



Research Paper

A phenomenological analysis of young male prisoners' experiences of trauma: 'Trauma is every day'

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ABSTRACT

This study explores the impact of trauma for 18-25-year-old men in a UK prison serving long sentences of more than 10 years, considering whether their offence and sentence length are part of that trauma, and exploring coping responses. Qualitative methodology (Interpretative Phenomenological Analysis: IPA) was used to analyse 9 semi-structured interviews with young men, discussing their experiences in their own terms. The experiences were organised into 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, though more difficult for some participants than others. The study supports existing concepts around the experience of trauma in young men, adding insights into the challenges to assessment and intervention work with this cohort, including avoiding assumptions of age-related homogeneity, and ideas for what might be helpful to these men whilst in prison.

1. Introduction

The evidence base for understanding the prevalence and impact of trauma is varied, due in part to the differences in defining trauma over recent years. In the research literature, the word *trauma* is usually 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.

It was Felitti et al. (1998) who operationalised cumulative childhood trauma by producing a list of ten *Adverse Childhood Experiences* (ACEs), and indicating how the risk of adult mental health difficulties rose in tandem with the frequency of ACEs experienced before the age of 18-years-old. A body of research followed this up to quantify the effects for individual ACEs (e.g., Hughes et al., 2017) and whilst this has been useful in identifying cohort-level risk factors, it is not sufficient for an understanding of individual differences in the experience, perception and impact of trauma, nor of the unique presentations often found in forensic settings. An ACE score says little about the nature or impact of childhood experiences, about mediating or mitigating factors, or other possibly impactful experiences. It is also not able 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 therefore not the only ACEs, when trauma is defined by the person experiencing it.

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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 and others include vocabulary such as *abuse*, *toxic stress*, *PTSD* and *multiple traumas*, often used to mean the same thing. To date there is a lack of theory to explain the development of traumatic responses in children and young adults ([Van Wesel, Boeije, Alisic and Drost, 2012](#)). The International Statistical Classification of Diseases and Related Health Problems (ICD-11), has recently adopted *Complex Post Traumatic Stress Disorder* (CPTSD) or *Developmental PTSD* to refer to the constellation of symptoms that may result from prolonged, chronic exposure to traumatic experiences, as opposed to PTSD, which is more typically associated with a discrete traumatic incident. This is helpful to broadening the approach to presenting difficulties to be more responsive and less focused on psychiatric 'symptoms' of previous trauma. It also frames difficulties instead as 'survival strategies', and the individual's way of coping with what was overwhelming and problematic ([Taylor et al., 2020](#)).

The professional bodies have responded with advice to practitioners (BPS, 2013) to describe trauma-related responses 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 and 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 articulate it as traumatic or seek help.

Young adults (18-25 year-olds) make up around 10% of the population of the UK ([Revolving, 2021](#)) but in March 2022 accounted for 27% of the people in prison ([HMPPS, 2022](#)). They are also more likely to have recently experienced more adverse experiences of abuse, neglect, bereavement, violence and having been in care, than young men in the community ([Blades et al., 2011](#), HM Inspector of Probation, 2011; [Lader et al., 2000](#)). Therefore, understanding the prevalence, nature and meaning of these adverse experiences for this vulnerable group is significant for those responsible for holding them safely in custody. It is important to the consideration of how they continue to be affected and how this impacts upon their wellbeing and custodial management, to better serve the aims of their detention and separation from society. The intersection between the phenomena of trauma and the forensic factors of the crime and punishment are unique to this particular group, requiring psychologically informed models of understanding that include the phenomenological perspective.

1.1. The impact of exposure to potentially traumatic events

Multiple studies have found that young people in custody tend to have experienced ongoing and varied trauma, often involving threat to life and bereavements, ([Ford et al., 2013](#); [Moore et al., 2013](#); [Ruchkin et al., 2002](#)). 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 and Thayer, 2019](#)) anxiety, oppositional defiance ([Nagin and Tremblay, 1999](#)) risk taking, substance abuse, and aggression ([Jorgenson, 2019](#)). Complex trauma is also known 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 ([Finkelhor, 2009](#)).

Empirical work has indicated that young people exposed to multiple forms of adversity are also more likely to evidence higher levels of delinquent behaviour and externalising of distress than those exposed to less adversity ([Kretschmar et al., 2019](#)), suggesting that childhood adversities wield a long-term influence on patterns of offending across adolescent development ([Bonner et al., 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 et al., 2007](#); [Hodges et al., 2013](#)), meaning that the negative effects of trauma may be expected to increase in the context of multiple traumas. However, a recent study by [Daniunaite et al. \(2021\)](#) found that it is the type of trauma – those associated with social factors - rather than general prevalence that is most likely to leave its mark with a more complex post-traumatic reaction. Overall, the evidence indicates that active maltreatment in childhood impacts on adult outcomes such as the likelihood of violence, though less is currently known about the impact of other types of childhood maltreatment such as emotional neglect.

It is now better understood how exposure to early adversity affects developing brains and bodies by affecting the brain's reward centre; this inhibits the prefrontal cortex, which is necessary for impulse control and executive function. Studies to date suggest that trauma during sensitive neurodevelopmental periods like adolescence (e.g. exposure to violence), can exert maximal effects on the development of specific brain regions ([Andersen and Teicher, 2008](#); [Bale and Epperson, 2015](#); [Curley and Champagne, 2016](#); [Pechtel et al., 2014](#); [Tomoda et al., 2012](#)). [Koenigs and Grafman \(2009\)](#), found physical changes to neurological pathways especially in the amygdala and ventromedial prefrontal cortex of the brain, areas which help process fear and the regulation of negative emotions. Indeed, exposure to prison itself - along with all the concomitant experiences of victimisation, fear, anxiety, and deprivation - has also been shown to have neurological impact ([Coffman, 2023](#)).

There are still gaps in the literature despite the evidence base linking childhood adversity and adolescent delinquency. Most evidence is correlational, so we cannot determine whether these 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 another variable. Possible confounding variables might be genetic vulnerabilities, pre-natal factors, familial confounds ([Ball et al., 2008](#); [Connolly and Beaver, 2016](#); [Kavish et al., 2019](#); [Schaefer et al., 2018](#)), or developing hormonal systems ([Bilbo and Schwarz, 2012](#)). According to [Masten \(2001\)](#) not all individuals exposed to childhood adversity face equal risks for problematic developmental trajectories. Many young people exposed to an adverse environment have been shown to demonstrate resilience and an ability to thrive ([Cicchetti, 2010](#); [Luthar et al., 2000](#)). The traditional view assumed that development evolves through predetermined stages relevant to the age of the person. However, epigenetics research is instead indicating how environmental conditions can interact with genetic expression during

development, which helps explain adaptive processes (Cicchetti and Rogosch, 1996; Walker et al., 2024).

Studies examining the relevance of the impact of offending on the offenders tend to focus on amnesia for violent crime and to suggest dissociation as the cause of that amnesia (Evans et al., 2009). 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 and 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 (Brewin et al., 1996). However, we have a limited understanding of the psychological consequences of offending, especially amongst long-sentenced prisoners, and particularly the younger cohort. As prison sentence lengths have increased in recent years, there is a growing cohort of very long-sentenced prisoners, with potentially an accumulation of difficult child and adulthood experiences underpinning their lack of engagement and response to rehabilitation.

With the evidence base currently more developed in considering these highly individual factors, the findings are rarely considered 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 et al., 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; a progression on these findings could be to explore the impact of racial discrimination relative to other ACEs, helping determine how complex trauma may have a differential impact by ethnicity. This could help services understand how to use the most appropriate screening and intervention options. However, whilst knowing information about traumatic event exposure history and current levels of posttraumatic stress can inform practitioner responses (Grisso and Vincent, 2012), caution should still be applied in assessing exposure to race-based traumatic events in the absence of practitioner skill and available services (Modrowski et al., 2023).

1.2. The link between trauma and offending behaviour

Young men involved in the criminal justice system (CJS) represent one of the most pervasively traumatised populations, with studies indicating that at least 60% of incarcerated young men report at least one lifetime experience of trauma prior to prison, with rates varying by country based on study methods such as probability and random sampling (Listenbee et al., 2013; Pettus-Davis et al., 2019). The physical and emotional consequences of childhood abuse and neglect continues to affect development through childhood, adolescence and adulthood. 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 and Harvey, 1997; Van der Kolk et al., 2005; Wojciechowski, 2020).

Research evidence has demonstrated the effects of trauma 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 demonstrated how early child maltreatment affects emotional control, which resulted in key developmental differences for those young adults with a trauma history, for example behaving recklessly and reacting aggressively to provocation. Other reported effects include emotional numbing, a persistent low level fear state, behavioural impulsivity, being hyper vigilant, hyperactive, withdrawn and depressed (Kerig et al., 2012; Kerig, 2019). There also appear to be a high level of associated cognitive difficulties, such as limited planning skills and problems responding flexibly to challenging situations (Anderson et al., 2006; Pontifex et al., 2009) and struggles associated with brain development such as working memory and attention (Tonks et al., 2008). Taken together, the evidence base suggests that young adult prisoners are more disinhibited and make poorer social judgements, especially in hostile situations (Milders et al., 2003; Williams et al., 2013).

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 suggest that ACEs may lead to a heightened risk of antisocial behaviour (Boswell and Wedge, 2002; Craig et al., 2017; Fox et al., 2015). Although most of the prevalent 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, Williams et al. (2012) found that 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 conducted with young people who had committed serious violent offences suggests there may be a correlation between serious offending and significant, 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 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 and 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), and that the ongoing experience of events such as committing violent offences and receiving very long custodial sentences are likely also impactful. This interface can be expected to have a significant role in the experiences, behaviour, and management of this cohort; it is therefore important to better understand the meaning of those experiences from the perspective of the young men, post-offence and sentencing.

1.3. The impact of offence perpetration

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; Rew et al., 2022), with adult male, violent offender populations (Badenes-Ribera et al., 2020) or under 18 year olds (Bailey et al., 2001; Bailey et al., 2001). The impact is clear in the reports by young, violent perpetrators, of hyperarousal, intrusive thoughts, anger, nightmares and images of the events that led to the offence (Caffo and Belaise, 2003; Dolan and Smith, 2001; Eitle and Turner, 2002; Overstreet and Braun, 2000).

Welfare and Hollin (2012) reviewed literature exploring involvement in extreme violence and violence-related trauma for young people, and found sufficient evidence to indicate that childhood abuse is associated with later violence, which carries its own traumatic impact. Glimpses of the impact of violent offending is evident also in prevalence studies such as Boswell et al. (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 et al. (2007), conducted interviews with a large UK sample of young offenders convicted of serious violence. This and their next 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 they committed and ruminations relating to the same. Further to this, Evans et al. (2007a,b) 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 and Marche, 2020). Without more evidence of the relevant psychological factors affecting those who commit serious violent and/or sexual offending, clinical and risk assessments are potentially limited in how well they evaluate the needs and risks for prisoners in this cohort.

1.4. The impact of being in prison at a young age

Additional 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 and Kunst's work (2013) 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, revealing 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 appears 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 can also be traumatic for young adults, and coercive practices that are common in custodial facilities may continue to expose the individual to trauma (LeBel and Goldstein, 2005). 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 does exist reveal interesting relationships. 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 males' 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 et al., 2016; for a study with adolescent asylum seekers). More focused research with this age group and in this setting would add greatly to our understanding of the psychological processes pertinent to this process of adaptation.

1.5. The impact of a long prison sentence at a young age

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. 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. This 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, 2005; Tynan, 2019). Whilst psychological research 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, 2007) to elucidate the

key deprivations of prison life. This links also to Harvey's (2007) work on stages of adaptation and ethnographic work conducted by others in this area (Crewe et al., 2017; Tynan, 2019). These studies all indicate how adaptations are an inevitable response to the pains of imprisonment, with a range of differential responses to confinement, including individual manifestations of power and resistance. Many characteristics have been associated with resilience and adaptation in the papers cited above, but no one trait or set of traits has been shown to be most effective, as it appears to be the flexibility of mindset and range of coping skills which play a key part in adaptation.

The existing 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 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). This points to the need for services and practitioners to be able to respond to the needs and risks posed by this cohort, as well as the wider context to individual assessment and intervention work in custodial settings (Haney, 2013) where trauma can be a key responsibility barrier, with more empirical work needed to support services in their work. The lack of research work may be due in part to the UK being one of only three nations 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 prevalence rates of trauma, without clinical information about the nature or impact of those experiences. The next steps are to take more account of the key factors in what it is that makes experiences negative and impactful for individuals.

1.6. Summary of study rationale

We know that exposure to trauma and multiple adversities at an early age can have a lasting psychological impact, and this impact can be related to the likelihood of offending later in life. We also know that in the process and consequences of committing a violent offence, people can experience a new and different form of trauma, or find their earlier traumatic sequelae reignited by the experience. Furthermore, with the consequences of violent offences including long prison sentences, psychological impacts of trauma and adversity are likely to be repeated, reinforced, and reshaped by the custodial experience. As such, our custodial management of individuals who have committed such offences needs to meaningfully include an understanding of how the experiences of trauma interface with the experiences of imprisonment.

Presently, much of the research related to this interface has considered cohort-level risk factors, which is insufficient to understand the individual differences and presentations common in forensic practice. In order to meaningfully respond to the impact of trauma and adversity on the management and support needs of young men with long custodial sentences, we need to understand how these individuals make sense of their past and present experiences, so as to plan interventions in a manner that is not undermined by the long-term consequences of such experiences. Therefore, this empirical study aimed to explore how young men in custody understand their experience of adversity and traumatic events, with a particular consideration of whether and how the experiences of both their offence and their sentence length were part of that understanding.

2. Method

2.1. Aims

This study aimed to better understand the meaning of adverse experiences from the perspective of the young man himself, post offence and sentencing, to take forward the limited state of research in this field. 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 aims of the study were 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 and to explore any interface between their understanding of trauma and offending behaviour.

2.2. Study research methods

To comprehensively capture the necessary nuance in understanding the complexities of living through trauma and adversity, these aims required methods that offer participants the opportunity to recall and talk about their experiences in their own terms due to the explorative and sensitive nature of the topic; qualitative research methods are therefore best suited. Given our focus on the meaning ascribed to complex personal experiences by individual's themselves, we chose to adopt Interpretative Phenomenological Analysis (IPA; Smith et al., 2009) methods. IPA is designed on principles of phenomenology (exploration of conscious experiences), ideography (valuing the individual story), and hermeneutics (the process of understanding meaning-making), which are ideal foundations for these research aims. IPA methodology also allows for rich analysis based on small, purposive sampling to ensure sufficient homogeneity within a sample, making it an ideal approach for research with young offenders currently in custody whose circumstances make research recruitment more challenging.

2.3. Participants

Participants were recruited from a single Youth Offending Institute in England, where the first author had professional connections as the lead psychologist. The YOI identified individuals in custody who met inclusion criteria (18–25, sentences longer than 10 years),

and then shared an information sheet inviting them to take part. Nine young men engaged in this study and all were in the first three years of their sentence (see Table 1 below for sample characteristics); this sample size is deemed sufficient for robust qualitative data analysis of this sort (Guest et al., 2006). 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 was 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). 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, with the first author an experienced forensic psychologist and the process agreed by HMPPS National Research Committee. A favourable ethical opinion on the study was also granted by a university ethics committee.

2.4. Procedure

A semi-structured, interview-based research design was 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. Each participant was interviewed separately for the consent process (about 30 min), again on at least two occasions to go through the interview schedule (about 1 h each interview), and then again for participant verification where available (about 1 h). Participant verification is 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 and Closs, 2016). The study adopted this phase of meaning-making hoping to achieve a more layered analysis of the phenomenon, with eight of the nine participants taking up the offer of a final discussion.

2.5. Analytical approach

IPA was used to analyse the data, following the guidance on IPA processes provided by Smith et al. (2009). IPA is broadly two phases of analysis; a) a phenomenological analysis of each individual experience from an 'insider' perspective and (b) an interpretative analysis from an 'outsider' perspective. An iterative approach is used, starting with initial transcript notation and specification of emergent themes for each participant, which are then critically assessed for validity in relation to the original transcripts (including through participant verification, as noted above). Participant-level themes are then appraised at a group level, to develop a set of group-level superordinate themes, ensuring that the breadth of transcript divergence and convergence had been captured. At each stage, the first author discussed the findings to that point with at least one of the other authors to ensure that the analytic steps taken were remaining sufficiently grounded in the data.

We note that IPA guidelines were updated in Smith et al. (2009), the analytic steps have remained broadly consistent, but a different form of nomenclature was introduced. As this analysis was conducted prior to this release, we have used here the nomenclature of the guidelines in place at the time of analysis to.

3. Findings

The participant's accounts were organised into three group-level superordinate themes: 'Conceptual Confusion', 'Impact Now, and 'Settling', each with sub-themes and also with recognition of some overlap between themes. Each theme is discussed below and illustrated with quotes (see Table 2).

Table 1
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 Black British: Caribbean: n = 2 White: n = 3	Conspire To Commit Robbery: n = 1 Wounding With Intent: n = 1	14 years: n = 1 15 years: n = 4 16 years: n = 1 26 years: n = 1	Standard Determinate Sentence: n = 1 Detention In Young Offender Institution n = 1 Extended Discretionary Sentence n = 1	

3.1. 'Conceptual confusion'

This first superordinate theme relates to the participants' understanding of difficult life events, which indicated a particular interpretation of how to define and categorise such experiences. Despite all describing experience of 'Typical Adversity' (a sub-theme) such as familial or neighbourhood dysfunction, their focus was on the more unusual experiences they had witnessed or been subject to. In this they prioritised the effects of custody as the most impactful. Most did not describe typical adverse experiences as traumatic or unusual and 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.

The sub-theme 'Atypical Adversity' included events not found in standard definitions of ACEs, such as experiencing 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.

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.

The men indicated habituation to frequent and often extreme violence and so were not always able to conceive of or report it as traumatic or impactful. 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.

Mac: "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".

Another aspect of 'Conceptual Confusion' was how all participants took a unique view of how to conceive of trauma (the sub-theme 'Different Definition of Trauma'), based on their atypical experiences of difficult life events as a child and adult, which appeared to impact on how they defined adversity or trauma.

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?

Kai's words indicate the recurring theme of how the young men 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.

Mac had also described a particularly stressful and violent offence scenario involving threat to himself as simply "*being in the wrong place at the wrong time, I wouldn't call it traumatic*". For many of the participants, their understanding of what could be considered a traumatic event appeared linked to a lifelong experience of such events. For Carter this was easy to express as "*all that shit – just like a Sunday for me but was my whole life*". This was explored directly with Carter who had been most able to articulate a lifelong experience of adversity and he was asked whether he thought he understood the definition of traumatic experiences the same as other people.

Carter: Well not necessarily but it could be. Like I had a traumatic experience yesterday, and I am suffering a PTSD from a robbery a year ago. I suffered trauma when I was a child and suffer that still – so yeah maybe they are the same thing.

The participants spoke repeatedly and in various ways about why it was 'Hard to talk about trauma' (a sub-theme), meaning both

Table 2
IPA themes developed.

Superordinate Theme	Subordinate Theme
Conceptual Confusion	Typical Adversity Atypical Adversity Different definition of trauma Hard to talk about trauma
Impact now	Making sense of it now Impact of offence as traumatic Impact of sentence as traumatic Impact of custody as new trauma
Settling	Dealing with trauma Stabilising Adapting yourself Adapting your view of others

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. This difficulty expressing the experience of potentially traumatic events and any impact was also described by Mac, who 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, meaning that significant events experienced when a young child were often hard to recall and link to later impacts.

Abdylia: 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.

Abdylia describes here how at a young age he tried to communicate his experience of extreme events, but that he still does not know the meaning of his drawings. 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.

Other possible contributory reasons for how the young men reported consistent and cumulative exposure to potentially traumatic events - but denied any ongoing impact from them - are the likelihood of desensitisation to violence combined with a social identity of "hard" masculinity, informed by ideas about how to be a man (Trickett, 2011). Openness and vulnerability are discouraged in prison by fellow prisoners and serve as barriers to addressing past traumas (Morse & Wright 2022). A systematic review by Figueira et al. (2024) explored the roles played by masculinity, trauma, and fear of victimisation in knife crime by young men. Themes were found of bravado, loyalty, retaliation, and a need for a certain type of reputation when recounting their experiences of victimisation. This combined with a social identity influenced by a street code that endorsed violence, may result in young men not expressing vulnerability because they no longer feel it. In Cesaroni et al. (2023), many participants adhered to a type of prison masculinity which constrained help-seeking behaviour and possibly thwarted trauma recovery, despite being a possibly adaptive response to prison.

3.2. 'Impact now'

The second superordinate theme was 'Impact now', where the young men spoke to their experience of dealing with the consequences of having committed serious violent offences. These accounts related to the events, attitudes, thought and behaviours, 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.

The sub-theme 'Making sense of it now' related to the need all participants felt to create some meaning from the experiences, although this 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". 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, "if I'd been at home it wouldn't have happened and I blame myself". For some like Abdylia it was about living with the impact despite not knowing "what to feel", and meaning that he would often contradict himself when thinking about possible impact or not, and who or what was responsible for any impact.

The 'Impact of offence as traumatic' sub-theme captured the experience of committing a serious violent offence, which for the majority of participants had led to the death of their victim. The interviews were full of descriptions of a process of coming to terms with this, and many referred to the ongoing effort to not think about it so as to avoid the possible impact.

Kai: one of the things about being in prison, the bad things, is that I overthink things, think too much yeah. If I didn't overthink things I'd be cool would have it all".

Here we see Kai describe his attempts to learn to avoid rumination, his phraseology indicating that this rumination feels to him like the major barrier in being able to settle into a new life in prison.

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 – having been convicted on a joint venture basis – illustrates here how having not directly harmed the victim himself, the news of the death was not something he expected; terminology such as "shock" indicates an emotional impact of the surprise. This was repeated across the sample, where many participants 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.

Jawan: Yeah like I've seen people getting stabbed before and they didn't die ... 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.

All those who had committed murder spoke of the shock of realising the victim had died, contributing to the process of having to make sense of their life and identity. It appeared to be a difficult and sometimes overwhelming challenge for them. 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.

Carter: 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.

The 'Impact of sentence as traumatic' sub-theme captured the experiences described by all 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.

Jawan: 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's description of the impact of how he felt on his sentencing day was put in the present tense, as though he were still processing the impact. Every participant spoke of their psychological, physical and practical responses to adjusting to life in custody, described by many as life changing (the sub-theme 'Impact of custody as new trauma'). The everyday reality of the pains of imprisonment were clear and 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 used rules to punish and exclude.

Abdylia: *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.*

The participants spoke of 'Dealing with trauma' (a sub-theme in the analysis) in 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 some 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.

Ciaran: *yeah that's why I don't how to put those things, I don't talk like that innit?*

For some like Abdylia, the coping response had become so habitual it was impossible to articulate for being so much an embedded aspect of his daily life, "*I don't know – I just do it!*". 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. For those participants 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.

3.3. 'Settling'

The 'Settling' superordinate theme 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 'Stabilising' sub-theme 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 possible 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.

This description of accepting the sentence, but not accepting responsibility for the offence, was typical of the sample's responses and their confusion in trying to understand the conviction and length of sentence. They were often unable to imagine the length of time, usually the same length of time or more than they were years old. A phrase often used to end tracts of speech was simply "*it is what it is*", which appeared to indicate a form of radical acceptance, to afford the participants some power over the situation they found themselves in. 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.

The 'Adapting yourself' sub-theme refers to the young men's experiences of adaptation and habituation to responding to previous and current difficulties. Here the men learned 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. Shan and Abdylia spoke of adaptation "*gotta get used to it ... and you know like get used to fitting in? Adapting*". This 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. 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.

Carter: 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?

The 'Adapting your view of others' sub-theme referred to how the men had to adapt their view of people in authority and their peers, to be able to make use of those people whilst settling into custody. Alongside talking to trusted professionals, many 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: "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. Even those with a difficult family dynamic to deal with had made a conscious effort to keep communication open, and this seemed linked to a time of needing encouragement, support and hope. It was riven with sadness and potentially difficult emotions though, as Ciaran 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, and they spoke of often expressing this gratitude to those people, bringing about a positive change in those relationships.

4. 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 superordinate themes: 'Conceptual Confusion', 'Impact Now' and 'Settling'.

4.1. The 'conceptual confusion' theme in context

The significance of finding differences in the way that adversity is defined and the preferred language for it relates to the study 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 participants' experiences appeared linked to a reluctance to accept diagnostic or other professional nomenclature (see [Karstoft and Armour, 2022](#); [Afifi and Asmundson, 2020](#) for recent commentary in this area). 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 (see [Leighton, 2012](#)), 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 with reduced risk of harm to self or others.

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 et al., 2012](#)), this sample also described frequent and cumulative abuse and dysfunction, and all witnessed significant physical injury and/or death. Of particular note 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 the atypicality of experience 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.

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 and Asmundson, 2020](#)). If the definition of trauma is events which are overwhelming, then many of the sample had survived cumulative trauma; however in not necessarily experiencing feelings of being overwhelmed, they did not then define it as trauma. This was particularly the case for those who were gang-involved; 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. As discussed previously in section 3.1, being in prison can also require that negative emotions are suppressed and vulnerability discouraged as part of a performance of masculinity ([Cesaroni et al., 2023](#)).

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. There were often confusing exchanges in the interviews, 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, type and impact of experiences being referred to. Whilst the terminology has changed and expanded its meaning over the years as a means of making sense of personal and collective experiences, its implications for individual's identity might well be different.

Recognising that linguistic choices act as organising devices in thinking and talking about complex phenomena, the dominant linguistic choices in this study were those of "touchy subjects", "hard times" and "mad things", which shaped how participants experience trauma and form their responses. There has been little research work done in this field for comparison to these findings; however, it is needed for a greater understanding of how this phenomena develops and can be supported by practitioners, especially in a context where arguably the concept of trauma is so elastic as to be a creeping concept (Haslam and McGrath, 2020).

4.2. The 'Impact Now' theme in context

The second theme 'Impact Now', captured how the young men spoke of 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 the length of sentence. The finding of significant impact from offence perpetration, of sentencing, and of being in prison 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 and Berle, 2019), where men spoke of dealing with the shock of entry to custody, uncertainty about their surroundings, and the loss of safety. 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. 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, framing that as possibly denial or avoidance of responsibility instead. The everyday reality of the pains of imprisonment (Sykes, 2007) were illustrated in that the young men interpreted the experience as brutalising, unfair and disproportionate. As all the participants had previously experienced multiple childhood adversity, the analysis revealed links made between those past experiences and 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 used rules to punish and exclude. The young men in this sample learned the importance of keeping busy to pass the time, 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.

The study findings relating to the impact of the perpetrated offence are consistent with those reported by Boswell et al. (2003) and Evans et al. (2007a,b), 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 previous trauma also reported the most impact from their offence, via difficulties such as sleep or mood problems. 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 et al., 2020).

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 our 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. Their 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 to their experiences of helpful survival and coping mechanisms. Their contempt for a way of speaking about trauma that might imply weakness, and of possibly endangering their ability to survive was notable. It is hypothesised that this was linked to 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.

A related hypothesis to explain this is that there was a gendered discourse in the form of the language of strength and toughness used by some participants in this study to explain both why they did not speak about trauma and their strategies for survival in prison (see also Murray, 2020). 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. 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 less helpful with young prisoners who have adopted a functional coping response to trauma of not talking about it, which works as 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.

4.3. The 'settling' theme in context

The previous themes related to strategies in not speaking about difficult life events, differences in defining adversity and the preferred language for it, and a unique articulation of the impact of trauma were all brought to bear on the final theme of 'Settling'. The theme also highlighted interesting aspects which could inform 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 responsiveness and readiness to engage is fully explored with each man. It should be noted though that it is not yet standard practice for all prisons to have a bespoke means of working with young adults, leading to inconsistencies in how young men are treated in different jails.

A process of stabilisation was described by some, underpinned by a radical acceptance of their situation. Whilst there were many factors in relation to this stabilisation, the focus in many interviews was on learning rules and expectations as the key to survival, and this fits with the findings in similar studies (Canlione and Abrams, 2021). What was not spoken about, in keeping with the evidence base (Vaswani and Paul, 2019), was that of help seeking behaviour to get professional support with problems faced; a preference for self-reliance or peer support was clear. 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 et al. (2020) 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. This appraisal of adverse or traumatic life events is known to serve as a mechanism accounting for differences in adversity exposure and psychological adjustment (see review by Gusler et al., 2022).

Comparing the findings around coping, adaptation and settling with similar empirical research, there is an alignment with the work by Harvey (2007) on survival and adaptation by young males in prison. The cognitive, psychological and emotional effects of trauma underpinned the ways the participants adapted to imprisonment. 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. 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. 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 et al., 2021), 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 et al., 2021). This may be due in part to a lack of consideration 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. Their descriptions of resilience were more akin to survival, with a definition of resilience as being the same as grit, distancing from past difficulties and a sense of agency. 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. 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.

4.5. Limitations

Whilst a restricted range of language can be an expected impact of significant adversity, it may have impacted on the findings. It was not possible to fully explore whether participants identified differential impacts of various trauma types or if the 'dependency' of the traumatic experience made a difference to the experience of trauma. This was in part due to the struggles 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 as previously described. It may also have been due to the recognised high rates of unmet speech, language and communication needs in this population. Bryan et al. (2015) suggested at least 60% of young people accessing youth justice services present these unrecognised difficulties. Early identification of language difficulties is crucial because it serves as a risk factor for other problems, such as literacy difficulties and educational failure, which may in turn increase the likelihood of a young person becoming involved in offending behaviour.

This was due to most of the participants initially denying any impact at all from previous difficulties. A specific limitation relates to the impact of gender, race, ethnicity on the study. As a considerably older, white, female researcher, the first author never shared common demographics with the interviewees, and whilst consideration was given to that throughout, it cannot be assumed that this did not limit the interviews and the interpretation of the findings. Indeed, 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. Many of the participants conceived of trauma by speaking to their experience of racial trauma, either in the community, at school, from the police, social services, courts or now in prison. However, when racial trauma was so ordinary as to not always warrant comment, focused research work with this cohort requires careful planning and implementation.

5. Conclusion

To date, this was the first psychological study of its kind undertaken with this age group and those who have received long

sentences. It highlighted the high prevalence and types of trauma exposure 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. The findings from this study fit with the existing literature and 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, but made specific to this sample of young men with long sentences.

This study's findings offers insights into how long-term, young adult prisoners define difficult life events and how they respond to them. This has relevance for practitioners, researchers and organisations in demonstrating that the current approaches couched in a professional and academic understanding of trauma may not adequately meet the needs of a group, whose own understanding of their experiences are likely to differ so significantly. This article has outlined some of the implications for the engagement, assessment, intervention and management considerations of young men who have harmed others and suffered harm themselves, which require a more ideographic approach to the integration of the young men's experiences into these considerations.

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 who through impact of offence perpetration and then sentence length are most 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.

CRedit authorship contribution statement

Rachel O'Rourke: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Mike Marriott:** Writing – review & editing, Supervision, Conceptualization. **Richard Trigg:** Writing – review & editing, Supervision, Conceptualization. **Rosie Kitson-Boyce:** Writing – review & editing, Supervision, Conceptualization.

Data statement

The data that support the findings are registered in the NTU Data Archive at <https://doi.org/10.17631/rd-2022-0004-ddat>. Due to the nature of this research, the participants in this study did not agree for their data to be shared publicly, so supporting data is not available to be shared.

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References

- Afifi, T.O., Asmundson, G.J., 2020. Current knowledge and future directions for the ACEs field. In: *Adverse Childhood Experiences*. Academic Press, pp. 349–355. American Psychiatric Association, 2013. *Diagnostic and Statistical Manual of Mental Disorders, fifth ed.* American Psychiatric Association, Arlington.
- 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. *J. Int. Neuropsychol. Soc.* 12 (2), 224.
- Andersen, S.L., Teicher, M.H., 2008. Stress, sensitive periods and maturational events in adolescent depression. *Trends Neurosci.* 31 (4), 183–191. <https://doi.org/10.1016/j.tins.2008.01.004>.
- Bailey, S., Smith, C., Dolan, M., 2001. The social background and nature of “children” who perpetrate violent crimes: a UK perspective. *J. Community Psychol.* 29 (3), 305–317. <https://doi.org/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. *J. Trauma Stress.* <https://doi.org/10.1002/jts.22630>.
- Bale, T.L., Epperson, C.N., 2015. Sex differences and stress across the lifespan. *Nat. Neurosci.* 18 (10), 1413–1420.
- 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. *JCPP (J. Child Psychol. Psychiatry)* 49 (1), 104–112. <https://doi.org/10.1111/j.1469-7610.2007.01821.x>.
- Bilbo, S.D., Schwarz, J.M., 2012. The immune system and developmental programming of brain and behavior. *Front. Neuroendocrinol.* 33 (3), 267–286. <https://doi.org/10.1016/j.yfrne.2012.08.006>.
- Blades, R., Hart, D., Lea, J., Willmott, N., 2011. *Care-a stepping stone to custody. The Views of Children in Care on the Links between Care, Offending and Custody.* Prison Reform Trust, London.
- 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 Q.* JQ 37 (4), 697–714. <https://doi.org/10.1080/07418825.2019.1688852>.
- Boswell, G., 1996. *Young and Dangerous: the Backgrounds and Careers of Section 53 Offenders.* Avebury, Aldershot.
- 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.
- Brewin, C.R., Dalgleish, T., Joseph, S., 1996. A dual representation theory of posttraumatic stress disorder. *Psychol. Rev.* 103 (4), 670. <https://doi.org/10.1037/0033-295X.103.4.670>.
- Bryan, K., Garvani, G., Gregory, J., Kilner, K., 2015. Language difficulties and criminal justice: the need for earlier identification. *Int. J. Lang. Commun. Disord* 50 (6), 763–775. <https://doi.org/10.1111/1460-6984.12183>.
- Caffo, E., Belaise, C., 2003. Psychological aspects of traumatic injury in children and adolescents. *Child Adolesc. Psychiatr. Clin.* 12 (3), 493–535.

- Canlione, K.C., Abrams, L.S., 2021. Surviving life: how youth adapt to life sentences in adult prisons. In: *The Palgrave International Handbook of Youth Imprisonment*. Palgrave Macmillan, Cham, pp. 503–523.
- Cesaroni, C., Maycock, M., Vaswani, N., 2023. Prison masculinities, trauma and incarcerated young men. *Men Masculinities* 26 (2), 188–209.
- Cicchetti, D., Rogosch, F.A., 1996. Equifinality and multifinality in developmental psychopathology. *Dev. Psychopathol.* 8 (4), 597–600. <https://doi.org/10.1017/S0954579400007318>.
- Cicchetti, D., 2010. Resilience under conditions of extreme stress: a multilevel perspective. *World Psychiatry* 9 (3), 145. <https://doi.org/10.1002/j.2051-5545.2010.tb00297.x>.
- Coffman, M., 2023. *The Neurological Imprint of Incarceration and its Effect on Recidivism*, vol. 37. Notre Dame JL Ethics & Pub. Pol'y, p. 251.
- Connolly, E.J., Beaver, K.M., 2016. Considering the genetic and environmental overlap between bullying victimization, delinquency, and symptoms of depression/anxiety. *J. Interpers Violence* 31 (7), 1230–1256.
- Cox, A., 2011. Doing the programme or doing me? The pains of youth imprisonment. *Punishm. Soc.* 13 (5), 592–610. <https://doi.org/10.1177/1462474511422173>.
- Craig, J.M., Piquero, A.R., Farrington, D.P., Tfofi, M.M., 2017. A little early risk goes a long bad way: adverse childhood experiences and life-course offending in the Cambridge study. *J. Crim. Justice* 53, 34–45. <https://doi.org/10.1016/j.jcrimjus.2017.09.005>.
- Crewe, B., 2011. Depth, weight, tightness: revisiting the pains of imprisonment. *Punishm. Soc.* 13 (5), 509–529. <https://doi.org/10.1177/1462474511422172>.
- Crewe, B., Hulley, S., Wright, S., 2017. Swimming with the tide: adapting to long-term imprisonment. *Justice Q.* 34 (3), 517–541.
- Crewe, B., Hulley, S., Wright, S., 2020. *Life Imprisonment from Young Adulthood*. Palgrave Macmillan UK, London.
- 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. <https://doi.org/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. *Front. Neuroendocrinol.* 40, 52–66. <https://doi.org/10.1002/cad.20164>.
- Copeland, W.E., Keeler, G., Angold, A., Costello, E.J., 2007. Traumatic events and posttraumatic stress in childhood. *Arch. Gen. Psychiatry* 64 (5), 577–584. <https://doi.org/10.1001/archpsyc.64.5.577>.
- Daniunaitė, 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. *Eur. J. Psychotraumatol.* 12 (1). <https://doi.org/10.1080/20008198.2021.1890937>.
- 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. *Psychiatr. Serv.* 68, 1288–1295. <https://doi.org/10.1176/appi.ps.201600330>.
- Ehlers, A., Clark, D.M., 2000. A cognitive model of posttraumatic stress disorder. *Behav. Res. Ther.* 38 (4), 319–345. [https://doi.org/10.1016/S0005-7967\(99\)00123-0](https://doi.org/10.1016/S0005-7967(99)00123-0).
- Eitle, D., Turner, R.J., 2002. Exposure to community violence and young adult crime: the effects of witnessing violence, traumatic victimization, and other stressful life events. *J. Res. Crime Delinquen.* 39 (2), 214–237.
- Ericson, R.V., 1975. *Young Offenders and Their Social Work*. Lexington Books, Farnborough.
- Evans, C., Ehlers, A., Mezey, G., Clark, D.M., 2007a. Intrusive memories in perpetrators of violent crime: emotions and cognitions. *J. Consult. Clin. Psychol.* 75 (1), 134. <https://doi.org/10.1037/0022-006X.75.1.134>.
- Evans, C., Ehlers, A., Mezey, G., Clark, D.M., 2007b. Intrusive memories and ruminations related to violent crime among young offenders: phenomenological characteristics. *J. Trauma Stress* 20 (2), 183–196. <https://doi.org/10.1002/jts.20204>.
- Evans, C., Mezey, G., Ehlers, A., 2009. Amnesia for violent crime among young offenders. *J. Forensic Psychiatr. Psychol.* 20 (1), 85–106. <https://doi.org/10.1080/14789940802234471>.
- 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. *J. Crim. Justice* 53, 25–33. <https://doi.org/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. *Am. J. Prev. Med.* 14 (4), 245–258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8).
- Figueira, A., Alleyne, E., Wood, J., 2024. Fear and masculinity as motivational narratives for knife-related crime: a systematic review of the literature. *Trauma Violence Abuse* 25 (5), 4016–4029.
- Finkelhor, D., 2009. *Children's Exposure to Violence: A Comprehensive National Survey*. Diane Publishing, Washington DC.
- Ford, J.D., Grasso, D.J., Hawke, J., Chapman, J.F., 2013. Poly-victimization among juvenile justice-involved youths. *Child Abuse Neglect* 37 (10), 788–800.
- 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. <https://doi.org/10.1016/j.chiabu.2015.01.011>.
- Gibbs, J.J., 1982. First cut is the deepest-psychological breakdown and survival in the detention setting. In: Johnson, R., Toch, H. (Eds.), *Pains of Imprisonment*, pp. 97–114.
- Goffman, E., 1968. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Aldine Transaction.
- Gooch, K., 2019. Kidulthood: ethnography, juvenile prison violence and the transition from 'boys' to 'men. *Criminol. Crim. Justice* 19 (1), 80–97.
- Guest, G., Namey, E.E., Mitchell, M.L., 2006. *Collecting qualitative data: a field manual for applied research*. Sage.
- Grisso, T., Vincent, G., 2012. *Trauma in dual status youth: putting things in perspective*. RFK National Resource Center for Juvenile Justice.
- Gusler, S., Guler, J., Petrie, R., Marshall, H., Cooley, D., Jackson, Y., 2022. Adversity interpreted: a scoping review of adversity appraisal measurement. *Trauma Violence Abuse* 23 (4), 1111–1133.
- Hadi, M.A., Closs, S.J., 2016. Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *Int. J. Clin. Pharm.* 38 (3), 641–646. <https://doi.org/10.1007/s11096-015-0237-6>.
- Haney, C., 2013. The contextual revolution in psychology and the question of prison effects. In: Liebling, A., Maruna, S. (Eds.), *The Effects of Imprisonment*. Routledge, London, 2013.
- Harvey, J., 2007. *Young Men in Prison*. Routledge, London.
- Haslam, N., McGrath, M.J., 2020. The creeping concept of trauma. *Soc. Res.: Int. Q.* 87 (3), 509–531.
- Hearn, N., Joseph, S., Fitzpatrick, S., 2021. Post-traumatic growth in prisoners and its association with the quality of staff-prisoner relationships. *Crim. Behav. Ment. Health* 31 (1), 49–59.
- Herman, J.L., Harvey, M.R., 1997. Adult memories of childhood trauma: a naturalistic clinical study. *J. Trauma Stress* 10 (4), 557–571. <https://doi.org/10.1023/A:1024889601838>.
- HMPPS, 2022. *HMPPS Offender Equalities Annual Report 2021/22*. 1. Prison population_FINAL.Ods (live.Com).
- 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. <https://doi.org/10.1016/j.chiabu.2013.04.001>.
- Horowitz, M.J., 1976. Diagnosis and treatment of stress response syndromes: general principles. In: Parad, H., Resnik, H., Parad, L. (Eds.), *Emergency and Disaster Management: A Mental Health Sourcebook*. The Charles Press Publishers, Maryland, pp. 259–269.
- 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. *Lancet Public Health* 2 (8), 356–366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4).
- Hulley, S., Crewe, B., Wright, S., 2016. Re-examining the problems of long-term imprisonment. *The British Journal of Criminology*, 56 (4), 769–792. <https://doi.org/10.1093/bjc/azv077>.
- Jarman, B., 2020. Only one way to swim? The offence and the life course in accounts of adaptation to life imprisonment. *Br. J. Criminol.* 60 (6), 1460–1479. <https://doi.org/10.1093/bjc/azaa036>.

- Jewkes, Y., 2005. Men behind bars: "doing" masculinity as an adaptation to imprisonment. *Men Masculinities* 8 (1), 44–63. <https://doi.org/10.1177/1097184X03257452>.
- Jorgenson, C., 2019. *The Impact of Multiple Types of Childhood Trauma on Juvenile Delinquent Behavior* (Doctoral Dissertation, Alliant International University).
- Karstoft, K.I., Armour, C., 2022. What we talk about when we talk about trauma: content overlap and heterogeneity in the assessment of trauma exposure. *J. Trauma Stress*.
- Kavish, N., Connolly, E.J., Boutwell, B.B., 2019. Genetic and environmental contributions to the association between violent victimization and major depressive disorder. *Pers. Individ. Differ.* 140, 103–110.
- 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. *J. Trauma Stress* 25 (3), 272–279. <https://doi.org/10.1002/jts.21700>.
- Kerig, P.K., 2019. Linking childhood trauma exposure to adolescent justice involvement: the concept of posttraumatic risk-seeking. *Clin. Psychol. Sci. Pract.* 26 (3). <https://doi.org/10.1111/cpsp.12280>.
- Koenigs, M., Grafman, J., 2009. Posttraumatic stress disorder: the role of medial prefrontal cortex and amygdala. *Neuroscientist* 15 (5), 540–548.
- Kretschmar, J.M., Tossone, K., Butcher, F., Flannery, D.J., 2019. Patterns of poly-victimization in a sample of at-risk youth. *J. Child Adolesc. Trauma* 10 (4), 363–375. <https://doi.org/10.1007/s40653-016-0109-9>.
- Kuzel, A.J., 1992. *Sampling in qualitative inquiry*. In: Crabtree, B.F., Miller, W.L. (Eds.), *Doing Qualitative Research*, vol. 3. Sage Publications, Inc, pp. 31–44.
- Lader, D., Singleton, N., Meltzer, H., 2000. Psychiatric Morbidity Among Young Offenders in England and Wales. <https://doi.org/10.1080/0954026021000046074>.
- 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. *Psychiatr. Serv.* 56 (9), 1109–1114. <https://doi.org/10.1176/appi.ps.56.9.1109>.
- Leighton, S., 2012. Adolescents' understanding of mental health problems: conceptual confusion. *J. Publ. Ment. Health*.
- Leighton, S., Dogra, N., 2009. Defining mental health and mental illness. In: Leighton, S., Dogra, N. (Eds.), *Nursing in Child & Adolescent Mental Health*. Open University Press, Berkshire, pp. 1–18.
- Liem, M., Kunst, M., 2013. Is there a recognizable post-incarceration syndrome among released "lifers". *Int. J. Law Psychiatr.* 36 (3–4), 333–337.
- Listenbee Jr., Robert L., Torre, Joe, Gregory, Boyle, Cooper, G., Cooper, Sharon W., Deer, Sarah, Tilton Durfee, Deanne, James, Thea, Lieberman, Alicia, Macy, Robert, Marans, Steven, McDonnell, Jim, Mendoza, Georgina, Taguba, Antonio, 2013. Report of the Attorney General's National Task Force on Children Exposed to Violence, pp. 1–152.
- Luthar, S.S., Cicchetti, D., Becker, B., 2000. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev.* 71 (3), 543–562. <https://doi.org/10.1111/1467-8624.00164>.
- Masten, A.S., 2001. *Ordinary Magic: Resilience in Development*. Guilford Publications.
- McCallum, K., 2018. Does PTSD predict institutional violence within a UK male prison population? *J. Forensic Pract.* 20 (4), 229–238. <https://doi.org/10.1108/JFP-12-2017-0055>.
- McDonald, S.E., Im, H., Green, K.E., Luce, C.O.C., Burnette, D., 2016. 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. <https://doi.org/10.1037/trm0000175>.
- Milders, M., Fuchs, S., Crawford, J.R., 2003. Neuropsychological impairments and changes in emotional and social behaviour following severe traumatic brain injury. *J. Clin. Exp. Neuropsychol.* 25 (2), 157–172. <https://doi.org/10.1076/jcen.25.2.157.13642>.
- Modrowski, C.A., Sheerin, K., Grant, M., Collibee, C., Kemp, K.A., 2023. Applying the exploration, preparation, implementation, and sustainment framework to trauma-focused screening in the juvenile legal system: considerations and recommendations for future research. *Psychological Injury and Law* 1–14.
- 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. <https://doi.org/10.1016/j.chiabu.2013.07.012>.
- Morse, J.M., 2000. Determining sample size. *Qual. Health Res.* 10 (1), 3–5. <https://doi.org/10.1177/104973200129118183>.
- Morse, S.J., Wright, K.A., 2022. Imprisoned men: masculinity variability and implications for correctional programming. *Corrections* 7 (1), 23–45.
- 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. *Int. J. Forensic Ment. Health* 1–39. <https://doi.org/10.1080/14999013.2020.1856978>.
- Mulcahy, J., 2018. 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. *Criminol. Crim. Justice*. <https://doi.org/10.1177/1748895820914379>.
- 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 Dev.* 70 (5), 1181–1196.
- Overstreet, S., Braun, S., 2000. Exposure to community violence and post-traumatic stress symptoms: mediating factors. *Am. J. Orthopsychiatry* 70 (2), 263–271.
- 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. <https://doi.org/10.1016/j.neuroimage.2014.04.025>.
- Pettus-Davis, Carrie, Renn, Tanya, Lacasse, Jeffrey R., Motley, Robert, 2019. Proposing a population-specific intervention approach to treat trauma among men during and after incarceration. *Psychol. Men Masc.* 20 (3), 379–393.
- Piper, A., Berle, D., 2019. The association between trauma experienced during incarceration and PTSD outcomes: a systematic review and meta-analysis. *J. Forensic Psychiatr. Psychol.* 30 (5), 854–875. <https://doi.org/10.1080/14789949.2019.1639788>.
- Pollock, P.H., 1999. When the killer suffers: post-traumatic stress reactions following homicide. *Leg. Criminol. Psychol.* 4 (2), 185–202. <https://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. <https://doi.org/10.1016/j.neuropsychologia.2009.07.021>.
- Revolving Doors, 2021. *Evidence Review: Diverting Young Adults Away from the Cycle of Crisis and Care*. Revolving Doors Agency, London.
- Rew, G., Clark, L., Rogers, G., 2022. Making sense of offence related trauma: exploring two patients lived experience. *Journal of EMDR Practice and Research*.
- Ruchkin, V.V., Schwab-Stone, M., Kopolov, R., Vermeiren, R., Steiner, H., 2002. Violence exposure, posttraumatic stress, and personality in juvenile delinquents. *J. Am. Acad. Child Adolesc. Psychiatr.* 41 (3), 322–329.
- 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. *Clin. Psychol. Sci.* 6 (3), 352–371. <https://doi.org/10.1177/2167702617741381>.
- Smith, J.A., Flowers, P., Larkin, M., 2009. *Interpretative Phenomenological Inquiry*. Sage, London.
- Stern, K., Thayer, Z., 2019. Adversity in childhood and young adulthood predicts young adult depression. *Int. J. Publ. Health* 64 (7), 1069–1074. <https://doi.org/10.1007/s00038-019-01273-6>.
- 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*. Palgrave Macmillan, Cham, pp. 57–83. Retrieved from https://link.springer.com/chapter/10.1007/978-3-030-49068-3_3.
- 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 Inj.* 22 (4), 325–332. <https://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). <https://doi.org/10.1371/journal.pone.0052528>.
- Trickett, L.F., 2011. Fears of the fearless. *International Journal of Law, Crime and Justice* 39, 280–302.
- Tynan, R.R., 2019. *Young Men's Experiences of Long-Term Imprisonment: Living Life*. Routledge.

- 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. *J. Trauma Stress: Official Publication of the International Society for Traumatic Stress Studies* 18 (5), 389–399. <https://doi.org/10.1002/jts.20047>.
- 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. <https://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. *Howard J. Crim. Justice* 58 (4), 513–534. <https://doi.org/10.1111/hojo.12344>.
- Walker, E.F., Aberizk, K., Yuan, E., Bilgrami, Z., Ku, B.S., Guest, R.M., 2024. Developmental perspectives on the origins of psychotic disorders: the need for a transdiagnostic approach. *Dev. Psychopathol.* 1–11. <https://doi.org/10.1017/S0954579424000397>.
- 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. *Child. Youth Serv. Rev.* 34, 1553–1559. <https://doi.org/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. *J. Interpers Violence* 36 (5–6), 2498–2520. <https://doi.org/10.1177/0886260518760019>.
- Webermann, A.R., Murphy, C.M., 2019. Childhood trauma and dissociative intimate partner violence. *Violence Against Women* 25 (2), 148–166. <https://doi.org/10.1177/1077801218766628>.
- Welfare, H., Hollin, C.R., 2012. Involvement in extreme violence and violence-related trauma: a review with relevance to young people in custody. *Leg. Criminol. Psychol.* 17 (1), 89–104. <https://doi.org/10.1111/j.2044-8333.2010.02002.x>.
- Widom, C.S., Maxfield, M.G., 2001. An Update on the "Cycle of Violence. National Institute of Justice, Washington, DC. Retrieved from. <https://eric.ed.gov/?id=ED451313>.
- 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., 2013. Traumatic brain injury and juvenile offending: complex causal links offer multiple targets to reduce crime. *J. Head Trauma Rehabil.* 30 (2), 69–74. <https://doi.org/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. *J. Interpers Violence* 35 (13–14), 2511–2535. <https://doi.org/10.1177/0886260517704231>.
- Yoon, S., Howell, K., Dillard, R., Shockley McCarthy, K., Rae Napier, T., Pei, F., 2021. Resilience following child maltreatment: definitional considerations and developmental variations. *Trauma Violence Abuse* 22 (3), 541–559.