice (TICP) into prison planning and design. *International journal of environmental research and public health,* 16(20), 3818. doi.org/10.3390/ijerph16203818

Johnstone, L., & Boyle, M. (2018). The power threat meaning framework: An alternative nondiagnostic conceptual system. *Journal of Humanistic Psychology*, doi.org/10.1177/0022167818793289

Jones, L. (2018). Trauma-informed care and 'good lives' in confinement: Acknowledging and offsetting adverse impacts of chronic trauma and loss of liberty. London: Routledge.

Karatzias, T., Shevlin, M., Fyvie, C., Hyland, P., Efthymiadou, E., Wilson, D., . . . Cloitre, M. (2017). Evidence of distinct profiles of posttraumatic stress disorder (PTSD) and complex posttraumatic stress disorder (CPTSD) based on the new ICD-11 trauma questionnaire (ICD-TQ). *Journal of Affective Disorders*, 207, 181-187. doi:10.1016/j.jad.2016.09.032

Kerig, P. K., Ward, R. M., Vanderzee, K. L., & Moeddel, M. A. (2009). Posttraumatic stress as a mediator of the relationship between trauma and mental health problems among juvenile delinquents. *Journal of Youth and Adolescence, 38*(9), 1214-1225.

Kerig, P. K., Becker, S. P., & Egan, S. (2010). From internalizing to externalizing: Theoretical models of the processes linking PTSD to juvenile delinquency. *Posttraumatic stress disorder (PTSD): Causes, symptoms and treatment*, *33*, 78.

Kerig, P. K., Moeddel, M. A., & Becker, S. P. (2011). Assessing the sensitivity and specificity of the MAYSI-2 for detecting trauma among youth in juvenile detention. Paper presented at the *Child & Youth Care Forum, 40*(5) 345-362.

Kerig, P. K., Bennett, D. C., Thompson, M., & Becker, S. P. (2012). "Nothing really matters": Emotional numbing as a link between trauma exposure and callousness in delinquent youth. *Journal of Traumatic Stress*, *25*(3), 272-279. doi.org/10.1002/jts.21700

Kerig, P. K., & Becker, S. P. (2015). 12 Early Abuse and Neglect as Risk Factors for the Development of Criminal and Antisocial Behavior. *The Development of Criminal and Antisocial Behavior*, 181-199. doi.org/10.1007/978-3-319-08720-7_12

Kerig, P. K. (2019). Linking childhood trauma exposure to adolescent justice involvement: The concept of posttraumatic risk-seeking. *Clinical Psychology: Science and Practice*, *26*(3). doi.org/10.1111/cpsp.12280

Kretschmar, J. M., Tossone, K., Butcher, F., & Flannery, D. J. (2017). Patterns of poly-victimization in a sample of at-risk youth. *Journal of Child & Adolescent Trauma*, *10*(4), 363-375. doi:org/10.1007/s40653-016-0109-9

Kubiak, S., Covington, S., & Hillier, C. (2017). Trauma-informed corrections. In D. Springer, & A. Roberts (Eds.), *Social Work in Juvenile and Criminal Justice* System, 4th edition. Springfield, IL; Charles C. Thomas.

Kuzel, A. J. (1992). Sampling in qualitative inquiry. In B. F. Crabtree & W. L. Miller (Eds.), *Doing Qualitative Research*, 3 (p. 31–44). Sage Publications, Inc.

La Greca, A. M., Silverman, W. K., Vernberg, E. M., & Prinstein, M. J. (1996). Symptoms of posttraumatic stress in children after hurricane andrew: A prospective study. *Journal of Consulting and Clinical Psychology*, 64(4), 712. doi.org/10.1037/0022-006X.64.4.712

Lader, D., Singleton, N., & Meltzer, H. (2000). *Psychiatric morbidity among young offenders in England and Wales.* doi:10.1080/0954026021000046074

Lammy, D. (2017). *The Lammy review*. Retrieved from: <https://www.gov.uk/government/organisations/lammy-review>

Lansing, A. E., Plante, W. Y., Beck, A. N., & Ellenberg, M. (2018). Loss and grief among persistently delinquent youth: The contribution of adversity indicators and psychopathy-spectrum traits to broadband internalizing and externalizing psychopathology. *Journal of child & adolescent trauma*, *11*(3), 375-389. doi.org/10.1007/s40653-018-0209-9

Larkin, M., & Thompson, A. R. (2012). Interpretative phenomenological analysis in mental health and psychotherapy research. *Qualitative research methods in mental health and psychotherapy*, 101-116. doi.10.1002/9781119973249

LeBel, J., & Goldstein, R. (2005). Special section on seclusion and restraint: The economic cost of using restraint and the value added by restraint reduction or elimination. *Psychiatric services*, *56*(9), 1109-1114. doi.org/10.1176/appi.ps.56.9.1109

LeDoux, J. E. (1994). Emotion, memory and the brain. *Scientific American*, 270(6), 50-57. Doi:10.1038/scientificamerican0694-50

Lee, R. D., & Chen, J. (2017). Adverse childhood experiences, mental health, and excessive alcohol use: Examination of race/ethnicity and sex differences. *Child Abuse & Neglect,* 69, 40-48. doi:10.1016/j.chiabu.2017.04.004

Levenson, J. S., Willis, G. M., & Prescott, D. S. (2016). Adverse childhood experiences in the lives of male sex offenders: Implications for trauma-informed care. *Sexual Abuse*, *28*(4), 340-359. doi.org/10.1177/1079063214535819

Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, *73*(1), 26.

Leighton, S., & Dogra, N. (2009). Defining mental health and mental illness. In S. Leighton & N. Dogra (Eds), *Nursing in Child & Adolescent Mental Health* (pp. 1-18) Berkshire: Open University Press.

Liem, M., & Kunst, M. (2013). Is there a recognizable post-incarceration syndrome among released "lifers"? *International Journal of Law and Psychiatry*, *36*(3-4), 333-337.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*(3), 543-562. doi.org/10.1111/1467-8624.00164

Lyons, E. E., & Coyle, A. E. (2007). *Analysing Qualitative Data in Psychology*. Sage Publications Ltd.

Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In F*orum qualitative Sozialforschung/Forum: qualitative social research,* 11(3). doi.org/10.17169/fqs-11.3.1428

Masten, A. S. (2015). *Ordinary magic: Resilience in development*. Guilford Publications.

McCallum, K. (2018). Does PTSD predict institutional violence within a UK male prison population? *Journal of Forensic Practice*. Vol 20(4), 229 238. doi.org/10.1108/JFP-12-2017-0055

McCarten, K. (2020). *Trauma-informed practice*. HM Inspectorate of Probation Academic Insights: London, UK. Retrieved from https://uwe-repository.worktribe.com/output/6004001

McDonald, S. E., Im, H., Green, K. E., Luce, C. O. C., & Burnette, D. (2019). Comparing factor models of posttraumatic stress disorder (PTSD) with Somali refugee youth in Kenya: An item response theory analysis of the PTSD Checklist–Civilian Version. *Traumatology*, *25*(2), 104. doi.org/10.1037/trm0000175

McNally, R. J. (2005). Debunking myths about trauma and memory. *The Canadian Journal of Psychiatry,* 50(13), 817-822. doi:10.1177/070674370505001302

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

Middleton, J., Harvey, S., & Esaki, N. (2015). Transformational leadership and organizational change: how do leaders approach trauma-informed organizational change… twice?. *Families in Society*, *96*(3), 155-163.

Milders, M., Fuchs, S., & Crawford, J. R. (2003). Neuropsychological impairments and changes in emotional and social behaviour following severe traumatic brain injury. *Journal of Clinical and Experimental Neuropsychology*, *25*(2), 157-172. doi.org/10.1076/jcen.25.2.157.13642

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. doi:10.3402/ejpt.v3i0.17246

Mokkink, L. B., De Vet, H. C., Prinsen, C. A., Patrick, D. L., Alonso, J., Bouter, L. M., & Terwee, C. B. (2018). COSMIN risk of bias checklist for systematic reviews of patient-reported outcome measures. *Quality of Life Research, 27*(5), 1171-1179.

Moore, E., Gaskin, C., & Indig, D. (2013). Childhood maltreatment and post-traumatic stress disorder among incarcerated young offenders. *Child Abuse & Neglect*, 37(10), 861-870. Doi:10.1016/j.chiabu.2013.07.012

Morris, D. J., Shergill, S., & Beber, E. (2019). Developmental trauma in a forensic intellectual disability population. *Journal of Intellectual Disabilities and Offending Behaviour.* Vol. 11 No. 1, pp. 35-48. doi.org/10.1108/JIDOB-06-2019-0011

Morrissey, C., Hogue, T. E., Mooney, P., Lindsay, W. R., Steptoe, L., Taylor, J., & Johnston, S. (2005). Applicability, reliability and validity of the psychopathy checklist-revised in offenders with intellectual disabilities: Some initial findings. *International Journal of Forensic Mental Health*, 4(2), 207-220. doi:10.1080/14999013.2005.10471225

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, *52*(2), 250. doi:10.1037/0022-0167.52.2.250

Morton, S., Berg, A., Levit, L., & Eden, J. (2011). *Finding what works in health care: Standards for systematic reviews.* National Academies Press.

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, 10(1) 3-5. doi.org/10.1177/104973200129118183

Mossière, A. M., & Marche, T. (2020). Emotionality during and after the Commissions of an Offence: A Look at Offence-Related Shame and Intrusive Memories in Justice-Involved Adult Males. *International Journal of Forensic Mental Health*, 1-39. doi.org/10.1080/14999013.2020.1856978

Mulcahy, J. (2017). Daring to Ask "What Happened to You?"-Why Correctional Systems Must Become Trauma-Responsive. Advancing Corrections. Retrieved from https://www.researchgate.net/publication/324531733_Daring_to_Ask_What_Happened_to_You_-_Why_Correctional_Systems_Must_Become_Trauma-Responsive

Murray, C. (2020). 'Can't hack the whack': Exploring young men's gendered discourses on time in prison. *Criminology & Criminal Justice*. doi.org/10.1177/1748895820914379

Murray, H. D., Glaser, B., & Calhoun, G. (2013a). Using the MMPI-A in identifying trauma symptoms among juvenile offenders. *Journal of Forensic Psychiatry & Psychology, 24*(3), 337-352.

Murray, H. D., Glaser, B., & Calhoun, G. (2013b). Using the MMPI-A in identifying trauma symptoms among juvenile offenders. *Journal of Forensic Psychiatry & Psychology, 24*(3), 337-352.

Muniz, C. N., Fox, B., Miley, L. N., Delisi, M., Cigarran, G. P., & Birnbaum, A. (2019). The effects of adverse childhood experiences on internalizing versus externalizing outcomes. *Criminal Justice and Behavior*, 46(4), 568-589. doi.org/10.1177/0093854819826213

Nagin, D., & Tremblay, R. E. (1999). Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. *Child Development*, 70(5), 1181-1196. doi:10.1111/1467-8624.00086

Newman, E., Risch, E., & Kassam-Adams, N. (2006). Ethical issues in trauma-related research: A review. *Journal of Empirical Research on Human Research Ethics,* 1(3), 29-46. doi.org/10.1525/jer.2006.1.3.29

Nikulina, V., Gelin, M., & Zwilling, A. (2017). Is there a cumulative association between adverse childhood experiences and intimate partner violence in emerging adulthood? *Journal of Interpersonal Violence*, 1–28. doi.org/10.1177/0886260517741626.

Ogloff, J. R., Cutajar, M. C., Mann, E., Mullen, P., Wei, F. T. Y., Hassan, H. A. B., & Yih, T. H. (2012). Child sexual abuse and subsequent offending and victimisation: A 45 year follow-up study. *Trends and Issues in Crime and Criminal Justice*, (440), 1-6. Retrieved from https://search.informit.org/doi/abs/10.3316/INFORMIT.578804228398477

Ozer, E. J., & Weiss, D. S. (2004). Who develops posttraumatic stress disorder? *Current Directions in Psychological Science, 13*(4), 169-172.

Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, 129(1), 52. doi:10.1037/0033-2909.129.1.52

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). Updating guidance for reporting systematic reviews: development of the PRISMA 2020 statement. Journal of Clinical Epidemiology, 134, 103-112. doi.org/10.1136/bmj.n71

Pallant, J. (2007). A step by step guide to data analysis using SPSS for windows. *SPSS Survival Manual,* London: McGraw-Hill Education.

Paul, S. E., Boudreaux, M. J., Bondy, E., Tackett, J. L., Oltmanns, T. F., & Bogdan, R. (2019). The intergenerational transmission of childhood maltreatment: Nonspecificity of maltreatment type and associations with borderline personality pathology. *Development and Psychopathology*, 31(3), 1157-1171. doi:https://doi.org/10.1017/S095457941900066X

Pechtel, P., & Pizzagalli, D. A. (2011). Effects of early life stress on cognitive and affective function: An integrated review of human literature. *Psychopharmacology, 214*(1), 55-70.

Pechtel, P., Lyons-Ruth, K., Anderson, C. M., & Teicher, M. H. (2014). Sensitive periods of amygdala development: the role of maltreatment in preadolescence. *Neuroimage*, *97*, 236-244. doi.org/10.1016/j.neuroimage.2014.04.025

Perkins, A., Calhoun, G. B., Glaser, B. A., & Kunemund, A. J. (2016). Identifying trauma symptoms among adjudicated youth using the BASC-2 SRP and CROPS. *The Journal of Forensic Psychiatry & Psychology, 27*(5), 665-683.

Perry, B. D., Pollard, R. A., Blakley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: How "states" become "traits". *Infant Mental Health Journal,* 16(4), 271-291. doi.org/10.1002/1097-0355(199524)16:4<271::AID-IMHJ2280160404>3.0.CO;2-B

Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, *20*(1), 7-14. DOI: 10.14691/CPPJ.20.1.7

Piper, A., & Berle, D. (2019). The association between trauma experienced during incarceration and PTSD outcomes: A systematic review and meta-analysis. *The Journal of Forensic Psychiatry & Psychology*, *30*(5), 854-875. doi.org/10.1080/14789949.2019.1639788

Pollock, P. H. (1999). When the killer suffers: Post-traumatic stress reactions following homicide. *Legal and Criminological Psychology*, *4*(2), 185-202. doi.org/10.1348/135532599167842

Pontifex, M. B., O'Connor, P. M., Broglio, S. P., & Hillman, C. H. (2009). The association between mild traumatic brain injury history and cognitive control. *Neuropsychologia*, *47*(14), 3210-3216. doi.org/10.1016/j.neuropsychologia.2009.07.021

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

Pynoos, R. S., Steinberg, A. M., & Piacentini, J. C. (1999). A developmental psychopathology model of childhood traumatic stress and intersection with anxiety disorders. *Biological Psychiatry*, 46(11), 1542-1554. doi:10.1016/s0006-3223(99)00262-0

Quiros, L., Varghese, R., & Vanidestine, T. (2020). Disrupting the single story: Challenging dominant trauma narratives through a critical race lens. *Traumatology*, 26(2), 160. doi.org/10.1037/trm0000223

Rechsteiner, K., Maercker, A., Heim, E., & Meili, I. (2020). Metaphors for trauma: a cross-cultural qualitative comparison in Brazil, India, Poland, and Switzerland. *Journal of Traumatic Stress*, 33(5), 643-653. doi.org/10.1002/jts.22533

Rivera, B., & Widom, C. S. (1990). Childhood victimization and violent offending. *Violence and Victims*, 5(1), 19-35. doi.org/10.1891/0886-6708.5.1.19

Kessler, R. (2000). Posttraumatic stress disorder: The burden to the individual and to society / discussion. *The Journal of Clinical Psychiatry*, 61, 4. Retrieved from https://search.proquest.com/docview/208828147

Rennie, D. L. (1995). Strategic choices in a qualitative approach to psychotherapy process research. Retrieved from https://psycnet.apa.org/record/1995-97629-008

Rose, S., Freeman, C., & Proudlock, S. (2012). Despite the evidence–why are we still not creating more trauma informed mental health services? *Journal of Public Mental Health,* Vol. 11 No. 1, pp. 5-9. doi.org/10.1108/17465721211207266

Ruchkin, V. V., Schwab-Stone, M., Koposov, R., Vermeiren, R., & Steiner, H. (2002). Violence exposure, posttraumatic stress, and personality in juvenile delinquents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(3), 322-329. doi:10.1097/00004583-200203000-00012

Ruzek, J. I., & Zatzick, D. F. (2000). Ethical considerations in research participation among acutely injured trauma survivors: An empirical investigation. General hospital psychiatry, 22(1), 27-36. doi.org/10.1016/S0163-8343(99)00041-9

Ryan, R. (1994). Posttraumatic stress disorder in persons with developmental disabilities. *Community Mental Health Journal*, 30(1), 45-54. doi:10.1007/BF02188874

Salkind, N. J. (2010). *Encyclopedia of research design.* Thousand Oaks: Sage.

Salmon, K., & Bryant, R. A. (2002). Posttraumatic stress disorder in children: The influence of developmental factors. *Clinical Psychology Review*, 22(2), 163-188. doi.org/10.1016/S0272-7358(01)00086-1

Sapolsky, R. M. (1998). The stress of gulf war syndrome. *Nature*, 393(6683), 308-309. doi: 10.1038/30606

Schaefer, J. D., Moffitt, T. E., Arseneault, L., Danese, A., Fisher, H. L., Houts, R., & Caspi, A. (2018). Adolescent victimization and early-adult psychopathology: approaching

causal inference using a longitudinal twin study to rule out noncausal explanations. *Clinical Psychological Science, 6*(3), 352-371. doi.org/10.1177/2167702617741381 Bilbo, S. D., &

Schellingerhout, J. M., Verhagen, A. P., Heymans, M. W., Koes, B. W., Henrica, C., & Terwee, C. B. (2012). Measurement properties of disease-specific questionnaires in patients with neck pain: A systematic review. *Quality of Life Research, 21*(4), 659-670.

Schwarz, J. M. (2012). The immune system and developmental programming of brain and behavior. *Frontiers in Neuroendocrinology*, *33*(3), 267-286.

Seedat, S., Pienaar, W. P., Williams, D., & Stein, D. J. (2004). Ethics of research on survivors of trauma. *Current Psychiatry Reports*, 6(4), 262-267. doi.org/10.1007/s11920-004-0075-z

Shiner, R. L., Allen, T. A., & Masten, A. S. (2017). Adversity in adolescence predicts personality trait change from childhood to adulthood. *Journal of Research in Personality, 67,* 171-182. doi:10.1016/j.jrp.2016.10.002

Silverman, D. (2015). *Interpreting qualitative data*. London, Sage.

Skuse, T., & Matthew, J. (2015). The trauma recovery model: Sequencing youth justice interventions for young people with complex needs. *Prison Service Journal*, 220, 16-25. Retrieved from https://www.crimeandjustice.org.uk/publications/psj

Slade, M., Leamy, M., Bacon, F., Janosik, M., Le Boutillier, C., Williams, J., & Bird, V. (2012). International differences in understanding recovery: systematic review. Epidemiology And Psychiatric Sciences, 21(4), 353- 364. doi10.1017/S2045796012000133

Smith, C., & Thornberry, T. P. (1995). The relationship between childhood maltreatment and adolescent involvement in delinquency. *Criminology*, 33(4), 451-481. doi.org/10.1111/j.1745-9125.1995.tb01186.x

Smith, J. A., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. *Qualitative Health Psychology: Theories and methods*. London, Sage.

Smith, J. A. (2004). Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology. *Qualitative Research in Psychology*, *1*(1), 39-54. doi10.1191/1478088704qp004oa

Smith, J. A., Osborne, M. (2008). Interpretative Phenomenological Analysis in JA Smith,(Ed) *Qualitative psychology: A Practical Guide to Research Methods,* London, Sage.

Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological inquiry, London, Sage.

Smith, J. A., & Shinebourne, P. (2012). *Interpretative phenomenological analysis.* In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), APA Handbooks in Psychology. APA handbook of research methods in psychology, 2, p. 73–82. American Psychological Association. https://doi.org/10.1037/13620-005

Smith, J.A. (2019): 'Participants and researchers searching for meaning: conceptual developments for interpretative phenomenological analysis, *Qualitative Research in Psychology* 26(2).

Soberman, G. B., Greenwald, R., & Rule, D. L. (2002). A controlled study of eye movement desensitization and reprocessing (EMDR) for boys with conduct problem. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 217-236. doi.org/10.1300/J146v06n01_11

Sobsey, D., & Doe, T. (1991). Patterns of sexual abuse and assault. *Sexuality and Disability*, 9(3), 243-259. doi: 10.1007/BF01102395

Spinelli, E. (2005). The interpreted world: An introduction to phenomenological psychology. Sage.

Stavropoulos, P. (2019). The principles of trauma-informed care and the need for cultural and organisational change. In *Humanising Mental Health Care in Australia* (pp. 307-318). Routledge.

Stein, D. J., McLaughlin, K. A., Koenen, K. C., Atwoli, L., Friedman, M. J., Hill, E. D., ... & Kessler, R. C. (2014). DSM-5 and ICD-11 definitions of posttraumatic stress disorder: Investigating "narrow" and "broad" approaches. *Depression and Anxiety*, 31(6), 494-505. doi:10.1002/da.22279

Stern, K., & Thayer, Z. (2019). Adversity in childhood and young adulthood predicts young adult depression. *International Journal of Public Health*, 64(7), 1069-1074. doi: 10.1007/s00038-019-01273-6

Svenaeus, F. (2000). The body uncanny; further steps towards a phenomenology of illness. *Medicine, Health Care and Philosophy*, *3*(2), 125-137. doi.org/10.1023/A:1009920011164

Sweeney, A., Clement, S., Filson, B., & Kennedy, A. (2016). Trauma-informed mental healthcare in the UK: What is it and how can we further its development? *Mental Health Review Journal*, 21(3), 174-192. doi.org/10.1108/MHRJ-01-2015-0006

Sykes, G. M. (2007). The society of captives: A study of a maximum security prison. Princeton University Press.

Taylor, J., Akerman, G., & Hocken, K. (2020). Cultivating Compassion Focussed Practice for Those Who Have Committed Sexual Offences. In *Sexual Crime and Trauma* (pp. 57-83).

Palgrave Macmillan, Cham. Retrieved from https://link.springer.com/chapter/10.1007/978-3-030-49068-3_3

Terwee, C. B., Bot, S. D., de Boer, M. R., van der Windt, D, Knol, D. L., Dekker, J., . . . de Vet, H. C. (2007). Quality criteria were proposed for measurement properties of health status questionnaires. *Journal of Clinical Epidemiology, 60*(1), 34-42.

Terwee, C. B., Prinsen, C. A., Chiarotto, A., Westerman, M. J., Patrick, D. L., Alonso, J., . . . Mokkink, L. B. (2018). COSMIN methodology for evaluating the content validity of patient-reported outcome measures: A delphi study. *Quality of Life Research, 27*(5), 1159-1170.

Toner, J., Daiches, A., & Larkin, W. (2013). Asking about trauma: The experiences of psychological therapists in early intervention services. *Psychosis*, 5(2), 175-186. doi.org/10.1080/17522439.2012.697484

Tonks, J., Huw Williams, W., Frampton, I., Yates, P., Wall, S. E., & Slater, A. (2008). Reading emotions after childhood brain injury: Case series evidence of dissociation between cognitive abilities and emotional expression processing skills. *Brain Injury*, *22*(4), 325-332. doi.org/10.1080/02699050801968303

Tomoda, A., Polcari, A., Anderson, C. M., & Teicher, M. H. (2012). Reduced visual cortex gray matter volume and thickness in young adults who witnessed domestic violence during childhood. *PloS one*, *7*(12), doi:org/10.1371/journal.pone.0052528

Trochim, W.M. (2006). Qualitative measures. *Research Measures Knowledge Base, 361*, 2-6.

Tynan, R. R. (2019). Young men's experiences of long-term imprisonment: Living life. Routledge.

Unick, G. J., Bassuk, E. L., Richard, M. K., & Paquette, K. (2019). Organizational trauma-informed care: Associations with individual and agency factors. *Psychological Services*, 16(1), 134. doi.org/10.1037/ser0000299

Van der Kolk, B. A., Pelcovitz, D., Roth, S., & Mandel, F. S. (1996). Dissociation, somatization, and affect dysregulation: The Complexity of adaption to trauma. *The American Journal of Psychiatry*. doi.org/10.1176/ajp.153.7.83

Van der Kolk, B. A. (2004). Psychobiology of posttraumatic stress disorder. In J. Panksepp (Ed.), Textbook of Biological Psychiatry (p. 319–344). Wiley-Liss.

Van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*: Official Publication of the International Society for Traumatic Stress Studies, 18(5), 389-399. doi.org/10.1002/jts.20047

Van der Kolk, Bessel A. (2017). Developmental trauma disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35(5), 401-408. doi.org/10.3928/00485713-20050501-06

Van Rooyen, K., & Nqweni, Z. C. (2012). Culture and posttraumatic stress disorder (PTSD): A proposed conceptual framework. *South African Journal of Psychology*, *42*(1), 51-60. https://doi.org/10.1177/008124631204200106

Van Wesel, F., Boeije, H., Alisic, E., & Drost, S. (2012). I'll be working my way back: A qualitative synthesis on the trauma experience of children. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(5), 516. doi.org/10.1037/a0025766

Vaswani, N., & Paul, S. (2019). 'It's knowing the right things to say and do': Challenges and opportunities for trauma-informed practice in the prison context. *The Howard Journal of Crime and Justice*, 58(4), 513-534. doi.org/10.1111/hojo.12344

Wang, Y., Xu, K., Cao, G., Qian, M., Shook, J., & Ai, A. L. (2012). Child maltreatment in an incarcerated sample in China: prediction for crime types in adulthood. *Children and Youth Services Review*, *34*, 1553–1559. doi:10.1016/j.childyouth.2012.04.015

Wamser-Nanney, R., Cherry, K. E., Campbell, C., & Trombetta, E. (2021). Racial differences in children's trauma symptoms following complex trauma exposure. *Journal of Interpersonal Violence*, *36*(5-6), 2498-2520. doi.org/10.1177/0886260518760019

Warr, J. (2020). Forensic Psychologists: Prisons, Power, and Vulnerability. Emerald Group Publishing.

Webermann, A. R., & Murphy, C. M. (2019). Childhood trauma and dissociative intimate partner violence. *Violence against women*, *25*(2), 148-166. doi.org/10.1177/1077801218766628

Weeks, R., & Widom, C. S. (1998). Self-reports of early childhood victimization among incarcerated adult male felons. *Journal of Interpersonal Violence*, 13(3), 346-361. doi.org/10.1177/088626098013003003

Welfare, H., & Hollin, C. R. (2012). Involvement in extreme violence and violence-related trauma: A review with relevance to young people in custody. *Legal and Criminological Psychology*, *17*(1), 89-104. doi.org/10.1111/j.2044-8333.2010.02002.x

Widom, C. S., & Maxfield, M. G. (2001). *An update on the "cycle of violence"*. Washington, DC: National Institute of Justice. Retrieved from https://eric.ed.gov/?id=ED451313

Widom, C. S., Czaja, S., Wilson, H. W., Allwood, M., & Chauhan, P. (2013). Do the long-term consequences of neglect differ for children of different races and ethnic backgrounds? *Child Maltreatment*, 18(1), 42-55. doi:10.1177/1077559512460728

Widom, C. S., & Maxfield, M. G. (1996). A prospective examination of risk for violence among abused and neglected children a. *Annals of the New York Academy of Sciences,* 794(1), 224-237. doi:10.1111/j.1749-6632.1996.tb32523.x

Willig, C. (2001). Qualitative research in psychology: A practical guide to theory and method. *Buckingham: OUP.*

Williams, K., Papadopoulou, V., & Booth, N. (2012). Prisoners' childhood and family backgrounds. Results from the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners. Ministry of Justice Research Series, 4, 12.

Williams, W. H., McAuliffe, K. A., Cohen, M. H., Parsonage, M., & Ramsbotham, J. (2015). Traumatic brain injury and juvenile offending: complex causal links offer multiple targets to reduce crime. *The Journal of Head Trauma Rehabilitation*, *30*(2), 69-74. doi: 10.1097/HTR.0000000000000134#

Wojciechowski, T. W. (2020). PTSD as a risk factor for the development of violence among juvenile offenders: A group-based trajectory modeling approach. *Journal of Interpersonal Violence,* 35(13-14), 2511-2535. doi:10.1177/0886260517704231

Woodall, J. (2007). Barriers to positive mental health in a Young Offender's Institution: A qualitative study. *Health Education Journal*, 66(2), 132-140. doi:10.1177/0017896907076752

World Health Organization. (2018). *International classification of diseases for mortality and morbidity statistics* (11th Revision). Geneva: World Health Organization.

Wolpaw, J. M., & Ford, J. D. (2004). Assessing exposure to psychological trauma and post-traumatic stress in the juvenile justice population. Los Angeles, CA: National Child Traumatic Stress Network.

Wright, S., Liddle, M., & Goodfellow, P. (2016). Young offenders and trauma: experience and impact: a practitioner's guide. Beyond Youth Custody. Retrieved from http://www.beyondyouthcustody.net/resources/publications/young-offenders-trauma-experience-impact-practitioners-guide/

Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI journal*, 16, 1057. doi:10.17179/excli2017-480

Young, Baroness Lola (Ed) (2014). The Young Review: Improving outcomes for young Black and/or Muslim men in the Criminal Justice System. Final report. London: The Young Review.

Youth Justice Board (2021). *Ethnic disproportionality in remand and sentencing in the youth justice system. Analysis of administrative data.* Youth Justice Board for England and Wales. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_da

ta/file/952483/Ethnic_disproportionality_in_remand_and_sentencing_in_the_youth_justice_system.pdf

Zito, A. (2010). Assessing trauma symptomatology among juvenile offenders: An exploration of the BASC-2 and TSCC. Unpublished manuscript.

APPENDICES

Appendix 1 Systematic Review Methodology Details – PICO

What tools are effective in screening for trauma in young males in custody? A Systematic Review of trauma screening measures of young males in custody.

Population

Young, male offenders aged 14-25yrs inclusive in the criminal justice system

Intervention

How is trauma assessed currently with this population?

Context

Concept 1: custody

"criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate OR detained

AND

Concept 2: young

young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile

AND

Concept 3: men
Male OR man OR men

AND
Concept 4: trauma
trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse

AND
Concept 5: screening tools
assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*

Outcome

A comparison of tools that evaluate trauma and childhood adversity.

Additional outcome(s)

The following points will be compared between the tools:

- o Measure name
- o Administration time
- o Target audience
- o Data source: rater or self-report
- o Number of adversity topics
- o Types of adversities
- o Whether adversity was dependent or not on the person's own actions
- o Primary purpose [including if tool was used in context of intervention evaluation]
- o Cross cultural validity
- o Scoring methods
- o Strengths and limitations

Appendix 2 Database and Search Terms

PTSDPubs: noft(assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*) AND noft(trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse) AND noft(Male OR man OR men) AND noft(young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile) AND noft("criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate)

ProQuest Dissertations and Theses: noft("criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate) AND noft(young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile) AND noft(Male OR man OR men) AND noft(trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse) AND noft(assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*) NOT noft("drug abuse" OR "drug usage" OR drug OR "substance use" OR alcohol OR "alcohol abuse")

PsycINFO: ((noft("criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate OR detained) AND noft(young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile) AND noft(Male OR man OR men) AND noft(trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR

PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse) AND noft(assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*)) NOT (stype.exact("Books" OR "Dissertations & Theses") AND subt.exact(("humans" OR "male") NOT ("substance use treatment" OR "drug usage" OR "alcoholism" OR "alcohol abuse" OR "rape" OR "hiv" OR "substance abuse, intravenous" OR "hiv infections" OR "alcohol drinking patterns" OR "intravenous drug usage")) AND po.exact(("Human" OR "Male") NOT "Animal"))

PsycTests: noft(assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*) AND noft(trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse) AND noft(Male OR man OR men) AND noft(young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile) AND noft("criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate)

The Cochrane Library: ((assess* OR measur* OR tool OR questionnaire OR screen* OR testing OR interview*) AND (trauma* OR "adverse childhood experiences" OR "negative childhood experiences" OR "negative life experience" OR "difficult life experience" OR PTSD OR "posttraumatic stress" OR "stress disorder" OR maltreatment OR abuse) AND (Male OR man OR men) AND (young OR youth OR adolescen* OR "early adulthood" OR teen* OR juvenile) AND ("criminal justice" OR prison* OR jail OR custod* OR "secure setting" OR detention OR incarcerat* OR offend* OR inmate)) NOT ("drug abuse" OR "drug usage" OR drug OR "substance use" OR alcohol OR "alcohol abuse")

Appendix 3 Data Extraction form: the Characteristics of the 14 Included Studies

	Type of text	Country	Author/s & year published	Purpose of study	Measure title	Multi-dimensional or specific trauma measure	Study population	Sample size (n)
1.	Journal article	USA	Cashel, Ovaert & Holliman, 2000	To assess the utility of the MMPI-A for identifying PTSD in incarcerated adolescents	Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A)	Multi-dimensional measure with trauma subscale - The MMPI-A consists of 105 scales- including a PK scale for PTSD	13-18yrs	Total n= 60 All males
2.	Doctoral dissertation	USA	Cruz-Katz, 2016	To identify the factor structure of the STRESS and its validity as a trauma screening measure in justice involved youth	The Structured Trauma-Related Experiences and Symptoms Screener (STRESS)	Specific trauma measure	12-18yrs Average age 15.67	Total n= 384 Male n= 256
3.	Journal article	USA	Dargis, Sitney, Caldwell, B., Caldwell, M.,	To establish the reliability and validity of The Trauma Checklist	The Trauma Checklist	Specific trauma measure	14-20yrs Average age 16.4yr	Total n=114 All males

			Edwards, Harenski, & Kiehl, et al., 2019					
4.	Journal article	Norway	Dovran et al., 2013	To assess the reliability of the CTQ-SF	The Childhood Trauma Questionnaire-Short Form (CTQ-SF)	Specific trauma measure	Average age 32yrs	Total n=517 Male n=109
5.	Journal article	Germany	Dudeck, Vasic, Otte & Streb, 2015	To assess the validity of the CTQ-SF	The Childhood Trauma Questionnaire (CTQ-SF)	Specific trauma measure	Average age 32.8yr	Total 'inmates'= 224 'majority were male'
6.	Journal article	USA	Edner, Glaser & Calhoun, 2017	To assess the utility of the CROPS in identifying trauma in adjudicated youth	Child Report of Posttraumatic Symptoms (CROPS)	Specific trauma measure	12-17yrs	Total n=215 Male n =108
7.	Journal article	USA	Edner, Glaser, Calhoun, Murray, Khan & Domaldson, 2020	The TSJO was examined to evaluate the trauma detection accuracy of the MMPI-A among juvenile offenders and provide preliminary validation for the TSJO. (This study also looked at the classification accuracy of MMPI-A clinical scales but not using methods that could be evaluated with the COSMIN methodology).	Trauma Scale for Juvenile Offenders (TSJO)	Specific trauma measure	13-18yrs Average age 15.2yr	Total n=71 Male n=52

8.	Journal article	USA	Edner et al., 2020	To examine the psychometric properties of the CROPS 14-item for juvenile offenders.	The Child Report of Posttraumatic Symptoms (CROPS)	Specific trauma measure	13-17yrs Average age 15.2yrs	Total n=74 Male n=44
9.	Doctoral dissertation	USA	Flaherty, 2017	To determine the utility of the CROPS and the TSCC in assessing for trauma symptomology among a sample of adjudicated youth	Child Report of Posttraumatic Symptoms (CROPS) & Trauma Symptom Checklist for Children (TSCC)	Specific trauma measures	13-17yrs Average age 15.17yrs	Total n=76 Male n=30
10.	Journal article	USA	Grasso, Doyle & Koon, 2019	1. To examine the predictive utility of the TSIRS and 2. DVERS in detecting probable posttraumatic stress disorder and poly-victimization assessed via a validated self-report instrument	1. The Trauma-Related Symptoms and Impairment Rapid Screen (TSIRS) 2. Dimensions of Violence Exposure Rapid Screen	Specific trauma measures	13-20yrs Average age 16.93yrs	Total n=218 Male n = 86.7% (190)
11.	Doctoral dissertation	USA	Harrington, 2008	To validate the CAPS-CA with juveniles in custody	The Clinician-Administered PTSD Scale for Children & Adolescents (CAPS-CA)	Specific trauma measure	14-18yrs	Total n=60 All males
12.	Journal article	USA	Kerig, Moeddel & Parker, 2011	To investigate the sensitivity and specificity of the MAYSI-2 for detecting trauma and symptoms of PTSD in detained youth	The Massachusetts Youth Screening Instrument (MAYSI-2)	Multi-dimensional measure with trauma subscale – The MAYSI-2 includes a	12-16yrs Average age 15.5yrs	Total n=498 Male n=337

						Traumatic Experiences Scale		
13.	Journal article	USA	Murray, Glaser & Calhoun 2013,	To determine if there were differences in item-level responses on the MMPI-A between adolescents in custody who have/have not experienced childhood maltreatment and/or grief and loss	Minnesota Multiphasic Personality Inventory- Adolescent (MMPI-A)	Multi-dimensional measure with trauma subscale - The MMPI-A consists of 105 scales-including a PK scale for PTSD	14-18yrs	Total n=186 Male n=145
14.	Doctoral dissertation	USA	Zito, 2016	The primary purpose of this study is to determine if the BASC-2 clinical scales can be used to identify juvenile offenders who endorse trauma symptomatology as measured by the TSCC.	The Behavioural Assessment System for Children, Second Edition (BASC-2) + Trauma Symptom Checklist for Children (TSCC)	Specific trauma measures	13-16yrs Average age 15.3yrs	Total n=63 Male n=39

- Adjudication' is analogous to conviction in US juvenile court terminology

Appendix 4 COSMIN: Definitions of the relevant domains and psychometric properties for health-related patient-reported

outcomes based on Mokkink et al., (2018), and Terwee et al., (2007)

Domain	Measurement Property	Aspects of a measurement property	Definition
Reliability			The degree to which the measurement is free from measurement error
	Internal consistency		The degree of the interrelatedness among the items.
	Reliability		The proportion of the total variance in the measurements which is because of 'true' differences among patients.
	Measurement error		The systematic and random error of a patient's score that is not attributed to true changes in the construct to be measured.
Validity			The degree to which an instrument measures the construct(s) it purports to measure.
	Content validity	Content validity was not evaluated at this stage.	The degree to which the content of an instrument is an adequate reflection of the construct to be measured.
		Face validity	The degree to which (the items of) an instrument indeed looks as though they are an adequate reflection of the construct to be measured.
	Construct validity		The degree to which the scores of an instrument are consistent with hypotheses based on the assumption that the instrument validly measures the construct to be measured.
		Structural validity	The degree to which the scores of an instrument are an adequate reflection of the dimensionality of the construct to be measured.
		Hypotheses testing	Item construct validity.
		Cross-cultural validity was not evaluated at this stage.	The degree to which the performance of the items on a translated or culturally adapted instrument are an adequate reflection of the performance of the items of the original version of the instrument.
	Criterion validity	Criterion validity was not evaluated at this stage.	The degree to which the scores of an instrument are an adequate reflection of a 'gold standard'.

Responsiveness		**Responsiveness**: the ability of an HR-PRO instrument to detect change over time in the construct to be measured.
Interpretability		**Interpretability**: the degree to which one can assign qualitative meaning to an instrument's quantitative scores/ score change. (not a psychometric property)

Appendix 5 Quality Assessment: Summary of Selected Criteria Rating Quality of Psychometric Properties (Cordier et al., 2017; Terwee et al., 2007)

Property	Definition	Quality criteria[v,vi]
Internal consistency	The extent to which items in a (sub)scale are inter-correlated, thus measuring the same construct	**+** Factor analyses performed on adequate sample size (7 * # items and >100) AND Cronbach's alpha(s) calculated per dimension AND Cronbach's alpha(s) between 0.70 and 0.95 **?** No factor analysis OR doubtful design or method **-** Cronbach's alpha(s) >0.70 or < 0.95, despite adequate design and method **±** Conflicting results **NR** No information found on internal consistency **NE** Not evaluated
Reliability	The extent to which patients can be distinguished from each other, despite measurement errors (relative measurement error)	**+** ICC or weighted Kappa > 0.70 **?** Doubtful design or method (e.g., time interval not mentioned) **-** ICC or weighted Kappa < 0.70, despite adequate design and method **±** Conflicting results **NR** No information found on reliability **NE** Not evaluated
Content validity	The extent to which the domain of interest is comprehensively sampled by the items in the measure/scale	**+** A clear description is provided of the measurement aim, the target population, the concepts that are being measured, and the item selection AND target population were involved in item selection

[v] + = positive rating;? = Indeterminate rating; - = negative rating; ±= conflicting data; NR = Not reported; NE = Not evaluated.

[vi] Doubtful design or method = lacking of a clear description of the design or methods of the study, sample size smaller than 50 subjects (should be at least 50 in every (subgroup) analysis), or any important methodological weakness in the design or execution of the study.

? A clear description of above- mentioned aspects is lacking OR only target population involved
OR doubtful design or method
- No target population involvement
± Conflicting results
NR No information found on target population involvement
NE Not evaluated

Construct validity	The extent to which scores on a particular questionnaire relate to other measures in a manner that is consistent with theoretically derived hypotheses concerning the concepts being measured	**+** Specific hypotheses were formulated AND at least 75% of the results are in accordance with these hypotheses **?** Doubtful design or method (e.g., no hypotheses) **-** Less than 75% of hypotheses were confirmed, despite adequate design and methods **±** Conflicting results **NR** No information found on construct validity **NE** Not evaluated

Levels of Evidence:
Strong evidence positive/negative result = Consistent findings in multiple studies of <u>good</u> methodological quality OR in one study of <u>excellent</u> methodological quality
Moderate evidence positive/negative result = Consistent findings in multiples studies of <u>fair</u> methodological quality OR in one study of <u>good</u> methodological quality
Limited evidence positive/negative = One study of <u>fair</u> methodological quality
Conflicting evidence = Conflicting findings
Not Evaluated = *studies of poor methodological quality according to COSMIN excluded from further analyses*
Indeterminate = Studies with Indeterminate measurement property rating
NR = Not reported

Appendix 6 Quality Assessment: Criteria for Overall Quality Score using criteria set out by Schellingerhout et al., (2012)

Property	Rating	Quality criteria
Reliability Internal consistency	+ ? -	(Sub)scale is uni-dimensional AND Cronbach's alpha(s) ≥ 0.70 Dimensionality not known OR Cronbach's alpha not determined (Sub)scale not uni-dimensional AND Cronbach's alpha(s) < 0.70
Measurement error	+ ? -	MIC > SDC OR MIC outside the LOA MIC not defined MIC ≤ SDC OR MIC equals or inside LOA
Reliability	+ ? -	ICC/weighted Kappa ≥ 0.70 OR Pearson's r ≥ 0.80 Neither ICC/weighted Kappa, nor Pearson's *r* determined ICC/weighted Kappa < 0.70 OR Pearson's *r* < 0.80
Validity Construct Validity	+ ? -	Factors should explain at least 50% of the variance Explained variance not mentioned Factors explain < 50% of the variance
Hypothesis testing	+ ? -	(Correlation with an instrument measuring the same construct ≥ 0.50 OR at least 75% of the results are in accordance with the hypothesis) AND correlation with related constructs is higher than the unrelated constructs Solely correlations determined with unrelated constructs (Correlation with an instrument measuring the same construct < 0.50 OR < 75% of the results are in accordance with the hypothesis) AND correlation with related constructs is lower than the unrelated constructs

Level	Rating	Criteria
Strong	+++ or ---	Consistent findings in multiple studies of **good** methodological quality OR in one study of excellent methodological quality
Moderate	++ or - -	Consistent findings in multiple studies of **fair** methodological quality OR in one study of **good** methodological quality
Limited	+ or -	One study of **fair** methodological quality
Conflicting	±	Conflicting findings
Unknown	?	Only studies of **poor** methodological quality

[…] reference number, + positive results, - negative results

Appendix 7 A Glossary of Scale Abbreviations

Title abbreviation	Full title of measure
BASC-2 SRP-A	The Behavior Assessment System for Children, Second Edition, Adolescent Version-Self Report
CAPS	The Clinician-Administered PTSD Scale for Children & Adolescents
CROPS	Child Report of Posttraumatic Symptoms
CTQ-SF	The Childhood Trauma Questionnaire-Short Form
DVERS	Dimensions of Violence Exposure Rapid Screen
MMPI-A	Minnesota Multiphasic Personality Inventory-Adolescent
MAYSI-2	The Massachusetts Youth Screening Instrument
STRESS	The Structured Trauma-Related Experiences and Symptoms Screener
TSIRS	The Trauma-Related Symptoms and Impairment Rapid Screen
TSCC	Trauma Symptom Checklist for Children
TSJO	Trauma Scale for Juvenile Offenders
TC	The Trauma Checklist

Appendix 8 Quality Assessment: Methodological Ratings of Studies (using the COSMIN Risk of Bias Checklist Mokkink et al., 2018)

Measures N=12	Structural Validity COSMIN Box 3	Internal consistency COSMIN Box 4	Reliability COSMIN Box 6	Measurement Error COSMIN Box 7	Hypothesis testing for construct validity COSMIN Box 9
BASC-2 SRP-A **Zito, 2016** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	No information found on internal consistency statistics.	1. Unclear **- doubtful** 2. Time interval not stated **- doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. No ICC reported – **inadequate** 5. **n/a** 6. **n/a** 7. **n/a** 8. no other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate to the hypotheses– **very good** 4. no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: inadequate*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
CAPS-CA **Harrington, 2008** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	1. ICCs given for the scale's items -**very good** 2. Cronbach's alpha calculated – **very good** 3.n/a 4.n/a	1. Unclear **- doubtful** 2. Time interval not stated **- doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. n/a kappa was calculated – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good**

		5.no other flaws – **very good**	**6. n/a** **7. n/a** **8**. interviewers were not blind to aims of the study – **inadequate**		3. Statistical method was appropriate – **very good** **4.** no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
CROPS Flaherty, 2017 *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	**1.** ICCs given for the scale's items -**very good** **2.** Cronbach's alpha calculated – **very good** **3**.n/a **4**.n/a 5.no other flaws – **very good**	**1.** Unclear **- doubtful** **2.** Time interval not stated **- doubtful** **3.** Unclear if test conditions were similar – **doubtful** **4.** no correlation coefficients reported – **inadequate** **5**. n/a **6**. n/a **7**. n/a **8**. no other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate – **very good** **4.** no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
CROPS Edner et al., 2017	**1.** Exploratory Factor Analysis performed with PCA - **adequate** **2. n/a**	**1.** ICCs given for the scale's items -**very good**	**1.** Unclear **- doubtful** **2.** Time interval not stated **- doubtful**	**Measurement error was not reported by this study**	**Hypothesis testing was not reported by this study**

Overall methodological rating: Inadequate	**3.** sample size was not 5 times greater the number of scale items - **inadequate** **4.** No other flaws – efforts made to check factor loadings, correlations between factor scores and mental health conditions **–very good**	**2.** Cronbach's alpha calculated – **very good** **3.**n/a **4.**n/a no other flaws – **very good**	**3**. Unclear if test conditions were similar – **doubtful** **4.** no correlation coefficients reported – **inadequate** **5**. n/a **6.** n/a **7.** n/a no other flaws – **very good**		
	Methodological Rating: inadequate	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: n/a*
CROPS **Edner et al., 2020** *Overall methodological rating: doubtful*	**1.** Exploratory Factor Analysis performed with PCA - **adequate** **2. n/a** **3.** sample size n=74 which is greater than 5 times the number of items on the scale (n=14 or 12) **very good** **4.** No other flaws – efforts made to conduct robust OCA, check factor loadings **– very good**	1. ICC calculated for whole scale version of both 14-item and 12-item – **very good** 2. Cronbach's alpha was calculated **– very good** 3. n/a 4. n/a n/a	1. Unclear – **doubtful** 2. Time interval not stated **– doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. Pearson's coefficients calculated **–very good** 5. n/a 6. n/a no other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate – **very good** **4.** no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: adequate	*Methodological Rating: very good*	*Methodological Rating: doubtful*	*Methodological Rating: n/a*	*Methodological Rating: very good*

CTQ-SF Dovran, 2013 *Overall methodological rating: doubtful*	**1.** Confirmatory Factor Analysis performed - **very good** **2. n/a** **3.** sample size n=517 which is greater than 7 times the number of items on the scale (n=28) -**very good** **4.** No other flaws**–very good**	**1.** ICCs calculated for total scale and sub scales –**very good** **2.** Cronbach's alpha calculate – **very good** **3.**n/a **4.**n/a 5.no other flaws – **very good**	**1.** Unclear **- doubtful** **2.** Time interval not stated **- doubtful** **3.** Unclear if test conditions were similar – **doubtful** **4.** intra class correlation coefficients reported – **very good** **5. n/a** **6. n/a** **7. n/a** **8.** no other flaws – **very good**	**Measurement error was not reported by this study**	**Hypothesis testing was not reported by this study**
	Methodological Rating: very good	*Methodological Rating: very good*	*Methodological Rating: doubtful*	*Methodological Rating: n/a*	*Methodological Rating: n/a*
CTQ-SF Dudeck et al., 2015 *Overall methodological rating: Inadequate*	**1.** Confirmatory Factor Analysis performed - **very good** **2. n/a** **3.** sample size n=224 which is greater than 7 times the number of items on the scale (n=28) -**very good** **4.** No other flaws**–very good**	**1.** ICCs not calculated -**inadequate** **2.** No Cronbach's alpha– **inadequate** **3.**n/a **4.**n/a 5.no other flaws – **very good**	**Reliability statistics were not reported by this study**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate – **very good** 4. no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**

	Methodological Rating: very good	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: n/a*	*Methodological Rating: very good*
DVERS **Grasso et al., 2019** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	1. ICC calculated for whole scale **–very good** 2. Cronbach's alpha was calculated **– very good** 3. n/a 4. n/a 5. n/a	1. Unclear **– doubtful** 2. Time interval not stated **– doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. n/a 5. yes – kappa calculated –**very good** 6. K values are reported but all lower than 0.70. Not clear if weighted kappa was used as would be preferred as was ordinal scores and multiple raters were used – **doubtful** 7. weighting scheme not described – **adequate** study did not set out to examine reliability and validity - **inadequate**	**Measurement error was not reported by this study**	4. constructs are clear – **very good** 1. measurement properties of the comparator instruments in a population similar to the study population – **very good** 2. Statistical method was appropriate – **very good** 4. no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*

MMPI-A **Cashel et al., 2000** *Overall methodological rating: inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	1. ICC calculated for whole scale **–very good** 2. Cronbach's alpha was calculated **– very good** 3. n/a 4. n/a n/a	1. Unclear **– doubtful** 2. Time interval not stated **– doubtful** 3. Test conditions were not similar – i**nadequate** 4. Correlations reported- **adequate** 5. n/a 6. n/a 7. n/a 8. 8. No other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method of discriminate function analysis was appropriate–**very good** 4. no other flaws **–very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
MMPI-A **Murray et al., 2013** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	**1.** ICCs not calculated -**inadequate** **2.** No Cronbach's alpha– **inadequate** **3**.n/a **4**.n/a 5.no other flaws – **very good**	1. Unclear **– doubtful** 2. Time interval not stated **– doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. No correlations reported - **inadequate** 5. n/a 6. n/a 7. n/a	**Measurement error was not reported by this study**	**Hypothesis testing was not reported by this study**

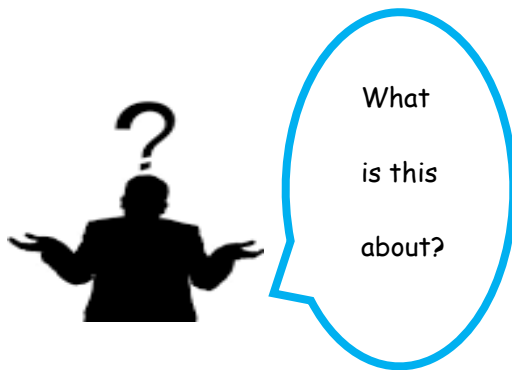|			8. 8. No other flaws – **very good**		
	Methodological Rating: n/a	*Methodological Rating: inadequate*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: n/a*
MAYSI-2 **Kerig et al., 2011** *Overall methodological rating: Inadequate*	1. No factor analysis was performed, perhaps due to low sample size– **inadequate** 2. n/a 3. not done 4. no other flaws – **very good**	1. ICC calculated for whole scale **–very good** 2. Cronbach's alpha was calculated **– very good** 3. n/a 4. n/a 5. n/a	1. Unclear **– doubtful** 2. Time interval not stated **– doubtful** 3. Test conditions were not similar – i**nadequate** 4. Correlations reported but not Spearman or Pearson - **inadequate** 5. n/a 6. n/a 7. n/a 8. 8. No other flaws – **very good**	1. unclear if sample were stable in-between administration of different tests– **doubtful** 2. administered at different times – **doubtful** 3. not similar – due to eversion of MAYSI-2 versus interviews for others – **inadequate** 4. **n/a** 5. IRR calculated at 95-100% -**very good**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method of MRs was appropriate –**very good** 4. no other flaws **–very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: inadequate	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: inadequate*	*Methodological Rating: very good*
STRESS **Cruz-Katz, 2016** *Overall methodological rating:*	**1.** Confirmatory Factor Analysis performed - **very good** **2. n/a** **3.** sample size n=384 which is greater than 7 times the number of	**1.** ICCs given for the scale's total score and scale scores -**very good** **2.** Cronbach's alpha calculated – **very good** **3**.**n/a**	**1**. Unclear - **doubtful** **2**. Time interval not stated - **doubtful** **3**. Assumable that test conditions were similar – **adequate** **4**. calculates ICC as preferred for	**Measurement error was not reported by this study**	**1.** constructs are clear – **very good** **2.** measurement properties of the comparator instruments were clear – **very good**

doubtful	items on the scale (n=45) **very good** **4.** No other flaws – also checked for correlations between factor scores and mental health conditions **–very good**	4.n/a 5.no other flaws – **very good**	continuous scores and formula described – **very good** 5. n/a 6. n/a 7. n/a 8. no other flaws – **very good**		**3.** Assumable that statistical method was appropriate; Pearson's correlations calculated - **adequate** 4. no other flaws – **very good** 5. n/a 6. n/a 7. n/a
	Methodological Rating: very good	*Methodological Rating: very good*	*Methodological Rating: doubtful*	*Methodological Rating: n/a*	*Methodological Rating: adequate*
TC **Dargis, et al., 2019** *Overall methodological rating: Inadequate*	**1.** Exploratory Factor Analysis performed with PCA - **adequate** **2. n/a** **3.** sample size n=114 which is greater than 7 times the number of items on the scale (n=7) **very good** **4.** No other flaws – efforts made to conduct robust OCA, check factor loadings, correlations between factor scores and mental health conditions **–very good**	**1.** ICCs given for the scale's items -**very good** **2.** Cronbach's alpha calculated – **very good** **3.n/a** **4.n/a** 5.no other flaws – **very good**	**1.** Unclear - **doubtful** **2.** Time interval not stated - **doubtful** **3.** Unclear if test conditions were similar – **doubtful** **4.** calculates ICC as preferred for continuous scores and formula described – **very good** **5. n/a** **6. n/a** **7. n/a** **8.** no other flaws – **very good**	**Measurement error was not reported by this study**	**1.** constructs are clear – **very good** **2.** measurement properties of the comparator instruments are not clear - **inadequate** **3.** Assumable that statistical method was appropriate; Pearson's correlations calculated - **adequate** **4.** no other flaws – **very good** **5. n/a** **6. n/a** **7. n/a**
	Methodological Rating: adequate	*Methodological Rating: very good*	*Methodological Rating: doubtful*	*Methodological Rating: n/a*	*Methodological Rating: inadequate*

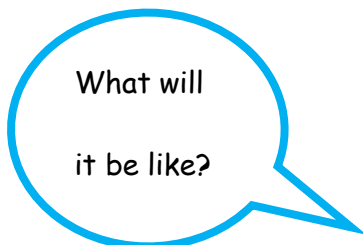| TSCC **Briere, (1996)** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	**1.** ICCs given for the scale's items -**very good** **2.** Cronbach's alpha calculated – **very good** **3.**n/a **4.**n/a 5.no other flaws – **very good**	**1.** Unclear **- doubtful** **2.** Time interval not stated **- doubtful** **3.** Unclear if test conditions were similar – **doubtful** **4.** no correlation coefficients reported – **inadequate** **5**. n/a **6.** n/a **7.** n/a **8.** no other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate – **very good** **4.** no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
TSIRS **Flaherty, 2017** *Overall methodological rating: Inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	1. ICC calculated for whole scale –**very good** 2. Cronbach's alpha was calculated **– very good** 3. n/a 4. n/a 5. n/a	1. Unclear **– doubtful** 2. Time interval not stated **– doubtful** 3. Unclear if test conditions were similar – **doubtful** 4. n/a **5.** yes – kappa calculated –**very good** **6.** K values are reported but all lower than 0.70. Not clear if weighted kappa was used as	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in a population similar to the study population – **very good** 3. Statistical method was appropriate – **very good** 4. no other flaws – **very good** 5. **n/a**

			would be preferred as was ordinal scores and multiple raters were used – **doubtful** 7. weighting scheme not described – **adequate** 8. study did not set out to examine reliability and validity -**inadequate**		6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*
TSJO **Grasso et al., 2019** *Overall methodological rating: inadequate*	Not applicable as study was not seeking to test the structural validity and no such statistics were reported	**1.** ICCs given for the scale's items -**very good** **2.** Cronbach's alpha calculated – **very good** **3.**n/a **4.**n/a 5.no other flaws – **very good**	**1.** Unclear **- doubtful** **2.** Time interval not stated **- doubtful** **3.** Unclear if test conditions were similar – **doubtful** **4.** no correlation coefficients reported – **inadequate** **5**. **n/a** **6**. **n/a** **7**. **n/a** **8**. no other flaws – **very good**	**Measurement error was not reported by this study**	1. constructs are clear – **very good** 2. measurement properties of the comparator instruments in same sample– **very good** 3. Statistical method was appropriate – **very good** 4. no other flaws – **very good** 5. **n/a** 6. **n/a** 7. **n/a**
	Methodological Rating: n/a	*Methodological Rating: very good*	*Methodological Rating: inadequate*	*Methodological Rating: n/a*	*Methodological Rating: very good*

COSMIN Ratings: 'very good', 'adequate', 'doubtful', 'inadequate' and 'N/A' – worst rating only described for each domain

Appendix 9 Research Information Sheet

What
is this
about?

1. I would like to talk to you to about any difficult life experiences and events.
2. I am asking other young adult men to take part too. Each interview will be on your own not in a group.
3. I will speak with you and take notes about your thoughts without putting your name on them.
4. You do not have to take part and that is okay.
5. I will only ask to come and speak with you if you have said that it is okay to do so.

What will
it be like?

✓ We will only talk about experiences you want to share.
✓ Some people say it helps a lot to talk about things like this. Even if they get upset when talking at the time it doesn't usually last longer than the interview.
✓ The interview will last for about 1 – 2 hours depending on how much you want to talk for.
✓ I will use a Dictaphone to tape our interview and afterwards type up the words. This will not identify you but use a unique identifier of 4 letters and 2 digits. The Dictaphone will be password protected and kept in a locked drawer.
✓ If you need a break or would like to stop at any time, that is okay.
✓ It is important you know that if you tell me about any intent to harm yourself or others then I will have to pass on this information to the prison authorities. Also if you admit to any crimes you have not been convicted of, including in prison, then this will also have to be passed on.

I would like to ask you about:

1. Your experience of serving a long sentence.
2. Any impact committing your offence has had on you.
3. Your experiences growing up.
4. Whether those affect you still in any way.
5. What has helped you survive any difficult experiences?
6. What else you would like in order to help you stay strong.
7. Anything that gets in the way of that.

What will we talk about?

What happens to the information I tell you?

1. The interview will be recorded on a Dictaphone if you give permission. The Dictaphone will be password protected so only I will have access to it. When it is not on my person it will be in a locked drawer in the psychology office. The recording will be transferred onto a password protected file on my HMPPS computer at HMYOI Aylesbury. The recording will then be deleted.
2. I will type up the interview notes and discuss it with my supervisor to check we are thinking about the meaning of your experience.
3. The notes from the interviews with the men taking part will be made into a report without any names in. This can then be shared to see what needs doing to improve life in custody for people like yourself.
4. All notes will be kept only in the interviewer's locked drawer in their office which no one else can get into.
5. We cannot keep things you talk about in our meetings secret

It is your choice! There will be no penalty if you do not want to take part.

You can ask to talk to me about the research to see if you are interested.

If you change your mind later, I may be able to come back and talk to you.

What if I say no?

What

happens

afterwards?
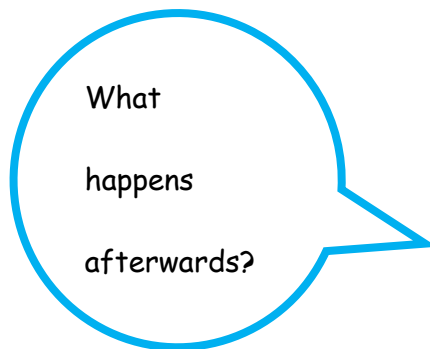
- ✓ After the interviewer has left you, you may have other questions. Let me know in writing if you want and I will respond.
- ✓ You can ask your questions by speaking or writing to the psychologist on the bottom of your consent form.
- ✓ The latest date you can ask for your words to not be used though is 1st June 2020. After that point I will not know which words are used as they will all have been made anonymous.
- ✓ If you want to talk through what we spoke about with someone else there is the Listeners, the Samaritans, your OMiC KeyWorker or the Psychology team in this prison.

To make contact with the researcher or their supervisors please put in a request to the Governor of the jail.

Appendix 10 Research Consent Form – Difficult Life Events

What is

this

1. I would like to talk to you to about any difficult life experiences and events.
2. I am asking other young adult men to take part too. Each interview will be on your own not in a group.
3. I will speak with you and take notes about your thoughts without putting your name on them.
4. You do not have to take part and that is okay.
5. I will only ask to come and speak with you if you have said that it is okay to do so.
6. I am doing this as a student at Nottingham Trent University.
7. I do also work as a psychologist in the Prison Service.

✓ We will only talk about experiences you want to share.
✓ Some people say it helps a lot to talk about things like this. Even if they get upset when talking at the time it doesn't usually last longer than the interview.
✓ The interview will last for about 1 – 2 hours depending on how much you want to talk for.
✓ I will use a Dictaphone to tape our interview and afterwards type up the words. This will not identify you but use a unique identifier of 4 letters and 2 digits. The Dictaphone will be password protected and kept in a locked drawer.
✓ If you need a break or would like to stop at any time, that is okay.
✓ It is important you know that if you tell me about any intent to harm yourself or others then I will have to pass on this information to the prison authorities. Also if you admit to any crimes you have not been convicted of, including in prison, then this will also have to be passed on.

What will it

be like?

What will we talk about?

I would like to ask you about:

1. Your experience of serving a long sentence.
2. Any impact committing your offence has had on you.
3. Your experiences growing up.
4. Whether those affect you still in any way.
5. What has helped you survive any difficult experiences?
6. What else you would like in order to help you stay strong.
7. Anything that gets in the way of that.

What happens to the information I tell you?

1. The interview will be <u>recorded on a Dictaphone</u> if you give permission. The Dictaphone will be password protected so only I will have access to it. When it is not on my person it will be in a locked drawer in the psychology office. The recording will be transferred onto a password protected file on my HMPPS computer at HMYOI Aylesbury. The recording will then be deleted.
2. I will type up the interview notes and discuss it with my supervisor to check we are thinking about the meaning of <u>your</u> experience.
3. The notes from the interviews with the men taking part will be made into a report <u>without any names in</u>. This can then be shared to see what needs doing to improve life in custody for people like yourself.
4. All notes will be kept only in the interviewer's <u>locked drawer</u> in their office which no one else can get into.
5. We cannot keep things you talk about in our meetings secret but <u>only things about risk will be shared</u> with others to protect people. I will tell you if I think I need to do that, e.g. risk of harm to self or others.
6. I will probably quote what you have said to me in a report, but no-one will be able to know that it is you who said it.

It is your choice! There will be no penalty if you do not want to take part.

✓ You can ask to talk to me about the research to see if you are interested.

✓ If you change your mind later, I may be able to come back and talk to you.

✓ You will be paid the usual hourly rate for your place of work whilst in interview with me. You can still change your mind about our interview after you have attended and not lose your pay.

What if

I say no?

...ance to think

...his is voluntary.

3. I understand it is my choice to meet and I can end this at any time. There are no consequences at all to changing my mind about taking part.

I understand that a Dictaphone will be used and written notes made in the interview and my name changed to protect my identity.

Once the interview notes have been taken away to use in the research I can't then ask to withdraw.

I understand the results of this study will be discussed at meetings to make sure the prison service looks after young men on long sentences better.

7. If at any time you have reason to complain, please speak or write to the person named at the bottom of this sheet

What I am

agreeing

to?

I would like to take part:

Research Participant		Signature	Date
Name			
Researcher		Signature	Date
Name	**Position**		

To make contact with the researcher or their supervisors please put in a request to do so to the Governor of your jail.

Appendix 11 Research Interview Schedule

Introduction:
    1. Revisit information contained within the Participant Information Sheet.
    2. Give participants time to ask any more questions and sign the Research Consent Form.
    3. Discuss contextual information, e.g. how long they've been in that prison, lived on that wing, how they generally find life there etc.
    4. The aim of this interview is to gain an in-depth understanding of your experience of difficult life events. I am interested in exploring your thoughts, feelings, perceptions and reflections. There are no right or wrong answers and I would like you to be as open and honest at possible. I may say little sometimes because I am interested in listening to your views. Some questions may seem obvious but this is because I am interested in hearing your personal thoughts and feelings.
    5. Please take your time in thinking and talking, there is no rush today.

1. What does the term difficult life events mean to you?
    Prompt: Can you tell me more about how you come to understand that?

    Prompt Are there other terms you use and why is that please?

    Prompt Could you give me an example of an event like that?

    Prompt: Ensure good understanding of what the terms mean and unpick 'trauma' if used.

2. As you know, we are here to talk about those difficult experiences you've had in your life so far. It is up to you where you would like to start, perhaps with telling me about either what sort of experiences you have had or by telling me about one of them in particular?
    Prompt: Can you tell me more about that?

    Prompt: Could you please tell me what your thoughts were at the time?

    Prompt: Would you mind saying something about how you felt?

    Prompt: use the prompt sheet at Appendix A to go over some examples of difficult childhood experiences participants sometimes speak about.

    Prompt: How often did that happen? Over what period of time?

    Prompt: ensure clarity about age of life when this experience began and ended and how often.

3. What kind of impact did that have on you?
    Prompt: Can you tell me more about that please?

    Prompt: use the prompt sheet at Appendix B if required to go over some examples

Prompt: for impact on life in terms of school, work, relationships, interests.

Prompt: Did the kind of impact it have change over time or did it change in any way?

4. **Who did you think was responsible for that happening to you?**
   Prompt: Did you always think that they/you were responsible for what was happening to you?

   Prompt Ensure clarity about whether the conclusion now is what is has always been or if that has changed over time and what might have influenced that interpretation.

5. **What did you do to try and deal with what was happening to you?**
   Prompt: Can you tell me more about that please?

   Prompt: Could you say more about what you were thinking about how you coped at the time, e.g. did you feel better for it or not,

   Prompt: Why do you think you adopted that way of dealing with it? Did you observe others doing that and use that method too?

   Prompt: Clarify type of responses, specific about physical, emotional and cognitive responses, and whether that would be categorised as internal or external coping.

   Prompt: Do you think you coped with things differently because the event you've described happened to you/because you were responsible for it happening?

   Prompt: What might have changed over time?

   Prompt: What might be different about how you coped, depending on whether you felt responsible for it or not.

6. **Are there ways in which you were able to adapt to what had happened?**
   Prompt: Can you tell me more about how you came to learn to do that? Are there other terms you use and why is that please? Could you give me an example of ways in which you did this please?

   Prompt: What might be different because of what has happened to you? Is there anything you have achieved or felt more or less because of these events? e.g. done well in school or sports, cultural pride and support, other role models, physical health problems, feelings of hope, faith, sense of purpose, motivation, ability to manage emotions, physical fitness, becoming a partner or father.

   Prompt: Are there ways in which it has changed you as a person? In how you see yourself or how other people see you?

   Prompt: From your experience, what factors helped you to cope with the event/s? Internal factors or external ones such as someone who helped you, or new skills learnt or other events.

7. **You have / haven't mentioned your sentence as a difficult event to come to terms with? Why is that please?**
   Prompt: Can you tell me more about why that is please?

Prompt: Would you be able to say more about what your thoughts have been as time has gone by?

Prompt Would you mind saying more about the kind of feelings you have had over the sentence so far?

Prompt: ask participant to talk about what their interpretation of their experience has been over the different stages of their sentence, e.g. entry phase, early period etc.

Prompt: what was difficult, had you been in custody before, what was same or different this time?

Prompt: participants in other research have spoken about different phases of coping and experience as they adjust over time, e.g. shock and denial and appealing sentence then acceptance and adjustment.

Prompt: From your experience, what factors helped you to cope with the sentence?
Prompt: From your experience, what factors got in the way of you coping well with the sentence?

8. **Can we talk about whether your offence/s itself is something you consider as a difficult life event, particularly in terms of how it impacted on you?**
   Prompt: Can you tell me more about that please if it is true for you or why you might not think it is true for you?

   Prompt: When we spoke about your other experiences of difficult life events you said you coped by *[refer to previous responses here*]. How does that compare with your experiences around your offence/s do you think?

   Prompt: depending on the type of offence, people have said how that can sometimes be an experience they perceive as a difficult life event they have to come to terms with and cope with. What has it been like for you?

   Prompt: this might include how people think about their life, the future, the importance or not of relationships*.

   Prompt: From your experience, what factors helped you to cope with the event/s?
   Prompt: From your experience, what factors got in the way of you coping well with the event/s?

9. **Is there anything that we haven't talked about that you think is an important part of your experience?**
   Prompt: Can you tell me more about that please?

   Prompt: How does that compare with the other events or factors we have spoken about so far?

Debrief:
1. Thank the participant for taking the time to talk, grateful for being able to hear their story.
2. Highlight again the information in the Participant Information Sheet about what will happen to the results and who to contact for further information.
3. Emphasise to contact me if they want to discuss anything further and how to do that.

4. Ensure there is someone on the wing they can talk to if they need to, e.g. peer mentor, keyworker, Listener or Samaritans phone.

5. Time to process and reflect on the interview. How did they find it? Do they have any additional questions?

Ask about whether they would like to receive information about the findings. How would they prefer this, face-to-face or by post.

Appendix 12 Examples of difficult life events prompt sheet

This list is meant to include both directly experienced, as well as

witnessed or lived with:

1. Bereavements.
2. Physical abuse, e.g. being pushed, slapped, punched, had things thrown at, kicked?
3. Emotional abuse, e.g. being humiliated, shamed, belittled, sworn at, afraid, bribed?
4. Sexual abuse, e.g. touched or fondled in an inappropriate way, oral, anal or vaginal intercourse by someone at least 5 years older than you?
5. Neglect and lack of love, e.g. never felt loved or made to feel special, or close to someone.
6. Neglect and lack of care, e.g. had dirty clothes, lack of food, usual medical attention when needed.
7. Parental separation or divorce.
8. Lived with anyone who had problems with drink or drugs?
9. Problems in living environment, e.g. poor housing or high crime neighbourhood.
10. Crisis such as fire or burglary or victim of crime.
11. Legal problems such as being evicted or going to court.
12. Contact with social services or police.
13. Disappointments such as failing exams or being let down.
14. Family ill-health, e.g. anyone depressed or mentally ill or suicidal?
15. Loss of social network or family or partners
16. Anyone in the household having gone to prison.

Appendix 13 Examples of responses to difficult life experiences

This list is to give some examples of how other people who have had difficult life events have described how they responded:

1. Feeling on guard.
2. Difficulties sleeping or sleeping more than normal.
3. Nightmares, which may have then diminished over time.
4. Eating more or less than normal.
5. Feeling numb, which may have then lessened over time.
6. Anger.
7. Depression or low mood.
8. Difficulties concentrating.
9. Too much or too little energy.
10. Avoiding physical contact.
11. Withdrawing from social contact with others.
12. Physical health problems, e.g. asthma, stomach problems, ulcers.
13. Aggression to others.
14. Changes to how you view yourself.
15. Switching between moods.
16. Thinking or planning to take your life.
17. Harming yourself.
18. Crying easily.
19. Blaming yourself for things other people did to you.
20. Feeling ashamed of what has happened to you.
21. Feeling like you only have yourself to rely on.

Appendix 14 Verification Interview: Research Interview Schedule

Introduction:
1. Check participant is content with safe systems of interviewing and compliance with physical distancing and hand hygiene etc.
2. Revisit information in the Participant Information Sheet.
3. Give participant time to ask any more questions and review the Research Consent Form.
4. Check whether the participant has read the transcript provided with the themes noted.
5. The aim of this interview is to review the interviews we had before about your experiences of difficult life events. I am interested now in discussing with you your views on how I have summarised your thoughts, feelings and experiences into themes for my research analysis.
6. There are no right or wrong answers and I would like you to be as open and honest at possible about how you feel I have interpreted what you said before, or on how I have picked certain words to label that, or how you feel now about your responses.
7. Please take your time in thinking and talking, there is no rush today.

Questions:

1. If you have read over the transcript, would you prefer to start somewhere in particular with this discussion or would you like me to lead through and start at the beginning?
    a. ***Prompt***: If participant prefers me to lead, use the 'Personal Experiential Themes' chart for this participant, start at the beginning and explain how the theme was labelled according to the quotes used.
    b. ***Prompt***: use the interview schedule Appendix C as a reminder of what questions were asked
2. What do you think of why I have picked out that quote as relevant?
3. What do you think of how that quote has been labelled?
4. Are there other terms you would use and why is that please?
5. Do you think there are other themes from your interviews that have not been mentioned?

Debrief:
1. Thank the participant for taking the time to talk, grateful for being able to hear their story previously and now work with them to gain the most accurate coding for the relevant quotes.
2. Highlight again the information in the Participant Information Sheet about what will happen to the results and who to contact for further information.
3. Emphasise to contact me if they want to discuss anything further and how to do that.

4. Ensure there is someone on the wing they can talk to if they need to, e.g. peer mentor, keyworker, Chaplaincy or Samaritans phone.

5. Time to process and reflect on the interview. How did they find it? Do they have any additional questions?

Appendix 15 Adapted Research Consent Form
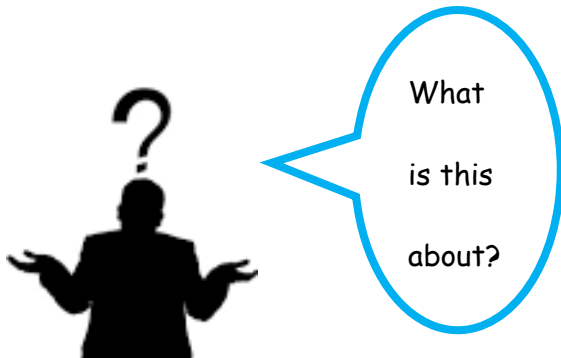
What is this about?

1. I would like to talk to you to about any difficult life experiences and events.
2. I am asking other young adult men to take part too. Each interview will be on your own not in a group.
3. I will speak with you and take notes about your thoughts without putting your name on them.
4. You do not have to take part and that is okay.
5. I will only ask to come and speak with you if you have said that it is okay to do so.
6. I am doing this as a student at Nottingham Trent University.
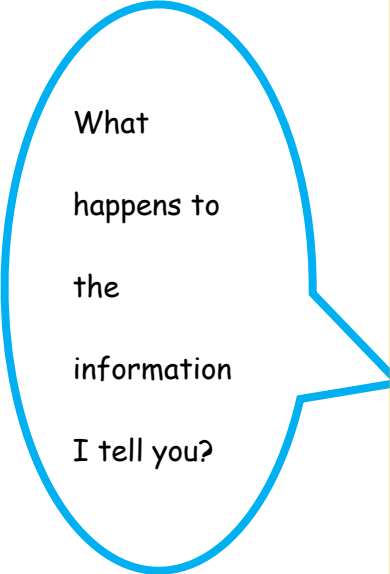7. I also work as a psychologist in the Prison Service.

What will it be like?

✓ We will only talk about experiences you want to share.
✓ Some people say it helps a lot to talk about things like this. Even if they get upset when talking at the time it doesn't usually last longer than the interview.
✓ The interview will last for about 1 – 2 hours depending on how much you want to talk for.
✓ If you need a break or would like to stop at any time, that is okay.
✓ I will use a Dictaphone to tape our interview and afterwards type up the words. This will not identify you but use a unique identifier of 4 letters and 2 digits. The Dictaphone will be password protected and kept in a locked drawer.
✓ If you tell me about any intent to harm yourself or others then I will have to pass this on to the prison managers. Also if you admit to any crimes you have not been convicted of, including in prison, then this will also have to be passed on.

What will we talk about?

I would like to ask you about:

1. Your experience of serving a long sentence.
2. Any impact committing your offence has had on you.
3. Your experiences growing up.
4. Whether those affect you still in any way.
5. What has helped you survive any difficult experiences?
6. What else you would like in order to help you stay strong.
7. Anything that gets in the way of that.

What happens to the information I tell you?

1. The interview will be <u>recorded on a Dictaphone</u> if you give permission. The Dictaphone will be password protected so only I will have access to it. The recording will be transferred to a password protected file on my HMPPS computer at HMYOI Aylesbury. The recording will then be deleted.
2. I will type up the interview notes and discuss it with my supervisor to check we are focused on the meaning of <u>your</u> experiences.
3. The notes from the interviews with the men taking part will be made into a report <u>without any names in</u>. This can then be shared to see what needs doing to improve life in custody for people like yourself.
4. All notes and the Dictaphone will be kept in my office in a locked <u>drawer</u>.
5. We cannot keep things you talk about in our meetings secret but <u>only things about risk will be shared</u> with others to protect people. I will tell you if I think I need to do that, e.g. risk of harm to self or others.

It is your choice! There will be no penalty if you do not want to take part.
- ✓ You can ask to talk to me about the research to see if you are interested.
- ✓ If you change your mind later, I may be able to come back and talk to you.
- ✓ You will be paid the usual hourly rate for your place of work whilst in interview with me. You can still change your mind about our interview after you have attended and not lose your pay.

What if I say no?

What I am agreeing to?

1. I understand all the points above and have had a chance to think about it and ask questions.
2. I agree to meet the researcher to take part and this is voluntary.
3. I understand it is my choice to meet and I can end this at any time. There are no consequences at all to changing my mind about taking part.
4. I understand that a Dictaphone will be used and written notes made in the interview and my name changed to protect my identity.
5. Once the interview notes have been taken away to use in the research I can't then ask to withdraw.
6. I understand the results of this study will be discussed at meetings to make sure the prison service looks after young men on long sentences better.
7. If at any time you have reason to complain, please speak or write to the psychologist named at the bottom of this sheet

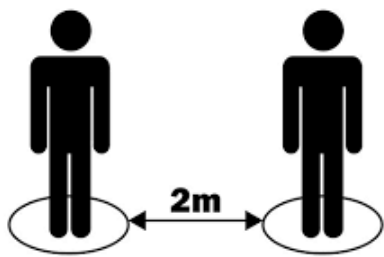**COVID: what will happen during face to face contact?**

Before the interview please wash your hands or please ask to use the sanitiser gel. Where possible we will have regular breaks to hand-wash too.

All surfaces and equipment will be cleaned before you arrive and you will be shown where to sit.

We will need to keep a 2 metre distance from each other. Because of this we will not be able to shake hands.

Should you or the member of staff need to sneeze or cough, this must be into a tissue or into your elbow area.

I will wear a face mask until we are both sat down and then I will take it off.

I would like to take part:

Research Participant	Signature	Date

Researcher	Signature	Date

To make contact with the researcher or their supervisors please put in a request to do so to the Governor of your jail.

Appendix 16 NTU Research Ethics Committee original (2019) and covid update (2020) permissions

Cali, Annabel

Fri 11/10/2019 09:34

To: O'Rourke, Rachel 2018 (PGR)

Cc: Marriott, Mike; Trigg, Richard; Kitson-boyce, Rosie

R O'Rourke BLSS CREC Application form 30 Sept 019.doc

Appendix A Research Information Sheet R O'Rourke.docx

Appendix B Research Consent Form R O'Rourke.docx

Appendix C Interview Schedule R O'Rourke.docx

Appendix D Interview cribsheet R O'Rourke.docx

Message sent on behalf of the College Research Ethics Committee (CREC)

 Dear Rachel

Thank you for the recent submission of your application (no. 2019/211) to the College Research Ethics Committee (CREC) on 28 September 2019 requesting ethical clearance for the project entitled: *How does the experience of trauma impact on young men in custody?*

 The reviewers have agreed that the application form is both very thorough and closely reasoned and confirm that in their judgement there were no outstanding ethical concerns that required further discussion or exploration prior to data collection and they are satisfied that your application meets with their ethical approval.

 However, the Participant Information Sheet / Consent form seems to raise the following points:

 As a matter of drafting the final point in the 'What will it be like' box has not been completed and it is clearly important that the full implications of self-disclosure are set out as in the application form itself (see especially Section 6 and Section 9).

1. The use of the Dictaphone is only referred to in the final 'What I am agreeing to box' : we think it should be integrated with the note taking provisions in the other parts of the form.

2. Also in the 'What I am agreeing to box' point 3 should indicate also that the interviewee ending the interview will not have any adverse consequences and as a small typographical point that the word 'notes' needs to be inserted after 'written' in point 4.

3. There is no mention of the inducement in the document- but this is something which has expressly been mentioned in Section 10 of the application form in the context that participants will be informed that accepting the inducement does not negate the specified right to withdraw.

4. Finally, the application form engages in subtle discussion about confidentiality / anonymity in this type of empirical work (see Section 6 of the application form) and expressly indicates that there will be disclosure around the likely use of direct but anonymous quotes. We appreciate this is not easy to express in the context and that the PIS/Consent Form has clearly been very carefully designed with its target audience in mind: however, we are not sure that this point is clearly addressed in the 'What happens to the information I tell you?' section.

The reviewers have confirmed that they are happy to leave it to your supervisory team, Dr Mike Marriott, Dr Richard Trigg and Dr Rosie Kitson Boyce, to ensure that the changes are made.

You may proceed with your project without delay, but could you please resubmit a copy of your altered documents for our records.

We would like to wish you well in the completion of your project.

Sent on behalf of

CREC

Annabel Cali

Research and REF Administrator

Research Office

Nottingham Trent University

Arkwright Room B113

Tel: +44 115 848 8157

E-mail: annabel.cali@ntu.ac.uk

Cali, Annabel

Wed 09/12/2020 11:45

To: O'Rourke, Rachel 2018 (PGR)

Cc: Marriott, Mike; O'rourke, Rachel [HMPS] <Rachel.O'rourke@justice.gov.uk>

R O'Rourke BLSS CREC Application form December 2020.doc

Message sent on behalf of the Chair of the Schools of Business, Law and Social Sciences Research Ethics Committee

Dear Rachel

Thank you for the revised submission of your ethical application no. 2020/341 (amendment to 2020/301, 2019/211) to the Schools of Business, Law and Social Sciences Research Ethics Committee (BLSS REC) on 08 December 2020 requesting ethical clearance for the project entitled: *How does the experience of trauma impact on young men in custody?*

We are pleased to confirm that your revised study has met with favourable ethical opinion through Chair's Action.

The favourable ethical opinion is valid until **30 April 2021**. Should your project extend beyond this time then an application for an extension would need to be submitted to the BLSS REC.

Please note, your project has been granted a favourable ethical opinion based on the information provided in your application. However, should any of the information change at any point during your study or should you wish to engage participants to undertake further research, then you are required to resubmit your application to BLSS REC for further consideration.

We would like to wish you well in the completion of your project and thank you for your patience.

Sent on behalf of

Chair BLSS REC

Annabel Cali

Research and REF Administrator

Research Operations

Nottingham Trent University

Arkwright Room B113

Tel: +44 115 848 8157

E-mail: annabel.cali@ntu.ac.uk

https://myntuac.sharepoint.com/sites/ResearchOperations

Appendix 17 HMPPS National Research Committee approval letter

Ministry
of Justice

HM Prison &
Probation Service

National Research Committee
Email: National.Research@Justice.gov.uk

25 December 2019

<u>FINAL APPROVAL</u>

Ref: 2019-332

Title: *How does the experience of trauma impact on young men in custody?*

Dear Rachel,

The National Research Committee (NRC) is pleased to provide final approval for your research project. The terms and conditions below will continue to apply to your research project.

Please note that unless the project is commissioned by MoJ/HMPPS and signed off by Ministers, the decision to grant access to prison establishments, National Probation Service (NPS) divisions or Community Rehabilitation Company (CRC) areas (and the offenders and practitioners within these establishments/divisions/areas) ultimately lies with the Governing Governor/Director of the establishment or the Deputy Director/Chief Executive of the NPS division/CRC area concerned. If

establishments/NPS divisions/CRC areas are to be approached as part of the research, a copy of this letter must be attached to the request to prove that the NRC has approved the study in principle. The decision to grant access to existing data lies with the Information Asset Owners (IAOs) for each data source and the researchers should abide by the data sharing conditions stipulated by each IAO.

Please note that a MoJ/HMPPS policy lead may wish to contact you to discuss the findings of your research. If requested, your contact details will be passed on and the policy lead will contact you directly.

Please quote your NRC reference number in all future correspondence.

Yours sincerely,

Elizabeth Heredge

National Research Committee

National Research Committee - Terms and Conditions

All research

Changes to study - Informing and updating the NRC promptly of any changes made to the planned methodology. ***This includes changes to the start and end date of the research***.

Dissemination of research - The researcher will receive a research summary template attached to the research approval email from the National Research Committee. This is for completion once the research project has ended (ideally within one month of the end date) and must be sent

prior to any output or papers being released or submitted for publication. The researcher should complete the research summary document (approximately three pages; maximum of five pages) which (i) summaries the research aims and approach, (ii) highlights the key findings, and (iii) sets out the implications for MoJ/HMPPS decision-makers. The research summary should use language that an educated, but not research-trained person, would understand. It should be concise, well organised and self-contained. The conclusions should be impartial and adequately supported by the research findings. It should be submitted to the NRC. Provision of the research summary is essential if the research is to be of real use to MoJ and HMPPS.

Publications - The NRC (National.Research@Justice.gov.uk) to receive an electronic copy of any output or papers submitted for release or publication based on this research at the time of submission and at least one month in advance of the publication. The date (when known) and location of publication should be clearly outlined.

Data protection - Researchers must comply with the requirements of the Data Protection Act 2018, the General Data Protection Regulation (GDPR) and any other applicable legislation. Data protection guidance can be found on the Information Commissioner's Office website:

http://ico.org.uk

Researchers must store all data securely and ensure that information is coded in a way that maintains the confidentiality and anonymity of research participants. The researchers must abide by any data sharing conditions stipulated by the relevant data controllers.

Research participants - Consent must be given freely. It will be made clear to participants verbally and in writing that they may withdraw from the research at any point and that this will not have adverse impact on them. If research is undertaken with vulnerable people – such as young offenders, offenders with learning difficulties or those who are vulnerable due to psychological, mental disorder or medical circumstances - then researchers should put special precautions in place to ensure that the participants understand the scope of their research and the role that they are being asked to undertake. Consent will usually be required from a parent or other responsible adult for children to take part in the research.

Termination – MoJ/HMPPS reserves the right to halt research at any time. It will not always be possible to provide an explanation, but we will undertake where possible to provide the research institution/sponsor with a covering statement to clarify that the decision to stop the research does not reflect on their capability or behaviour.

Research requiring access to prison establishments, NPS divisions and/or CRCs

Access – Approval from the Governing Governor/Director of the establishment or the Deputy Director/Chief Executive of the NPS division/CRC area you wish to research in. (Please note that NRC approval does not guarantee access to establishments, NPS divisions or CRC areas; access is at the discretion of the Governing Governor/Director or Deputy Director/Chief Executive and subject to local operational factors and pressures). This is subject to clearance of vetting procedures for each establishment/NPS division/CRC area.

Security – Compliance with all security requirements.

Disclosure – Researchers are under a duty to disclose certain information to prison establishments/probation provider. This includes behaviour that is against prison rules and can be adjudicated against, undisclosed illegal acts, and behaviour that is potentially harmful to the research participant (e.g. intention to self-harm or complete suicide) or others. Researchers should make research participants aware of this requirement.

Appendix 18 Sample Interview Transcript

IPA TRANSCRIPT

Language of strength Family impact	36 P#2: I was frightened, I was scared and didn't know what to think, I didn't 37 know what to do. I just thought I need to stay strong, at the end of the day it's a 38 big thing that has happened, but I have to stay strong not just for myself but for 39 my family.	**Commented [RO'R6]:** Goal of resilience
	40 R: that sounds like a big deal for a 17 year old to manage, you are 41 actually feeling scared but you are thinking I have got to deal with this not just 42 for me but for my family. How did you get on with that, was it easy to do?	
Loss of friends Family important to him	43 P#2: it wasn't easy, when I came to prison I didn't have my friends so it was 44 just my family. My mum and my brothers and my Nan and uncles.	**Commented [RO'R7]:** Loss of friends /shrinking world Importance of family
	45 R: did you talk to other people about what you were feeling?	
Coping by not speaking about it	46 P#2: no I kept it in and bottled it up.	**Commented [RO'R8]:** Dealing with it by not speaking about it
Not speaking was usual coping	47 R: why did you do that? 48 P#2: I wasn't used to speaking to people like that, I didn't speak to anyone 49 really not even my Mum. Took time for me to open up to other people.	**Commented [RO'R9]:** Dealing with it by not speaking about it is default mode **Commented [RO'R10]:** Conclusion about self.
	50 R: we'll come back later on to why you were someone who didn't trust 51 people, but at that time one of the worst things that has ever happened in life 52 has happened to you and you are thinking I need to lock this down, manage it 53 and cope with it. Where were you at this time?	
	54 P#2: I was in C innit.	
	55 R: so did you talk to anyone and was anyone giving you advice about 56 how to cope with it?	
Saying it's ok but it's not ok	57 P#2: not really if mum would ask me how I was I would say I was fine. 58 Always say I was fine. But in my head I know I'm not.	**Commented [RO'R11]:** Dealing with it by not speaking about it Trying to be resilient Emotional labour
Family impact	59 R: when you weren't feeling okay what was going on what were you 60 thinking or feeling?	
Becoming withdrawn	61 P#2: in myself…I felt like I let my family down, let my Mum down and 62 depressed and in my own little world.	**Commented [RO'R12]:** Shrinking world
	63 R: and I've got a list we'll come to in a minute to check with you but at the 64 moment you are describing how you were dwelling on it and it affected your 65 mood, but any other impact at the time when you were in C?	
Angry about injustice	66 P#2: I don't know [.] I had little fights, I was angry. Because of the situation I 67 was in; my case is very complicated there were people who weren't involved 68 who got the same as people who were involved so I was angry.	**Commented [RO'R13]:** Felt injustice
	69 R: and what camp were you in – the ones who were or weren't involved?	
	70 P#2: I was the ones who weren't involved.	
	71 R: can you tell me briefly what the offence was?	

Page 2 of 20

Appendix 19 Individual Learning Plan

Removed for NTU repository version

Appendix 20 Glossary of Terms

Please note this glossary is provided to expand further on the narrative in section 1.3, around the various terminology and phrasing used in this field

Abuse

Interactions where one person behaves in a violent, demeaning or invasive manner towards another person (e.g. child or partner).

Acute Trauma

Acute trauma is a single event that happens for a limited amount of time. This could include medical trauma, sexual or physical assault, or natural disaster for example.

Adverse Childhood Experiences (ACEs)

ACEs refers to a 1998 study by the Centers for Disease Control and Prevention that examined the relationship of prevalence of traumatic experiences in childhood to a number of negative mental and physical health outcomes in adulthood.

Adversity

Adversity refers to the perception of negative events that have occurred during a person's life. These events are outside the control of the person, have the potential to affect development, and cause harm or the potential for harm along with stress and suffering.

Autism Spectrum Disorder (ASD)

ASD is a developmental disability characterised by deficits in social communication and interaction and the presence of restricted interests and repetitive behaviors.

Bio-psycho-social

The bio-psycho-social phrase can refer to both a model of clinical care and a philosophical approach to suffering, disease, and illness. It emphasises the impact of the biological, psychological and societal factors on people.

Chronic Trauma

Where an event may happen over and over again or it may be a multiple layering of events, e.g., ongoing abuse, neglect, domestic violence, human trafficking. Experiencing an event may increase your risk factors for susceptibility when you go through another event.

Complex Trauma

Complex traumas are traumatic experiences that involve multiple interpersonal threats during childhood or adolescence, such as repeated abuse. These traumas are hypothesised to cause more severe psychopathology and poorer cognitive function than other non-complex traumas.

Countertransference

This term describes a practitioner's conscious or unconscious emotional reactions to a person they are working with.

Custody

For the purposes of this thesis custody refers only to those held in prison custody and not police or other custody.

Delinquency

Delinquency is generally used to refer to criminal behaviour committed by juveniles under the legal age of adulthood

Depersonalization

This describes a person feeling as if they are unreal/not real, detached or observing themselves from outside themselves regarding thoughts, feelings, sensations, body or actions.DSM-5, p302. Examples include altered perceptions, a distorted sense of time, unreal or absent self and feeling emotionally or physically numb.

Developmental Trauma

Developmental trauma is multiple or chronic exposure to one or more forms of developmentally adverse interpersonal trauma (abandonment, betrayal, physical

assaults, sexual assaults, threats to bodily integrity, coercive practices, emotional abuse, witnessing violence and death), (ACEs Connection, retrieved 2019).

Dissociation

The splitting off of aspects of mental content from conscious awareness. Dissociation is a mechanism central to dissociative disorders. The term is also used to describe the separation of an idea from its emotional significance and affect, as seen in the inappropriate affect in schizophrenia.

Diagnostic and Statistical Manual of Mental Disorders (DSM)

The DSM is published by the American Psychiatric Association and used in the diagnosis of many mental health conditions.

Flashback

A reactivated traumatic memory experienced, a feeling or sense of reliving past trauma in the present. A symptom of Posttraumatic Stress Disorder and common in complex Dissociative Disorders.

GPDR

General Data Protection Regulation, a set of EU rules on data protection and privacy.

Hypervigilance

Refers to where a person constantly checks the environment for signs of danger or threat. Common in post-traumatic stress disorders, paranoid personality disorder and children abused/neglected by parents.

Paranoid ideation

Paranoid ideation refers to paranoid ideas and thoughts, such as being suspicious of others or believing that one is being harassed, persecuted, or unfairly treated.

Pathological

This refers to thoughts, feelings or behaviours considered outside of usual human experience.

Personality disorder

This refers to where a person has an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment.

Psychological trauma

Psychological trauma refers to both the experience of an event felt to be overwhelming, threatening or dangerous as well as the symptoms experienced which might be both emotional and physical.

Race-based Trauma

People from various ethnic minority backgrounds may experience racial discrimination as a psychological trauma, and it may elicit a response comparable to post-traumatic stress. Examples include microaggressions and hate crimes.

RDF

The Research Development Framework is published by Vitae and describes the knowledge, behaviour and attributes of successful researchers.

Repression

This refers to a psychoanalytic phrase now in common use which describes the action or process of suppressing a thought or desire in oneself so that it remains unconscious.

Resilience

Resilience is the ability to adapt and grow following adversity

Schema

A schema is a psychological concept referring to the idea that people have mental representations that enable us to organise knowledge into categories such as object, person, social, event, role, and self.

Stress

Stress is defined as a state of mental or emotional strain.

Toxic Stress

This phrase is often used to refer to prolonged activation of the stress response systems which can lead to long-lasting effects on the body and brain.

Trauma

For the purposes of this thesis trauma is used to refer to the event experienced by a person which was perceived as overwhelming, distressing or threatening.

Traumatic Grief

Traumatic grief is a response to death and/or grief that is similar to other reactions to trauma. Individuals may ruminate on the details of the death, have difficulty with memory and development, and experience emotional and physical arousal symptoms.

Trauma informed care

Refers to a system development model that is grounded in and directed by an understanding of how trauma exposure can affects people's neurological, biological, psychological and social development.

Young Offender

In the UK a young offender is someone aged between the age of 10 and 17 years old who has committed a criminal offence.