Patients or Perpetrators? An Exploration of Psychological Trauma in Incarcerated Gang and Non-Gang Males

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Declaration

The research reported in this thesis was conducted at the School of Psychology, University of Kent, whilst the author was a full-time postgraduate student on a GTA 50th Anniversary scholarship (September, 2014 – December 2018). The theoretical and empirical work herein is the independent work of the author completed under the supervision of Professor Jane Wood. The author has not been awarded a degree by this or any other university for the work included in the thesis. The literature review reported in Chapter 2 has been presented at the British Psychological Society's Division of Forensic Psychology annual conference:

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Dedication

I dedicate this Thesis and endeavor to ‘my babes’ Dolly [Parton] and Kenny [Rogers]

Dolly 03/01/2009 - 30/11/2017

Kenny 26/07/2012 – 16/07/2020

Definitions and Conventions

Definitions

Psychological Trauma

Many definitions, classifications, and measures of psychological trauma exist and are sometimes used incorrectly and interchangeably with terms that actually describe two separate and distinct parts of trauma: the event, and the symptoms. One can experience a potentially traumatic event, such as the death of a loved one, but not become 'traumatised 'or unwell as a result—the two can be mutually exclusive. Unless otherwise specified, the term psychological trauma (in places shortened to *trauma*) used in this thesis refers to the emotional, biological, cognitive, and interpersonal *symptoms* that result from a traumatic event. The term does not denote a clinical diagnosis, but rather symbolises an individual's subjective interpretation of an event as traumatic. When referring to a clinical diagnosis of traumatic sequalae, such as Posttraumatic Stress Disorder (PTSD), the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013) will be used (see Appendix 1 for full diagnostic criteria).

Trauma exposure

Trauma exposure refers specifically to the traumatic event[s] itself e.g. witnessing a fatal car accident, or being the victim of an assault. This is a prerequisite for a formal diagnosis of PTSD, defined as Criterion A in the DSM-5 (5th ed.; DSM–5; American Psychiatric Association, 2013). Thus, while one can experience a potentially traumatic event or series of events or episodes and not go on to develop PTSD, one cannot be diagnosed with PTSD without having experienced a traumatic event first. The traumatic event is necessary, but not sufficient to generate a PTSD diagnosis. Unless otherwise specified the use of the

term trauma exposure in this thesis refers to the event[s] that *cause/contribute* to the development of trauma-related symptoms.

Internalising and externalising symptoms/problems

Achenbach (1966) proposes a 'polar dichotomy', an operationally defined pair of symptom clusters, that describe inwardly (internalising) and outwardly-oriented (externalising) psychiatric symptoms in children, each of which are described in turn below.

Internalising symptoms

The use of the term internalising symptoms in this thesis refers collectively to problems of obsessive-compulsive symptoms, somatic complaints, withdrawal, anxiety/depression and other inwardly-directed symptoms that generate unease, tension and suffering as defined by Achenbach (1966). In this thesis this includes the following disorders or collection of symptoms: PTSD, anxiety, and depression.

Externalising symptoms

The use of the term externalising symptoms in this thesis refers collectively to problems of aggression, delinquency and other outwardly-directed behaviour that generates discomfort and conflict with others as defined by Achenbach (1966). In this thesis this includes gang behaviour, individual and group delinquency.

Gang

Despite over a 100 years' worth accumulated gang literature and the ever-increasing focus on youth and gang violence in popular media, researchers, practitioners and policy-makers have yet to reach a consensus on what a gang is (Bursik & Grasmick, 1993; Klein,

1991, 2011). Not having a universal gang definition has important, and potentially damaging, implications for how we make decisions about the treatment and punishment of those labelled (rightly or wrongly) as gang members; it also stunts the creation of cutting-edge international gang research and the development of new initiatives and programs that can be used to prevent and control the burgeoning public health problem that gangs present. As such, defining gangs is much more than a simple case of semantics.

Conly (1993) goes as far to suggest abandoning the term 'gang' altogether, maintaining that it can never be standardised because it is not a term used by youth that represents the empirical reality of their involvement but rather a relatively meaningless collection of identifiers used by adults with vested interests in there being a 'gang problem' (Conly, 1993). This is not an uncommon position; Sherif & Sherif (1967) raise caution about agencies, such as law enforcement, 'creating' problems that they are tasked with solving—through overly-retributive and ineffective suppression methods (Wood, Alleyne & Beresford, 2016). Similarly, Marshall, Webb & Tilley (2005) recommend focusing solely on the gang *behaviour* rather than getting preoccupied with defining the cause.

Gang definitions can differ along fundamental lines such as age, motivation, and identity, meaning studies looking at 'gangs' may be examining qualitatively different groups of people, and hence producing inconsistent and ungeneralisable findings (Klein, 2001). This raises considerable problems for theoreticians when trying to piece together, and make sense of, several disparate chunks of information. After undertaking an extensive and systematic review of the gang literature Hardman (1967) concluded that "there seems to be no 'best' theory or research method" (p.5) for examining gangs, and the same is true today, over 50 years later (Wood & Alleyne, 2010).

For the purpose of this thesis and with the view of contributing to a network of comparable gang research the Eurogang definition will be used: "a street gang (or

troublesome youth group corresponding to a street gang elsewhere) is any durable, street-oriented youth group whose identity includes involvement in illegal activity" (Esbensen & Weerman, 2005). There are four key components to this definition: age composition (the majority of group members should be between the ages of 12 and 25), stability (the group should be at least 3 months old), location (group members should congregate and 'hang out' predominantly in public places without the supervision of adults), and group identity (Criminal and delinquent behaviour should form part of the group's culture and identity) that specify the necessary requirements for a group to be classified as a gang. In essence a gang should be youthful, durable, street-oriented, and have a criminal group identity.

Conventions

Abbreviations and Acronyms

All abbreviations and acronyms are first described in full and thereafter abbreviated.

Numbering of Studies

Chapter numbers are not the same as study numbers – they are independent of each other. Study 1 is presented in Chapter 4 and Study 2 is presented in Chapter 5

Tables and Figures

All tables and figures are represented in the following format: x.y. The 'x' refers to the chapter the table or figure is presented in and the 'y' refers to the order in which the specific table or figure appears. For example, Figure 3:2 appears in the third chapter and is the second figure

Abstract

Gangs and gang violence are a serious problem affecting the health and wealth of many communities across the globe. Violence is central to the gang's identity and operation; as such, the majority of gang research has focused on understanding gang members as perpetrators of violence using traditional socio-criminological theories that support a *criminal* justice solution. To date, little research has focussed on the psychological causes or effects of violence in this population. This is surprising giving that trauma exposure and traumatic sequalae, such as PTSD, are known risk factors for criminal justice involvement, and that gang members, by virtue of the activities they participate in, are likely to be exposed to potentially traumatising events. Building on the psycho-traumatological study of juvenile delinquents and the growing discipline of gang psychology, this thesis marks a small contribution towards a systematic programme of research dedicated to mapping, and intervening to change, the trauma pathways of gang-involved males.

Across six chapters, comprising theory, empirical works, and critical commentary this thesis found that; 1) there is a significant gap in the extant literature that illuminates the need for more trauma-centric gang studies; 2) existing developmental models of trauma can be re-purposed and adapted to explain how PTSD-induced deficits in biological, emotional, cognitive, and interpersonal functioning, alongside harmful group processes inherent in the gang, contribute to more severe and enduring trauma trajectories for gang members compared to their non-gang counterparts; 3) results from the quantitative study showed that gang members were more likely to experience weapons-related trauma, including exposure to toxic substances, as well greater levels of group identification, group pressure, pluralistic ignorance, moral disengagement, individual and group delinquency, and were more likely to exhibit antisocial and paranoid personality traits. The qualitative findings speak to the

pervasiveness and disruptiveness of trauma in the lives' of young incarcerated males, irrespective of membership status.

The implications of this thesis speak to the propogration of a new subdiscipline of psychological research—Gang Psychotraumatology; the creation of trauma-informed place-based interventions that consider the multiple dichotomies of gang members as individuals *and* group agents, victims *and* perpetrators; and policies that support the humanisation and rehabilitation of gang members.

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Lists of Tables and Figures

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CHAPTER 1: Introduction and Chapter Overview

1.1 Purpose and Objectives

Gangs and gang violence present a serious threat to the health, wealth and security of many communities across the globe, yet little research has focused on the psychotraumatological causes or effects of violence in this population. This is surprising given that trauma exposure and traumatic sequelae, such as PTSD, are known risk factors for criminal justice involvement, and that gang members, by virtue of their risky lifestyle, are likely to be exposed to potentially traumatising events. The aim of this thesis was to add to the emerging discipline of Gang Psychology by exploring the relationships between trauma exposure and traumatic sequalae in incarcerated gang-involved and non-gang males in order to generate a preliminary insight into: 1) the dimensionality of gang members' identities and roles as victims and perpetrators of violence through their experiences of psychological trauma, 2) whether gang members are a distinct subset of juvenile offender in terms of how they experience and react, psychologically and behaviourally, to traumatic events, 3) whether the group processes inherently present in the gang are able to explain the potential differences in how gang members and non-gang members experience and react to traumatic events

1.2 Chapter Overview

To this end, this thesis presents the following body of work: Chapter 2 presents a narrative review and synthesis of the literature examining the relationship between trauma exposure and internalising and externalising symptoms in gang-involved young men providing an overview of the existing research landscape and highlighting gaps in knowledge pertaining to (1) the nature and prevalence of trauma exposure in gang-involved youth, and (2) the nature and prevalence of internalising and externalising pathology in gang-involved youth.

Chapter 3 builds on this by knitting together biological, emotional, cognitive, and interpersonal concepts to explicate the developmental trauma trajectory of young men into delinquency and gang behaviour. It uses existing literature to show how the 'groupness' of the gang—i.e. group identity, group belonging, group pressure, perceived cohesion, and pluralistic ignorance—can inflame *existing* trauma symptoms and increase chances of experiencing *new* traumatic events that sustain and exacerbate the trauma trajectory during membership, setting gang members on a unique trauma path with a unique trauma profile to their non-gang counterparts. By integrating trauma and social psychological scholarship, the author demonstrates the incendiary nature the group environment can have on gang members experiences of trauma, and symptom manifestation.

Chapter 4 presents a quantitative study aiming to test the argument that gang members encounter and manifest traumatic experiences differently from comparable non-gang males, and explores the contribution of dysfunctional personality characteristics, moral disengagement and social psychological processes to these differences.

Chapter 5 builds on the quantitative trauma data presented in Chapter 4 by examining the phenomenology of trauma in incarcerated gang and non-gang members using reflexive thematic analysis to provide a more meaningful and contextualised understanding of trauma from the perspective of the participant. Chapter 6 concludes the thesis by summarising key findings and themes, outlining overall limitations and considering the research, practice, and policy implications of this body of work.

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CHAPTER 2: The Role of Trauma in the Development of Internalising and Externalising Symptoms in Gang-involved Males: A Review of the Literature

2.1 Gang members as perpetrators of violence

Gangs and the associated harm they cause are a considerable public health problem facing many global cities. Street gangs are typically linked to serious violent crime and illicit drug trades that undermine social order, devastate communities, and inflict grievous, and oftentimes fatal, harm on those who cross their paths. It is estimated that there are more than one million juvenile gang members in the United States, with the number of gangs in large metropolitan areas increasing, and children as young as five becoming members (Pyrooz & Sweeten, 2015). One element in particular that characterises gangs and gang activity as a public health issue is the 'contagion' of the violence (Fagan, Wilkinson & Davies, 2007). Violence does not stop with the gang or their rivals; research shows that gang activity drives overall rates of violence in affected communities (Robinson, Boscardin, George, Teklehaimanot, Heslin & Bluthenthal, 2009). In neighbourhoods with 30+ gangs within a two-mile radius the average number of homicides per square mile is 61, compared to three in neighbourhoods with no gangs (Robinson et al., 2009).

Similarly, in the UK, within London alone, the Metropolitan Police estimate that there are 225 recognised gangs, with a combined total of 3600 members. Fifty percent of all shootings and 22% of serious violence in London is reported to have been committed by known gang members (HM Government, 2011). More recent official statistics report that there were over 40,000 knife-related offences recorded at the end of March 2018, the highest number in an eight-year series of available comparable data, and of these 40,000 offences 268 were homicides (Allen, Audickasm Loft & Bellis, 2019). In the eight months spanning January to October 2019 there were 65 fatal stabbings in London alone. Despite knife-related offences being at a record high the number of *fatal* stabbings has rapidly decreased – not

because knife attacks are becoming less frequent, ferocious or deliberate, but our emergency responders and trauma surgeons are becoming increasingly skilled at saving the lives of young men with knife wounds. While gang membership and knife crime are not strictly synonymous, the connection between the two (Bannister, Pickering, Batchelor, Burman, Kintrea & McVie, 2010), and weapons use more generally (Butters, Harrison, Adlaf & Erickson, 2009; Beaver, DeLisi, Vaughn & Barnes, 2010) is strong and well-established.

Similar patterns of violent offending have been found in other areas across the UK, such as Manchester, Birmingham and Glasgow, but gang activity is not just limited to big cities (Bennet & Holloway, 2004), and nor does it stay confined there. As outlined in the County Lines Gang Violence, Exploitation & Drug Supply 2016 National Briefing Report (National Crime Agency, 2016) gangs based within urban city locations, known as 'urban hubs' are infiltrating rural and coastal county towns creating new markets for drugs and weapons, and driving up overall crime rates.

The government's Serious Violence Strategy (Home Office, 2018) outlines how County Lines drug dealing, defined as:

> gangs and organised criminal networks involved in exporting illegal drugs into one or more importing areas [within the UK], using dedicated mobile phone lines or other form of "deal line". They are likely to exploit children and vulnerable adults to move [and store] the drugs and money and they will often use coercion, intimidation, violence (including sexual violence) and weapons (Home Office, 2018, p.48).

has contributed to this rise in knife crime, gun crime and homicide. As *more* gangs become weaponised due to drug-dealing activity, so to will their rivals and other criminal associates that support their illict trade, causing an exponential increase and spread of serious and deadly violence (Home Office, 2018).

Mobile phones and social media are central to county lines operations and are used to promote drug selling activity and recruit others into the lifestyle. Youth targeted by these gangs are those who are poor, vulnerable, marginalised and hence tempted by the material goods (e.g. money, designer clothes, fast cars, and flash jewellery) advertised through Facebook and Instagram that may seem unobtainable through legitimate means. However, evidence from a parliamentary investigation shows that even the menial offer of free food can be enough to lure young boys into a criminal lifestyle – so called 'chicken shop grooming' (Guardian, 2019). This highlights 1) the extent and severity of poverty young inner-city boys are facing, 2) the predatory and exploitative nature of county lines gangs, and 3) the ability of social media to glamourise and promote the gang lifestyle. Together these factors create an appetite for wealth and status in poor young boys that gang members then capitalise on for their own criminal means and advancement.

As mentioned, the link between gang membership and violent offending is robust (Battin, Hill, Abbott, Catalano, & Hawkins, 1998; Bjerregaard & Smith, 1993; Esbensen & Huizinga, 1993; Esbensen & Winfree, 1998; Huff, 1998; Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993). Gang members not only experience difference rates of violence—a 90.7% lifetime prevalence rate of violence compared to 46.4% in non-gang members (Thornberry, Krohn, Lizotte, Smith & Tobin, 2003)—but the characteristics of gang violence are qualitatively different. Gang violence involves more lethal weapons, drive-by shootings, younger assailants, unintended and innocent victims, and a greater number of associated criminal charges (Klein & Maxson, 2006; Robinson et al., 2009). Similarly, Huff (1998) found that gang members, were 20 times more likely to participate in a drive-by shooting, 10 times more likely to commit murder, four times more likely to attack a rival, and three times more likely to attack their own friends than comparable at-risk youth.

This phenomenon is *not* simply a product of associating with delinquent peers, but of gang membership per se (Battin et al., 1998). Gangs have a catalysing and amplifying effect on violent offending, where the level of group violence exceeds that of the gangs' individual members combined—in other words, gang violence as a whole is greater than the sum of its component parts or members. This is, in part, due to factors inherently linked to the group environment i.e. involvement in inter-gang rivalries as a means of defending territory and establishing dominance; intra-gang violence as a means of maintaining order, and reprimanding disobedience; the use of instrumental violence to acquire valued goods, and to protect drug trafficking and sales; and the use of expressive violence as a means of establishing and fostering group status, identity, cohesion, and camaraderie (Klein, Weerman & Thornberry, 2006). Together this evidence points towards gang members as a uniquely violent population, with an increased risk of suffering physical and psychological harm as a result, even compared to similarly violent non-gang youths.

2.2 Gang members as victims of violence

Gang membership begets violence, but violence also begets victimisation. Research shows that delinquency and victimisation are closely linked (Esbensen & Huizinga, 1991; Lauritsen, Sampson & Laub, 1991); Loeber, Kalb & Huizinga, 2001; Shaffer & Ruback, 2002), and that as violent offending increases, so does the risk of subsequent victimisation (Huizinga and Jakob-Chien, 1998). The reverse is also true; victimisation can provoke violence, most notably exampled in cases of gang retaliation (Loeber et al., 2001). A statistic commonly cited to illustrate this association is that gang members—arguably the most prolific and ferocious perpetrators of violent crime—are 100 times more likely to be killed than are members of the general population (Decker & Pyrooz, 2010). This phenomenon is referred to as the victim-offender overlap, where one's offending activity is positively

correlated with one's victimisation experiences (Jennings, Piquero & Reingle, 2012). Several sociological and criminological theories have attempted to explain this nexus over the years (see Jennings et al., 2012 for a full review), but have failed to take in to account the unique street gang context (Berg, Stewart, Schreck & Simons, 2012; Pyrooz, Moule & Decker, 2014). Pyrooz et al., (2014) argue that gang-related processes: collective identities, norms of reciprocity, reputation enhancement and maintenance, normative orientations toward criminal involvement, and group liability create opportunities for violence and victimisation that are not present for non-gang delinquents and explain why gang members are more likely to be victimised than similar non-gang youth (Peterson, Taylor & Esbensen, 2004; Katz,Webb, Fox & Shaffer, 2011; Pyrooz, Moule & Decker, 2014). Despite this fact, gang members are often viewed, and treated solely with respect to their criminal identities (Kerig, Chaplo, Bennett, & Modrowski, 2016; Garbarino, Dubrow, Kostelny & Pardo, 1992).

Experiencing violent victimisation in childhood and adolescence—precisely the age youth are most likely to join gangs—can be extremely harmful for a child's development and is associated with a wide range of, oftentimes enduring and co-morbid, psychosocial sequalae, including: depression (Stein, Golding, Siegel, Burnam, & Sorenson, 1988), suicide (Briere & Runtz, 1986), PTSD (Briggs & Joyce, 1997), anxiety (Edlynn, Miller, Gaylord-Harden & Richards, 2008), substance abuse (Kilpatrick, Ruggiero, Acierno, Saunders, Resnick & Best, 2003), and academic failure (Boney-McCoy & Finkelhor, 1995). While there is a considerable mental health morbidity associated with violent victimization, especially sexual, weapons-based, and aggravated assaults, in the general child/adolescent population, this effect is more severe in justice-involved youth i.e. juvenile delinquents and young offenders. Research shows that experiences of trauma and resultant psychiatric conditions, such as PTSD, anxiety, suicidality are significantly higher in detained compared to community samples (Wasserman, McReynolds, Lucas, Fisher & Santos, 2002). In fact, in

a randomly-selected sample of almost 900 American male juvenile detainees, more than 90% had reported at least 1 traumatic exposure, and 56.8% were exposed 6 or more times. Eleven percent of detainees had a PTSD diagnosis, with "*having seen or heard someone get hurt very badly or be killed*" being the most frequent precipitating traumatic event (Abram, Teplin, Charles, Longworth, McClelland & Dulcan, 2004). Higher rates of PTSD have been found in similar samples: 24% of male juvenile delinquents (Burton, Foy, Bwanausi, Johnson & Moore, 1994); 49% of incarcerated female delinquents (Cauffman, Feldman, Watherman & Steiner, 1998), and 32% of violent young male offenders met a diagnosis of PTSD. Gang members are juvenile delinquents, by virtual of their youth and criminal involvement, but as members of a group with a collective criminal identity i.e a gang, they are more likely to experience higher rates of violence and victimisation—potentially traumatising events—that may place them at greater risk of experiencing post-traumatic symptoms.

2.3 Rationale for the review

As we have seen gang members are exposed to a range of potentially traumatising events as both perpetrators and victims of violence, which may place them at risk of developing a range of traumatic sequelae, such as PTSD (Kerig, Wainryb, Twali & Chaplo, 2013) and other internalising and externalising symptomology. Emerging research into the mental health of gang members shows that they are more likely to experience intrusive thoughts, emotional numbing, dissociation, perpetration-induced trauma, suicidal behaviour, and a sense of hopelessness, and belonging, than comparable non-gang youth (Li, Stanton, Pack, Harris, Cottrell & Burns, 2002; Kerig et al., 2016; Madan, Mrug & Windle, 2011). These findings mark a move away from gang members being viewed, researched, and treated solely as criminals, to gang members as a vulnerable and ‘in-need’ population.

While we are beginning to see the outlines of Gang Psychotraumatology as a defined and dedicated area of study, research examining the origins and effects of traumatic exposure in gang-involved youth is still in its infancy, and lags behind that on delinquent youth more generally (e.g. Kerig & Becker, 2010; Kerig, 2012; Kerig, Ward, Vanderzee, & Arnzen Moeddel, 2009). Theoretical advances have been made in the development of integrated epidemiological models of trauma and delinquency e.g. the Trauma Coping model (Ford and Russo, 2006; Ford and Courtois, 2009) and Kerig & Becker's (2010) Transactional Developmental model, but none of these models consider gang membership or gang violence—despite the links between delinquency and gang involvement.

Equally, adaptations of 'the big four' general theories of crime: Criminal/Propensity Trait Theory (Glueck & Glueck, 1950; Yablonsky 1963; Sanchez-Jankowski;1991), Social Bond Theory (Hirschi, 1969; Gottfredson & Hirschi, 1990; Sampson & Laub, 1993), General Strain Theory (Agnew 1992; Agnew & Brezina, 2012), and Social Learning Theory, as well as integrated theories of gang membership: Interactional Theory (Thornberry 1987; extended subsequently by Thornberry, Krohn, Lizotte, Smith & Tobin, 2003), Howell & Egley's, (2005) developmental adaption of Interactional Theory, and Unified Theory (Wood & Alleyne 2010) outline and explain the individual-level attributes, social psychological processes, and contexts that lead to gang involvement. However, none of these models consider trauma exposure or traumatic sequalae, such as PTSD, as either a risk factor for, or consequence of gang membership—despite the links between childhood trauma and delinquency (Kerig & Becker, 2010), delinquency and gang membership (Thornberry, Krohn, Lizotte & Chard-Wierschem, 1993; Thornberry et. al., 2003; Krohn & Thornberry, 2008), gang membership and violence (Melde & Esbensen, 2013), and violence and psychological trauma (Singer, Anglin, Yu Song & Lunghofer, 1995; Rosenthal, 2000). The absence of trauma from these theories is significant because, as we will see in Chapter 3,

experiencing a traumatic event or a series of chronic traumatic events (such as child abuse/maltreatment or gang membership) affects every sphere of functioning (biological, emotional, cognitive, interpersonal), and how we interact with others and our environment—and how they interact with us in turn. As such, current gang models are missing crucial traumatological information that if included would potentially alter their proposed pathways in to and out of the gang.

The present dearth of interdisciplinary trauma-centred gang research means there are no findings to translate into real-world programs that address the very real, tangible and quantifiable damage gangs are having on their members, communities, and wider economy. Gang and youth violence place a heavy burden on Accident and Emergency departments in affected areas and is estimated to cost the UK's National Health Service (NHS) almost 3 billion pounds every year (Catch 22-Dawes Unit, n.d.), a cost commensurate with other NHS priorities such as alcohol use disorders, smoking and obesity. Mental health services are experiencing similar strain as gang members are accessing psychiatric services and psychotropic medications more than comparable non-gang individuals (Coid et al., 2013).

There is now increasing recognition in UK research and policy that the gang lifestyle itself can facilitate exposure to potentially traumatic events, but also the role that childhood adversity and early-life trauma plays in the life course of gang-involved youth (Madden, Brodie & Hrobonova, 2013; Strategic Ambitions for London, 2014; Public health England, 2015). By applying a psycho-traumatological lens to the study of gangs, we consider whether gang members constitute a unique subset of juvenile delinquent, who experience and react to trauma exposure differently. If researchers are able to construct a map of a youth's developmental landmarks we may understand when, and under what circumstances, at-risk youth become gang-involved, and the role of trauma in this transition. By exploring the trauma trajectories of gang-involved youth we can develop a greater understanding of the

complex and dynamic associations between trauma exposure, trauma symptoms, and factors that may aggravate or mitigate these symptoms. Knowing this information will pave the way for better, tailored, earlier interventions, and evidenced-based policy reforms for young men at-risk of gang membership and psychological harm.

2.4 Existing reviews within the trauma research

Existing reviews and meta-analyses (e.g.Brewin, Andrews, & Valentine, 2000; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Kelly, 2010; Maas, Herrenkohl, & Sousa, 2008; McDonald & Richmond, 2008; Raby & Jones, 2016; Trickey, Siddaway, Meiser-Stedman, Serpell, & Field, 2012; Welfare & Hollin, 2012) demonstrate associations between trauma exposure (e.g. community violence, child maltreatment, perpetration-induced trauma, exposure to gang violence) and internalising and externalising symptoms in children, young offenders, and gang members. However, this current review is unique in its breadth and diversity in that it includes published peer-reviewed studies *and* grey literature that focus on trauma as a cause, *and* as a consequence of gang membership.

2.5 Aims and objectives

The aim of this narrative review is to collate and critically evaluate the literature exploring the relationship between trauma exposure and internalising and externalising symptoms in gang-involved young males. This review will achieve this by answering the following research questions:

1. What is the nature and prevalence of trauma exposure in gang-involved youth?
2. What is the nature and prevalence of internalising and externalising symptoms in gang-involved youth?
3. What is the nature of the *relationship* between trauma exposure and

internalising/externalising symptoms in gang-involved youth?

The findings and knowledge garnered from this review will (1) provide an overview of the current gang x trauma landscape, focusing specifically on the link between traumatic experiences and sequalae in this population; (2) highlight evidence gaps and inconsistencies that can be used to inform a dedicated and specialised area of gang research—Gang Psychotraumatology; (3) help to establish an essential theoretical framework that will support a focused and justified research question; and (4) outline the policy and practice implications that support tailored and responsive trauma-centric interventions for gang members.

2.6 Methodology

2.6.1 Design Type

This is a narrative literature review, providing a comprehensive, critical, and objective synthesis of the current knowledge on trauma exposure and internalising and externalising symptoms in gang-involved young males.

2.6.2 Eligibility Criteria

2.6.2.1 Inclusion criteria

Included studies were those that empirically examined the relationships between trauma exposure and internalising and/or externalising symptoms in gang-involved young males. Specifically, to be included in the final selection, studies were required to meet four criteria:

1. Include gang-involved young males.

2. Explore the *relationship* between trauma exposure *and* internalising (e.g. PTSD, anxiety, depression, suicide, and dissociation) and/or externalising symptoms (e.g. aggressive, antisocial, and criminal behaviour) i.e. relevant studies must include both a trauma variable and an internalising and/or externalising variable. Descriptive studies examining gang members' mental health, without a required trauma variable, are included, due to the nascence of this topic, and the need to define, and establish the scope of the problem.
3. Contain empirical, quantitative or qualitative information about trauma exposure and internalising and/or externalising symptoms, collated using structured assessment methods e.g. validated questionnaires, structured/semi-structured interviews, or clinical DSM-IV/V diagnoses.
4. Be written in English.

2.6.2.2 Exclusion criteria

1. Other anti-social/criminal groups e.g. organised crime networks, drug cartels, biker/outlaw gangs or prison gangs. Although these groups are similar to street gangs in terms of their criminal identities, there are qualitative differences in the structure, functionality, and motivation of these groups that may render their findings ungeneralisable to street gang populations (Decker, Bynum & Weisel, 1998).
2. Studies with a primary focus on substance use disorders, general medical conditions (e.g. traumatic brain injury) or developmental disorders (e.g. learning disabilities, Autism Spectrum Disorders) are excluded to ensure clear and parsimonious links are made between trauma exposure and trauma-related symptoms in typically-developed gang-involved youth.

3. Studies with female, or male and female samples. If papers include a mixture of male and female participants, (where possible) data regarding male participants will be included. The emphasis of this review is on young males given their disproportionate involvement with gangs and gang-related violence (Merrin, Hong, & Espelage, 2015). While females have been reported to engage in a full range of gang activities, including physical assaults and shootings, they do so on a less frequent basis (Esbensen, Deschenes & Winfree, 1999). Research shows that female gang members, compared to their male counterparts, are more likely to experience sexual victimisation (Miller, 1998), forced prostitution (Dorais & Corriveau, 2009), and intimate-partner violence (Ulloa, Dyson & Wynes, 2012). Such interpersonal violations are more common among female delinquents and have been linked to distinct patterns of internalising and externalising symptoms (Kerig, ward and Vanderzee& Moeddel 2008). Because of this, female experiences and manifestations of trauma, may differ from typical male trauma pathways. As such the exploration of gendered trauma trajectories warrants a separate and dedicated review of the literature.

2.6.3 Search strategy and data sources

Computer-assisted searches were conducted, between 02/04/2015 – 10/04/2015 (and updated in March 2016) to identify all available published and unpublished works examining trauma exposure and internalising and/or externalising symptoms in gang-involved young males. The following databases: APA PsycNFO, APA PsycARTICLES, Criminal Justice Abstracts, Child Development & Adolescent Studies, CINAHL Plus, and Academic Search Complete—searched collectively through EBSCOhost; Web of Science, PubMed, Scopus, and ProQuest (all years) were used to search for terms related to trauma, gang membership,

internalising symptoms, and externalising symptoms (as shown in table 1.1). Truncation (denoted by the asterisk) was used to maximise the number of derivatives searched in the database (e.g. trauma, traumatising, traumatic), and wild cards such as ? and # were used to identified alternative spellings (e.g. American vs English).

Table 2.1 Terms used to search for study variables

Gang Membership	Trauma Exposure	Internalising Problems	Externalising Problems
Gang members*, gang involve*, gang affiliat*, street gang	Trauma*, community violence exposure, CVE, community violence, exposure to violence, violence exposure, victim*, perpetration-induced trauma, PITS, offence-related trauma, offence-instigated trauma, complex trauma, developmental trauma disorder, child abuse, maltreatment, neglect	Mental, psychiat*, psycho*, anx*, suicid*, dep*, post-traumatic stress disorder, PTSD, dissociat*, stress, paranoi*, internali#ing	Crim*, offend*, delinquen*, perpetrat*, antisocial, externali#ing

Note. The * symbol indicates truncation; the # symbol retrieves alternatives (e.g. American vs English) spelling in database searches

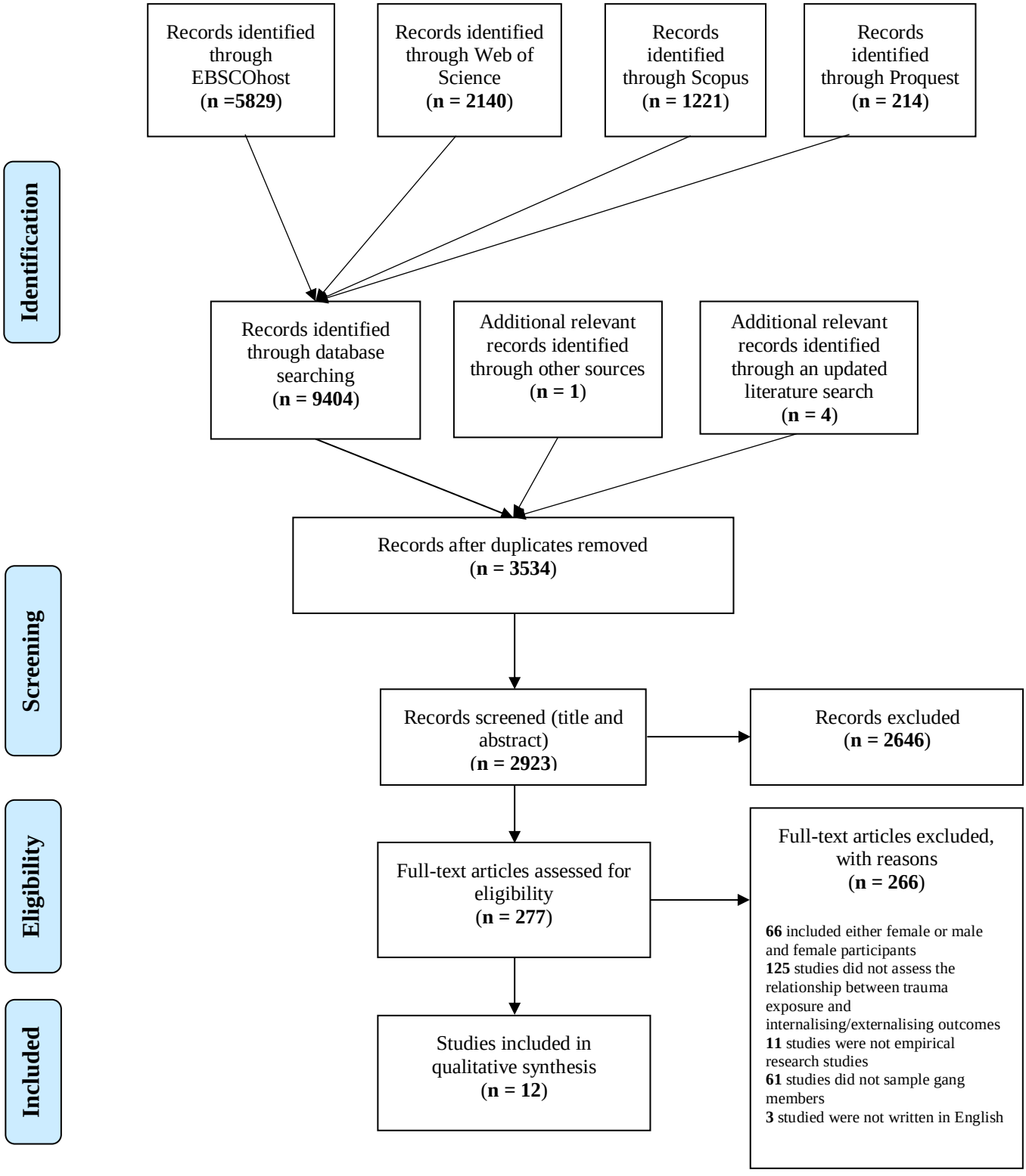
Initial searches were intentionally broad—varying combinations of search categories—to ensure retrieval of all relevant documents. Boolean operators (e.g. “and”, “or”, “not”) were used to include/exclude terms related to particular search categories e.g. gang membership AND trauma; gang membership AND delinquency AND mental health, narrowing and expanding the search to maximise the scope and specifity of the results.

Table 2.2. The combination of search categories terms

Gang membership AND trauma
Gang membership AND internalising problems
Gang membership AND externalising problems
Gang membership AND trauma AND internalising problems
Gang membership AND trauma AND externalising problems
Gang membership AND internalising problems AND externalising problems

Using this strategy, 9409 documents were extracted. After deleting duplicates (*n* = 5875), the title and abstract of the remaining documents were screened, where the majority of those excluded were ones that did not primarily examine *relationship* between trauma exposure *and* internalising and/or externalising outcomes. After conducting a full-text review, and checking each document against the specified inclusion and exclusion criteria, 12 studies remained and included in the qualitative synthesis. See Figure 1.1 for a schematic overview of the study selection process. Appendix 1 lists all included studies and provides a brief synopsis of each study's sample, predictors, outcomes, analysis approach and key findings

Figure 2.1 PRISMA Flow Diagram



2.7 Results

2.7.1 Study and sample characteristics

Sample sizes of included studies ranged from 17 to 6378 with a median sample size of 105, a mean of 1121 and a total of 13,453 participants. Participants' ages ranged from 11 to 25. These calculations are derived from the 12 eligible studies, only nine of which provided statistics for both age ranges and the mean age. The majority of studies (9; 75%) recruited participants from the USA, and three (25%) recruited participants from the UK. Of the 12 studies, ten (Coid et al., 2013; Corcoran, Washington, & Meyers, 2005; Echanove, 2013; Fernandez, 2000; Harper et al., 2008; Hoffer, 1991; Valdez, Kaplan & Codina, 2000; Watkins & Melde, 2016; Wood & Dennard, 2017; Wood, Kallis & Coid, 2017) included gang membership as a grouping variable, one as a moderator (Tome, 1992) and one (Adams, 2004) examined gang membership as an externalising symptom. All studies used self-report items to assess gang membership with six using a single item ("Are you a member of a gang?") to determine gang status. The majority of studies categorised gang membership dichotomously (i.e. gang member or not), whilst two differentiated levels of membership (e.g. non-gang, peripheral, and core-gang members) and four compared gang members to other non-gang youth. Three (Echanove, 2013, Hoffer, 1991, Tome, 1992) examined Latino/Mexican-American gang members, whilst the ethnicity of gang members from the remaining studies was predominantly African-American.

2.7.2 Study focus and design

All 12 studies were quantitative, had cross sectional designs, with one being a secondary analysis of a longitudinal dataset—the National Longitudinal Study of Adolescent to Adult Health (Watkins & Melde, 2016). The remainder of the 11 studies were all primary

research. Three studies were doctoral theses, and the remainder were peer-reviewed journal publications.

2.7.3 Key Findings

2.7.3.1 The nature and prevalence of traumatic events in gang-involved youth.

Only Five studies examined trauma exposure in gang-member males. Hoffer's (1991) participants (91%) reported exposure to gang-related gunfire; 70% witnessed another gang member being shot; 64% reported leaving wounded rivals to die; 51% witnessed a bystander being shot; 45% had seen a bystander being stabbed; 39% reported leaving wounded bystanders to die; 34% reported being shot; 34% reported being stabbed; and 33% witnessed a family member being shot. Gang members who identified highly with their group experienced higher rates of violence exposure, compared to low identifiers. In two studies (Coid et al., 2013; Wood, Kallis & Coid, 2017) gang members, compared to non-gang violent men, were more likely to have been violently victimised, to fear future victimisation, and to have experienced violence at work and at home. Gang members also experienced more trauma events e.g. bankruptcy, homelessness and victims of stalking. Wood & Dennard (2017) found that incarcerated street gang prisoners had higher levels of exposure to violence than incarcerated non-gang members. In contrast, Echanove (2013) found no associations between a trauma exposure composite and trauma subtypes (physical and/or emotional abuse, and physical and/or emotional neglect) and gang membership.

2.7.3.2 Gang membership and internalising symptoms.

Eleven of the 12 gang studies (Adams, 2004; Coid et al., 2013; Corcoran et al., 2005; Fernandez, 2000; Harper et al., 2008; Hoffer, 1991; Tome, 1993; Valdez, Kaplan, & Codina, 2000; Watkins & Melde, 2016; Wood & Dennard, 2017; Wood et al., 2017) examined gang

membership and mental health symptoms. Together they show that gang membership is associated with a wide range of psychological symptoms, including: PTSD, anxiety, emotional numbing, psychopathy, depression, suicide attempts, hallucinations, delusions, somatisation, withdrawal, paranoid ideation, psychosis and obsessive-compulsive symptoms. In the seven studies comparing gang members to other non-gang groups, the former scored significantly higher on most outcomes including psychopathy, antisocial personality disorder, psychosis, paranoia, anxiety, suicidal thoughts and actions, self-harm, psychiatric service use (consultation with medical practitioners, psychologists or psychiatrists, psychiatric admission and prescribed psychotropic medication), drug/alcohol use. However, findings for depression were mixed; three studies (Fernandez, 2000; Harper et al., 2008; Watkins & Melde, 2016) report higher depression in gang members compared to non-gang equivalents and two (Coid et al., 2013; Wood et al., 2017) found no differences between gang members and non-gang violent men in depression levels. One study (Tome, 1993) reported a positive relationship between gang membership and PTSD using a self-constructed demographics questionnaire, but not with the Derogatis Stress Profile (DSP; Derogatis, 1987). PTSD symptoms also varied with gang identification; high identifiers exhibited higher rates of PTSD symptoms than low identifiers (Hoffer, 1991). One study distinguished between gang membership and gang affiliation and showed that gang members reported higher symptom levels of: anxiety, psychosis, ASPD, substance, gambling and pornography dependence than did gang affiliates (Wood et al., 2017).

Gang members also scored higher on composite measures of internalising symptoms assessed by the Oregan Mental Health Referral Checklist (OMHRC). Specifically, gang members had higher percentages of endorsers on 30 of the 31 OMHRC items and were significantly more likely than non-gang counterparts to report suicide attempts, desire to kill, hallucinations, delusions or other bizarre ideas, loss of reality/incoherence that is not

substance related, sexual acting out, running away from home, repetitive thoughts or behaviours, withdrawal and anxiety (Corcoran et al., 2005).

2.7.3.3 Trauma exposure and internalising symptoms in gang members.

Only three studies examined trauma exposure as an explanatory variable in the relationship between gang membership and internalising symptoms. One (Coid et al., 2013) found that attitudes towards violence, past victimisation and violence characteristics (involvement in violence, violence convictions, excited by violence and instrumental violence) accounted for gang members' higher rates of ASPD, suicide attempts and psychiatric support. Further, violent victimisation, and violent rumination seems to explain the gang membership, anxiety, psychosis and service use association, but cannot explain the levels of anxiety experienced by violent men. This suggests that different factors may underlie the mental health symptoms of gang members and non-gang men.

Hoffer (1991) found that gang members exposed to higher levels of traumatic violence, compared to gang members exposed to lower levels of violence, exhibited more PTSD symptoms and scored higher on the Brief Symptom Inventory (BSI; Derogatis, 1975) subscales measuring somatisation, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. However, Tome (1993) found no association between stressful childhood events (witnessing family violence, witnessing violent deaths of friends/family, child physical and sexual abuse, and parental substance abuse) and PTSD symptoms in Mexican-American gang members.

2.7.3.4 Externalising symptoms in gang members.

Of the 12 studies that examined gang members, two (Corcoran et al., 2005; Harper et al., 2008) examined the association between gang membership and externalising symptoms.

These showed that gang membership is significantly related to a range of externalising symptoms. In the three studies comparing gang members to other non-gang groups, gang members scored higher on the majority of outcomes (e.g. school suspension, being drunk or under influence of drugs at school and carrying handgun at school, carrying a handgun outside school, selling drugs, vehicle theft, police involvement, physical assault, and gang fights). Gang members also scored higher on composite measures of externalisation such as on the Child Behaviour Checklist (CBCL). Interestingly, when mental health symptoms were controlled for, compared to non-gang participants, gang members continued to exhibit significantly higher rates of antisocial and criminal behaviour. Conclusions were that the difference between the two groups in their antisocial criminality cannot be explained by the difference in their levels of internalising symptoms (Corcoran et al., 2005) and so, the association between mental health and antisocial outcomes is inconclusive in this case. Where gang membership was assessed as an outcome (rather than a grouping variable) emotional numbing positively correlated with gang involvement. Even when the influence of PTSD was controlled for, results showed that gang involvement and delinquency were higher in juvenile delinquents than comparison youth. Contrary to the findings of Corcoran et al., (2005) internalising symptoms (i.e. emotional numbing) appear to act in a processual capacity linking delinquent youth to later gang-involvement.

2.8 Discussion

In this review, twelve studies examining the associations between trauma exposure and internalising and externalising symptomology in gang-involved youth were identified and reveal important findings. They also highlight key problems associated with the literature that point towards future avenues of trauma-informed research.

Understanding the effects of trauma on gang-involved youth requires an interdisciplinary effort; a requirement to draw on psychological, biological, sociological, anthropological and historical insights within a larger transactional framework (Sameroff, 2009). Although this undertaking is beyond the scope of this literature review, the findings here contribute crucial pieces of the puzzle and highlight the importance of applying a psycho-traumatological lens to the study of gang membership. Together the findings discussed above show that trauma exposure *is* associated with a broad range of internalising and externalising pathology found in gang-involved youth. But, given the shortage of research examining the link between trauma and mental health in gang members, it is too early to tell whether psychological trauma is a risk factor *for* membership, or whether membership, and the associated violent gang lifestyle, contributes to the development of psychological trauma—information vital for mapping, and intervening to change, the trajectories of traumatised individuals.

To date, no existing theoretical models that explicate the trauma-delinquency connection (see Kerig, Becker, 2010 for a comprehensive review) refer specifically to gang membership, despite gangs' well documented links to violence and victimisation (Peterson, Taylor, & Esbensen, 2004; Taylor, Peterson, Esbensen & Freng, 2007). So, it is crucial that gang researchers begin to make theoretical and empirical advances that will fertilise and scaffold our understanding of exactly *what it is*, if anything, that contributes to gang members' unique trauma trajectory. Establishing a link between trauma and gang membership is vital, and will provide empirical support for the use of trauma-informed therapies as part of wider gang prevention and intervention programmes, rather than relying solely on suppressive, and largely ineffective, criminal justice responses such as intensive policing, gang injunctions, and the overuse of joint enterprise laws (Wood, Alleyne & Beresford, 2016).

While it is important to identify and understand risk factors that contribute to the trauma sequelae of young gang males, we also need to recognise, and learn to promote, the conditions that foster resilience in affected youth; that is, we need to better understand *how*, and through which mechanisms, some individuals who have been exposed to traumatic events manage to stay mentally healthy. Studies of trauma in at-risk youth show that social support, perceived or actual, may buffer against the harmful effects of trauma but due to the lack of relevant research we do not yet know if this also applies to gang members. It may be that the sense of belonging associated with membership may be offset by group norms that facilitate morally reprehensible behaviour, such as the perpetration of violence. Thus, the examination of variables that may alter, either negatively or positively, the outcomes of trauma-exposed youth will give insight into *whom* interventions should to be aimed at, *what* criminogenic or therapeutic elements should be included, *where* along the developmental pathway interventions should be targeted, and via *which* services e.g. schools, the criminal justice system (police, prisons, probation etc.), healthcare services (GP or acute care), or charities.

2.8.1 Limitations and gaps in knowledge

Many existing gang studies have not directly tested whether trauma comprises a mechanism through which gang-involvement is linked to adverse mental health outcomes. Therefore, we need to formally test the mediated and moderated effects in data derived from prospective longitudinal studies. Gang studies that do examine trauma in gang-involved youth, do not consider the dynamic interactions of other variables such as gang norms, personality traits, resiliency and other wider contexts– unlike the literature looking at juvenile delinquents. Future research efforts should focus on strengthening the empirical base via

well-designed descriptive studies, like that conducted by Coid et al., 2013, so more complex and nuanced designs can be cultivated thereafter.

Trauma is a woolly concept and exactly what constitutes a traumatic event, from a personal, and diagnostic perspective, can be difficult to pin down. How one experiences and reacts to a traumatic event can be affected by a constellation of pre-traumatic factors (e.g. pre-morbid mental health issues), peri-traumatic factors e.g. (the gravity of the event, and relationship to the perpetrator), and post-traumatic factors (e.g. subjective appraisals). As such, trauma occurs in a context that will be different for everybody. Because of this, it is important to incorporate variables and test for interactions that represent the wider context trauma occurs in. In other words, research design must simulate real life. This is especially important with gang-involved youth where machismo (exaggerated sense of masculine pride), status (Alleyne & Wood, 2010) and the importance of appearing infallible may modify or mask the reporting of trauma-related symptoms—until, as Coid et al., (2013), identified, they reach adulthood and a critical stage in their mental health. Further, many of the included studies used classification systems such as the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM–5*; American Psychiatric Association, 2013) and the ICD-10 classification of mental and behavioural disorders (World Health Organisation, 1992) to identify traumatic stressors and mental health conditions. However, due to differences between these two systems, and changes in the criteria over successive publications, some of the diagnoses may not be directly comparable. The constellation of symptoms we now understand to be PTSD looks very different from the same condition 40, 100, 200 years ago, and how the symptoms were diagnosed reflected the patient population at the time e.g. hysteria for neurotic women, railway spine for rail workers and shell shock for soldiers exposed to explosive shells. As such, we need to move with the times, and continually re-evaluate how we pathologise our current day patients and perpetrators, like gang members.

Similar issues surround the definition and assessment of gang membership. Without a clear and operationalised definition, comparing gangs across different time (to assess their evolution and diversification), countries (to assess universality), and contexts (prison versus street gang) cannot be achieved in a meaningful way. Being able to accurately identify gangs and gang members becomes even more crucial in practice, when being a gang member or not invokes a particular punishment or sentence length, or determines access to rehabilitative programs. Indeed, being clear on what we mean by a 'gang' has ramifications that extend to the lives and liberty of marginalised, and often traumatised, young males. Half of the studies that included gang membership, as an independent variable or as an externalising symptom, assessed participants' gang status through the use of a single question, "Are you a gang member?". While, several studies attest the validity of this self-nomination technique (Esbensen & Carson, 2012), it does not, and cannot, capture the shades of grey that lay in between "yes" and "no" responses. Further, participants' responses to this question will include their subjective conceptualisation of what a *gang* is, which is likely to differ from person to person. It is therefore vital that academics, practitioners and policy makers operate under a consensual, parsimonious and quantifiable definition to ensure the propagation of comparative research, and the development of measures that capture the fluidity and complexity of gang involvement.

This current review is subject to several limitations: 1) due to the lack of financial capacity for translation, non-English written documents were excluded. Because of this it is likely that relevant non-English studies have are not represented in this review; 2) including 'male-only' samples may mean that the conclusions drawn from this review may not generalise to female trauma trajectories as outlined in the eligibility criteria; 3) the lack of quality assessment in this review means the primary study results, especially the doctoral theses, and the present synthesis should be considered cautiously; 5) literature searches were

last conducted in 2016; it is therefore likely that new knowledge about trauma and gang membership has been published in the last five years that is not reflected in this review.

2.9 Conclusion

To conclude, this review forms the first step in being able to answer one of the key questions of this thesis: Are gang members a unique and distinct subset of juvenile delinquent, with a unique and distinct trauma and mental health profile? The aim of this chapter was to gain a better understanding of what the trauma landscape looks like for gang members according to the existing literature. Collectively, the findings confirm a tentative link between trauma exposure and trauma symptoms in gang members. However, the lack of high-quality trauma-centric gang studies, that extend beyond superficial-level data, means we cannot yet be certain whether the nature (type, frequency, severity) of traumatic events and internalising/externalising symptoms differs between gang and non-gang members, and whether the processes and mechanisms that link traumatic events with symptoms is also different. Understanding these potential differences is crucial to creating individualised and effective strategies and interventions that meet the needs of gang-involved youth. The following chapter will explore the potential theoretical mechanisms and processes that link trauma and gang membership.

CHAPTER 3: The Journey to Gang Membership and the point of divergence: The effect of group processes on gang members' experiences of trauma and symptom manifestation

In recent years increasing attention has been paid to juvenile delinquents within PTSD studies and the wider trauma literature; a field, before now, predominately concerned with the plights of war veterans (e.g. Byrne & Riggs, 1996; Jakupcak et al., 2007; Kang, Natelson, Mahan, Lee & Murphy, 2003; Kulka et al., 1990), natural disaster survivors (e.g. McFarlane, 1988; Nolen-Hoeksema & Morrow, 1991; Neria, Nandi & Galea, 2008), victims of child maltreatment (e.g. Kendall-Tackett, Williams & Finkelhor, 1993; Anda et al., 2007; Mullen, Martin, Anderson, Romans & Herbison, 1996) and refugees (Carlson & Rosser-Hogan, 1991; Silove, Sinnerbrink, Field, Manicavasagar & Steel, 1997). However, increases in juvenile violent crime—coupled with the need for more creative and effective responses—has spurred researchers to apply a new lens; one that sees beyond juvenile delinquents as morally impoverished superpredators (Bennett, DiIulio & Walters, 1996) to consider their roles as victims, and their violence as a potential manifestation of untreated psychological trauma. By their early teens juvenile delinquents have already accumulated extensive and varied trauma histories and are suffering the associated behavioural and psychological consequences (Kerig & Becker, 2010). Research in this area points to trauma exposure as a *risk factor* for later criminal and antisocial behaviour, including gang membership, which is often compounded by complex and co-morbid mental health problems. Trauma exposure can also be a *product* of the of the violent gang lifestyle, resulting in traumatic sequalae, such as PTSD, depression, anxiety, aggressive behaviour and other internalising and externalising symptoms (Kerig & Becker, 2015). In short, trauma exposure can be both a *cause* and *consequence* of belonging to a gang, therefore highlighting the importance and potential utility of applying a traumatological perspective to the holistic study and treatment of gang members.

The unique study of gangs, as unique and distinct subset of juvenile delinqueny, is warranted given the uniqueness of the gang environment and the processes at work within it. Gang violence is more the sum of the gang's collective members. The gang milieu "provides a unique social forum for violence amplification" (Melde & Esbensen, 2013, p.143), and as such the nature and extent of violence is more serious, pervasive and contagious than that of demographically similar peers, and even other delinquent youth groups (Decker, 1996). Research shows that joining a gang increases members' likelihood of engaging in violent offending by 10-21% above that of general delinquency, meaning that the gang environment is not conducive to supporting offending per se, but violent offending in particular (Melde & Esbensen, 2013). Other research shows that gang membership independently predicts delinquency beyond the effects of having delinquent friends, and past delinquency (Battin, Hill, Abbott, Catalano & Hawkins, 1998). The fact that gang members are most violent during active membership supports the social facilitation and enhancement models of delinquency, and suggests that gang members are not just "different kinds of people" but rather exposed to a *different kind of environment;* an environment that promotes violence through sociopsychological processes, such as social identity, pluralistic ignorance, cohesion, status enhancement, cognitive dissonance and moral disengagement (Thornberry et al., 1993; Decker, 1996; Hughes, 2013).

Violence is an integral, and defining, feature of gang life, and exposure to violence, as a victim, witness, or even perpetrator, has been linked to PTSD and other internalising and externalising disorders and symptoms (Fowler, Tompsett, Braciszewski, Jacques-Tiura & Baltes, 2009; Fitzpatrick & Boldizar, 1993; Schwab-Stone, Chen, Greenberger, Silver, Lichtman & Voyce, 1999), and may explain why preliminary findings from gang researchers

show gang members to exhibit higher levels of these symptoms, than comparably violent non-gang men (Coid et al., 2013). However, few studies have moved beyond the documentation of prevalence rates to examine the underlying mechanisms that may be responsible for the interrelations, or rather 'transactions' between gang membership, trauma and mental health.

That is, prevailing theoretical models of the developmental psychopathology of trauma position delinquency as a result of biological, cognitive, emotional and interpersonal deficits caused by PTSD. However, missing from these models are gangs, and gang violence—arguably the most serious, complex, and costly form of delinquency. The absence of gangs from these models is surprising given the strength of the relationship between gang membership and delinquency (Esbensen & Huizinga, 1993; Gordon, Lahey, Kawai, Loeber, Stouthamer-Loeber & Farrington, 2004; Thornberry, Krohn, Lizotte & Chard-Wierschem, 1993; Hill, Howell, Hawkins & Battin-Pearson, 1999; Battin-Pearson, Thornberry, Hawkins & Krohn, 1998; Peterson, Taylor & Esbensen, 2004; Short Jr, Rivera & Tennyson, 1965; Miller, 1958; Cloward & Ohlin, 2013; Battin, Hill, Abbott, Catalano & Hawkins, 1998).

While there are no existing theories of trauma that chart and explain the developmental trajectory to and beyond gang membership, there are no existing theories of gang membership that include the mechanism of trauma as a risk factor for membership, or as a consequence. As such, we have two unconnected and incomplete fields of scholarship that would be more productive and useful to researchers, policy-makers and practitioners if brought together. Because we do not currently have any 'ready-made' theories to guide our understanding of the interplay between trauma exposure, gang membership, and internalising and externalising sequalae we have to piece together the best available evidence we have from the most comparable populations—juvenile delinquents.

The purpose of this chapter is to apply what we know about the trauma trajectories of juvenile delinquents, and the social psychological processes that operate in groups, and gangs, to better understand the relevance and role of psychological trauma to gang membership, focusing on the developmental pathway from childhood through to adolescence.

To this end this chapter will: 1) review existing concepts, theories, and frameworks that describe and explain the biological, emotional, cognitive, and interpersonal mechanisms linking trauma exposure to violent delinquent behaviour and gang membership using Kerig & Becker's (2010) Transactional Developmental Model (TDM) of Trauma and Delinquency; 2) to examine and integrate selected theoretical and empirical works that may help explicate the incendiary nature of the group environment on gang members experiences of trauma and symptom manifestation; and 3) to explore the potential benefit of a trauma-informed transactional model of gang membership over current integrated gang theories.

It must be noted that the theoretical perspectives and constructs discussed in this chapter are not exhaustive. The aim of this chapter is not to review all potential trauma theories, or sociopsychological processes with a tangential link to gang membership, but rather to present a range of selected theoretical and empirical works that may help explain explain the trauma trajectory up to and throughout gang membership.

3.1 The Transactional Developmental Model (TDM) of Trauma and Delinquency

Kerig and Becker (2010) bring together existing ideas, research, and theory that have the potential to demarcate the mechanisms accountable for the relationships among trauma, PTSD, and delinquency into one coherent framework. This framework is based on Sameroff's (1975) original TDM that speaks to the importance of capturing the complexities and nuances of human development through 'transactions. Transactions in this sense refer to the "bidirectional, interdependent, effects of the child and the environment" over time

(Sameroff, 2009, p. 3). The debate about how and why children 'turn out' the way they do extends beyond simply nature *versus* nurture to include the continuing process of mutual and emergent effects between a child (phenotype), their biology (genotype), and their social context (environtype). Inherent in this model is the concept of transformation. Because the TMD conforms with the developmental psychopathology principles of equifinality (that a diversity of pathways, including chance events may lead to the same outcome), and multi-finality (that one component may function differently depending in the organisation of the system in which it operates) it is *specific* enough to explain why children who have experienced terrible things early in life go on to experience terrible things later in life—such as incarceration, gang-involvement, and self-destructive behaviours—but *flexible* enough to explain developmental anomalies, such as when a child raised in a loving nuclear family residing in an affluent neighborhood grows up to be a gang member, or alternatively why a child raised in a gang-controlled housing project might go on to graduate at a prestigious university. As such, it is well-equipped to explicate the complex non-linear developmental pathway of a juvenile delinquent, and a gang member.

> *Transactions are omnipresent. Everyone in the universe is affecting another or is being affected by another. Everything in the universe is affecting something else or is being affected by something else. Everything is in a relationship, from the most complex society to the most elementary particle*. […] *much of the history of science has been devoted to discovering the separate things in the world, the results have been quite the opposite. Most important discoveries were of the relationships in the world* (Sameroff, 2009, p.3)

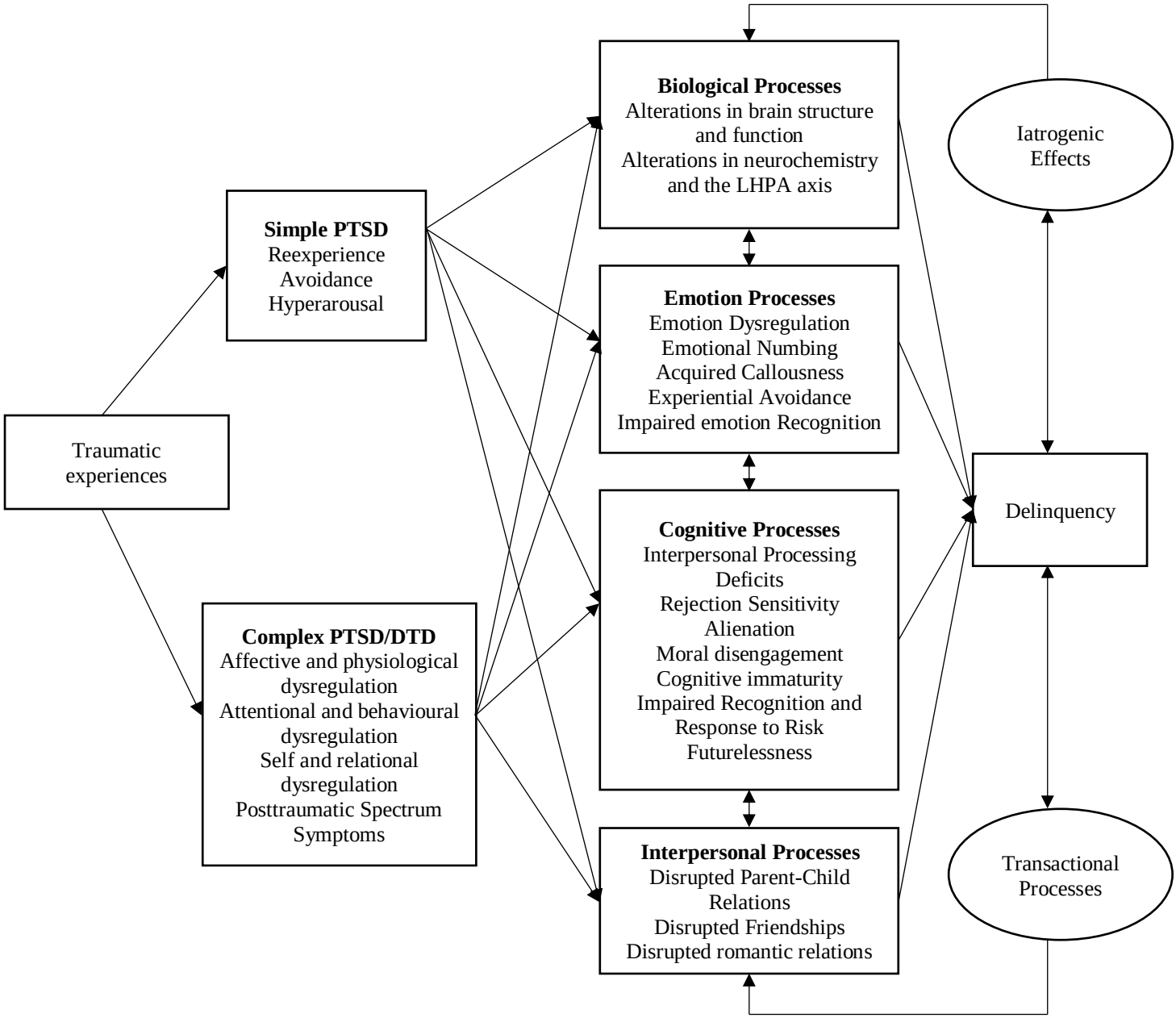
It is important to explore the developmental trajectory of children into adolescence because it is at this age point, between the ages of 10–18 years old, that children begin to get involved in delinquent and potentially gang-related behaviour (Pyrooz, 2014). By

understanding what sort of experiences, at what time, present the most significant risk for later violent offending, and what sort of skills, values, and resources (internal and external) are required to prevent and offset this, policy-makers and health and social care professionals can develop meaningful and targeted interventions aimed at *treating* the epidemic of gang and youth violence. This work has already begun in the form of Kerig & Becker's (2010) TDM of Trauma and Delinquency, but there is no specific reference to gang membership. While gang members *are* juvenile delinquents, and share the same/similar socio-demographic characteristics and risk factors, they are unique by virtue of their affiliation with a gang. As such it is reasonable to theorise that gang members, prior to the point of joining a gang, have experienced the same or similar developmental trajectory as non-gang delinquents—in which case Kerig & Becker's (2010) model applies equally to both. It is only during and after membership, and being exposed to the insidious group processes inherent in the gang that gang members begin to be exposed to stimuli, and exhibit symptoms that are different from their non-gang delinquent peers; at which point the trajectories diverge. That is, youth bring the psychological trauma they have acquired as a juvenile delinquent with them to the gang, only for it to get worse as part of their membership.

Kerig & Becker's (2010) TDM of Trauma and Delinquency (depicted in Fig 3.1), is based on the premise that PTSD symptomology mediates the relationship between trauma exposure and delinquency, and demonstrates how exposure to traumatic events can lead to either simple or complex PTSD depending on the *chronicity*, *pervasiveness* and *age of onset* of the trauma. Simple PTSD results from Type I traumas, which are discrete, dramatic, single-event stressors, whereas Complex PTSD results from Type II traumas (AKA Developmental Trauma Disorder; DTD, Cook et al., 2005; Van der Kolk & Courtois, 2005; Cloitre et al., 2009), which begin early in life, and are enduring, pervasive and interpersonal in nature, often occurring within the child's immediate caregiving system. However, like any

taxonomic approach to defining human behaviours the distinction between Type I and Type II traumas is not black white. For instance, it is possible for children to experience one-off traumas, such as a car accident (Type I) amidst a background of chronic low-level neglect and maltreatment (Type II). Posttraumatic stress (Simple and Complex) has been found to mediate the relationship between trauma and delinquency by effecting changes in biological, emotional, cognitive and interpersonal domains (Allwood & Bell, 2008; Ruchkin, Henrich, Jones, Vermeiren, & Schwab-Stone, 2007; Kerig et al., 2009). Delinquency is then consolidated and exacerbated through iatrogenic and transactional processes that take place between the individual and their environment and everything in between. Each of these mechanisms depicted in Figure 3.1.and supporting evidence will now be described in turn

Fig 3.1. Mechanisms Underlying the Relationships Among Trauma, PTSD, and Juvenile Delinquency.



Note. The symptoms of Simple PTSD outlined in Kerig & Becker's (2010) TDM of Trauma & Delinquency were accurate at the point of publication in 2010. This DSM-IV TR (4th ed., text rev.; *DSM–IV–TR*; American Psychiatric Association, 2000) diagnosis of PTSD has since been superseded by DSM 5 that includes a fourth symptom of 'negative alterations in cognition and mood'.

3.1.1 Traumatic experiences and PTSD

Experiencing a traumatic event at any age can be distressing and harmful, but particularly if experienced in childhood. The developmental phase at which trauma occurs, along with five other factors (severity of the stressor, genetic predisposition, social support, previous trauma, and pre-existing personality) can determine one's response to trauma and long-term adjustment (Van der Kolk, 2003). For the purposes of this chapter, trauma is defined according to The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM–5*; American Psychiatric Association, 2013) as exposure to actual or threatened death, serious injury, or sexual violence, resulting from one or more of the following scenarios: directly experiencing the trauma, witnessing the trauma**,** learning about a friend or family member being exposed to trauma, or repeated indirect or extreme exposure to aversive details of traumatic events occurring in the line of duty. (e.g., paramedic, military personnel). PTSD is a classified as a DSM-5 Trauma- and Stressor-Related Disorder, meaning it requires exposure to a traumatic or stressful event as a diagnostic criterion.

Four symptom clusters have to be present for at least one month after experiencing the traumatic event (Criterion A) in order for The DSM-5 diagnosis of PTSD to be made. These are Criterion B: Re-experiencing of the trauma, Criterion C: avoidance of trauma-related stimuli, Criterion D: negative changes in cognition and mood, Criterion E: changes in arousal and reactivity (see Appendix 2 for full diagnostic criteria). This symptom profile applies to single-event traumas and is referred to in Figure 3.1 as simple PTSD.

Conversely, complex trauma is characterised by repeated and sustained trauma over a long period of time; within the family context this could be domestic violence, child neglect, maltreatment and abuse. Within the context of war this could be ethnic cleansing, refugee status, child soldiering, and even gang membership (Courtois, 2004). Complex trauma disrupts children's abilities for self-regulation and interpersonal relatedness causing long-

term adjustment problems that places them at risk for future trauma exposure and cumulative impairment (e.g. mental health problems, criminal justice involvement, unemployment, and dysfunctional family, peer and romantic relationships). This developmental trauma trajectory starts in childhood and continues through adolescence and into adulthood (Cook et al., 2017; Van der Kolk, 2017). Complex trauma and the resulting symptomology are not captured in the DSM-5 PTSD diagnosis, which focuses on the effects of single-event traumas only, and is referred to in Figure 3.1 as Complex PTSD or when applied to the experiences of a child: Developmental Trauma Disorder.

3.1.2 Biological Processes

3.1.2.1 Behavioural Inhibition

Research shows that pre-morbid personality traits, such as behavioural inhibition, can heighten youth's sensitivity to traumatic events and minimise their ability to cope, subsequently increasing their risk of developing of developing PTSD (Ruchkin et al., 1998). Ruchkin et al., (2002) found that incarcerated youth with a full diagnosis of PTSD, also exhibited higher levels of behavioural inhibition, including harm avoidance and poor coping efficacy. However, given the cross-sectional nature of the study it is equally possible that trauma exposure contributes to the development of behavioural inhibition, which in turn leaves the youth more susceptible to developing trauma symptomology.

Research has also shown that the propensity for violence is enhanced in individuals who have a genetic vulnerability coupled with a history of early childhood adversity (Caspi et al., 2002; Huizinga et al., 2006; Weder et al., 2009; Widom & Brzustowicz, 2006). Using data from a New Zealand birth cohort Caspi et al., (2002) examined the gene-by-environment interaction involved in the relationship between childhood maltreatment and antisocial phenotypes. Specifically, the authors examined differences in the levels of a functional

polymorphism called monoamine oxidase A (MAOA)—an enzyme that breaks down neurotransmitters' dopamine, norepinephrine, and serotonin—the so-called 'warrior gene'. MAOA has two forms, a low activity allele and a high activity allele. Results showed that those possessing the low activity allele and who had experienced childhood maltreatment were significantly more likely to have conduct disorder, antisocial personality, and exhibit violent and antisocial behaviour. That childhood adversity moderates the relationship between MAOA and violence explains why not all children who are maltreated grow up to aggress against others.

In fact, researchers have found a similar biological basis for gang membership. Beaver, Delisi, Vaughn & Barnes (2010) examined the relationship between MAOA and gang membership, and MAOA and weapons use. Using a molecular genetic association research design authors found, in line with aforementioned research, that the low activity MAOA allele conferred a greater risk of gang membership, and after joining, a greater likelihood of using weapons in a fight. This effect was significant for males, but not females.

3.1.2.2 Alterations in Brain Structure and Function

Research into the neurobiological effects of trauma has shown that PTSD is linked to poorer memory and attention, as well as damage to the right brain and frontal lobe (Newport & Nemeroff, 2000). However most of this research has been in adults, and for children with developing brains, the effects of trauma may be especially damaging (De Bellis, 2001; Ford, Courtois, Steele, Hart & Nijenhuis, 2005). Hence it is particularly important to explore the relationships between PTSD, brain structure and biological stress systems in order to understand the mechanisms via which PTSD is associated with juvenile delinquency and potentially gang-related behaviour (see Lipschitz, Morgan, & Southwick, 2002 for an in-depth review).

The hippocampus is the region in the brain responsible for memory, and emotion modulation, and one of the brain areas most susceptible to traumatic stress (Gould & Tanapat, 1999; Kim, Song, & Kosten, 2006). Studies show reduced hippocampal size and functioning in child abuse survivours with PTSD (Bremner et al., 1997; Stein, Koverola, Hanna, Torchia & McClarty,1997), as well as in violent offenders (Raine, Buchsbaum, & LaCasse, 1997). Trauma-related damage to memory, fear recognition and response, and emotion regulation might contribute to youth's criminal involvement; and the increased levels of drug use found in this population (Vermierin, 2003) might aggravate these neurobiological effects – going some way in explaining the disproportionate number of incarcerated young men exhibiting internalising symptoms (Stimmel, Cruise, Ford & Weiss, 2014; Abram, Teplin, Charles, Longworth, McClelland & Dulcan, 2004; Moore, Gaskin & Indig, 2013).

More immediate effects of complex trauma on brain development have been identified. De Bellis, Keshavan et al., (1999) found that maltreated youth with PTSD had reduced intracranial and cerebral volumes than equivalent youth who had not been maltreated. PTSD Symptom clusters (e.g. intrusive thoughts, experiential avoidance, hyperarousal and dissociation) were also positively associated with ventricular volume and negatively associated with brain volume and total corpus callosum and regional measures, suggesting that the overwhelming stress of complex trauma is linked adverse brain development. Trauma has also been linked to deficits in orbitofrontal functioning (of the orbitofrontal cortex, situated in the prefrontal lobe), responsible for emotion processing and regulation, interpersonal communication, and moral reasoning, in antisocial individuals (Ishikawa & Raine, 2003; Schore, 2003). Such deficits may negatively affect youth's ability to respond to stressful situations in a safe, appropriate and prosocial manner e.g. when encountering a rival gang member, or when behavioural inhibitions are lowered (Giancola,

1995; Schore, 2003). Research also makes a connection between orbitofrontal activation in adults with PTSD who had experienced abuse in childhood (Raine, 2002; Shin et al., 1997). Collectively, these findings show how frontal lobe deficits, as well as neuronal loss might explain the relationships between PTSD and delinquency in traumatised youth.

3.1.2.3 Alterations in Neurochemistry and the Biological Stress System

In addition to brain structure, PTSD can also affect the body's physiology. The body has a set of biological stress systems: the catecholamine system (epinephrine, norepinephrine, and dopamine), the sympathetic nervous system, and the limbic-hypothalamic-pituitary-adrenal (LHPA) axis, that activate in response to emergency, and prolonged stressors. When we are presented with a threat (perceived or actual) our body readies itself to either fight the threat or flee from it. This stress activates the catecholamine and sympathetic nervous systems, which increases heart rate, expands the lungs, dilates pupils, inhibits digestion, and activates the LHPA system. Activation of the LHPA axis induces secretion of adrenocorticotropic hormone (ACTH) from the anterior pituitary gland which in turn stimulates the adrenal gland to release the stress hormone, cortisol (Kerig & Becker, 2010). Compared to the autonomic nervous systems (parasympathetic and sympathetic) which are fast-acting and respond to brief emergency situations like single-event traumas, the LHPA axis reacts more slowly and becomes the dominant response for complex trauma, such as child abuse, maltreatment, and neglect etc. which are often repeated and sustained over years (De Bellis, Baum, et al., 1999). Cortisol mobilises the body's energies for sustained and prolong activities designed to save life, either by avoiding danger or facing it head on; this is an adaptive response.

Research shows that compared to healthy, and anxious youth, those with a diagnosis of PTSD exhibit elevated levels of catecholamines and excreted greater concentrations of

cortisol. Furthermore, these neurochemicals were positively correlated with the duration of trauma and with intrusive, avoidant and hyperaroused PTSD symptomology (De Bellis, Baum, et al., 1999). Thus, youth with PTSD have dysregulated bio- and endocrinological stress systems that lead to hypersensitive and overreactive responses to stress (De Bellis, 2001; Heim, Meinlschmidt, & Nemeroff, 2003) as well as dysregulated emotions and impulse control (Gollan, Lee, & Coccaro, 2005). Maladaptive stress responses can be thought of like oversensitive car alarms that, instead of activating when there is a true attempt at a break-in, sound whenever there is a gust of wind or another car rushes past at highspeed. That is, the threshold for activation is lowered because the car is hypersensitive—the same is true for PTSD, where an individual reacts to benign stimuli as if it were a real threat to life e.g. a Vietnam veteran ducking for cover when hearing car back fire. Thus, it is clear to see how such reactions contribute to a propensity in traumatised youth to respond hastily and excessively to provocation, and incorrectly perceive situations to be more hostile than they actually are, both of which have been shown to increase aggressive and delinquent behaviour.

However, in the case of complex trauma the brain compensates for elevated LHPA activity through a negative feedback loop that reduces the response to LHPA stimulation, resulting in a desensitisation to traumatic stress (De Bellis et al., 1994; Glaser, 2000). The manifest symptoms of desensitisation include: callous-unemotional traits, inability to acquire conditioned responses to punishment, and heightened threshold and need for external stimulation. Collectively, these characteristics describe a subset of delinquent youth with psychopathic traits (Widom &Wilson, 2009).

In fact, McBurnett, Lahey, Rathouz, & Loeber, (2000) tested the salivary cortisol concentration of 38 young boys with conduct disorder and found that boys with low levels of cortisol exhibited early onset and persistent aggression and three times the number of aggressive symptoms than boys with high cortisol levels. Similarly, Popma et al., (2007)

found that among 103 boys referred to a residential treatment facility for severe problem behaviours in the Netherlands, boys with disruptive behaviour disorder had the lowest levels of cortisol and that cortisol levels moderated the relationship between testosterone levels and overt aggression.

3.1.3 Emotion Processes

3.1.3.1 Affect Dysregulation

Horowitz & Reidbord, (1992) argues that PTSD is, in essence, a disorder of affect regulation characterised by a constant vacillating battle between uncontrolled emotional states and attempts compensate. In addition, van der Kolk & Fisler (1994) found that one of the most damaging traumatic sequala for a developing child is disruption of their ability to regulate affect, emotions, and impulses, each of which can contribute to the development of aggressive and self-destructiveness behaviours (Ford et al., 2006). Typically, parents are a guiding force in the development of emotion regulation strategies, but when the parent is absent, physically or emotionally, or is the source of trauma, in the case chronic and pervasive maltreatment or neglect, the development of effective emotion regulation capabilities is undermined. Consequently, if the child doesn't learn to control and moderate their emotions in response to stressful stimuli, this can manifest in internalising, externalising symptoms, or a combination of both (Cole & Zahn-Waxler, 1992).

3.1.3.2 Emotional Numbing

Another mechanism linking PTSD to delinquency is emotional numbing. Emotional numbing is one of the four PTSD symptom clusters (re-experiencing, arousal, avoidance and emotional numbing) and is characterised by detachment from others, restricted affect and anhedonia (inability to derive enjoyment from previously enjoyable activities). Lansford and

colleagues (2006) argue that emotional numbing is an adaptive response to trauma that protects the youth from becoming overwhelmed by distress while simultaneously increasing their likelihood of acting it out against others. Allwood, Horan, & Bell (2009) examined the effects of post-trauma emotional numbing in urban working-class youth and found that emotional numbing, particularly diminished fear, was associated with exposure to violence in the home and community, and numbing of fear was related to all types of delinquent behaviours, and numbing of sadness to only aggression.

Research also shows that emotional numbing may be particularly symptomatic of perpetrator-induced traumatic stress (PITS). As the name suggests PITS refers to the traumatisation that results from inflicting serious injury, harm or death on another, which may be especially relevant to gang members given the disproportionate level and severity of violence membership entails. Kerig, Chaplo, Bennett & Modrowski (2016) examined the associations between gang membership, trauma exposure, perpetrator-induced trauma (PIT) and PTSD in a sample of young offenders and found that gang members compared to their non-gang counterparts experienced higher levels of violence exposure, PIT, dissociation and emotional numbing. Further analyses showed that PIT mediates the relationship between gang membership and PTSD meaning that gang members are being psychologically affected by the harm they are causing others.

3.1.3.3 Acquired Callousness

The concepts of affect dysregulation and emotional numbing have been linked to the development of acquired psychopathic or callous-unemotional (CU) traits in juvenile delinquents with histories of childhood maltreatment (Forth et al., 2003; Krischer & Sevecke, 2008; Poythress et al., 2006; Weiler & Widom, 1996). In addition to the *inherent* callousness known as primary psychopathy, characterised by high levels of callousness and low levels of

anxiety, Porter (1996) argues there is another secondary form of psychopathy, characterised by high levels of callousness and high levels of anxiety, that is *acquired* through the de-activation or dissociation from emotions following a traumatic event. This emotional detachment works to protect the child in the immediate aftermath of a traumatic event by helping them to cope with overwhelming feelings of distress. However, this temporary defence mechanism can transform into a generalised emotionally-stunted interpersonal style that is maladaptive and associated antisocial behaviour. In support of this premise, research shows that young offenders with acquired psychopathy report more extensive trauma histories and higher levels of PTSD symptoms, particularly hyperarousal and dissociation (Kerig & Sink, 2010; Tatar, Kimonis, Kennealy, Skeem, & Cauffman, 2009).

3.1.3.4 Experiential Avoidance

Experiential avoidance describes the emotional, cognitive, and behavioural efforts to separate oneself from the traumatic event (Hayes et al., 1996). Traumatised youth lacking appropriate strategies for affect regulation (e.g. support from friends, family, church, community and engaging in prosocial distraction techniques) are likely to resort to inappropriate strategies that are most accessible and familiar to them, such as substance abuse, and gang membership—activities likely to get them into trouble with the law. Flannery, Singer, Williams, & Castro (1998) examined the relationships between violence exposure and victimisation, coping strategies, psychological trauma, and self-reported violent behaviour in community youth and found that those exposed to violence reported higher levels of PTSD symptoms and maladaptive coping (e.g. impulsivity, and substance abuse).

3.1.3.5 Emotion Recognition

Youth who have experienced childhood maltreatment process emotions differently from those who have not (Pollak et al., 2008). Specifically, victims of child abuse are primed to read ambiguous facial expressions as angry and are more sensitive to detecting even subtle indications of anger in the faces of others (Pollak, Cicchetti, Hornung, & Reed, 2000; Pollak & Sinha, 2003). The adaptive value of this sensitivity is such that if a child is able to spot that a parent is agitated, they can wait until the parent has calmed down before approaching or avoid them all together. Thus, victims of child abuse have learned to vigilantly scan the environment for hostile cues as a means of self-preservation (Pollak, 2008). However, this creates a propensity to misread others as angry, which might lead traumatised youth to perceive danger and aggression as expected and inevitable, thus contributing to the development of delinquent behaviour.

3.1.4 Cognitive Processes

3.1.4.1 Interpersonal Processing Deficits

Similar to emotion processing, maltreated children appear to be cognitively primed to respond to aggressive cues. Dodge, Petit, Bates, and Volente (1995) examined whether childhood physical abuse and later externalising symptoms were mediated by social information-processing deficits. Results showed that children with histories of abuse went on to develop processing patterns, such as hostile attribution bias and positive expectations of aggression, which, in turn, predicted perpetration of aggressive and violent behaviours in adolescence. Positive evaluations of aggression as an instrument for acquiring material goods (e.g. drugs, weapons, territory) and enhancing individual and group status has been documented by Spaccarelli, Coatsworth & Bowden (1995). Spaccarelli et al (1995) found

that the relationship between exposure to interpersonal trauma in childhood and violent offending in adulthood was meditated by positive appraisals of aggression and the use of aggressive control as a coping mechanism. Further, studies have shown that PTSD symptomology and violence acceptance have an exacerbating effect on the relationship between violence exposure and aggressive behaviour (Allwood & Bell, 2008).

3.1.4.2 Rejection Sensitivity

Another information-processing pattern associated with childhood trauma is rejection sensitivity, the cognitive disposition to "anxiously expect, readily perceive, and intensely react to rejection by others" (Downey, Khouri, & Feldman, 1997, p. 85). Research shows that child abuse is predicts rejection sensitivity which in turn, mediates the relationship between early trauma and adult perpetration of interpersonal violence (Downey, Bonica, & Rincon, 1999; Purdie & Downey, 2000; Volz & Kerig, 2010). In relation to groups, it is possible that feelings of belonging, comradery, and loyal associated with group membership protect against rejection sensitivity and provide a sense of interpersonal safety and security. Alternatively, it may be that traumatised youth who join gangs may be more reluctant to leave, despite the risk of violence and victimisation, because of rejection sensitivity. Belonging to groups is a fundamental human need that we protect fiercely through fear of being rejected or alienated. The implication of group processes on the relationship between trauma exposure and PTSD will be explored in greater depth in Chapter 5.

3.1.4.3 Alienation

Historically, researchers believed that the construct of alienation comprised of six dimensions: powerlessness, self-estrangement, normlessness, isolation, meaninglessness, and societal estrangement (Seeman 1959, 1983), but more recent factor analyses show that the

construct is best represented by the two dimensions of powerlessness and self-estrangement (Lacourse et al., 2003). Both theoretical and empirical evidence links alienation of young people to delinquent behaviour (Horney, 1950; Seeman, 1959) via individuals' perceived inability to control or influence their surroundings, sense of isolation and meaninglessness (Horney, 1950). This is especially true in incarcerated populations where levels of self-reported alienation have been found to be positively correlated with delinquency (Calabrese & Adams, 1990; Sankey and Huon, 1999). There is also evidence that identifies alienation as a risk factor for gang membership. Research suggests that the rigidity of the bureaucratic school structure coupled with adolescents' desire for freedom makes the 'no rules' lawless mentality of gang life all the more appealing. Indeed, Shoho (1996) found that students who were gang-affiliated exhibited higher levels of alienation, specifically normlessness and powerlessness than their non-affiliated peers. During the pre-teen and teenage years youth begin to develop an identity and desire the freedom to make decisions that align with this identity. Gangs can provide the perceived freedom and immediate gratification that school cannot.

This sense of the gang as a surrogate family is mirrored by Vigil (1988) who speaks to the significance of adolescence, and early life experiences in negotiating new gang identities. For youth with problematic upbringings (e.g. low SES, low IQ/educational attainment, poor parenting skills, child abuse, inner-city living, and delinquent affiliates), what we call at-risk youth, gang life may be the only means of securing the kinship, affirmation, and convention that would otherwise come from traditional societal institutions, such as family, school, and religion. In addition to the outwards displays of machismo (gang signs, weapons, provocative rap music, displays of violence etc.) that give the illusion of infallibility, the gang's values, norms and goals provide members with a sense of regiment, direction and stability that makes them feel safe. For at-risk adolescent youth, gangs are

strong competitors for the traditional family environment. This is especially important during adolescence; a tumultuous period of life characterised by transformation as the individual learns to adapt to not only a new body, but also new societal expectations. Around about this time youth begin to gravitate from parental influences and become more concerned with that of their peers.

The concept of feeling alienated is also captured in the DSM–IV (4th ed.; *DSM–IV*; American Psychiatric Association, 1994) diagnosis of PTSD, in the Criterion C symptom cluster, which includes anhedonia or feelings of distance or isolation from others. O'Donnell, Schwab-Stone, and Ruchkin (2006) examined the mediated effects of normlessness and self-estrangement, comprising the two-factor model of alienation, on the relationship between community violence exposure and psycho-emotional maladjustment in a community sample of a study of 1,478 urban schools school children. Results showed that only self-estrangement partially mediated the relation between violence exposure and psycho-emotional maladjustment. And although both witnessing and experiencing violence were both related to normlessness, only direct victimisation was associated with isolation and self-estrangement.

3.1.4.4 Moral Disengagement & Cognitive Dissonance

Bandura (1990, 1991, 2002; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) theorised we selectively employ eight strategies: (1) moral justification; (2) euphemistic labelling; (3) advantageous comparison; (4) diffusion of responsibility; (5) displacement of responsibility; (6) distortion of consequences; (7) blaming the victim; (8) dehumanisation, that relieve us of our moral obligation to treat others with respect dignity, kindness, and compassion. This removal of self-censure allows us to commit reprehensible acts, without the associated negative feelings. Moral disengagement has been linked to trauma, gang membership and dysfunctional personality characteristics such as CU traits. These concepts

and are discussed in more detail relation to the group and gang context in the following section in this chapter 3.2.3.8.

3.1.4.5 Stigmatisation: Shame and Self-blame

Self-perceptions and associated emotions such as shame and blame have been found to mediate the relationship trauma and delinquency. Stigma includes appraisals of shame and self-blame beliefs, and is commonly seen in children who have been victims of abuse (Feiring et al., 2007; Finkelhor & Browne, 1985), especially when the abuse is perpetrated by a family member (Freyd, 1997). Feiring, Taksa, & Lewis, (1996) argue that shame creates an uncomfortable internal state that youth attempt to displace onto others, which contributes to the development of aggressive attitudes and behaviour. This is supported by research that found shame to be associated with aggression, paranoia, resentment, irritability, and blaming others (Tangney, Wagner, Fletcher, & Gramzow, 1992). These finding suggest that there are interrelations between self-perceptions, trauma, and delinquency. In support of this hypothesis Stuewig & McCloskey (2005) found that parental rejection predicted increased shame-proneness, which was associated with adolescent depression, and reduced guilt-proneness, which was associated with reduced delinquency. Collectively, these findings suggest that whereas trauma-related stigma increases the risk of delinquency, a general proneness toward guilt reduces the risk of engaging in delinquent activities.

3.1.4.6 Cognitive Immaturity

Young offenders exhibit cognitive deficits associated with impaired decision-making and judgment, intellectual disorders, and vulnerability to coercion (Steinberg, Blatt-Eisengart, & Cauffman, 2006; Steinberg & Cauffman, 1996; Steinberg & Scott, 2003), with similar patterns being found in victims of complex trauma, such as children from abusive or

neglectful families. Research shows that children who have been maltreated experience declines in cognitive performance over time, high levels of executive functioning deficits, and poor academic achievement, which might make them more likely to get into trouble, and less likely to be able to escape it (Wenar & Kerig, 2006). In fact, Kerig & Becker (2010) found that rational decision-making and cool-headedness are features that differentiate between youth who end up in prison and those who do not.

3.1.4.7 Deficits in recognition and response to Risk

Evidence shows that PTSD might affect youth's ability to make sophisticated decisions about risky situations and behaviours—a task difficult enough for typically-developing adolescents whose prefrontal cortex is not yet fully formed—by impairing and warping their recognition and response to risk (Giedd, 2012; Orcutt, Erickson, & Wolfe (2002). Difficulty maintaining concentration due to dissociative, intrusive, and arousal-based symptoms may interfere with youth's ability to accurately weigh up the costs versus benefits of participating in antisocial and criminal activities. Chronic diffuse arousal may contribute to the development of a hypersensitive internal alarm system with high sensitivity but low specificity—like the faulty car alarm mentioned early. The over-reactivity of this alarm system will lead to a number of false positives that over time leads youth to habituate to internal signals of danger, increasing their likelihood of becoming involved in risky and illegal activities. This inability to assess the balance of risk versus reward, short and long-term gratification, may also explain the low levels of academic commitment, aspirations and achievement found in gang-involved youth. In fact, research shows that low academic achievement, in combination with other factors such as, family structure and poverty, delinquent peers, prior delinquency, and alcohol and drug use can predict gang membership as early as 10 and 12 years old (Hill, Howell, Hawkins & Battin-Pearson, 1999).

3.1.4.8 Futurelessess

The most severe manifestation of disregard for risk is the belief that there is no future in which youth will have to face the consequences of their actions. Having a sense of a foreshortened future or an inevitably traumatic and unfulfilled future is a common symptom in youth with PTSD. Futurelessness and the YOLO (you only live once) or "live each day as if it's your last" mentality is also a feature of the high-risk lifestyle characteristic of juvenile delinquents. This mindset may be heightened in contexts where youth have witnessed death, especially the deaths of their friends, which is not uncommon for youth growing up in inner-city gang-dominated areas (Bell & Jenkins, 1991; Smith & Patton, 2016). For example, Schwab-Stone et al., (1995) examined the relationship between community violence exposure and feeling unsafe in a sample of 2,248 inner-city school children, and found the exposure to violence was associated with diminished expectations for the future. Additionally, Borowsky, Ireland, & Resnick (2009) analysed data from the US National Longitudinal Study of Adolescent Health and found that participating in risky behaviours predicted premature mortality in youth. Reciprocally, perceived premature mortality (e.g. not living past 35 years old) predicted involvement in risky behaviours, such as substance abuse, sexual promiscuity, suicide attempts, and fighting.

3.1.5 Interpersonal Processes

3.1.5.1 Disrupted Parent-child Relationships

Even in families where there is child maltreatment, problematic parent-child relationships can further exacerbate the effects of this trauma (Moffit & Caspi, 2001). Evidence shows that in the majority of cases young offenders have been abused in childhood by family or close family friends (National Correctional Task Force on the Female Offender,

1999). However, it is likely that the children who are most at-risk of being abused by a known or unknown assailtant are those of parents with poor parenting skills and supervision, and who are neglectful, either intentionally or unintentionally, because they are distracted or unable to provide care due to by their own challenges or emotional problems (Finkelhor, 1984). An especially important connection between parenting and trauma is that children whose parents are unsupportive and emotionally cold are those most likely to develop PTSD and endurng mental health problems in the aftermath of a traumatic experience (Mannarino & Cohen, 1996).

3.1.5.2 Disrupted Peer Relations: Friendships

Research shows that traumatised youth are more susceptible to the effects of delinquent peer association (Dishion, Spracklen, Andrews & Patterson, 1996; Fergusson, Swain-Campbell & Horwood, 2002). Due to the alienation and perceived stigma being a victim of child abuse can cause, these youth may gravitate towards 'counter culture' peer groups that differentiate themselves from the mainstream by engaging in behaviours that deviate from accepted societal standards (Finkelhor & Browne, 1985). Involvement in antisocial groups, such as gangs, is often interpreted as a product of youths' rejection from prosocial groups, which they would prefer to join if they had a choice. Indeed, rejection is associated with antisocial behaviour (Dishion, Andrews & Crosby, 1995), but there is also an active selection process, whereby youth desire and actively seek out deviant groups that can provide a sense of belonging, meaning and access resources that are not available through legitimate means (Wenar & Kerig 2006).

3.1.6 Transactional relations

As outlined earlier transactions refer to the continuing process of mutual and emergent effects within relationships between an individual, their biology, and surroundings. Consideration of the interrelations between trauma, delinquency, and gang membership requires a dynamic transactional approach. As detailed previously, some forms of delinquent behaviour (e.g. sexual promiscuity, truanting, drug and alcohol abuse), are products of maladaptive coping skills that derive directly from PTSD. However, even if trauma catalyses delinquency—and research suggests it does (see above) — engagement in the high-risk behaviours associated with a delinquent lifestyle may also increase youth's exposure to traumatic events. In this way, trauma is both a contributor and consequence of delinquency. For example, trauma might lead to risky behaviours that may result in a criminal justice sanction, thus contributing to alienation, stigmatisation, and low self-efficacy in prosocial spheres of development further consolidating an antithetical identity, increasing affiliation with delinquent peer groups such as gangs, which further exacerbates violent delinquent behaviour, and in turns increase the risk of exposure to new traumatic events. This complex chain reaction demonstrates the symbiosis that occurs between a person and their environment, and vice versa. In essence, the transactional element of this model is instructional; it tells us how we should interpret the connections between the nodes.

3.1.7 Iatrogenic and Criminogenic Effects of Imprisonment

Iatrogenesis in this context refers to the inadvertent induction or exacerbation of violence or criminality as a consequence of criminal justice interventions aimed at 'treating' the disease of crime. Evidence suggests that involvement with the criminal justice system (CJS) is associated with the consolidation and exacerbation of delinquency (Steinberg, Chung, and Little, 2004). Whilst in custody, youth are deprived of the opportunity to engage

in normative adolescent experiences that foster and promote *psychosocial maturity*, self-sufficiency, positive peer relations and a sense of mastery and competence (Greenberger, 1984). Instead, through incarceration, their prosocial development becomes stunted, with many long-term prisoners failing to meet age-specific cognitive, emotional, and interpersonal gains. This is especially true for adolescents entering youth detention centres (Kerig & Becker, 2010). Biological, cognitive, and emotional immaturity to know, and be able to do better, coupled with exposure to norms and mores of prison life can result in inmates becoming more skilled at committing crimes and becoming 'better' criminals.

Thus, not only are prisons failing in their duty to "help [offenders] lead law-abiding and useful lives in custody and after release"—Her Majesty's Prison (HMP) Mission Statement—the experience of incarceration, despite its putatively rehabilitative aim, can be regressive.

In sum, Kerig & Becker (2010) have curated a selection of theories and research from across the discipline of Psychology, using a transactional developmental framework, that explains the biological, emotional, cognitive and interpersonal mechanisms linking trauma exposure to delinquency. This TDM of trauma and delinquency maps the developmental trajectory from childhood to adolescence and documents the significance of developmental landmarks along the way. It is proposed that this same or similar developmental trajectory also applies to gang members as a subset of juvenile delinquent. And that it is only until after youth join a gang that these trajectories begin to diverge. This divergence is caused by exposure to the unique gang environment and group processes that operate within it, that are not experienced by those outside of the gang.

3.2 An adapted TDM of Trauma and Gang Membership

Figure 3.2 shows an adapted version of Kerig & Becker's TDM of Trauma and Delinquency (depicted in Figure 3.2) that displays how delinquent youth become gang youth through selection, facilitation, or enhancement processes. Once in a gang the iatrogenic

effects (e.g. involvement with the criminal justice system), transactional processes, and group processes (e.g. group identification, group belonging, perceived cohesion, group pressure, pluralistic ignorance, moral disengagement and cognitive dissonance, and moral injury), maintain the cycle of risky gang activities (e.g. drug dealing, gang initiations, territory protection, retaliatory and pre-emptive strikes involving), increasing opportunities for encountering potentially traumatising events and leading to PTSD and dysregulated functioning in biological, emotional, cognitive and interpersonal domains, which leads to delinquency, and so the cycle continues. Each new element of the model, indicated in red, will now be outlined in turn.

3.2.1 From delinquency to gang membership: Selection, facilitation, enhancement

Thornberry and colleagues (Thornberry et al., 1993; Thornberry et al., 2003; see also Krohn & Thornberry, 2008) argue that there are three different ways in which delinquent youth can become gang youth: Selection, facilitation, enhancement. The selection model argues that gangs attract already delinquent youth into a common group of interest; this interest being criminality. This means it is the "kind of *people*" who join the gang that make it delinquent, rather than the "kind of *group*" that makes those who join delinquent. This is consistent with criminal propensity theory that states that some people have a higher likelihood (or propensity) of engaging in delinquent behaviour than others due to variability in traits such as temperament, impulsivity, aggression, and self-control. Proponents of this theory believe that there is a natural selection process that leads predisposed youth to form deviant collectives such as gangs, in the same way that "birds of a feather flock together" (Glueck and Glueck, 1950). As such, criminally-prone youth will find ways to join or be recruited by a gang in order to continue and further their delinquent lifestyle. Thus, according to the selection model levels of delinquency should be elevated before, during, and after gang

membership—because the traits that support the manifest delinquent behaviour are stable and do not change over time. In sum, Thornberry and colleagues argue that "from a criminal propensity perspective, there is nothing "special" about gangs, as they are nothing more than collections of crime-prone individuals" (Pyrooz & Ferrer, 2014, p.1)

The facilitation model posits that youth become more delinquent as a result of joining a gang. This means, in opposition to the selection model, that it is the "kind of group" or context that explains the elevated levels of delinquency in gang members. This is consistent with social learning and strain theories that argue that the combination of experiencing strain and having little to no appropriate coping mechanisms to deal with this pushes youth into the arms of gangs. Gangs then fulfil the role that other social institutions (e.g. school, family, church, prosocial peer groups) would ordinarily fill—acting much like a surrogate family (Melde & Esbensen, 2011; Sweeten, Pyrooz, & Piquero, 2013). This model explains that it is the gang that is responsible for delinquency, and that levels of delinquency should be elevated only during periods of gang membership—because the context that supports the manifest delinquent behaviour is transitory and can change over time.

The enhancement model is an amalgamation of both selection and facilitation perspectives. Thornberry et al. (1993) explains that the two models are not necessarily mutually exclusive. For example, an individual might have engaged in criminal behaviour before joining the gang, which is then augmented as a result of their membership. Even if they exhibited an existing criminal propensity beforehand this is exaggerated by environment and criminal tools mentioned above. In other words, it is both the "kinds of people" and the "kinds of context" that explain the gang-delinquency nexus. Gangs are both "attractors" *and* "facilitators" of delinquent behaviour. Therefore, those who join gangs should have higher levels of delinquency while active in the gang than before and after, and this level of pre-, post- delinquency is higher than their non-gang counterparts. While it is

beyond the scope of this chapter to review the evidence for and against the three models and decide which has the most explanatory power, each present a route into gang membership.

In sum, the same way the gang is a facilitator *and* attractor of delinquency it is also a facilitator and attractor of trauma, and trauma-related illnesses. As such, the modified transactional model presented in Figure 3.2 is an *enhancement* model of trauma. Like the enhancement model of delinquency, delinquent youth over the course of their childhood will have been exposed to trauma and suffered resulting traumatic sequalae, which is then subsequently augmented after they become gang members. As such gang members would have their highest levels of trauma exposure and trauma symptoms during active membership.

3.2.2 Iatrogenic and transactional processes

As with Kerig & Becker's original TDM the iatrogenic processes are the same; the criminal justice interventions aimed at 'treating' the social disease of violence inadvertently results in the consolidation and exacerbation of delinquency (Steinberg, Chung, and Little, 2004). As mentioned earlier, transactions refer to the continuing process of mutual and emergent effects within relationships between an individual, their biology, *their group*, and surroundings. The interrelations between trauma, delinquency, and gang membership require a dynamic transactional approach. As detailed previously, some forms of delinquent behaviour (e.g. sexual promiscuity, truanting, drug and alcohol abuse), are products of maladaptive coping skills that derive directly from PTSD. However, even if trauma catalyses delinquency, engagement in the high-risk behaviours associated with a delinquent lifestyle may also increase youth's exposure to traumatic events. In this way, trauma is both a contributor and consequence of delinquency. For example, trauma might lead to risky behaviours that may result in a criminal justice sanction, thus contributing to alienation,

stigmatisation, and low self-efficacy in prosocial spheres of development further consolidating an antithetical identity, increasing affiliation, through either selection, facilitation or enhancement pathways, with delinquent peer groups such as gangs, which, the through the processes of group identification, group pressure, pluralistic ignorance, and moral disengagement, further exacerbates violent delinquent behaviour, and in turns increase the risk of exposure to new traumatic events.

3.2.3 Group Processes

As social animals we have a fundamental motivation to form and maintain enduring, stable, and positive interpersonal relationships (Baumeister & Leary, 1995). The thesis that forging and fostering social connections is paramount to our health, adjustment, and fulfilment is not a new one. Many of Psychology's most seminal works (e.g. Freud, 1930; Maslow, 1943, 1968; Lorenz, 1935; Bowlby, 1958, 1969; Asch, 1951; Milgram, 1963; Zimbardo, 1971; Janis, 1972; and Thrasher, 1927) examine how groups, our relations to others, or their influence, can be helpful or harmful to our survival and personal growth. In fact, much of human behaviour, cognition, and emotion can be explained through the satisfaction of this drive. As such the centrality of *others* to understanding the *individual,* and vice versa, cannot be understated and speaks directly to the transactional nature of human development. The need to belong is just as powerful and visceral as our physiological need for water, food, and oxygen, meaning people will go to great lengths to secure relationships, and prevent their dissolution. With this in mind, it is then possible to see how group membership (or the fear of exclusion) can motivate individuals to behave in ways that are consistent with the norms and mores of that group—even if this means engaging in morally reprehensible behaviours. A group, by virtue of numbers and structure, also allows members to self-exonerate from inhumane conduct through the transfer of personal responsibility to

other members. It is therefore easy to see how the desire for acceptance, the lack of accountability, and the 'otherness' of outgroups, when combined, can cause ordinary people to engage in extraordinary acts of cruelty (Zimbardo, 2007). Gangs are a prime example of how dangerous groups can be.

3.2.3.1 Groups as curative

Groups, defined as "two or more interdependent individuals who influence each other through social interaction" (Forsyth, 1999, p.5), can be as curative as they are corruptive. A body of research collectively referred to as the Social Cure explains the therapeutic effects of group membership on health and well-being through the mechanism of social identity. Social networks sustain and enhance our health and well-being providing us with the resilience to overcome seemingly insurmountable situations, such as neurological disease, trauma, and even terrorism (Jetten, Haslam & Haslam, 2010). Thus, the support of others not only enables us to not only live longer, but also affords us with a better, much richer quality of life. In fact, groups don't need to be inherently 'good' for its members to experience the benefits. Jetten et al., (2010) suggest that "seemingly unhealthy activities can paradoxically be better for us if they are the basis of a fulfilling social like" (p.1). Gangs are a prime example of this paradox: while drugs, violence, and criminality are inherently unhealthy behaviours they form the basis of the gang's identity, providing meaning, purpose, self-esteem and comradery. Based on this premise belonging to a gang could have a therapeutic effect on the health and wellbeing of its members.

A great deal of evidence, consistent across different populations and methodologies, has been generated over the past thirty years showing that group memberships are positively linked to good health, wellbeing, and longevity (Berkman 1995; Cohen and Janicki-Deverts 2009; Ertel, Glymour, and Berkman 2009; House, Umberson, and Landis 1988; Hughes and

Gove 1981; Kessler and McLeod 1985; Seeman 1996; Taylor 2007; Stroebe and Stroebe 1996; Thoits 1995; Uchino 2004), and that social support protects against the harmful effects of stress and trauma exposure (Cassel 1976; Cohen and Wills 1985; House 1981; Kessler et al. 1985; Kessler & McLeod 1985; Thoits 1995; Uchino 2004). In fact, the findings of a meta-analysis showed that the impact of having no social relationships on mortality is comparable to that of smoking, obesity, high blood pressure and living a sedentary lifestyle, and that people with adequate social support have a 50% greater likelihood of survival (Holt-Lunstad, Smith & Layton, 2010). This demonstrates just how important being connected to others is.

Whilst the link between meaningful high-quality relationships and improved health outcomes is now well known and scientifically verified, the mechanisms responsible for the association have been mooted over the years. Several different conceptualisations of social support have been proposed (e.g., Caplan, 1974; Cobb, 1976, 1979; Cohen & Wills, 1985; Hirsch, 1980; House, 1981; Kahn, 1979; Schaefer, Coyne, & Lazarus, 1981), but, arguably, the most comprehensive is Weiss' (1974) theory of the function of social relationships (Cutrona & Russell, 1987). Weiss (1974) describes six social functions or "provisions" derived from relationships with others: *guidance* (advice or information); *reliable alliance* (the assurance that others can be counted upon for tangible assistance); *reassurance of worth* (recognition of one's competence, skills, and value by others); *opportunity for nurturance* (the sense that others rely upon one for their well-being); *attachment* (emotional closeness from which one derives a sense of security); *social integration* (a sense of belonging to a group that shares similar interests, concerns, and recreational activities). Central to this model is that the absence of, or deficits in, any one of these functions has unique psychosocial consequences for the individual (e.g. lack of guidance may result in anxiety, and poor attachment may lead to loneliness). Collectively these provisions represent a

multidimensional model of social support that is operationalised in Cutrona & Russell' (1987) Social Provisions Scale—the most widely used widely used measure of social support in the field of Psychology (Perera, 2016). What we can yet be sure of is whether these support functions apply as equally to *gang* members as they do to other *group* members.

3.2.3.2 Groups as corruptive

However, it is unlikely that this finding is true for all groups of people, especially gang youth. As we have seen gang members experience a greater number of serious violent victimisations, even after controlling for individual, family, and peer influence, than non-gang youth, which points to the gang (group environment) as the aggravating factor (Curry, Decker, and Egley, 2002; Maxson, Curry, and Howell, 2002; Peterson, Taylor, and Esbensen, 2004; Rosenfeld, Bray, and Egley, 1999; Taylor et al., 2007; DeLisi, Barnes, Beaver & Gibson, 2009). This violent reality, however, runs counter to the perception of gangs as a 'safe haven'. Ethnographic accounts consistently show that youth are drawn to gangs because they falsely believe they can offer safety and protection (e.g., Miller, 2001; Padilla, 1992; Vigil, 1988). Paradoxically, youth report that fear of being victimised by gang members lead them to join a gang in hope that this would reduce the likelihood of victimisation. Melde, Taylor & Esbensen (2009) examined the protective quality of gang membership and found while gangs may reduce youth's *fear* of violence, their risk of *actual* victimisation increases. Due to the gang's propensity for violence it seems that the cost of belonging to a gang supersedes the benefits of belonging to a group. The processes responsible for this augmentative effect of the group on violence and victimisation include: group identification, group belonging, group pressure, perceived cohesiveness, pluralistic ignorance and moral disengagement, each will be discussed now in turn.

3.2.3.3 The social identity approaches

According to Hogg (2004) any examination of group behaviour requires consideration of social categorisation processes, and analysis of the relationships between these categories. The social identity approach (SIA), which includes social identity theory (SIT) and social categorisation theory (SCT) is considered the most influential approach for exploring group processes and intergroup relations (Hogg & Abrams, 1988; Tajfel & Turner; Turner, 1999). The core tenet of SIA is that part of a person's self-concept is derived from the social groups that they belong to (Hogg & Reid, 2006; Tajfel, 1972). Based on the work of Henry Tajfel (Tajfel,1969; Tajfel et al., 1971; Tajfel 1972), this approach views most group processes as emanating from the basic psychological process of categorisation. Social categorisation allows people to understand their social environment and provides a frame of reference, an awareness of their place within the social structure, that informs their attitudes and behaviours accordingly (Tajfel, 1978; Oakes, 2004). For example, categorising oneself as a gang member provides a meaningful information about one's relationship with fellow gang members, those who belong to others gangs, and the police. This understanding then forms the basis for action in social contexts (Viki & Abrams, 2013).

According to SCT, social categorisation is based on a collection of attributes called prototypes that provide information about 'typical' group members (Turner et al., 1987; Hogg, 2004). These prototypes form the basis of the meta-contrast principle that maximises perceived similarities within the group and the perceived differences between groups, creating an 'us' and 'them' distinction (Turner et al., 1994; Tajfel & Wilkes, 1963). Being able to differentiate between ingroup and outgroup prototypes, and coming to see oneself as extension of the group rather than an individual is called depersonalisation. Depersonalisation is what makes group behaviour psychologically possible and allows individuals to works as agents on behalf of the group (Hogg, 2004).

3.2.3.4 Group Belonging

As mentioned, humans have a 'fundamental need to belong', an evolutionary-derived motivation to form and maintain enduring, stable, and positive interpersonal relationships (Baumeister & Leary, 1995). This hypothesis is characterised by two separate but related needs: 1) the need for interactions that are personal and positive in nature, and 2) perception of an interpersonal bond underpinned by stability, affection, and longevity. The fact that groups can form with little to no prior affiliation or prompting and inspire loyalty and cohesiveness is demonstrated in the following seminal works: The classic Robbers Cave study (Sherif, Harvey, White, Hood & Sherif, 1961/1988) and the 'minimal groups' paradigm (Brewer, 1979; Billig & Tajfel, 1973; Tajfel, 1970; Tajfel, 1974; Tajfel, Flament, Billig & Bundy, 1971) and is testament to the presence and power of this motivation. The motivation that underpins our desire to join a group, is the same motivation that underpins our reluctance to leave a group, which explains why youth might want to join a gang in the first place, as they would any other group, and why they may be reluctant to leave even when the going gets tough.

3.2.3.5 Perceived Cohesiveness

Perceived Cohesion "encompasses an individual's sense of belonging to a particular group and his or her feelings of morale associated with membership in the group" (Bollen & Hoyle, 1990, p. 482). This perception reflects members' internal appraisal of themselves in relation to the group. Bollen & Hoyle (1990) acknowledge the definitional issues surrounding the concept of cohesion and the difficulties in capturing objective cohesion at the individual level, and argue that *perceived* cohesion is an appropriate subjective proxy. However, Klein & Crawford (1967) argue that for gangs, unlike like other groups, their source of cohesion stems from external sources, such as the presence of other gangs or the police i.e. being

united against a common enemy. Groups with high cohesion are highly productive so when applied to the context of gangs, whose primary output is violence, it is clear to see how highly cohesive gangs are also highly violent (Wood, 2015). These increased levels of violence and criminal activity are likely a result of the increased group identification and conformity to antisocial norms that group cohesion engenders (Hughes, 2013).

3.2.3.6 Pluralistic Ignorance

Arguably the most eminent studies in the discipline of Social Psychology pertain to the discrepancy between private attitudes and conformity to social norms (Asch, 1951; Sherif, 1936; Moscovici, 1985; Turner, 1991). The difference between what people privately believe and how they publicly act is called pluralistic ignorance. Specifically, pluralistic ignorance *"*is a psychological state characterised by the belief that one's private attitudes and judgments are different from those of others, even though one's public behaviour is identical" (Prentice & Miller, 1993, p.244). This phenomenon has also been found in gangs, where members have participated in activities that they privately reported feeling uncomfortable about (Matza, 1964). This experience of towing the line and feeling uneasy about engaging in criminal exploits is especially likely for new members who haven't yet had time to assimilate and internalise the gang's norms and values, and for those who don't fully buy in to them but belong to the gang because they perceive no other legitimate means for safety and security. Wood (2015) suggests that gang leaders may anticipate this and use gang initiation ceremonies to foster group homogeneity, norm compliance, and self-categorisation as a gang member. As members' identification with their group increases overtime, any differences between their private beliefs and overt behaviour diminishes, and their beliefs and behaviour both become aligned with the violent norms of the group (Reid, Cropley, & Hogg, 2005).

3.2.3.7 Group Pressure

In line with the SCT new gang members may feel pressured, either implicitly or explicitly, to participate in prototypical criminal activities, that outside of the gang they would not ordinarily engage in, in order to demonstrate that they are prototypical group members (Wood, 2015). Again, it is likely that new or reluctant members are most susceptible to group pressure and therefore more likely to behave in ways that they do not agree with. When there is a discrepancy between internal beliefs and external behaviour this can create an uncomfortable feeling called cognitive dissonance that prompts the individual to either change their thinking in line with their behaviour of vice versa.

3.2.3.8 Cognitive dissonance and moral disengagement

Being a 'successful' gang member involves adhering to the group's norms and performing the expected behaviours—mainly, violent offending. In order to do this, members may have to re-construct the meaning of their actions, or the characteristics of the target to minimise the psychological discomfort that arises from contravening one's moral standards (Wood, 2015). This feeling of uneasiness is called cognitive dissonance (Wood, 2015), and results from a mismatch between an individual's beliefs, and their actions (Festinger, 1962). Like the *need to belong*, developing and maintaining a sense of internal consistency (consonance), is a fundamental drive within the human psyche, and is a staple condition for physical and mental wellness. As such, when we experience inconsistency (dissonance) we are motivated to reconcile this by aligning our beliefs and actions to achieve congruence (Festinger, 1962). For instance, a gang member may perpetrate an act of violence against an innocent person as part of an initiation ritual, but privately think this behaviour is cruel and wrong. In order to avoid the feelings of anxiety and confusion that cognitive dissonance can cause, the individual will have to either change his behaviour to match his beliefs, or vice

versa. Due to the nature of gang life, avoiding behaviours that violate accepted moral strictures (e.g. hurting innocent people), is an unlikely option. Thus, in this situation the individual must restructure his beliefs in such a way that rationalisations his actions (e.g. hurting people is just 'part of business'), or absolves himself of agency (e.g. I only hurt that person because I was told to). It is this removal, or *disengagement*, of moral censures that allows gang members to perpetrate violence, and not feel bad about it. The process of excusing and justifying 'bad behaviour' has been explored from different perspectives within the field of Psychology in the form of 'neutralisations' (Sykes & Matza, 1957; McCarthy & Stewart, 1998) and 'cognitive distortions' (Barriga & Gibbs, 1996; Barriga, Landau, Stinson, Liau & Gibbs, 2000; Sykes & Matza, 1957) but the most enduring and established framework for understanding this phenomena is Bandura's socio-cognitive theory of moral disengagement (Bandura 1986, 1991; Bandura, Barbaranelli, Caprara & Pastorelli, 1996a, 1996b).

Bandura (1986) theorises that moral knowledge is linked to moral conduct via an affective self-regulatory system that promotes moral agency. Moral principles develop (concomitantly with our sense of self) through a process of socialisation, and act as bench marks for decency, and deter reprehensible conduct (Bandura et al., 1996). To ensure our behaviour conforms to our internal standards of right and wrong, we *monitor* our conduct, *judge* it against our internal moral standards and the situational context, and *regulate* it by applying self-reactive sanctions. The latter mechanism refers to the anticipation of satisfaction and self-worth associated moral action (and its correspondence to moral standards), and the self-condemnation that accompanies immoral action (and the contravention of moral standards). Anticipating these feelings motivates us to not only *refrain* from inhumane conduct, but to *proactively engage* in humane conduct. This element of agency means that, unlike other internalised 'overseers' of right and wrong, such as

Freud's Superego, (or Walt Disney's Jiminy Cricket), regulatory self-sanctions have to be consciously and deliberately activated—we have to *want* to act righteously. However, moral conflicts arise when individuals are tempted by the perceived benefits of acting immorally, such as the money, drugs, territory, and status associated with gang membership, and the persuasive arguments of other group members (Bandura 1990). In order to attenuate the cognitive dissonance that arises from this moral conflict we can *choose* to lift the regulatory self-sanctions that hold us accountable for our actions; that is, we morally disengage.

As outlined earlier in section 3.1.4.4 of this chapter Bandura (1990, 1991, 2002; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) theorised we can selectively employ the eight more disengagement strategies that will gradually change a considerate person into a cold person without notice through the incremental weakening of self-sanctions. For example, individuals may begin to perform small, relatively innocuous acts that can be tolerated with little self-censure—because the gap between their private beliefs and the overt behaviour is only small. After feelings of discomfort diminish through repeated performances, the level of moral reprehensibility progressively increases until, eventually, heinous acts can be performed without much distress or cognitive dissonance (Bandura, 1990). In other words, youth build up a tolerance for behaving badly whereby they desensitise themselves, revise their self-images, and develop self-justifications that promote the perpetration of violence (Wilkinson & Carr, 2008).

Wood (2015) suggests that there are factors specific to gang membership that facilitate moral disengagement. By the very nature of being a group, and the inevitable result of outgroups, gang members are more likely to be targeted by rival gangs, and use the notion of vengeance to justify retaliatory violence. Here, revenge is not simply a form of tit-for-tat one-upmanship, but is re-interpreted as the deliverance of justice; a worthy cause necessary for up-holding the image and reputation of the gang. Gang members' use of moral

disengagement strategies is supported in the literature; Alleyne, Fernandez & Pritchard (2015) found that compared to non-gang youth, gang members were more likely to use moral justification, euphemistic labelling, advantageous comparison, displacement of responsibility, victim-blaming, and dehumanisation strategies. But, dehumanisation, in particular, played a facilitative role in violent behaviour. This is supported by earlier work; Alleyne & Wood (2010) found that peripheral gang members, compared to non and core gang members were more likely to displace responsibility for their actions onto others. The authors suggest that this finding, in conjunction with peripheral youth's younger age, and higher levels of violence, hints at a developmental process. That is, as peripheral members rise through the ranks to core status they assume a more managerial position which involves greater levels of responsibility and delegation, and much less of the 'dirty work'.

Building on the work of Alleyne & Wood (2010), Niebieszczanski et al., 2015 found that incarcerated street gang offenders exhibited higher levels of moral disengagement than individual offenders and those who were 'affiliated' with gangs, but who had not offended with them. However, there was no difference in levels of moral disengagement between street gang and other group offenders, speaking to the unique contribution of the group, rather than gang context.

3.2.3.9 Moral Injury

Moral injury, like many trauma-related concepts, originated from the battlefield and speaks to the psychological distress that can arise when soldiers are faced with situations that transgress their deeply held ethical and moral beliefs (Litz, Stein, Delaney, Lebowitz, Nash, Silva, & Maguen, 2009). Specifically, moral injury is defined as "Perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" (Litz et al., 2009, p.700). Even though soldiers are trained to deal with

killing, death and the conditions of war, the sights, sounds, and smells of violence and its aftermath can be psychologically debilitating. However, for combatants fighting outside of military rules of engagement (ROE; i.e. directives that delineate under what circumstances combat can take place), the effects can be even worse. Litz et al., (2009) suggests that unconventional warfare like guerrilla wars—and potentially urban gang wars— tend to be more dangerous and confer greater risk for encountering morally injurious situations due to their unorthodox and unpredictable nature (e.g., unknown and unmarked enemies, illegal and makeshift weapons, no established ROE or battle fields ethics). This is because combatants' experiences do not map on to schematic beliefs about what war looks like, making it difficult for them to know what is right and wrong, moral and immoral.

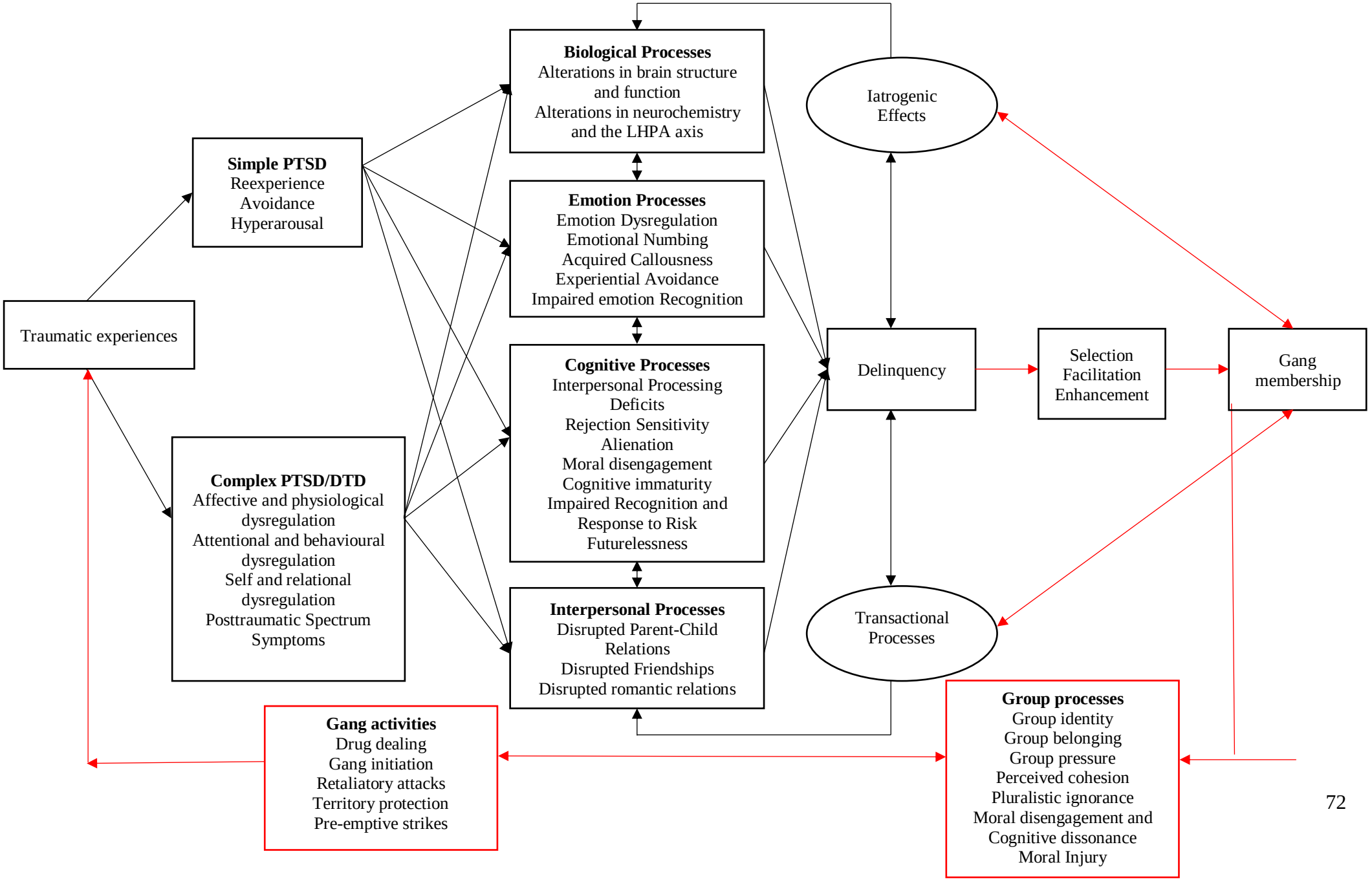
If soldiers are unable to justify or rationalise their actions within the context of their job i.e. being a soldier and serving their country, they can experience severe biopsychosocial impairment, akin to perpetrator-induced, or complex trauma. Similarly, if a gang member has low levels of group identification, high levels of pluralistic ignorance, and feels pressured to act in a prototypical way to commit an act of violence they are likely to experience cognitive dissonance. Cognitive dissonance, if not reconciled, can lead to negative emotions such as guilt, shame, anxiety, and PTSD symptomology. Litz et al., (2009) argues that in order to experience moral injury one must first have an awareness of their own morality and be capable of feeling empathy, concern and compassion:

> anguish, guilt, and shame are signs of an intact conscience and self- and other expectations about goodness, humanity, and justice. In other words, injury is only possible if acts of transgression produce dissonance (conflict), and dissonance is only possible if the service member has an intact moral belief system (Litz et al., 2009, p. 701)

In other words, people have to be able to feel emotions in order to get hurt, but what if experiencing trauma disrupts or stunts moral growth? Contrary to the idea that delinquency is linked to moral disengagement through the removal of guilt (Bandura et al.,1996; Kwak & Bandura, 1998), Garbarino (1999) proposes that trauma may interrupt moral development or lead to a changed morality that justifies victimising others. While the manifest symptoms of moral disengagement present as a cold and callous disregard for others, whether this is a voluntary switching off of one's morals, a trauma-acquired deficit, or a congenital personality trait is unclear. In relation to CU traits and the distinction between primary and secondary psychopathy, it may be that moral disengagement comes naturally to the primary psychopath but is acquired by the secondary psychopath. Studies have shown that delinquent youth with high levels of CU traits and anxiety, characteristic of secondary psychopathy, are more likely to report extensive trauma histories and PTSD symptoms (Sharf, Kimonis & Howard, 2014; Kahn et al., 2013). A similar concept to moral disengagement, in terms of symptom presentation, is emotional numbing. Kerig, Bennett, Thompson & Becker, (2012) found that emotional numbing, especially the numbing of sadness, mediated the relationship between trauma exposure and CU traits in a sample of young offenders. Based on this it is possible that emotional numbing and moral disengagement are cognitive strategies used by traumatised youth to block off emotions that would otherwise be too painful to bear.

In sum, it seems that immorality can be both a facilitator of violence, enabling youth to conduct heinous acts without any emotional repercussions, and a symptom of violence, where exposure to heinous acts, as a victim or perpetrator, can disrupt or switch off one's moral standards.

Fig 3.2. An Adapted Transactional Developmental Model of Trauma and Gang Membership



3.3 Unified Theory of Gang Involvement

In order to assess the potential utility of creating a trauma-informed model of gang membership that explains the trauma pathway to and beyond gang membership, it is first pertinent to compare it against the current gold standard integrated model of gang involvement: Unified Theory.

Using a theory knitting approach Wood & Alleyne's (2010) proposed an integrated theory of gang membership called *unified theory*. Wood & Alleyne's (2010) theoretical approach is based on the work of Ward and Hudson (1998), and speaks to concerns within gang research that "too much [of it] has ignored theory and launched itself into findings that offer some insight but do little to marry the literature and expand our overall understanding of the etiology of gang membership" (Wood & Alleyne, 2010, p.26)—a criticism also levelled at the discipline of Psychology more generally:

> The lack of a metalevel framework to guide empirical and theoretical research has resulted in the *ad hoc* proliferation of theories that often overlap and, essentially, neglect each other's existence. This may reflect a widespread failing in psychology to take theory construction and development seriously. The strategy of proliferation and neglect has a number of unfortunate consequences. First, it is inefficient and wasteful. Interesting ideas often are not developed to their full extent, and other theorists may, inadvertently, reinvent the wheel. Second, it results in a fragmented and uncoordinated theoretical landscape. Third, theorists and empirical researchers often are not aware of where the explanatory gaps are and what would be a fruitful avenue of inquiry (Ward & Hudson, 1998, p.48)

A theory knitting strategy addresses these problems by integrating the best current evidence into a new framework (Ward & Hudson, 1998). This involves identifying shared

and unique elements of the relevant theories, so new contributions and adaptations are made clear. The benefit of this approach is that good ideas do not get lost, relegated or duplicated, but rather added to and improved in an iterative process (Ward & Beech, 2006). Unified Theory does just this by bringing together concepts from existing criminological theories and integrating them with relevant psychological factors (see Figure 3.3). It includes concepts from similar models (e.g., Howell & Egley, 2005) to provide a more comprehensive framework with testable hypotheses to guide empirical examinations into gang involvement—both how youth join and desist from gang.

As outlined in Figure 3.3. Wood and Alleyne (2010) propose that individual, social and environmental factors shape youth's social perceptions of others, their environment, and their opportunities for success, which in turn informs their choice of peer group (either prosocial or antisocial). In line with social learning theory, peer groups reinforce and shape how we think, feel, and behave and as such have the ability to determine which pathway we end up travelling. If peer groups lead to greater social controls (e.g. school, church, community, employment) the likelihood of gang membership reduces. However, if peer groups provide opportunities for criminal learning and involvement, then psychological factors such as moral disengagement (relaxing or removal of moral standards) and pro-aggressive cognitive schemas (mental frameworks that organise, interpret and process information in a way that supports and reinforces pro-aggressive attitudes and behaviours) may provide the psychological infrastructure that encourages gang involvement. Although Unified Theory shares many commonalities with other gang theories, it is unique in the sense that social psychological processes are considered to be the only factor leading to gang membership either directly or via criminal activity (Pyrooz & Ferrer, 2014). The psychological rather criminological focus is what sets it apart from traditional theories of

gang membership, and because of this emphasis, it is the closest we have to a traumagenic understanding of gangs within the field of gang research—which isn't close enough.

Unified Theory is arguably the most comprehensive model of gang membership, including both criminological, and psychological factors, pathways into and out of the gang, as well as options for prosocial and antisocial lifestyles. Despite this it does not mention trauma exposure or the psychological and behavioural implications this can have. It is acknowledged that Unified Theory is not a trauma model of gang membership, nor was it designed to be, however, in its purpose to bring together and cohere the best evidence capable of explaining and predicting gang involvement, the absence of a variable that has such profound and wide-ranging effects on youth's biological, emotional, cognitive and interpersonal functioning is limiting factor of the model. Indeed, there are three broad criticisms of Unified Theory in terms of its ability to explain the relation of trauma to gang involvement and behaviour:

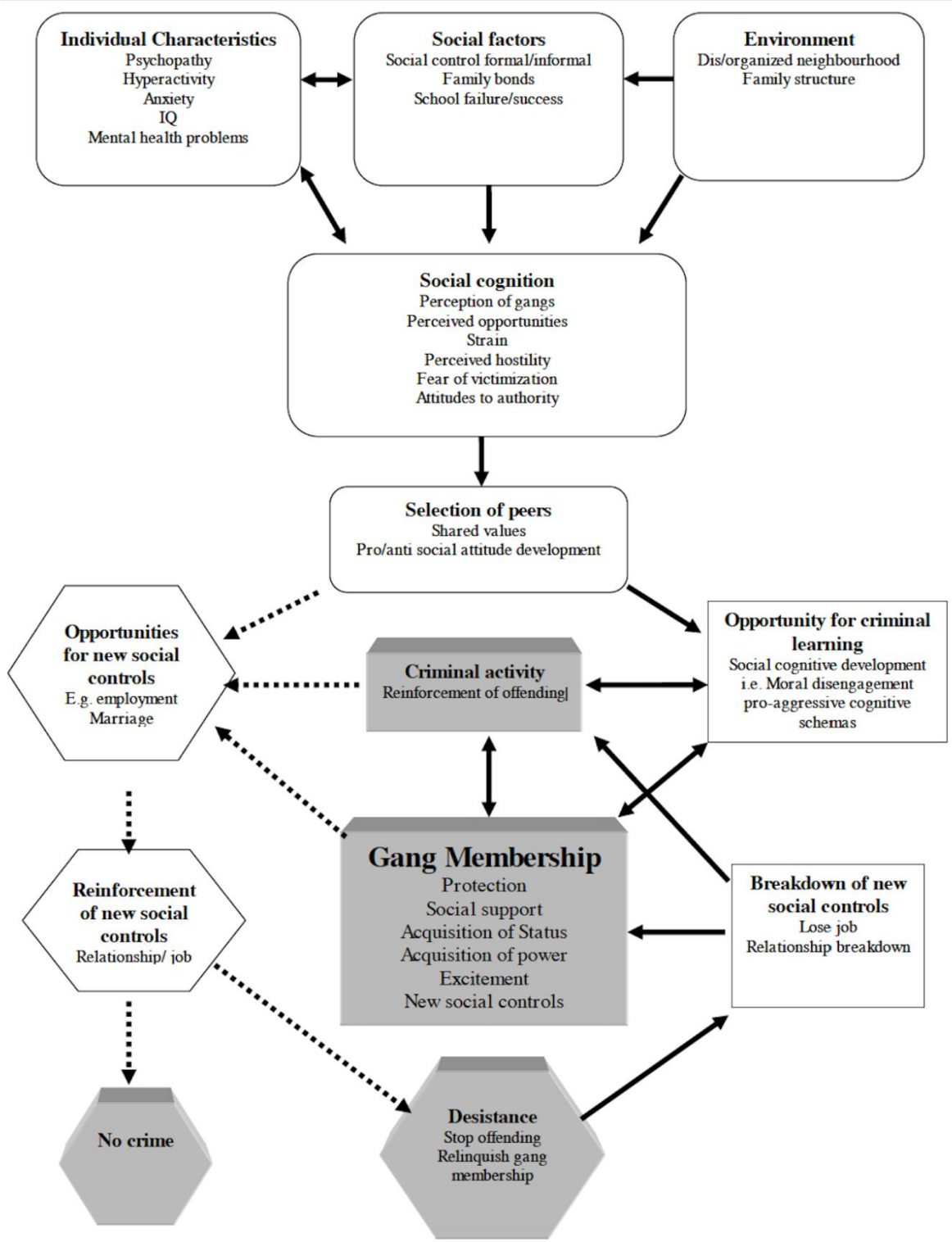
1) there is a heavy emphasis on interpersonal relationships, particularly the selection of peer groups as the single determining factor as to whether one enters into criminal and/or gang activity, with no mention of underpinning biological factors and processes that may feed into interactions with peers.

2) the relationship between variables are interactional not transactional. There is no acknowledgement that gang membership can be one of the factors that contributes to individual-level characteristics such as psychopathy (e.g. secondary trauma-acquired psychopathy); or that informal and formal social controls may be undermined by disrupted parent, peer, and romantic relationships caused by trauma, possibly making it difficult for youth to make friends, whether pro or antisocial; or that the presence of gangs has the capacity to turn neighbourhoods into literal warzones; meaning exposure to gang violence

will be high, opportunities outside of this, including safety, friends, and finances, will be low, so the option for anything other than gang membership is limited.

3) Linked to the second point is that the model alludes to an unrealistic choice of escape. Unified Theory assumes youth will be lured into membership by glamour, rewards, and reputation enhancements—which is true and can be seen in the county lines recruitment tactics outlined in Chapter 2—but does not account for 'reluctant' gang members, who see no real choice or opportunity for a prosocial life and join a gang under on the understanding that being with them is better than being against them. As such, a prospective gang member may not select a peer group due to shared values, but rather a group that gives them the best opportunity for (perceived) success and survival whether they agree with their values or not. In fact, it is possible that some gang members may not believe in and abide by the norms and mores of their gang, which as outlined earlier, can cause cognitive dissonance when they are expected to engage in prototypical behaviours that do conform with the norms and mores of the gang (e.g. violent initiations, retaliatory attacks etc.) but not their own private beliefs.

Figure 3.3 A diagrammatic overview of Wood & Alleyne's Unified Model of Gang Membership



3.4 Discussion

Man is indeed a creature strange enough that he might be capable of destroying himself and his planet for what would seem to be trivial reasons: a desire for social approval or loyalty to one's ingroup (Lefcourt, 1991, p.1)

Based on the aforementioned literature a number of assumptions can be made about relationships between gang membership, trauma exposure, moral disengagement and internalising/externalising symptoms. Members who identify highly with their gang, and who perceive the gang to be highly cohesive may be more likely to 1) be core gang members 2) engage in higher levels of violent criminal and antisocial behaviour as a function of the embedded gang norms and rules 3) develop PTSD and other co-morbid internalising and externalising symptoms as a result of their increased exposure to the potentially traumatising events, or 4) have existing traumatic sequelae exacerbated by exposure to potentially traumatising events. Gang members who *comply* with the words and actions of their group whilst privately (and morally) disagreeing may be more likely to develop PTSD and other trauma-related symptoms as a result of the cognitive dissonance that arises when their actions are not aligned with their values and belief. This may be particularly relevant to gangs where perpetrating violence against others may be necessary for initiation into the gang, establishing and managing a territory (and the illicit businesses operating within it), as well as maintaining order within the gang. The combat literature tells us that even in acts of self-preservation the resistance to cause severe or fatal injury to another human is strong, and to do so violates our natural inclination to ensure the survival of our own species, and can cause debilitating shame, guilt and posttraumatic stress (Grossman, 2009), and the requirements of gang membership fly in the face of this basic human inclination. MacNair (2005) suggests that causal participants of violence can experience the same, if not worse, posttraumatic symptoms as victims and has termed this Perpetration-Induced Traumatic Stress (PITS). In

this sense, traumatic stress may arise as a result of moral injury i.e. contravention of one's moral code. However, gang members' likelihood of developing PITS or other subsidiary psychological effects may depend on how successful they are in disengaging their moral standards (which varies commensurately with level of gang-involvement), and the presence of psychopathic personality traits (DeLisi, Peters, Dansby Vaughn, Shook & Hochstetler, 2014). Due to the core emotional deficits associated with psychopathy, individuals with high levels of this trait are unaffected by the mechanisms of moral disengagement. Specifically, because psychopaths are unable to connect empathetically to others they do not anticipate or feel the self-evaluative emotions of guilt, shame, and remorse that results from hurting others.

3.5 Conclusion

` The aim of this chapter was to bring together a range of concepts and theories from a broad spectrum of different psychological sub-disciplines relevant to understanding the impact of group processes on individual thought and behaviour, and to promote a closer consideration of the how these processes might increase the likelihood of gang members encountering traumatic events, and developing associated psychological and behavioural sequelae. Kerig & Becker's (2010) TDM of Trauma and delinquency outlines the pathways to delinquency, which, the author reasons, applies equally well to prospective gang members as a subset of juvenile delinquent, up until the point of joining a gang. It is at that point and during membership that the experiences of gang and non-gang members will begin to diverge as the former are exposed to harmful social psychological processes unique to the gang and group environment. The SIA functions as the central framework through which groups exert their helpful and harmful effects, and that group outcomes (or products) are determined by a confluence of factors that include: personality, dissonance, morality, motivational drives, and trauma. Groups, in and of themselves, are neither good, nor bad, but are crucibles that

catalyse, distort and augment members' emotions and intentions, producing behaviours that are more extreme and powerful than the component parts alone. This chapter has demonstrated how social psychological processes can be used to explain how young boys grow up to become gang members and how the gang environment and processes feed and maintain this trajectory during and after membership. The body of work discussed above points towards the need for holistic 'wrap-around' treatment that incorporates contextual factors, rather than individual being sole bearer of responsibility.

CHAPTER 4: The Internalising and Externalising Effects of Trauma Exposure: A Comparison of Gang-Involved and Non-Gang Male Offenders

Research conducted over the last 40 years has shown that a wide range of experiences, both natural and manmade, can have damaging effects on those who are victims and witnesses to them—and even on perpetrators responsible for causing them (Ruchkin et al., 2002). The manifestation and severity of trauma symptoms is differentially affected by a number of pre- peri- and post- traumatic factors, including, but not limited to: the chronicity (De Bellis & Zisk, 2014), cumulation (Breslau & Davis, 1987), and severity of traumatic events (Breslau, Troost, Bohnert & Luo, 2013), the emotional and physical proximity of the trauma to the victim (Pfefferbaum, 1997), the type of trauma (e.g. child sexual abuse, fatal car crash, natural disaster etc.), age of onset (De Bellis & Zisk, 2014), prior trauma exposure and posttraumatic symptoms (Breslau, Peterson & Schultz, 2008), and pre-morbid personality characteristics (Yehuda & McFarlane, 1995). Collectively, these factors create the context for how we as, academics, policy-makers, and practitioners, understand, legislate for, and treat trauma-related illness.

Gang membership may be another such factor that affects the likelihood of developing post traumatic symptoms because 1) when youth (delinquent and non-delinquent) become gang youth they bring with them substantial trauma histories and associated mental health problems, 2) belonging to a gang increases the risk of experiencing more traumatic events due to the violent and adversarial nature of inter and intra gang relationships and the implicit group processes that facilitate them, and 3) the same violent and adversarial gang environment that creates new 'opportunities' for encountering trauma may also exacerbates old or emerging trauma symptoms. This is because a group whose survival and success depends on its ability to instil fear and exert control over others through threatened and actual violence is unlikely to be sympathetic to the perceived vulnerabilities of mental illness. The

stigma attached to mental illness and the pressure to save face and act tough means gang members' symptoms may go unacknowledged and untreated–through fear of being exposed—and hence subsequently escalate. Furthermore, while some gang members take a gung ho approach to gang life, others—who join the gang because it's better to be with them than against them—may be forced implicitly or explicitly to act in ways that contravene their own moral code, generating an uncomfortable cognitive dissonance that can give rise to mental health problems such as PTSD. This is likely to be especially true for youth who weren't delinquent before joining a gang, in line with the selection model of gang membership and delinquency (Thornberry et al., 2003) These factors, specific to the gang environment and lifestyle, may mean that members are more likely than their non-gang equivalents to experience a range of trauma-related internalising and externalising symptoms. As such, the study of psychological trauma in gang members is a vital contribution to the field, helping to build a broader, better-informed and contextualised overview of the trauma landscape.

4.1 The Current Study

The aim of this chapter is to establish whether or not gang members present as a unique and distinct subset of delinquent youth in terms of how they experience and react to traumatic events. Chapter 2 presents a literature review outlining the need for more robust trauma-centric gang research, Chapter 3 outlines a theoretical framework explaining the developmental trauma trajectory into delinquent and gang behaviour, and how the 'groupness' of the gang can cause and contribute to the development of internalising and externalising symptoms once members have joined. This present chapter will be the first empirical test of the argument that gang members encounter and manifest traumatic experiences differently from delinquent youth who are not gang members, and the first

empirical exploration of the role that social and group processes play in these differences. To this end, this chapter will provide a description of the type, frequency, and severity of traumatic events, internalising (e.g. anxiety, depression, PTSD) and externalising symptoms (e.g. individual and group delinquency), and personality characteristics (e.g. antisocial personality disorder, paranoid personality disorder, callous-unemotional traits) experienced and exhibited by gang and non-gang offenders, as well as social psychological (e.g. moral disengagement and social provision) and group processes (e.g. group identification, group belonging, perceived cohesiveness, group pressure, pluralistic ignorance) . Doing so will enable us to establish the extent and limits of 'the gang problem' and better inform future research and efforts for addressing it.

4.2 Research Objectives

1. To compare the type, frequency and severity of traumatic events experienced by gang and non-gang offenders. Based on the existing literature it was expected that gang members would experience a greater number and type of traumatic events than non-gang members, and the nature of these events were likely to be more severe given the violent nature of the gang, and members' use of weapons.
2. To compare the type, frequency and severity of internalising and externalising symptoms experienced by gang-involved and non-gang offenders. It was expected that gang members would experience a greater number, variety and severity of symptoms than non-gang members based on their increased exposure of traumatic events, and their unique exposure to harmful group processes.
3. To explore the *relationship* between trauma exposure and internalising and externalising symptoms in gang-involved and non-gang offenders. Based on the existing literature was expected that a positive association between trauma exposure

and internalising and externalising symptoms would exist across both groups, whereby a greater number and severity of traumatic events leads to a concomitant increase in the number and severity of traumatic symptoms. For gang members it was expected that social and group processes unique to the gang environment would account, at least in part, for this association.

4. To compare the levels of social psychological and group processes reported by gang and non-gang members, and explore the role these processes play in the manifestation of symptoms across the two groups. It was expected that gang members would report higher levels of moral disengagement, social provision, group identification, group belonging, group pressure, and pluralistic ignorance compared to non-gang members, which would likely to contribute to the increased levels of internalising and externalising symptoms by strengthening belief, loyalty and obedience to the gang's criminal identity and cause.
5. To examine the presence and levels of dysfunctional personality characteristics between gang and non-gang members. This was an exploratory objective. Although there is a high prevalence rate of personality disorder diagnoses in the UK male prison population, this does not discriminate between those offenders who belong to gangs and those who don't, or speak to the potential associations between trauma, personality characteristics and internalising/externalising symptoms across the two groups (Lader, Singleton & Meltzer, 2003).

4.3 Method

4.3.1 Participants

Eighty male participants were recruited from a remand prison in the South East of England. This prison is a category B and C local prison holding approximately 1252

sentenced and un-sentenced adults and young offender males; the mean age of the sample recruited was 23 (SD = 3.89, range = 12). The majority of participants indicated that they were White British (53.8%), and the remaining participants indicated that they were Black British (32.5%), Mixed Ethnicity (10%), and Asian (3.6%). The mean sentence length in years reported by the participants was 6.5 (SD = 15.58, range = 99). Sixty-five participants were sentenced, 12 were on remand pending the outcome of a criminal trial, and three were on a recall for probation violations. Forty six percent of participants were classified as non-gang members and 54% were classified as gang members.

Table 4.1. Demographic characteristics of the total sample, non-gang and gang members offenders

Demographic Characteristics	**Total**	**Non-gang**	**Gang**
	n	n	n
Sample size	80	43	37
Mean age	23.6	24.4	22.7
Mean Sentence length (in years)	6.5	7.7	5.1
Ethnicity			
Black (African/Caribbean) British	26	10	16
White British	43	27	16
Mixed	8	4	4
Asian British	3	2	1

4.3.2 Design

A cross-sectional quasi-experimental design was used, allowing the researcher to compare gang-involved and non-gang offenders on measures of trauma exposure, internalising (e.g. PTSD, anxiety, depression) and externalising symptoms (e.g. individual and group-based delinquency), personality features (e.g. antisocial personality disorder, paranoid personality disorder, callous-unemotional traits), social (e.g. moral disengagement and social provision) and group processes (e.g. group belonging, group identification, perceived cohesiveness, group pressure, pluralistic ignorance). Quantitative data was

collected using self-report items (Likert and categorical response formats), and analysed using IBM SPSS 25 (IBM SPSS Statistics for Macintosh, Version 25.0).

4.3.3 Procedure

Prior to data collection, the study was approved by the School of Psychology's Ethics Committee and the National Offender Management Service's (NOMS) National Research Committee. Prisoners were recruited to the study by selecting every fifth name from a list of all prisoners aged between 18-30 years old. Participants were then screened according to a number of factors: risk to women, release date, current engagement with interventions, and active substance withdrawal. If a selected candidate was deemed inappropriate because of one of these factors, then the next name on the list would be used. These selection criteria were created and agreed collaboratively by the researcher and prison staff to 1) maintain the safety of the researcher, and 2) to prevent disrupting or derailing the rehabilitation of vulnerable and acutely unwell prisoners. One hundred and twelve participants were initially identified, nine declined to participate and 23 participants had left the establishment prior to interview, leaving a total of 80 consenting participants.

All eligible prisoners were given a study invitation (see Appendix 3). After the nature of the study was explained, participants could either tick '*Yes, I WOULD like to participate in this study'*, or, '*No, I WOULD NOT like to participate in this study'*. The purpose of the study invitation was to register interest only, and to arrange a date, time, and place for the interview. The study invitation did not constitute consent. Those who agreed to take part were met by the researcher on the agreed date, individually, in an office on their house block. The purpose of the study and procedure was explained and an information sheet was given to them and read aloud (see appendix 4). Participants were instructed that the questionnaires evaluated the nature of their friendship groups, past life experiences, and wellbeing. All

participants were informed that participation was voluntary, which meant they could leave the study at any time without penalty, and that, with their permission, the interview would be recorded using an encrypted voice recorder. For those who declined to be recorded, handwritten notes were made by the researcher. It was explicitly stated to participants that they would *not* receive any special treatment, incentive, or reward for their participation, nor would it be used in any clinical/judicial capacity to inform decisions surrounding their sentencing or progress within the prison. In line with NOMS' caveats, participants were informed that their responses would be anonymised and confidential, *unless*, during the interview they were to: a) disclose an intention to breach prison security, b) disclose an intention to commit further offense, c) break a prison rule that can be adjudicated against, d) indicate a threat of harm to themselves (i.e. self-harm or suicide) or others. In any of these circumstances, information would be recorded and reported immediately to prison staff. Participants were also informed that their questionnaires and debrief sheet would have a unique corresponding number on them so that if they chose to withdraw from the study, their data could be identified and destroyed. Following this briefing, participants were given the opportunity to ask questions or leave the study if they wished to do so. Those who wished to take part in the study signed the consent form (see appendix 5) which was retained by the researcher and stored separately from any research materials.

After receiving consent, 10 questionnaires assessing sociodemographic characteristics, trauma exposure, internalising and externalising symptoms, and personality features were administered individually by the researcher who read aloud the items and recorded participants' responses. Questionnaires took approximately 2 hours to complete, after which participants were verbally debriefed and provided with a debrief sheet (see appendix 6) that reiterated the purpose of the study, provided information on how to withdraw their data, gave instruction on how to access appropriate services within the prison,

and offered the researchers' contact details should they have further questions. Once the interview had finished the completed questionnaires were placed into a Manilla envelope that detailed the establishment's name (e.g. HMP X), the participants' unique number, unique recording ID (if applicable), and questionnaire order to allow for counterbalancing. The order of the presentation of measures was counterbalanced across each interview to avoid order effects (see table 4.2).

Table 4.2 The order of counterbalanced measures across the two sequences

Order 1	**Order 2**
The Youth Survey	The Youth Survey
↓	↓
The LEC-5 with criterion A assessment The PCL-5	The Social Provision scale The Moral Disengagement scale
↓	↓
The Beck Anxiety Inventory The Beck Depression Inventory The MCMI-III paranoid scale	The ICU scale PAI antisocial scale
↓	↓
The ICU scale PAI antisocial scale	The Beck Anxiety Inventory The Beck Depression Inventory The MCMI-III paranoid scale
↓	↓
The Social Provision scale The Moral Disengagement scale	The LEC-5 with criterion A assessment The PCL-5

Note. The order of measures was reversed across two sequences, but the Youth Survey was administered first in both cases.

4.3.4 Data Protection and Storage

All study data was processed and stored in accordance with the then Data Protection Act 1998, since subsumed by the Data Protection Act 2018. Data gathered during the

interview was processed for the purposes of this research project only. The data will be held for a period of five years in accordance with BPS best professional practice guidelines. Voice recordings were anonymised and held only until the data had been transcribed; the digital data was then erased as per the instructions set out by the National Offender Management Service (NOMS) National Research Committee. The names and places of those mentioned in the voice recordings were changed to protect the identity of the participant. No personal identifiable data was or will be published, and the identity of the participating establishments will remain anonymous. Interview data was not and will not be shared with any other organisation and was/will be accessed by the researcher only.

4.3.5 Ethical and Safety Considerations

Participants were informed from the outset, in the study invitation, information sheet and consent form, about the sensitive themes of the research. Because of this and the potential for re-traumatisation participants were reminded throughout that they can skip, stop or slow down the interview, without being penalised. To minimise risk and ensure participants' safety and wellbeing, questions pertaining to suicidality were checked immediately after the interview and any indication of recent or current suicidal thoughts were reported to appropriate staff. During the administration of the Beck Depression Inventory, three participants, on three separate occasions, indicated that they had experienced suicidal thoughts within the past two weeks and that, given the opportunity, they would attempt to commit suicide. In all three cases this information was passed directly to prison staff, and recorded in the observation book.

4.3.6 Measures

4.3.6.1 Sociodemographic Characteristics

The Youth Survey: Eurogang Program of Research (Weerman et al., 2009)

The Youth Survey (Weerman et al., 2009) is a comprehensive instrument consisting of 89 items that assess individual-level variables (e.g. demographics, family background, parental schooling, employment, victimisation history, proportion close friends in gang, ex-gang status, sibling involvement, and self-reported delinquency) and group level characteristics (e.g. gang involvement, age composition, common group crimes, drug and alcohol use, duration, ethnic composition, negative peer commitment, gender, group size, illegal activity, group name, reasons for joining, street orientation, territory, group values, roles, symbols and colors). Since this measure was originally designed to be administered in schools, an additional item was added asking respondents to indicate the length of their custodial sentence (see appendix 7).

4.3.6.2 Gang Membership

The Youth Survey: Eurogang Program of Research (Weerman et al., 2009)

This study used the Eurogang definition of a gang: "*a street gang (or troublesome youth group corresponding to a street gang elsewhere) is any durable, street-oriented youth group whose identity includes involvement in illegal activity*" to assess participants' gang involvement (see Appendix 7).

There are four key components to this definition: *age composition* (the majority of group members should be between the ages of 12 and 25), *stability* (the group should be at least 3 months old), *location* (group members should congregate and 'hang out' predominantly in public places without the supervision of adults), and *group identity* (Criminal and delinquent behaviour should form part of the group's culture and identity) that

specify the necessary requirements for a group to be classified as a gang. In essence a gang should be youthful, durable, street-oriented, and have a criminal group identity. Within the Youth Survey there are seven items, based on the Eurogang definition, that comprise the gang membership scale.

Gang membership was explored using varying methods of identification. Employing the Eurogang 'funnelling' method, group affiliations were first assessed with the following introductory item: "*In addition to any such formal groups, some people have a certain group of friends that they spend time with, doing things together or just hanging out. Do you have a group of friends like that*?" Participants who responded "yes" were then asked questions assessing gang membership. In accordance with the Eurogang definition the four *defining* components were measured using six questions: (1) youthfulness – "*How old is the youngest person in the group?*" and "*How old is the oldest person in the group?*"; (2) durability – "*How long has this group existed?*"; (3) street-orientation – responding "yes" to the item "*Does this group spend a lot of time together in public places like the park, the street, shopping areas, or the neighbourhood?*"*;* (4) group criminality as an integral part of the group identity – responding "yes" to the items "*Is doing illegal things accepted by or okay for your group?*" and "*Do people in your group actually do illegal things together?*". If participants met all of these criteria they were identified as gang members. In addition to the seven defining items (those that are essential to characterising a group as a gang), other items – referred to as descriptors – were used to garner additional information that *describe* specific characteristics and qualities of that particular group, for example gendered roles ("*Do boys and girls do different things?*"), or wearing a specific style or color of clothing.

The self-nomination method was also employed where participants responded 'yes' or 'No' to the item "*Do you consider your group of friends to be a gang*?". And finally, a third category of gang membership was characterised by participants who met all four criteria of

the Eurogang definition and responded 'yes' to the self-nomination item. We acknowledge the issues that may arise when explicitly using the term 'gang' in research (see Esbensen, Winfree, He, & Taylor, 2001; Esbensen & Maxson, 2012, for review of literature), and in order to distinguish gang members from offenders who claim membership to other types of antisocial groups (e.g. organised crime groups, biker groups, prison gangs etc.), participants were asked if they used any term other than 'gang' to describe their group (see table x for an over of gang status).

Participants were categorised into two groups based on the gang membership criteria described above: Non-gang members (those who didn't meet any of the criteria), and gang members (those who met the four Eurogang criteria, and/or self-nominated as a gang members).

4.3.6.3 Criminal and Antisocial Behaviour

The Youth Survey: Eurogang Program of Research (Weerman et al., 2009)

A 14-item subscale from the Youth Survey (Weerman et al., 2009) was used to assess the extent participants' groups were involved in antisocial and criminal behaviour (see Appendix 7). Using a four-point Likert-type scale (ranging from '*never*' to '*often*'), participants were asked how often their group had committed a range of offences 6 months prior to their incarceration. Examples include: '*threaten people*', '*illegal drug use*', '*destroy property*', and '*physical assault'*. Scores could range from 14 to 56 with higher scores on this scale indicating higher involvement in crime. This scale has previously demonstrated high internal consistency (e.g., Alleyne & Wood, 2013; $\alpha = .89$; Alleyne, Wood, Mozova, James, 2015; $\alpha = .91$), and this has been further substantiated in this study by with a Cronbach's $\alpha = .86$. A '*group offending'* score was calculated using the total score.

4.3.6.4 Trauma Exposure

The Life Events Checklist for DSM 5 with an extended criterion A assessment (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx & Keane, 2013)

The Life Events Checklist for DSM 5 (LEC-5) is a 17-item self-report tool that is used to assess respondents' exposure to potentially traumatic events (PTEs) across their lifetime (see Appendix 8). The LEC-5 can be used as a standalone measure of traumatic exposure or in conjunction with a PTSD assessment (e.g. the Clinician-Administered PTSD Scale (CAPS-5) or the PTSD Checklist-5 (PCL-5)) to facilitate a diagnosis of PTSD. The LEC-5 consists of 17 potentially traumatic events (PTE) (e.g. *natural disaster; fire/explosion; accident at work, home, recreation, or during transportation; exposure to toxic substances; assault; sexual assault or unwanted sexual experience; combat experience; captivity; illness, injury, or human suffering; sudden violent or accidental death; harm caused by participant; or any other stressful event*) that have been empirically linked with significant psychological distress or PTSD. A unique feature of the LEC-5 is that it enables the respondent to record the '*mode*' of trauma i.e. *how* the PTE was experienced: directly (as a perpetrator or victim), as a witness, or learning about it happening to a close friend or family member; and to endorse multiple types of exposure. Respondents' rated each of the 17 PTEs on a 5-point nominal scale (1 = Happened to me, 2 = Witnessed it, 3 = Learned about it, 4 = Not sure, 5 = Does not apply). This study used the LEC-5 extended version that includes an additional 8 items that are used to identify the index event, and elaborate on the respondent's 'worst event'—the one event that stands out as the 'most bothersome'.

Total scores were computed for the number of events *experienced (as a perpetrator or victim)*, *witnessed*, and *learned about* respectively, and a consummate score (total number of PTEs) was computed combining these three sub-facets.

The Life Events Checklist exhibits adequate temporal validity, good convergence with an established measure of trauma history (the Traumatic Life Events Questionnaire; TLEQ; Kubany et al., 2000) and has comparable associations with trauma related variables in a non-clinical sample. In a clinical sample of war veterans, the LEC was significantly and positively correlated with measures of psychological distress, particularly PTSD symptomology (Gray, Litz, Hsu & Lombardo, 2004). There are no current available psychometrics for the LEC-5, but given the minimal changes from the original few psychometric differences are anticipated. The LEC is one of the mostly widely used measures of trauma exposure in research and clinical practice due to its availability, compatibility with CAPS, depth of information, and psychometric characteristics (Gray, Litz, Hsu & Lombardo, 2004).

4.3.6.5 Internalising Symptoms

Posttraumatic Stress disorder

The PTSD Checklist for DSM 5 (PCL-5; Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013)

The PCL-5 is a 20-item self-report instrument that measures the 20 *DSM-5* symptoms of PTSD (see appendix 9). The PCL-5 can be used to monitor symptom change during and after treatment, screen individuals for PTSD, or make a provisional PTSD diagnosis. In this case, the PCL-5 was used in the latter two capacities. The PCL-5 requires participants to evaluate and record how much they have been *bothered* by PTSD symptoms in the past month using a 5-point Likert scale. The likert scales ranges from 0-4 (0 = *Not at all*, 1 = *A little bit*, 2 = *Moderately*, 3 = *Quite a bit*, 4 = *Extremely*), with higher scores on the scale indicating greater symptom severity. The 20 items comprise of the four PTSD symptom

clusters: cluster B: Intrusion (items 1-5), cluster C: Avoidance (items 6-7), cluster D: negative alterations in cognitions and mood (items 8-14), and cluster E: alterations in arousal and reactivity (items 15-20). Examples of items include: "*Repeated disturbing or unwanted memories of the stressful experience?*" (intrusions), "*Avoiding memories, thoughts or feelings related to the stressful experience?*" (avoidance), "*Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something wrong with me, no one can be trusted, the world is completely dangerous)?*" (negative alterations in cognition and mood), and "*Feeling jumpy or easily startled?*" (alterations in arousal and activity).

A total symptom severity score (range – 0-80) was calculated by summing the scores for each of the 20 items. *DSM-5* symptom cluster severity scores were also calculated by summing the scores for the items within each cluster, i.e., cluster B (items 1-5), cluster C (items 6-7), cluster D (items 8-14), and cluster E (items 15-20). A provisional PTSD diagnosis was made for each participant by treating each item rated as 2 = "Moderately" or higher as a symptom 'endorsed', then following the *DSM-5* diagnostic rule which requires at least: 1 intrusion item (questions 1-5), 1 avoidance item (questions 6-7), 2 cognitive and mood items (questions 8-14), and 2 arousal and reactivity items (questions 15-20). Preliminary validation work on the PLC-5 suggests a cut-off point of 33 (National Centre for PTSD)

The PCL-5 boasts strong internal consistency and good test–retest reliability. The PCL scores were found to correlate highly with scores derived from well-established measures of PTSD (the Impact of Events Scale (IES; Horowitz, Wilner & Alvarez, 1979) and the Mississippi Scale for PTSD, Civilian version (MS-C; Vreven, Gudanowski, King & King,1995) demonstrating convergent validity. Correlations between the PCL and other more global measures of psychiatric symptoms (e.g. the Symptom Checklist 90-Revised SCL-90-

R; Derogatis, 1983) were lower than those obtained between the PCL and other measures of PTSD, thus also providing some support for discriminant validity (Ruggiero, Del Ben, Scotti, & Rabalais, 2003). However, there are no current available psychometrics for the PCL-5, but given the minimal changes from the original, few psychometric differences are anticipated. The PCL-5 demonstrated very high reliability with a Cronbach's $\alpha = .95$.

Depression

The Beck Depression Inventory-II (BDI-II; Beck, Steer & Brown, 1996)

The BDI-II is a 21-item self-report questionnaire that is designed to measure the presence and severity of depressive symptoms consistent with DSM-IV diagnosis of Major Depression (4th ed.; DSM-IV; American Psychiatric Association, 1994; see appendix 10). The BDI-II is considered to have a two-factor structure represented by two subscales; affective and somatic components of depression. The affective subscale has 8 items (pessimism, past failures, guilty feelings, punishment feelings, self-dislike, self-criticalness, suicidal thoughts or wishes, and worthlessness), and the somatic scale has 13 items (sadness, loss of pleasure, crying, agitation, loss of interest, indecisiveness, loss of energy, change in sleep patterns, irritability, change in appetite, concentration difficulties, tiredness and/or fatigue, and loss of interest in sex). The questions relate to symptoms of depression with respect to the "past two weeks, including today" and are rated on a 4-point scale ranging from 0 to 3, with higher scores in the scale indicating greater symptom severity. Items 16 (Changes in Sleeping Pattern) and 18 (Changes in Appetite) contain seven options rated in order as 0, 1a, 1b, 2a, 2b, 3a, 3b to differentiate between increases and decreases in said behaviours/motivations. If a higher rated option is endorsed by the participant then this was noted for diagnostic purposes. The BDI-II total score is the sum of the ratings for the 21 items. If a participant has made multiple endorsements for an item then the item with the

highest rating is used. The maximum score is 63 points. The BDI-II demonstrated high reliability with a Cronbach's α = .88.

The BDI-II takes approximately 5-10 minutes to complete when self-administered. However, if the participant requested, or the researcher deemed necessary, oral administration then the following instructions were issued:

> This is a questionnaire. On the questionnaire are groups of statements. I will read a group of statements; then I would like you to pick out the one statement in each group that best describes the way you have been feeling during the past 2 weeks, including today. [hand a copy of the BDI-II to the participant]. Here's a copy for you so that you can follow along as I read. [read all the statements in the first group and then say]. Now, which of the statements best describes the way you have been feeling during the past two weeks, including today?

As instructed by the manual, if the participant gave the same rating for each group of symptoms, they were told that people seldom experience every symptom with the same degree of severity, and to carefully consider their responses.

Anxiety

The Beck Anxiety Inventory (BAI; Beck, Epstein, Brown & Steer, 1988)

The BAI is a 21-item self-report questionnaire that is designed to measure the presence and severity of anxiety symptoms consistent with DSM-IV (4th ed.; DSM-IV; American Psychiatric Association, 1994; see appendix 11). The questions relate to symptoms of anxiety with respect to the "past week, including today" and are rated on a 4-point scale ranging from 0 to 3 (0 = Not at all, 1= Mildly, 2 = Moderately, 3 = Severely), with higher scores on the scale indicating greater symptom severity. The BAI total score is the sum of

ratings given by the participant for the 21 symptoms, and conveys an estimate of the overall severity of anxiety described by the participant. The maximum score is 63 points. The BAI demonstrated very high reliability with a Cronbach's $\alpha = .94$.

The BAI takes approximately 5-10 minutes to complete when self-administered. However, if the participant requested, or the researcher deemed necessary, oral administration then the following instructions were issued:

> This questionnaire contains 21 symptoms. I will read each symptom aloud one by one. After each symptom that I read, I want you to tell me if you were bothered at all, mildly bothered, moderately bothered, or severely bothered by this symptom during the past week, including today. That includes right now. "Mildly" means that the symptoms did not bother you very much; "Moderately" means you were bothered very much by the symptom; and "severely" means that you could barely stand it. [hand copy of BAI to participant]. Here is a copy for you so you can follow along as I read.

As instructed by the manual, if the participant gave the same rating for each symptom, they were told that people seldom experience all symptoms in the same way, and to carefully consider their responses.

4.3.6.6 Personality features

Callous Unemotional Traits

The Inventory of Callous Unemotional Traits (ICU; Frick, 2004)

The Inventory of Callous-Unemotional Traits (ICU; Frick 2004) is a 24-item self-report questionnaire designed to assess callous and unemotional traits in youth (see appendix 12). The ICU was derived from the callous-unemotional (CU) subscale of the Antisocial

Process Screening Device (APSD; Frick and Hare 2001). It was constructed using four of the original items, and for each item ("*I am concerned about the feelings of others*," "*I feel bad or guilty when I do something wrong*," "*I care about how well I do at school or work*," and "*I do not show my emotions to others*") three positively and three negatively worded variations were developed. In total there are 12 positively worded items and 12 negatively worded items. Participants responded to these items on a four-point Likert scale (0 = "not at all true," 1 = "somewhat true," 2 = "very true," and 3 = "definitely true"). Scores were calculated by reverse-scoring the positively worded items and then summing the items to obtain a total score. The ICU demonstrated high reliability with a Cronbach's $\alpha = .86$.

Antisocial Personality Disorder

The Personality Assessment Inventory (PAI): Antisocial features subscale (Morey, 1991)

The Antisocial Features subscale of the PAI was used as a standalone 24-item self-report questionnaire (see appendix 13). The items assess respondents' history of acts and authority problems, egocentrism, lack of empathy/loyalty, instability and excitement-seeking. The Antisocial Features Subscale requires participants to consider the accuracy of each statement in relation to their own characteristics and behaviours, using a 4-point Likert-scale. The Likert-scale ranges from 1-4 (1 = *False, not at all*, 2 = *Slightly true*, 3 = *Mainly true*, 4 =*Very true*), with higher scores on the scale indicating higher levels of antisocial features. The 24 items comprise of the three sub-facets of antisocial features: Antisocial behaviours (items 1-7), Egocentricity (items 8-15), Stimulus-seeking (16-24). Examples of items include: *"I like to see how much I can get away with"* (Antisocial behaviour), "*When I make a promise, I really don't need to keep it"* (Egocentricity), *"I get a kick out of doing dangerous things"* (Stimulus-seeking). Five items are reversed (items 1, 5, 6, 7, 23). Total and subscale

scores were calculated for each participant. The PAI Antisocial features subscale demonstrated high reliability with a Cronbach's α = .81.

Paranoid Personality Disorder

Millon Clinical Multiaxial Inventory (MCMI)-III Paranoid Personality Disorder Subscale (Millon, Millon, Davis & Grossman, 1994)

The Millon Clinical Multiaxial Inventory—Third Edition (MCMI-III) is 28 scale objective personality measure, consisting of 175 true/false questions designed for adults 18+ years in clinical and forensic settings (see appendix 14). Only the 17-item Paranoid Personality Disorder (PPD) subscale was used in this study. The response format was changed from a dichotomous true/false answer to a 4-point Likert scale ranging from 0 (not at all true) to 3 (definitely true). Higher scores on the scale indicated greater agreement with the statement (e.g. There are people who are supposed to be my friends who would like to do me harm). This subscale can be used to assess paranoid personality features in the line with the DSM-5 (American Psychiatric Association 2013) definition of Paranoid Personality Disorder: "a pattern of pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent". The MCMI-II PPD Subscale demonstrates high reliability with a Cronbach's α = .84.

4.3.6.7 Social Psychological and Group Processes

Moral Disengagement

Mechanisms of Moral Disengagement Scale (Bandura, Barbarnelli, Carpara, & Pastorelli, 1996)

Bandura et al.'s (1996) Moral Disengagement scale consists of 32 items assessing participants' endorsements of moral disengagement strategies (see appendix 15). Participants responded on a five-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The scale is further broken down into eight subscales representing each of the moral disengagement strategies. Examples of items include: "*It is alright to protect your friends*" (moral justification); "*If someone is obnoxious, hitting them is just teaching them a lesson*" (euphemistic labelling); "*It is ok to insult someone, because physically insulting him or her is worse*" (advantageous comparison); "*If kids are not disciplined they should not be blamed for misbehaving*" (displacement of responsibility); "*men cannot be blamed for aggressive behaviour when all their friends behave that way*" (diffusion of responsibility); "*Teasing someone doesn't really hurt them*" (distorting consequences); "*If people are careless where they leave their things it is their own fault if they get stolen*" (attribution of blame); and "*Someone who is horrible does not deserve to be treated like a human being*" (dehumanisation of victims). The range of scores for the overall scale is 32 to 224 and the range for each subscale is 4 to 28. Higher responses on this scale (and its subscales) indicates a proneness to employ moral disengagement strategies. Bandura and colleagues (1996) reported the alpha coefficient for the composite measure to be .82. Some items were adapted to make them appropriate for use with an adult prison population, for example item 32 "Children are not at fault for misbehaving if their parents force them too much" was changed to "People are not to blame for committing offences if they are under pressure". These

changes were based on the scale used in Alleyne et al's., (2015) study with incarcerated street gang members. The Mechanisms of Moral Disengagement scale demonstrated high reliability with Cronbach's α = .90.

Group Belonging

The Youth Survey: Eurogang Program of Research (Weerman et al., 2009)

A 7-item subscale from the Youth Survey (Weerman et al., 2009) was used to assess participants' feeling of belonging to their group (see appendix 7). Using a 5-point Likert scale, ranging from 1 = Strongly disagree to 5 = Strongly agree, participants were asked how much they agree with a particular statement e.g. "being in my group makes me feel like I belong somewhere" and "My group provides a good deal of support and loyalty for each other". The 'group belonging' subscale of the Youth Survey demonstrates high reliability with a Cronbach's α = .90.

Group Identification

The Group Identification Scale (Henry, Arrow, & Carini, 1999)

The Group Identification scale is a 12-item self-report questionnaire that is designed to measure individual-level group identification (see appendix 7). This scale is comprised of three subscales: cognitive (how social identity and social categorisation influence group identification), affective (the contribution of interpersonal attraction), and behavioural (cooperative interdependence), that conform to the tripartite view of intra-group identification (Henry et al., 1999). Each subscale consists of four items. Examples of these items include: "*I think of this group as part of who I am*", "*All members need to contribute to achieve the group's goals*", "*I enjoy interacting with members of this group*". Participants responded to

these items on a 7-point Likert scale (1 = Strongly disagree – 7 = Strongly agree), with higher scores on the scale indicating higher levels of group identification. The Group identification Scale demonstrated high reliability with a Cronbach's α = .85. This measure was added onto the end of the Youth Survey (Weerman et al., 2009).

Perceived Cohesiveness

The Perceived Cohesiveness Scale (Bollen & Hoyle, 1990)

The Perceived Cohesiveness Scale (Bollen & Hoyle, 1990) is a 6-item self-report questionnaire that is designed to measure respondents' perceptions of their group cohesion (see appendix 7). Cohesion – based on the following definition: "perceived cohesion encompasses an individual's *sense of belonging* to a particular group and his or her *feelings of morale* associated with membership in the group" (Bollen & Hellen, 1990, p. 483) – has two primary dimensions: belonging and morale. These two dimensions are represented by two 3-item subscales. Examples of these items include "*I feel a sense of belonging to* _____", "*I am enthusiastic about* _____". The blank spaces allow for the name of the reference group to changed accordingly. For this research the blanks spaces were substituted for the words "my group". Participants' responses were recorded on a 10-likert scales, ranging from 1 = strongly disagree to 5 = neutral to 10 = strongly agree. The Perceived Cohesiveness Scale demonstrates very high reliability with a Cronbach's α = .92. This measure was added onto the end of the Youth Survey (Weerman et al., 2009).

Group Pressure

The Group Pressure scale is a 6-item self-report questionnaire that is designed to measure participants' experience of majority influence (see appendix 7). This questionnaire

was created by the author specifically for the purpose of this study. The questions relate to verbal (e.g. "*Have you ever publicly agreed with the words of other group members whilst privately disagreeing with them?*") and behavioural (e.g. "*Have you ever gone along with the actions of your group whilst privately thinking it was wrong?*") effects of majority influence and its contribution to criminal and antisocial behaviour (e.g. "*Have you ever committed a violent act against someone because of the pressure you have felt from your group?*"). Participants responded to these items dichotomously, with either a No (=1) or Yes (=2) response. The Group Pressure Scale demonstrated high reliability with a Cronbach's $\alpha = .86$. This measure was added onto the end of the Youth Survey (Weerman et al., 2009).

Pluralistic Ignorance

The Pluralistic Ignorance item is a single item, created by the author specifically for the purpose of this study, to assess participants' belief of other members' acceptance of group norms ("*Do you think other group members have done things for the group that, privately, they didn't agree with?*"). Participants responded to this item on a 3-point nominal scale (1 = Yes, 2 = No, 3 = I don't know). This measure was added onto the end of the Youth Survey (Weerman et al., 2009).

Social Provision

The Social Provision Scale (Cutrona & Russell, 1987)

Cutrona & Russell's (1987) Social Provision Scale is a 24-item self-report questionnaire that assesses the extent to which respondents' social relationships provide various forms of social support (see appendix 16). The Social Provision Scale is based on the six social provisions identified by Weiss (1974) and are represented by 6 subscales: Attachment (items 2, 11, 17, 21), Social Integration (items 5, 8, 14, 22), Reassurance of

Worth (items 6, 9, 13, 20), Reliable Alliance (items 1, 10, 18, 23), Guidance (items 3, 12, 16, 19), Opportunity for Nurturance (items 4, 7, 15, 24). Example of items include: "*There is no one I can turn to in times of stress*", "*There are people who value my skills and abilities*", "*I do not have a feeling of closeness with anyone*". Participants indicated on a 4-point scale the extent to which each statement described their current social networks. Responses range from 1 (strongly disagree) to 4 (strongly agree). After reversing negatively worded items a total score was be computed by summing all items. Higher scores indicate a greater degree of perceived support. The same procedure was applied to each of the 6 composite subscales. The Social Provision scale demonstrated high reliability with a Cronbach's $\alpha = .84$.

4.4 Results

4.4.1 Data Preparations and Plan of Analysis

The data set was screened, cleaned and prepared before statistical analyses were conducted. Missing data points were coded as -999 so as not to include them in analyses. Reversed items on the ICU (Frick, 2004); and PAI: Antisocial features subscale (Morey, 1991); Group Identification Scale (Henry, Arrow, & Carini, 1999); and Social Provision Scale (Cutrona & Russell, 1987) were reverse coded so that all items were positively keyed, whereby higher scores on the Likert scale indicate higher levels of the specified trait. All scales and subscales demonstrated high reliability with Cronbach's α between .80 - .90. Total scores were computed on all scale and nominal data for each participant; and an additional clinical cut-off score for a provisional diagnosis of PTSD was calculated. Data preparations and subsequent analyses were conducted using the IBM SPSS Statistics for Macintosh, Version 25.0.

4.4.2 Sociodemographic information and gang membership

Sociodemographic information regarding the sample, reported separately by gang membership is reported in Table 5.1. To examine group differences between gang and non-gang members a dichotomous variable was created based participants endorsement of the Eurogang Criteria and/or self-nomination of gang membership. Overall, 46 % of the endorsed being a gang member.

4.4.3 Trauma Exposure

Table 5.3 displays the proportion of participants endorsing each type of traumatic event on the LEC-5 questionnaire, reported separately by gang membership. Chi-square tests of independence were conducted to assess the association between gang membership and trauma type by cross-tabulating the dichotomous 'gang status' variable (e.g. Gang or Non-Gang Member) with whether or not they had experienced each of the different types of traumatic events (e.g. Yes or No). Results showed that of the 17 LEC-5 items there was only a significant association between gang membership—specifically, being a gang member—and having directly experienced (χ^2 (1) = 5.39, p = .020), witnessed (χ^2 (1) = 5.05, p = .025), and learned about (χ^2 (1) = 4.42, p = .035), a 'assault with a weapon', as well as having directly experienced 'exposure to toxic substances (χ^2 (1) = 4.00, p = .045). Contrary to expectations gang members were no more likely than non-gang members to report having caused 'serious injury, harm, or death to someone else'.

Table 4.3. Frequency distribution – traumatic events in the LEC-5 questionnaire (Happened to me)

Traumatic Event	Total Sample		Gang Member		Non-Gang Member	
	n	*%*	n	*%*	n	*%*
Natural disaster	7	*8.6*	4	*10.8*	3	*6.9*
Fire or explosion	15	*18.8*	7	*18.9*	8	*18.6*
Transportation accident	37	*46.3*	19	*51.3*	18	*41.9*
Serious accident	22	*27.5*	11	*29.7*	11	*25.6*
Exposure of toxic substance	4	*5*	0	*0*	4	*9.3*
Physical assault	71	*88.8*	36	*97.3*	35	*81.4*
Assault with a weapon	51	*63.7*	30	*81.1*	21	*48.9*

Sexual assault	7	*8.8*	4	*10.8*	3	*6.9*
Other unwanted/uncomfortable sexual experience	8	*10*	2	*5.4*	6	*13.9*
Combat or exposure to a warzone	6	*7.5*	3	*8.1*	3	*6.9*
Captivity	15	*18.8*	6	*16.2*	9	*20.9*
Life threatening illness or injury	18	*22.5*	10	*27.0*	8	*18.6*
Severe human suffering	7	*8.8*	3	*8.1*	4	*9.3*
Sudden violent death	3	*3.8*	1	*2.7*	2	*4.6*
Sudden accidental death	1	*1.3*	0	*0*	1	*2.3*
Serious injury, harm or death you caused to someone else	47	*58.8*	24	*64.9*	23	*53.5*
Any other stressful event or experience	23	*28.7*	8	*21.6*	15	*34.8*

Note. Values represent the number of "Happened to me" responses participants endorsed on the LEC-5. Participants were allowed to endorse multiple events.

The LEC-5 questionnaire not only captures whether the respondent has experienced different *types* of trauma, but also different *modes* of trauma i.e. *how* they experienced the traumatic events, whether it *happened* to them directly (as a victim or perpetrator), they *witnessed* it happen, *heard about it* happening to a close friend or family member, or whether they experienced it as *part of their job*—in line with the DSM-5 Criterion A requirements for a diagnosis of PTSD. Table 5.4 presents the results of independent samples *t*-tests comparing the total number of different trauma types experienced by gang and non-gang members, as well as the number of different trauma types within each of the different modes (e.g. happened to, witnessed, heart about, part of job). The results show that gang members, compared to their non-gang counterparts experienced a significantly greater variety of different trauma types overall, and were more likely to experience traumatic events by witnessing them and hearing about them happening to close others, not by experiencing them directly as a victim or perpetrator. This is mirrored in the data from the victimisation scale in the Youth Survey; an independent samples t-test showed that there was no statistically significant difference ($t(78) = -1.479$, $p = .143$) in total victimisation scores between gang ($M = 10.38$, $SD = 3.86$) and non-gang members ($M = 9.21$, $SD = 3.21$).

Table 4.4 t-test results comparing total number of different trauma types experienced across between gang and non-gang members and the breakdown across modes.

	Gang member (n = 37)		Non-Gang Member (n = 42)				
Trauma Exposure	Mean	SD	Mean	SD	df	*t* statistic	*p*-value
Total Trauma	13.38	4.46	10.24	4.64	77	*-3.04*	*.003*
Happened to	4.54	2.19	4.05	2.66	77	-.89	.371
Witnessed	4.43	2.38	3.43	2.08	77	-2.02	.047
Heard about	4.27	2.52	2.52	2.26	78	-3.24	.002
Part of Job	.14	.67	.23	1.23	77	.429	.669

4.4.4 Internalising symptoms

Table 4.5 displays the results of independent samples *t*-tests comparing total scores for Anxiety, Depression, PTSD, and PTSD composite symptom clusters between gang and non-gang members. Result showed that there were no statistically significant differences in internalising symptoms between gang and non-gang members. A chi-square test of independence was conducted by cross-tabulating the dichotomous 'gang status' variable (e.g. Gang or Non-Gang Member) with whether or not they 'qualified', by virtue of their symptoms, for a provisional diagnosis of PTSD (Yes or No). Results showed that there was no statistically significant association between gang membership and having met the requirement of a diagnosis of PTSD (χ^2 (1) = .840, p = .359).

Table 4.5. t-test results comparing Internalising symptoms between gang and non-gang members

	Gang member (n = 37)		Non-Gang Member (n = 42)				
Internalising Symptoms	Mean	SD	Mean	SD	df	*t* statistic	*p*-value
Anxiety	9.78	9.39	9.74	13.32	77	-.017	.986
Depression	15.08	8.77	14.91	10.17	78	-.081	.935
PTSD	25.73	18.74	22.45	22.84	77	-.692	.491
Cluster B (Intrusion)	6.16	5.81	5.84	6.43	78	-.236	.814
Cluster C (Avoidance)	3.19	2.70	2.49	2.60	78	-1.179	.242
Cluster D (Changes in Mood & Cognition)	7.16	5.97	7.17	8.62	77	.003	.998
Cluster E (Changes in arousal & activity)	9.22	7.17	7.00	7.31	78	-1.363	.177

In order to conduct a regression analysis, the data was split according to the dichotomous gang status variable (gang or non-gang member), creating two individual groups so analyses could be performed separately on each.

Simple regression analyses were conducted to assess the predictive ability of the total trauma score (the number of different types of trauma experienced by participants across the life course) on internalising symptoms: PTSD, anxiety, and depression for gang and non-gang members. Results showed that for non-gang members, the total trauma score significantly predicted PTSD symptom severity ($F(1,40) = 4.41$, p =.042; Beta = 6.683), and overall levels of anxiety (F(1,40) = 4.78, p =.035; Beta = .945) and depression (F(1,40) = 7.45, p =.009; Beta = .886), accounting for 9% (R = .099), 11% (R = .331) and 16% (R =.157) of the variance in PTSD symptoms severity respectively. However, for gang members, the total trauma score was a significant predictor of overall anxiety levels only (F (1,40) = 3.97, p = .054; Beta = .786), accounting for 10% (R= .319), not PTSD or depression.

4.4.5 Personality Features

Table 5.6 displays the results of independent samples *t*-tests comparing total scores for CU traits, ASPD, and PPD between gang and non-gang members. Results showed that gang members scored significantly higher than non-gang offenders on the PAI: Antisocial features subscale (Morey, 1991) and MCMI-III Paranoid Personality Disorder (Millon et al., 1994) subscale, meaning they exhibited higher levels of antisocial and paranoid traits indicative of personality disorders compared to their counterparts. While these measures are used in a research capacity only, not as a clinical tool for diagnosis, it does provide an indication that gangs members may be manifesting clinical or sub-clinical trait-based (as opposed to transitory state-based) characteristics that make them more prone to aggression and violence. There was no statistically significant difference between gang and non-gang members in their levels of CU traits.

Table 4.6. *t*-test results comparing personality characteristics between gang and non-gang members

	Gang member (n = 37)		Non-Gang Member (n = 42)				
Personality Features	Mean	SD	Mean	SD	df	*t* statistic	*p*-value
CU Traits	23.95	10.26	23.47	8.97	78	-.22	.824
ASPD	60.13	10.17	53.50	10.10	72	-2.78	.007
PPD	16.57	8.48	12.27	7.76	76	-2.34	.022

A multiple linear regression analysis was conducted to assess the predictive ability of dysfunctional personality characteristics: Antisocial Personality Disorder, Paranoid Personality Disorder, Callous-Unemotional traits, separately and together, on the severity of PTSD symptoms in gang and non-gang members. Results show a significant regression equation for non-gang members only ($F(3,35) = 15.32$, p<.001), with an R of .57, meaning together all three personality variables explain 32% of variance of PTSD symptom severity. However, paranoid personality disorder was the only *significant* predictor (*Beta*(38) = .774. p<.001) accounting for 53% (R = .729) of the variance in PTSD symptom severity alone. The severity of non-gang members' PTSD symptoms increased 2.270 for every 1-point increase on the MCMI-III Personality Disorder subscale.

Interestingly, while gang members exhibited significantly higher levels of paranoid personality characteristics compared to non-gang members, it was not a factor that contributed to the development of post-trauma internalising symptoms, such as PTSD.

4.4.6 Externalising symptoms

An independent samples *t*-test was conducted to compare externalising symptoms, operationalised as individual and group delinquency, between gang and non-gang members. Results showed that gangs members scored significantly higher on both individual (M = 46.65, SD = 12.22; $t(77) = -4.50$, p <.001) and group delinquency (M = 31.71, SD = 8.40; $t(60) = -3.91$, p <.001) subscales than non-gang offenders (M = 34.62, SD = 11.53; M = 24.26, SD = 5.95) respectively. However, no statistically significant differences were found

in sentence length, number of offences, and number of convictions between gang and non-gang offenders.

Multiple linear regression analyses were conducted to assess the predictive ability of total trauma score (the number of different types of trauma experienced by participants across the life course) and total PTSD symptom severity on individual and group delinquency across gang and non-gang members

With regard to individual delinquency, results showed a significant regression equation for gang members only ($F(2,34) = 6.54$, $p = .004$), with an R of .278 (7%). However, the total trauma score was the only *significant* predictor (*Beta*(36) = .444, $p = .005$) explaining 19% (R = .439) of the variance in individual delinquency. The level of gang members' individual delinquency increased 1.215 for each exposure to a different trauma type. With regard to group delinquency, results showed significant regression equations for both gang ($F(2,32) = 11.73$, $p < .001$) and non-gang members ($F(2,23) = 3.52$, $p = .047$) with R of .423 (17%); and .234 (5%) respectively. The total trauma score, and not PTSD symptom severity, was the only statistically significant predictor of group delinquency for both gang (*Beta*(34) = .567, $p < .001$) and non-gang members (*Beta*(25) = .450, $p = .023$), explaining 28% and 19% of the variance in group delinquency respectively. That trauma exposure predicts externalising symptoms like delinquency is in line with expectations. However, it is equally likely that this is a cyclical relationship whereby delinquency also predicts trauma exposure as outlined in the gang modified version of Kerig & Beckers, (2010) TDM of trauma and delinquency in Chapter 3.

4.4.7 Social Psychological Processes

Table 4.7 displays the results of independent samples *t*-tests comparing total scores for moral disengagement and the composite subscales: moral justification, euphemistic

labelling, advantageous comparison, displacement of responsibility, diffusion responsibility, distorting consequences, attribution of blame, and dehumanisation of victims between gang and non-gang members. Results showed that compared to their non-gang counterparts, gang members had significantly higher total moral disengagement scores, and scores on each of the subscales except for 'distorting consequences', which was marginally significant (p =.062). These findings indicate that gang members exhibit higher levels of moral disengagement across almost all facets than non-gang offenders.

Table 4.7 *t*-test results comparing total Moral Disengagement and subscale scores between gang and non-gang members

	Gang member (n = 37)		Non-Gang Member (n = 42)				
Total Moral Disengagement	Mean	SD	Mean	SD	df	*t* statistic	*p*-value
Moral Disengagement	90.32	13.82	78.50	15.84	77	-3.51	.001
Subscales							
Moral Justification	14.46	2.92	12.65	3.53	78	-2.47	.016
Euphemistic Labelling	11.49	1.98	9.79	2.46	78	-3.35	.001
Advantageous Comparison	10.46	2.79	8.63	2.96	78	-2.82	.006
Displacement of Responsibility	10.81	2.13	9.26	2.78	77	-2.74	.007
Diffusion of Responsibility	12.24	2.65	11.05	2.36	78	-2.13	.036
Distorting Consequences	9.54	2.23	8.53	2.48	78	-1.89	.062
Attribution of Blame	10.65	2.55	9.30	2.55	78	-2.35	.021
Dehumanisation of Victims	10.68	3.67	8.58	2.68	78	-2.93	.004

However, results from an independent samples t-test comparing the levels of social provision and composite subscales: guidance, reassurance, social integration, attachment, nurturance, reliable alliance between gang and non-gang members showed that there was no statistically significant difference between gang and non-gang members.

4.4.8 Group Processes

In order to assess group processes, participants who indicated that they did not belong to a friendship group were filtered out of dataset by selecting and removing those who answered 'No' to question 57 of the Youth Survey (Weerman et al., 2009): "*In addition to any such groups or teams, some people have a certain group of friends that they spend time with, doing things together or just hanging out. Did you have a group of friends like that*?". Sixteen participants answered 'No', leaving 64 participants out of the original 80.

4.4.8.1 Group Identification, Group Belonging and Perceived Cohesiveness

An independent samples t-test was conducted comparing levels of group identification, group belonging and perceived cohesiveness between gang and non-gang members. Results showed a statistically significant difference ($t(62) = -2.13$, $p = .034$) between gang and non-gang members in group identification only, whereby gang members ($M = 61.81$, $SD = 13.14$) exhibited higher levels of group identification than non-gang members ($M = 55.00$, $SD = 11.79$).

A multiple regression analysis was conducted to see if group identification, group belonging, and perceived cohesiveness, either separately or together, predicted internalising (e.g. PTSD, anxiety, depression) and externalising symptoms (e.g. individual and group delinquency) in gang and non-gang members, but results did not show any statistically significant findings in either group.

4.4.8.2 Group Pressure

A chi-square test of independence was conducted by cross-tabulating the dichotomous 'gang status' variable (e.g. Gang or Non-Gang Member) with each of the dichotomous (e.g. Yes/No) questions on the Group Pressure Scale:

1. Have you ever publicly agreed with the actions and words of other group members whilst privately disagreeing with them?
2. Have you ever gone along with the actions of your group whilst privately thinking it was wrong?
3. Have you ever felt pressure from your group to do something you didn't want to do?
4. Have you ever felt pressure from your group to commit a crime?
5. Have you ever felt pressure from your group to commit a violent act against someone?
6. Have you ever committed a violent act against someone because of the pressure you have felt from your group?

Results showed that there was a statistically significant association between gang membership and feeling pressure from one's group to commit a violent act (χ^2 (1) = 4.80, p = .028), with 81% of gang members, compared to only 18% of non-gang members, answering 'Yes' to this item. Similarly, results show a statistically significant association between gang membership and committing a violent act *because* of the pressure felt from one's group (χ^2 (1) = 3.94, p = .047), with 83% of gang members, compared to only 17% non-gang members, answering 'Yes' to this question.

4.4.8.3 Pluralistic Ignorance

A chi-square test of independence was conducted to assess the association between gang membership and pluralistic ignorance by cross-tabulating the dichotomous 'gang status' variable (e.g. Gang or Non-Gang Member) with the (Yes/No/Maybe) responses to following item: 'Do you think other group members have done things for the group that privately they

didn't agree with?'. Results showed that there is a significance association between gang membership and pluralistic ignorance (χ^2 (2) = 9.22, p = .010) with 83% of gang members, compared to 17% of non-gang members responding 'Yes' to this question.

4.5 Discussion

The overarching aim of this chapter was to explore the trauma, personality and mental health profile of gang and non-gang offenders to ascertain if there were any differences between incarcerated gang and non-gang members, and whether these differences could be explained by the presence of certain social and group processes unique to the gang that promote identification and obedience to a violent criminal lifestyle that creates new opportunities for trauma exposure and exacerbation of symptoms through violent inter- and intra-gang activities. The research findings from this study provide partial support for some hypotheses outlined at the beginning of this chapter. Key findings from this study will presently be discussed in relation to the existing literature.

4.5.1 Trauma Exposure

It is possible that gang members' experiences of 'exposure of to toxic substances' speaks to the relatively new 'trend' of using sulfuric acid to attack and maim enemies. The use of such tactics in gangs is beginning to be seen in the literature (Song, Armstrong & Murray, 2019; Lewis, Hodgkinson & Allison, 2020; Mann, Mojtahedi & Leadley, 2020). Contrary to expectations gang members were no more likely than their non-gang counterparts to have caused serious harm, injury or death to another—or rather, were no more likely to *report* perpetrating such acts. This is surprising given that violence is an integral and defining feature of the gang lifestyle, much of which involves inflicting violence on others as part of gang initiations, offensives strikes to demonstrate power and status, retaliatory attacks against

rival gangs, and defending lucrative drug networks and territories; as such one would expect this to be reflected in the data. However, given that gang members were more likely than non-gang offenders to exhibit paranoid personality traits indicative of paranoid personality disorder, it is possible that they perceived there to be malicious intent behind the question—despite being informed of the confidential nature of the interview session—and hence not answered truthfully through fear of the information being used against them in way that would negatively affect their sentencing. It is also possible that because the question '*have you ever caused serious injury, harm, or death to someone else*?' was asked within the context of it being a traumatic experience that gang members responded 'No' when in fact they had perpetrated such acts against others, they just did not deem it a traumatising experience.

A similarly unexpected finding was that gang members were no more likely than non-gang offenders to have been victimised in the past. Again, this may speak more to a reluctance to report such experiences rather than empirical reality. There is a vast evidence base supporting the link between gang membership and victimisation and the nexus between violence perpetration and victimisation more generally (e.g. Peterson, Taylor & Esbensen, 2004; Taylor, Peterson, Esbensen & Freng, 2007; Katz, Webb, Fox & Shaffer, 2011; Barnes, Boutwell & Fox, 2012); as such one would expect this to be reflected in the findings. However, for gang members, who value only strength, ferocity and fearlessness, being perceived as a victim would have negative implications for their reputation and standing within the gang, and prison setting, and hence may be reluctant to admit to being victimised (Stretesky & Pogrebin, 2007).

For gang members, these findings represent a distanced acknowledgement of trauma and a sense of 'otherness', where violence is something that is happening around them and to other people, but not them.

4.5.2 Internalising symptoms

Contrary to expectations there were no significant differences in the levels of PTSD or depression symptoms experienced by gang and non-gang members; and gang members were no more likely than their non-gang counterparts to meet the requirements of a provisional DSM-5 diagnosis of PTSD. However, the absence of internalising symptoms doesn't necessarily mean an absence of pathology. As we saw in Chapter 4, constant exposure to trauma, generates a normalised response where we become biologically and emotionally desensitised to the repeated and chronic activation of our internal alarm system, the para sympathetic and LHPA systems. Desensitisation models that counter the linear cumulative and dose-response models of trauma exposure and trauma symptoms have been found, especially in relation to exposure to community violence (Kennedy & Ceballo, 2016; McCart, Smith, Saunders, Kilpatrick, Resnick & Ruggiero, 2007; Gaylord-Harden, So, Bai & Tolan, 2017; Kelly, Anderson & Peden, 2009). The fact that gang members reported greater levels of weapons-related assaults and exposure to toxic substances, but did not report corresponding internalising symptoms may be evidence of a desensitisation effect. Indeed, Coenen (2013) explains how a nihilist philosophy and desensitisation to death go hand in hand for gang members:

> Gang members have developed a nihilist view on death showing no fear of the subject and acceptance of its constant and repetitive presence in their lives. Often luring in our nation's youth, gangs desensitise them to see their own death as inevitable and around the corner […] Gang members have a full acceptance of the brutality of death and understand death as a necessity in life. Nihilism is having lived without love, hope or meaning and in the case of gang members nihilism is death. They see death as forever present, forever in the future and as nothing to hide from or fear. Having no

fear for death creates a form of acceptance for mortality in life. (Coenen, 2013, p. 133)

4.5.3 Externalising symptoms

Although gang members were no more likely than their non-gang counterparts to have reported causing serious harm, injury or death to another in the LEC-5 questionnaire, they did report greater levels of individual and group delinquency. Given the extensive evidence base, reported throughout this thesis, linking delinquency and gang membership, this was an expected finding. This pattern of findings i.e. gang members' increased exposure to weapons-assaults, with no commensurate hike in internalising symptoms, but greater level of externalising symptoms may also be explained by the desensitisation hypothesis. As reported in chapter 4 desensitisation and emotional numbing in response to trauma can disrupt youth's ability to recognise, and respond to risk appropriately, increasing their likelihood of engaging in risky activities that may lead to involvement with the criminal justice system. This is mirrored in a study by Mrug, Madan & Windle (2016) who found that exposure to violence at age 11 was associated with lower levels of internalising symptoms at age 13. In turn, fewer internalising symptoms and more externalising symptoms at age 13 predicted violent behaviour at age 18. These results show that desensitisation to trauma in childhood contributes to the development of violent behaviour in adolescence.

4.5.4 Dysfunctional personality traits

Results from this study showed that gang members, compared to non-gang members exhibited higher levels of antisocial and paranoid personality traits, indicative of ASPD and PPD respectively, which aligns with the few existing studies examining personality characteristics in gang members. For instance, Coid et al., (2013) found that the rates of

ASPD were 57 times higher in gang members than in non-violent men, and six times higher than in violent non-gang men. This finding was supported by Wood et al., (2017) who found a statistically significant gradient effect with ASPD whereby the levels increased gradually from violent men, to gang affiliates, and finally to core gang members who exhibited the highest levels. Similarly, Mallion & Wood (2018) found that ASPD predicted gang membership in a sample of male offenders. As with ASPD there is also support for the association between gang membership and paranoid personality characteristics in the existing literature. For instance, Wood & Dennard (2017) found that street gang prisoners exhibited higher levels of paranoid personality characteristics than non-gang prisoners. Both ASPD and PPD are prevalent in incarcerated populations and have found to be comorbid with each other (Coid, 2002), but PPD was the only personality variable that significantly predicted PTSD severity, and this was only true for non-gang members.

4.5.6 Social psychological processes

Mixed support was found for the hypothesis that gang members would exhibit higher levels of group processes, and that these processes would predict levels of internalising and externalising symptoms, more so than non-gang members. Gang members did report higher levels of group identification, pluralistic ignorance, and group pressure (i.e. feeling pressure from their group to commit violent acts, and subsequently perpetrating acts because of the pressure felt from the group), but not social provision, group belonging, or perceived cohesiveness. It seems that gang members were only more likely to experience, and in greater amounts, the negative elements of belonging to a group i.e. the processes that foster conformity to group norms through pressure and duress (e.g. group process and pluralistic ignorance), rather than the positive processes within the group that foster conformity through members' belief in and alignment with the values and goals of the group (social provision,

group belonging, or perceived cohesiveness).These findings might point to two distinct means of influence: negative (e.g. force) and positive (e.g. free will). The former might be most effective on reluctant fringe gang members and the latter most effective on devoted core gang members. However, contrary to expectation none of the group processes significantly predicted internalising or externalising outcomes in either gang or none gang members.

Additionally, the finding that gang members had significantly higher moral disengagement scores than non-gang members is supported in the literature, which shows that moral disengagement predicts joining a gang, increases violence during the gang, and increases the likelihood of re-engaging with the gang after initially leaving. (Dhingra, Debowska, Sharratt, Hyland & Kola-Palmer, 2015; Niebieszczanski et al., 2015; Wood & Alleyne, 2010; Boduszek Dhingra & Hirschfield, 2015).

4.5.7 Limitations

There are several limitations associated with the data collection tools in this study that qualify the validity of findings. Firstly, unless specifically documented in item 17 of the LEC-5 '*any other very stressful event or experience*?', the study has no away of assessing and controlling for the traumatic effect of the prison environment on the mental health and behaviour of participants, and whether this effect differs across gang and non-gang prisoners. There is evidence that now supports the anecdotal views of ex-prisoners that there is a recognisable post-incarceration syndrome characterised by institutionalised personality traits (distrusting others, difficulty engaging in relationships, hampered decision-making), social–sensory disorientation (spatial disorientation, difficulty in social interactions) and social and temporal alienation (the idea of 'not belonging' in social and temporal setting) that captures the unique effects incarceration has on mental health (Liem & Kunst, 2013). Most research, including Liem &Kunst's (2013) study, has sampled 'lifers' serving substantial custodial

sentences of 25 years+ which is not representative of the local remand prison where the average sentence length of participants for this study was 2.5 years. However, how long it takes for the effects of incarceration to manifest, and whether short but repeated prison stints have a similar damaging impact to long-term incarceration is unknown. Despite this there are parallels between the findings of this present study and that of this existing trauma/gang literature, especially symptoms of paranoia and hypervigilance (Wood & Dennard, 2017).

Second, the measures in this study, although some being gold standard diagnostic measures, are used here only in a research capacity to provide *indications* of clinical events and symptoms. Because the findings from this study were not analysed and interpreted by of an appropriately qualified professional (e.g. a Clinical Psychologist), or verified by prison health records, the findings in this study should be taken only as tentative not confirmatory evidence of clinical syndromes.

Third, the LEC-5 questionnaire used to assess compliance with PTSD Criterion A only captures information on the type and mode of traumatic events, not *how many* traumatic events respondents have experienced irrespective of whether they are different. While calculating the number of trauma types does allow for differentiation across participants and groups, it is not the same as calculating the total number of individual traumatic events. However, research shows that experiencing multiple trauma types has the same cumulative effect on the development and severity of symptoms we multiple single-event (Suliman, Mkabile, Fincham, Ahmed Stein & Seedat, 2009; Agorastos et al., 2014). While the use of the LEC-5 was necessary for alignment with a DSM-5 PTSD diagnosis and generating universally comparable, and clinically relevant findings, it does not capture respondents' experiences of trauma from a phenomenological perspective. Therefore, it is important not to be blinkered by the strict diagnostic parameters of the DSM-5 definition of PTSD and to take

a broad view of the concept of trauma in order to understand how it might derail normal development and set youth on the pathway to delinquent behaviour and gang membership Fourth, given the nature of the study design it is difficult to establish causality between variables. For instance, whether trauma exposure contributed to the development of externalising symptoms manifested as individual-level and group-based delinquency.

Fifth, an alternative bivariate statistical analysis strategy could have been used to maximize the restriction on power given the relatively small sample size. Presently, statistical analyses were performed by splitting the data set into gang and non-gang groups, further reducing the sample size and power to detect significant effects if present. As such, more meaningful and reliable information and could have been yielded.

4.6 Conclusion

The current quantitative study documents gang and non-gang members experiences of trauma (e.g. type and frequency), internalising (e.g. PTSD, anxiety, and depression) and externalising (e.g. individual and group delinquency) symptoms, dysfunctional personality traits (ASPD and PPD) as well as social psychological processes (e.g. social provision, moral disengagement, group identification, group belonging, perceived cohesiveness, group pressure and pluralistic ignorance, group pressure). Though the findings from this study were mixed, with only partial support for hypotheses being found across all five research objectives, the fact gang members were more likely than their non-gang counterparts to experience: weapons-related trauma; group pressure, identification and pluralistic ignorance; moral disengagement; greater levels of individual and group delinquency; and more likely to exhibit antisocial and paranoid personality traits, indicates that gang members may be a unique and distinct subset of offender who require a unique and tailored suite of interventions aimed at promoting gang desistance and managing dysfunctional personality traits, in order to

reduce involvement in criminal activities, and opportunities for future traumatisation and exacerbation of symptoms.

CHAPTER 5: "It is what it is": A Qualitative Exploration of Gang-Involved and Non-Gang Offender's Experiences of Trauma

Most research that explores the impact of trauma on delinquent youth is quantitative in nature; there is significantly less research exploring the impact of trauma on delinquent youth and/or gang members, and what little of this there is, is either quantitative or single case studies. While numeric data can give precise and consistent quantifications of particular variables and the relationships between them, it cannot provide the richness, depth of understanding, and broader context that qualitative approaches can. The ability of words to derive *meaning* rather than *description* is especially important when it comes to the concept of trauma. Trauma is a rather 'woolly' concept and can be, and often is, defined in many different ways (Kerig & Becker, 2010). However, most quantitative studies use prescriptive diagnostic scoring systems, such as the DSM-5, to determine whether someone has or has not experienced a sufficiently traumatic event, and whether they can or cannot experience post-traumatic sequalae such as PTSD. Such algorithmic systems have the benefit of enabling access to appropriate treatment, fairly and consistently, to those in need. However, in agreement with Van der Kolk, McFarlane, & Weisaaeth (1996) and Paton, Crouch & Camic (2009) a PTSD diagnosis does not adequately describe the complexity of people's lived experiences of overwhelming and lifechanging events. As such, this study will undertake an unbounded exploration of trauma by examining the phenomenology of trauma in incarcerated gang and non-gang members using inductive thematic analysis. This qualitative data will supplement the quantitative trauma data presented in Chapter 5.

5.1 Method

5.1.1 Participants

Twenty prisoners were recruited from a remand prison in the South East of England. This prison is a category B and C local prison holding approximately 1252 sentenced and un-sentenced adults and young offender males. These participants are a subset of the larger quantitative study outlined in Chapter 5 who agreed for their interviews to be audio recorded. The mean age of participants is 23 *(SD* = 3.06, range = 10) and the mean sentence length is 3.2 years (SD = 2.29, range = 8). The majority of participants identified as White British (80%, *n*=16), two as White Irish (10%), and two as Black British (10%); 12 participants were classified as gang members (60%) and 8 were classified at non-gang members (40%). Table 6.1 provides and overview of participants characteristics.

Table 6.1. Summary demographic and offence characteristics of participants interviewed

Participant Number	**Age**	**Ethic Origin**	**Offence**	**Sentence (years)**	**Gang status**
1	20	White British	Burglary	2.5	Non-gang
2	22	White British	GBH*	2.5	Non-gang
3	22	White British	GBH	8.0	Gang
4	26	White Irish	ABH**	3.0	Non-gang
9	24	White British	Manslaughter	5.0	Non-gang
10	24	White British	Sexual assault; attempted rape	6.0	Gang
11	26	White British	Possession with intent to supply a Class A drugs	2.5	Non-gang
12	21	White British	GBH; racially-aggravated criminal damage	5.0	Gang
14	22	White British	Robbery with a bladed article	5.4	Gang
17	22	Black British	Possession with intent to supply a Class A drug	3.0	Gang
18	19	White British	Possession of imitation firearm; criminal damage	Remand	Non-gang
21	22	White Irish	Possession of a firearm	Recall	Non-gang
22	29	White British	Common assault	1.3	Gang
25	29	White British	Racially-aggravated violent disorder	1.4	Gang

27	19	Black British	GBH with intent to wound	7.5	Gang
29	26	White British	Assault	6 months	Non-gang
31	25	White British	Robbery	3.1	Gang
33	22	White British	Dangerous driving	1.4	Non-gang
34	27	White British	Possession with intent to supply a Class A drug	3.0	Gang
35	27	White British	Possession with intent to supply a Class A drug	2.5	Gang

Note. Of the participants with a 'Gang' status, only two (participants'17 and 22) met the Eurogang criteria and self-nominated as a gang member, the rest met only the Eurogang criteria of belonging to a gang. Participants 33 has a status of 'Non-gang' but was a former gang member.
*Gross Bodily Harm
**Actual Bodily Harm

5.1.2 Procedure

General offense-related and demographic information was captured using the self-report Youth Survey: Eurogang Program of Research (Weerman et al., 2009). An open-ended question asking participants to identify and describe their worst traumatic experience was asked as part of the Life Events Checklist for DSM 5 with an extended criterion A assessment (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx & Keane, 2013), forming the basis of this qualitative study. Specifically, participants who had experienced one or more of 17 different types of traumatic events outlined in part 1 of the LEC-5 questionnaire (see Appendix 7 for questionnaire) were asked to "think about the event you consider the worst event, which for this questionnaire means the event that currently bothers you the most. If you have experienced only one of the events in part 1, use that one as the worst event". Participants were then asked to answer a series of related questions about this 'worst event', one of which is an open-ended question: "Briefly describe the worst event (for example, what happened, who was involved, etc.)". While this question does form part of a prescriptive diagnostic system, the open-ended and loose nature of the question allows for unfettered

content-rich qualitative responses the can supplement and compliment the corresponding quantitative data outlined in Chapter 5. The unstructured nature of the question allowed for follow-up questions as the interview unfolded, as well as requests for clarification and elaboration.

This study was conducted as part of the larger quantitative study presented in Chapter 5, as such the same method of recruitment and consent procedures were applied. All interviews were conducted using a digital audio recorder with participants' knowledge and informed consent. All interviews were transcribed verbatim, with participants identities being protected by a unique number and recording ID in place of their name. Any potentially identifying information was removed from the transcripts.

5.1.3 Data analysis

The purpose of this qualitative study is to explore incarcerated gang and non-gang members' phenomenological experiences of trauma, and capture a unique insight into their affective and cognitive interpretation of events. An inductive thematic analysis based on Braun and Clarke's (2006) six-step methodology was conducted. A thematic analysis is a method for identifying, analysing and reporting patterns, called themes, within data. An *inductive* thematic analysis is where the identification of themes is data-driven, from the bottom up. The researcher has no pre-conceived ideas about what the data might yield or try fit data into a pre-existing conceptual framework. As such the documented themes emerge organically—unlike a *theoretical* thematic analysis where themes are sought to *confirm* the researcher's analytic interest or theoretical framework. Themes were identified at a semantic (explicit surface level meaning) and latent (underlying ideas and assumptions) level in order to draw inferences about the relationship between the characteristics of trauma and participants' responses these traumas.

The data from this study was analysed using Braun & Clarke's (2006) six-step thematic analysis methodology. The first step is *data familiarisation*: the author became familiarised with the data after conducting the interviews, listening to the audio recordings of the interviews, and then transcribing them verbatim. As part of the transcription process it was often necessary to replay interviews several times to ensure the accuracy of the transcription. Transcripts were read and re-read to identify initial ideas.

The second step is *generating initial codes*: data was initially coded for interesting features by highlighting quotes from interview transcripts. A code could be a standalone statement or a collection of statements. This process was conducted in a systematic fashion across the entire data set (all 20 interview transcripts), collating data relevant to each code.

The third step is *searching for themes*: all codes were reviewed, and those codes with similar content were grouped together under a potential overarching theme. A theme is "something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82). Sub-themes were also created when a cluster of similar codes represented something unique *within* a related overarching theme. Like step two, this process was conducted in a systematic fashion for each transcript across the entire dataset.

The fourth step is *reviewing themes*: The coded extracts (quotes) that make up the themes were reviewed to make sure they form a coherent pattern that is internally homogenous, but externally distinct from the data that comprises other themes (bottom-up). The overarching themes were reviewed to ensure that they accurately represented the codes and sub-themes subsumed within them (top-down). A tentative thematic map was then drafted to depict the relationship between themes. The themes were then checked to make sure they worked together across the entire data-set to tell the story depicted in the thematic map. In short, themes were reviewed and refined individually—what Braun & Clarke (2006)

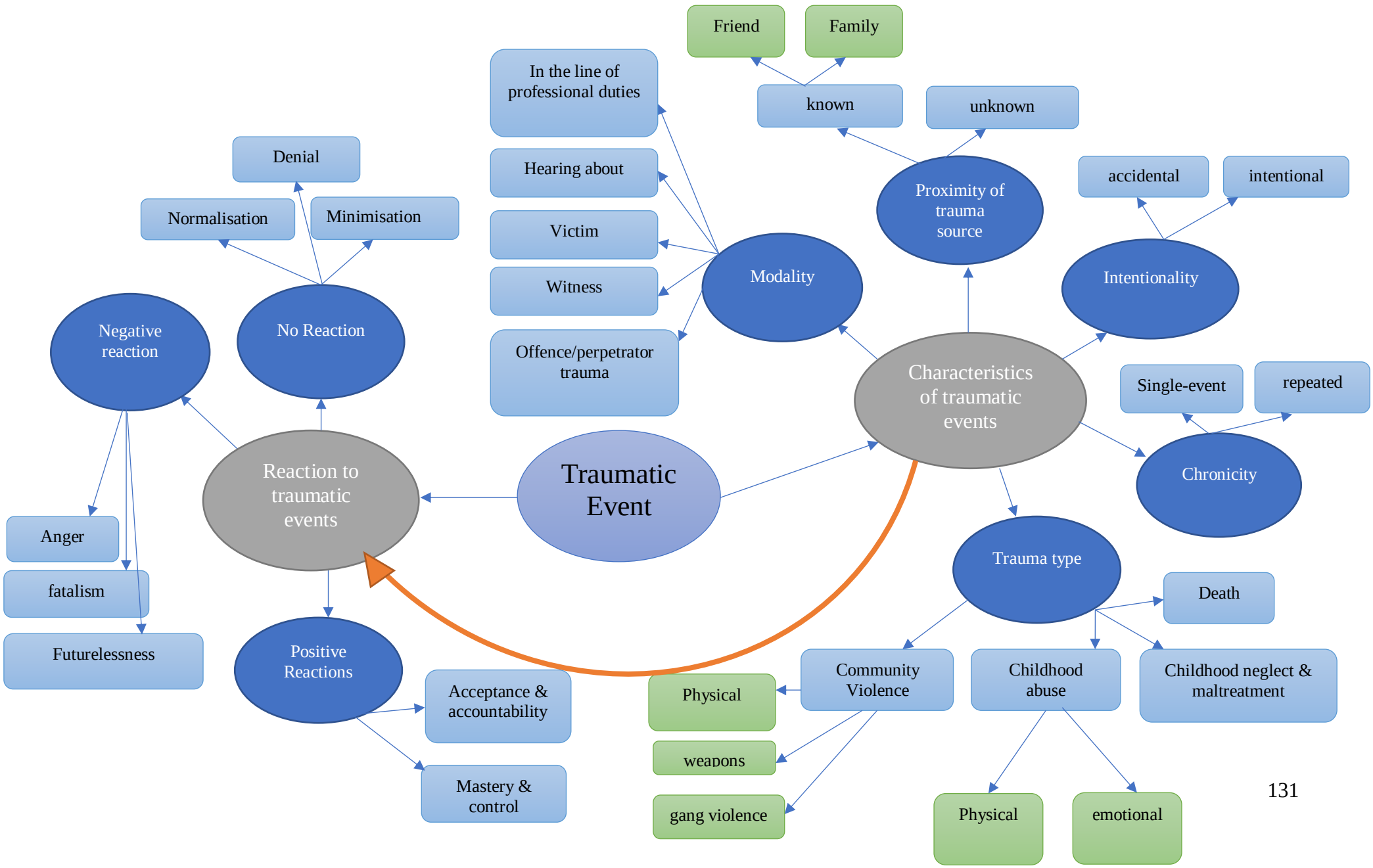
refer to as level 1—and how they fit within the bigger thematic picture—what Braun & Clarke (2006) refer to as level 2.

The fifth step is *defining and naming themes*: clear definitions were given to each theme, sub-theme, and code. As with Step 5 this was reviewed and refined at level 1 and 2 to ensure the themes were internally coherent and the overall 'story' the analysis tells made sense across the entire data set. The final step six is *reporting themes* and is outlined in the following Results section.

5.2 Results

Based on the inductive thematic analysis of 20 transcripts two broad themes relating to participants' worst traumatic event were identified across the dataset. These were: *characteristics of traumatic events*, and *reactions to traumatic events*. Figure 6.2 provides a diagrammatic representation of these themes and sub-themes. Each theme and sub-theme will be introduced and discussed in turn with illustrative quotes from participants.

Figure 5.2 Thematic Map of the Themes Relating to Offenders' Experiences of Trauma



5.2.1 Characteristics of traumatic events

This broad theme speaks to the range and diversity of traumatic events experienced by gang and non-gang and offenders. It captures different commonly cited objective characteristics about the event(s) that describe how they happened, when they happened, for how long, and by whom across five different sub-themes: Trauma type, chronicity, intentionality, proximity, and modality. Each sub-theme will now be discussed in turn.

5.2.1.1 Trauma types

Exposure to community violence

Exposure to community violence was a commonly cited trauma type with participants describing themselves as victims and witnesses of violence within the community context. For example, participant 17 (e.g. *"I've had 2 neck shots, I've been stabbed in my neck twice, I got stabbed there (points to arm), stabbed in the back. I've been through a lot")* and participant 11 *(*e.g. *"I got stabbed in the back; er erm well me mate was at the same time as well, he got stabbed in the leg. Some crazy kid with a knife […] never seen him in our lives.")*, both of which are gang members, describe the types of injuries that they have suffered and survived as a result of street-based violence. The use of weapons such as knives and guns are notable and mirrors the quantitative findings in Chapter 5—that gang members, compared to non-gang members, were significantly more likely to have been exposed to weapons and weapons-related assaults—as well as published research, and official statistics (Bjerregaard & Lizotte, 1995; Marshall, B., Webb & Tilley, 2005).

As outlined in Chapter 1weapons-use has increased concomitantly alongside the spread and scale of county lines drug gangs; for some participants in this study, community violence involved gang activity and selling drugs and one aspect of this was violent 'turf

wars' between people from different geographical areas. Participant 4 (non-gang member) describes hearing about the murder of a close friend:

> *"they […] went into the field and gave him a shovel, and said dig the hole and we'll bury the guns. He was digging the hole and he didn't know he was digging his own grave. They dug the hole put him on his knees and blew his head off. […] I was with him 10 minutes before. […] His mother committed suicide two years later she couldn't hack it."*

that was part of an ongoing gang war:

> *"It was two sides of a gang. One side of the city fighting with the other side of the city. But they were literally shooting each other for like…anyone was likely to get shot back then, do you get me. They were finding bodies every week. […] every week there was bodies getting found. within that feud alone I'd say there's over a 100 people that's dead, or at least 70 or 80 anyway."*

There was a consensus across participants that exposure to violent and threatening behaviour was an expected 'occupational hazard' and an acceptable calculated risk given the potential rewards. One participant describes the injuries he has sustained as part of his 'business', selling class A drugs e.g. *"I've been stabbed 7 times, I got stabbed right through my hand there (points to hand), stabbed right through my forearm there (points to arm), right through my side, in my back, through my leg, yeah, serious. […] 4 of them was related to my business [selling class A drugs*]" (Participant 35, gang member).

Whilst money and material goods are a key driver for criminal activity, a more dangerous motivation for violence emerged: reputation enhancement. Participant 17 describes how material goods, such as money, drugs, jewellery, cars etc. are used to convey status, power and notoriety within gangs, consequently making them targets for attack from jealous rivals as gangs within the area vie to become 'top dog':

So when they're talking and if your enemy hears that you've got certain things and he ain't got it, he's going to come for you. […] He's going to try and take them. So if that means stabbing you, or a bunch of cats shooting you or whatever, it will be done. Because right now everyone wants a name no one really wants the money. Everybody want to be known as 'ah that guy shoots his gun', I don't want to fuck with that guy because he's going to shoot me." (Participant 17, gang member)

In the same way striving for the top can create conflict, the fear of victimisation, and the reputational implications of this can foster violent pre-emptive and retaliatory strikes *"because no one wants to be a punk, no one want to be like he done this and I never done that […] like if I'm a victim of a crime I can't let it go."* (Participant 17, gang member), demonstrating just how important the perception of others is to them and the gang.

Childhood abuse, neglect and maltreatment

This subtheme pertains to experiences of trauma during childhood and captures examples of neglect and physical abuse from within and outside of the family. For example, participant 14 describes being violently abused by his grandad:

My grandad, err, put a walking stick across my leg and it snapped in three pieces. Err, he held me over Dover cliff. He said have I been taking drugs; I said no. Erm my grandad used to spank me all the time so I'd bruise. Erm he done a lot of shit what I'm not pleased about (Participant 14, gang member)

And participant 33 (non-gang member) describes the chronic neglect he experienced whilst living with his mother:

she [participant's mother] used to go out to get money, and she used to lock me bedroom, erm, with like a bottle to piss in, and she'd come back, like, sometimes a couple days later, sometimes a couple of weeks later. When I was 10 I went in to

foster care, she had a social worker from when I was 8 to when I was 10, but they used to walk in step over all the beer cans and needles, tick all their boxes and walk back out like everything was alright.

coupled with exposure to substance abuse:

I used to worry, like, she used to overdose like 2 to 3 times a week, and I used to have to call an ambulance out or something, and she'd have to go to hospital and I'd have to go with her. But I used to always worry that she'd do that somewhere else, outside, while I was locked in my house. And then obviously no one would know I was there. That used to worry me quite a lot. [unintelligible].

and transitory lifestyle with the threat of violence from drug dealers and loan sharks:

[…] She used to beat me up a lot, erm, when she was drunk. Me her and my dad lived in Blackpool, and when I was 3 she got in debt with people for drugs, and she took me and moved to London to get away from the people she owed the money to. And err we moved in to like a hostel, like an emergency accommodation hostel for a couple of nights. I think it was quite a lot of money she owed cause they found out where we was living within like the same day, and err they kicked the door in a beat both of us up.

Collectively, these descriptions create a profile that is characteristic of complex trauma (e.g. repeated and sustained interpersonal trauma that escalates overtime) and are similar to the experiences documented in the published literature of incarcerated young men (Ford, Chapman, Connor, & Cruise, 2012; Honorato, Caltabiano & Clough, 2016).

As we have seen in Chapter 3 complex trauma derails and disrupts biopsychosocial development and attachment bonding leading to a range of interacting problems (e.g. poor mental health, dysfunctional personality traits, substance abuse, maladaptive arousal reactions, impaired information processing, violence-endorsing schemas, and reinforcing peer

relationships etc.) that contribute to delinquent and criminal behaviour. As such it is clear to see how chronic childhood trauma can trigger a pathway that results in involvement with the criminal justice system.

Death

This subtheme pertains to participants experiences of death as traumatic events and captures the deaths of family members, friends and strangers.

The majority of participants indicated experiencing the death of a loved one to natural causes, e.g., participant 34 (gang member): *"My grandad got cancer and he died when I was young"* this was mirrored by Participant 12 (gang member): *"It would be my mum's death. She died of Septicaemia."*, and participant 14 (gang member): *"my nan passed away, she died in my arms"*, which speaks to experiences of death as a natural and expected part of life.

However, others report losing friends as a result of gang violence:

> *He shot him, my mate that was driving the car. [He] gave him a shovel, and said dig the hole and we'll bury the guns. He was digging the hole and he didn't know he was digging his own grave. They dug the hole put him on his knees and blew his head off. […] I was with him 10 mins before* (Participant 4, non-gang member).

drug overdose

> *We'd gone out to a rave one night in Birmingham, and we'd err been taking a few drugs and stuff, some Es, we'd come back, gone our separate ways and he'd carried on staying up. [...] a kid who lived in the same block of flats come running round banging on the door and was like "quick, [Chris] has been taken in an ambulance", and that's all we knew. So obviously we've rung his brother and that, he said ring back, we sat there waiting, rung back, and then that's when he said he's at the hospital it's not looking good. So we tried driving up there. And then when we got*

there his brother came out and had obviously said that he'd passed (Participant 3, gang)

and even at their own hands e.g. *"Probably my offense Miss, to be honest. Me and my friend had a fight and I killed him basically, accidently."* (Participant 9, non-gang). The latter three examples are quite different from the former, and speak to the sometimes unexpected and untimely nature of death.

5.2.1.2 Chronicity

This subtheme speaks to the duration of traumatic events or episodes and captures the division between single-event and multiple traumas that map on to diagnoses of PTSD and complex trauma. Although participant didn't make any explicit mention of about their duration of their experiences, it is apparent from the aggregated excerpts that participants experiences fell into these two distinct categories.

5.2.1.3 Intentionality

This subtheme pertains to the intentionality with which traumatic events or episodes were experienced and captures the distinction between events that were accidents and those that were purposeful. Only one participant directly commented on the intentionality of their 'worst traumatic event' and this related to a perpetrated act e.g. "*Probably my offense Miss, to be honest. Me and my friend had a fight and I killed him basically, accidently."* The participant in question was serving a manslaughter charge, central to which is the unintentional nature of the death. However, it was clear from the aggregated excerpts that participants experiences fell into either of these two categories.

5.2.1.4 Proximity of trauma source

This subtheme speaks to the proximity of the trauma source to the participant and captures information about whether the trauma source was known (e.g. a friend or family member) or unknown (e.g. a stranger). Those participants who identified a 'worst event' all identified events or episodes that involved people—not, for example a fire or natural disaster—, and in describing these events detailed their relation to these people, whether it be witnessing the suicide of a *stranger*, being maltreated and abused by one's *mother*, or hearing about the death of a *friend*. As such, it is clear from the aggregated excerpts that proximity of the trauma source falls in these two categories: known and unknown.

5.2.1.5 Modality

This subtheme relates to *how* the traumatic event or episode was experienced by the participant, whether it *happened to them* directly as either a victim or perpetrator, whether they *witnessed* it happen to someone else, *heard about it* happening to a close friend or family member, or experienced it as part of their job. Those participants who identified a 'worst event' all described the event(s) in relation to the mode in which it was experienced. For example, some participants *witnessed* loved ones die, some were *victims* of child abuse, or *perpetrators* of fatal attacks, others *heard about* their friends being murdered, and one witnessed an IED attack whilst on duty in Afghanistan. Collectively these different modes map on to the DSM-5 Criterion A.

Existing research shows that variations in these aforementioned trauma characteristics: trauma type (e.g. community violence, death, child abuse, child maltreatment and neglect), modality (e.g. perpetrator/offence-induced, victim, witness, heard about, in the line of duty), chronicity (e.g. single or multiple event), interpersonal proximity of the trauma source (e.g. known or unknown), and intentionality with which the trauma is experienced

(e.g. accidental or purposeful)—which emerged organically from the data using a bottom-up thematic approach—lead to variations in individuals' reactions to trauma (Hodas, 2006; Breslau, 1998; Van der Kolk, 2003). This is called a dose-response relationship where the magnitude of the event is associated with the magnitude of the clinical outcome (Kaysen, Rosen, Bowman & Resick, 2010). For instance, post-trauma symptom severity has been found to increase commensurately with the proximity of the traumatic event i.e. a child who has been personally *victimised* by child abuse is more vulnerable to the effects of trauma than a child who has only *heard about* it happening to someone else (Hodas, 2006). Furthermore, research shows that men who had *intentionally* perpetrated trauma were more likely to report PTSD symptomology than those who had *accidentally* perpetrated trauma (Nickerson, Aderka, Bryant, Litz & Hofmann, 2011). In sum, trauma that is closer, physically and interpersonally, intentionally inflicted, repeatedly and over an extended period of time is likely to be most harmful.

5.2.2. Reactions to traumatic events

This broad theme speaks to the range and diversity of offenders' subjective reactions to traumatic events. It captures a spectrum of emotions and cognitions from intense feelings of anger to seemingly no emotion at all, from a sense of futurelessness to recognition of learning and emotional maturity, from blaming others to accountability. This is documented in the following sub-themes: Negative reactions, Positive reactions, and No reaction.

5.2.2.1 Negative reactions

This subtheme relates to participants' negatively-oriented thoughts and feelings about the traumatic events or episodes they have been exposed to. These reactions capture externally-directed emotions of anger towards those who have harmed them and inwardly-

directed feelings of futurelessness and fatalism stemming from their experiences of trauma, and incarceration.

Fatalism and futurelessness

This subtheme speaks to participants' perceived lack of agency in being able to determine their own their own futures, and associated feelings of powerlessness, despondency and frustration this can have. One participant speaks about being exposed to parental domestic abuse as an adolescent and witnessing the attempted suicide of his father. Participant 1 (non-gang member) identifies his mother as the trigger that started a series of events that led to his 'inevitable' incarceration. Failing to acknowledge his own contribution, or that he could have intervened to change the course of action, places the blame for his behaviour externally, absolving himself of accountability, painting himself as the victim:

> *[…] I can sit here and explain to you right now exactly the reason why I came here; right now, I could. It all starts from my mum. […] Because my mum drove my dad to try and commit suicide, twice, and one of those times I actually went and found him, in the car […] yeah, I bought him home* (Participant 1, non-gang member).

In contrast, some participants spoke about the inevitability of violence, especially within the gang context. Participant 17 (gang member) describes having no choice but to react violently, even though this behaviour did not align with his own goals or values. As outlined in Chapter 4 group processes can place an immense pressure on members, explicitly and implicitly, to commit prototypical acts—which for gangs, is violence. In this sense gangs exert a fatalistic effect whereby members' individual agency is removed and they are conditioned to think, feel, and behave in line with prescriptive gang norms:

> *I didn't want to do none of this, none of these things, Like, my main thing was to join up do our thing, get money and go but you see it's never ever like that. Loads of other*

obstacles come. Like you could be going to do this but then you see another group and then this guy looks at that guy and that a whole war already because he got so much people around you. Like I don't really condone violence, if you understand what I mean, but sometimes…certain people might be pushing you, pushing it, pushing it, and you might think the only way I can deal with this now is if I do something. (Participant 17, gang member)

Recounting the event that led to his incarceration, GBH with intent to wound, participant 27 (gang member) describes the simultaneous feelings of disbelief and visceral awareness that life as he knew it is over, capturing the feelings of futurelessness found in traumatised individuals (Kerig & Becker, 2010)

I'm just like 'whoah' [unintelligible], I'm just thinking 'Fuck, my life is over, I'm fucked, I'm going to prison innit' (Participant 27, gang member)

In sum, all of these participants allude to the influence of others in either the traumatic events they have experienced or for the reason they ended up in prison. Collectively these themes capture participants' failure to either stop or change the course of past events, control current events, and influence future events. This perception of life as being set, and therefore unchangeable speaks to participants' passivity in determining their own future, with life being something that is *happening to them* rather than something they are actively driving.

Anger

This subtheme relates to participants' anger about the events they identified as their 'worst' traumatic event. Participant 33 identifies 'childhood' as his most traumatic time and goes on to describe the chronic and pervasive mistreatment and neglect he experienced whilst in the care of his mother. Although there was no explicit mention of feeling angry about his

mother or the situation, the language he uses to describe her and her lifestyle is indicative of this emotion.

> *She used to go out, I don't know how she managed to do it, probably whoring herself out or something, but she used to go out to get money, and she used to lock me bedroom, erm, with like a bottle to piss in, and she'd come back, like, sometimes a couple days later, sometimes a couple of weeks later* (Participant 33, non-gang member)

Participant 33 goes on to unpack the reasoning behind his mother's behaviour and explore the juxtaposition between her moral awareness (i.e. knowing the difference between right and wrong) and immoral action. His reaction is a product of the perceived intentionality of her actions (or inaction) and the incomprehensibility of this when comparing her parenting to the care and nurturance he provides for his own children:

> *I think of It as, all that stuff she done to me, she must of known that it was wrong, because an adult knows what's wrong don't they. All the stuff she done to me is unforgiveable, and I've got 2 kids of my own, and there's no way in hell, over my dead body, that I'd let her near them. I used to drop my kids of at school and worry all day about how they was getting on, things like that. I don't know how she could live with herself every day* (Participant 33, non-gang member)

Similarly, participant 27 identified his index offence (GBH with intent to wound) and subsequent incarceration as his 'worst' traumatic event and describes the anger he felt towards his friend whom he alleges is the true perpetrator of the crime. This reaction stems from a confluence of several factors: 1) the perceived injustice regarding his incarceration, 2) realising the gravity of being a convicted offender and the impact this will have on his future, and 3) the frustration of not being able to speak about his friend's involvement:

I was angry, angry with him, we had a couple fights still […]. Yeah cause he fucked up my life basically. I've never seen him never stab no one, I didn't even think he had it in him to ever stab no one. So, I'm thinking 'why you doing it, when you're with me fam', like why are you putting me in this situation, when it's you, and you don't even want to admit what you done. I can't just give someone up innit, I can't be a snitch basically. But, it sort of will affect my life, and it has affected my life in a really negative way but it's a sense of, like, cold, but yeah he fucked me over (participant 27, gang member)

Although, distinctly different situations, both participants see themselves as having been purposefully victimised or wronged by friends or family members—regardless of the legitimacy of this perception. In both cases trauma characteristics, such as interpersonal proximity to the trauma source (e.g. friends and family) and the intentionality of their actions (e.g. purposeful) contributed to a negative trauma reaction.

5.2.2.2 Positive reactions

Mastery and control

An interesting finding was that some participants regarded their traumatic experiences to have had an eventual positive affect on their life. There was a sense that learning from difficult experiences had enabled them to grow up and have increased mastery and control over their emotions, particularly anger. Participant 14 states '*I have learnt more about myself, so I've learnt, like, how to control my anger, how to control my emotions*". There is also a recognition that simple adaptive coping mechanisms, such sharing their experiences with others, cannot only be a means of seeking help, experiencing catharsis, but also an essential driver for an unfettered healthy and prosocial lifestyle. Participant 14 explains that:

"*if I share it I feel much better, which I have and I feel much better in myself. Erm and there's no point in dredging up the past, if you keep dredging up the past you're just going to lead the road of crime or drugs to get rid of that pain inside of you. So I've stopped all that and started sharing it. […] If you keep dreading up the past you're just going to put yourself in a predicament that you're going to fuck your life up*" (Participant 14, gang member).

Furthermore, this sub-theme captures the significance of 'teachable moments' in catalysing change. Although only one participant described such an experience, it was deemed worthy of including because it feeds into the broader literature on posttraumatic growth and survivorship (Tedeschi & Calhoun, 2004). Participant 33 describes an identifiable point in time that spurred him to take *control* of his life and seek help as a child to escape the family environment.

"one day I had a sleep over at someone's house, erm, up til that point I thought everything she done to me was what happened to everyone else behind the door; I thought it was normal, but after this sleepover I saw the way, how different my life was to them and I decided I had enough. And if they weren't going to take me away from her, I went down to the office, the social services office, I said I'm not fucking leaving until you sort it out, and they put me in foster care" (Participant 33, non-gang member)

'Looked after children' are those taken into the care of their Local Authority, usually in residential foster homes, secure units, or family placements. The term 'looked after children' has become a loaded moniker to describe disadvantaged children in the care system with poor chances of success in education, employment, and in their personal relationships (Wilson 2012; Dickson, Sutcliffe & Gough, 2009; Mannay et al., 2017), but for participant 33 who had experienced chronic neglect and maltreatment at the hands of his mother and her

partners, being a 'looked after child' was seen as a marked improvement and a means of satisfying fundamental physiological and safety needs (Maslow, 1943).

Acceptance and accountability

This sub-theme speaks to acceptance as a form of psychological resilience against the effects of trauma and feeds into the established corpus of literature on mindfulness-based acceptance therapy for post-trauma illness (Thompson, Arnkoff & Glass 2011; Vujanovic, Youngwirth, Johnson & Zvolensky, 2009). Etymologically speaking, 'acceptance' is to 'receive what is offered', but within the context of the applied behaviour analysis (ABA), acceptance is the "active non-judgemental embracing of experience in the here and now" (Hayes, 2004, p.21). In line with this idea of 'presentness' participant 14 spoke about the importance of *accepting* unchangeable past events, for example:

> *"If you carry on with the future, and think about the future and what you want for your future you'll stop thinking about It [past trauma]. What's done it done, you can't change what's been done. All you can change is your future"* (Participant 14, gang member)

and accepting blame and being a*ccountable* for the contributions they made to these events as a means of 'moving on', for example:

> *"[…] it's like if you keep blaming people, the only person you can blame is yourself. if you've been blaming them other people the rest of your life, when actually it's you to blame because you're the one that's been putting yourself in that predicament in the first place."* (Participant 14, gang member)

This sub-theme also touches on the concept of 'control'—not necessarily exerting control to moderate emotions as described in the 'mastery and control' sub-theme, but rather understanding and *accepting* the boundaries of control and not being able to "change what is

done". Whether people believe they can control their own fates, or accepting that they can't, is critical to the way they engage with challenges, like experiencing traumatic events, and how they cope with the resulting stress (Lefcourt, 1991). This concept of external events, being either a result of one's own will or actions (i.e. *within* our control) or as result of luck, chance or through the control of others (i.e. *outside* of our control) is referred to as internal and external locus of control respectively (Rotter, 1954; 1966). An internalised locus of control has been found to be a predisposing factor influencing the development of trauma-related psychopathology in emergency responders (Brown, Mulhern & Joseph, 2002; Robinson, Sigman & Wilson, 1997), natural disaster survivors (Mellon, Papanikolau & Prodromitis, 2009; Scott, Carper, Middleton, White, Renk & Grills-Taquechel, 2010) combat veterans (Solomon, Mikulincer & Benbenishty, 1989), and HIV sufferers (Simoni & Ng 2002), but there is no literature exploring the effects of locus of control in gang members, or in relation to perpetrator-induced trauma.

5.2.2.3 No reaction

As we have seen in previous chapters the manifestation of traumatic sequalae and one's ability to cope with this depends on a number of interlinking pre-, peri-, and posttraumatic factors. This can include pre-morbid personality characteristics, baseline stress levels (small gradual increases in stress prepares the body physiologically for bigger trauma), the nature of the trauma, and many other factors that comprise one's internal (e.g. psychological insight, resilience and skills, Sense of Coherence) and external resources (e.g. physical safety and social support). One means to coping with traumatic stress is to downplay, through denial, minimisation, and normalisation, the event and its significance. This sub-theme captures responses that either deny, minimise, or normalise participants exposure to traumatic events and/or their reactions to these events.

Denying

Four participants (18 non-gang member, 21 non-gang member, 22 gang member, 25 gang member) with extensive trauma histories could not identify a single 'worst event' in response to the question "Briefly describe the worst event (for example, what happened, who was involved, etc.)" despite endorsing several of the 17 different trauma types listed in part 1 of the LEC-5 (Weathers et al., 2013). Whether this failure to identify a most bothersome traumatic event stems from all events being *equally* traumatic or not considering these events to be traumatising is unclear.

Minimising and normalising

Several participants used language and turns of phrase, such as "it is what it is, at the end of the day" (Participant 14, gang member) to describe what would be considered qualifying Criterion A stressors. In other words, participants, in some cases, listed catalogues of traumatic exposures but spoke about them and their impact in a relatively matter-of-fact fashion. For instance, participant 2 (non-gang member) describes being involved in a bomb disposal effort, in which three people were seriously injured, but minimises the gravity of this event by using the following language**:** "Er, yeah we was on bomb disposal in Afghan, and er there was an IED and three people got hurt, that was about it."**.** It is possible that this stoic description of the event may be a product of his military resilience training and speak to the 'all in line of duty' mentality.

Similarly, even after recounting his experience of being stabbed in the back (physically, not metaphorically), participated 11(non-gang member) questioned the validity and relevance of his experience e.g. "I don't even know why I've even said this because when it happened we went to the hospital and said we both fell off a BMX […] life goes on"

Taken together, it is unclear whether this appearance of being unphased by traumatising events stems from a genuine biological desensitisation and hence normalised response to violence or abuse, as described in Chapter 3, or attempt at manage the impression to convey a hard man, macho image as per the prison trope.

5.3 Discussion

The overarching aim of this chapter was to explore offenders' experiences of traumatic events from a phenomenological perspective. The findings from this study supplement the quantitative data from Chapter 5 generating a more meaningful and contextualised understanding of trauma from the perspective of the offender. The findings highlight the prevalence and variety of traumatic events/episodes experienced by incarcerated young men and outline how the nature of traumatic events e.g. type, modality, chronicity, intentionality, and proximity of the trauma source, can affect how they think and feel about these events.

One latent theme that emerged, mapping on to both of the semantic themes: 'Characteristics of traumatic events', and 'Reactions to traumatic events', was control—either being in control (e.g. internal locus of control) or lacking control (external locus of control). For instance, there are certain characteristics of traumatic events, such as the type (e.g. child abuse, gang violence, domestic violence) and the proximity of the perpetrator (e.g. parent, rival gang member, partner) that make traumatic situations difficult to avoid and escape from, leading to learned helplessness and range of internalising symptoms, including depression (Palker-Corell & Marcus, 2004; Flannery & Harvey, 1991 Seligman, 1991). Negative reactions linked to an externalised locus of control had a temporal underpinning, meaning they referred to a failure to control *past* events, an in ability to divert or escape from *present* risky situations, and a perceived inability to effect change in the *future*; these were

collectively represented under the 'futurelessness and fatalism' subtheme. In contrast, having an internalised locus of control, and learning to either master and use control productively or relinquish control and accept the unchangeable events and feelings, were positive reactions to traumatic events.

5.3.1 Limitations

While this study signifies an important advancement in our understanding of gang and non-gang members' experiences of trauma there are some caveats associated with the data and how it was analysed that may qualify the findings. Firstly, the themes and sub-themes identified in this thematic analysis were not independently rated or verified. As such the analysis is potentially subject to the individual interpretation and biases of the researcher. However, it is widely acknowledged as a 'criticism' of qualitative approaches that qualitative data *is* inherently subjective and that different researchers can arrive at different conclusions based on same data (Olds & Hawkins, 2014; Sandelowski, 1995). As such, a degree of interpretation and flexible thinking is not only expected, but necessary to join potentially disparate themes into a cohesive narrative that is authentic, meaningful and an accurate reflection of participants' collective experiences. However, following Braun & Clarke's (2006) six-step methodology for inductive thematic analysis limits the potential for researcher bias to influence findings.

A second common criticism levelled at qualitative methods more generally is the lack of generalisability, or rather the lack of confidence in the generalisability of findings to the wider population. While this study has produced detailed and rich accounts of participants' traumatic events and the emotions and feelings in response to these events, whether these accounts are 'true' for other gang and non-gang prisoners, or in fact female equivalents we cannot be sure. Equally, we cannot be sure whether the same experiences reported by

participants are not held by others outside of this population. That is, there is a possibility that these accounts are not unique to prisoners (gang or non-gang), or those who have been involved with the criminal justice system, but to many people. However, the fact that participants' experiences (both the objective characteristics and subjective trauma-related feelings) map on to the findings of published quantitative studies reduces some of this doubt. A third, potentially limiting factor is that some of the identified themes and sub-themes were not prevalent across the whole dataset. However, Braun & Clarke (2006) state that the 'keyness' or relevance of a theme is not necessarily dependent on quantifiable measures, like prevalence – but rather whether it captures something important in relation to the overall research question.

Thirdly, this study does not directly compare the trauma characteristics and reactions of gang members vs non-gang members, which places a limit of our understanding of how their phenomenological experiences may differ, and whether gang members can be considered unique in this respect. However, the *inductive* epistemological perspective and methods used in this study, mean the themes, and resulting thematic map, were derived organically without any preconception about what they might be or if/how they may be related—unlike a *deductive* analysis that brings predefined hypotheses to the data, seeking to confirm them. Here, no distinguishable links or patterns were naturally identified that could separate out gang and non-gang members in terms of their lived trauma experiences and how they felt about it. This may be because such phenomenological differences do not exist or are not detectable with a sample size of 20 (12 gang and 8 non-gang members), or because such differences were not looked for in this approach. It was deemed a more structured and comparative analysis was better suited to quantitative methods that aggregate and organise *objective* data to reach a generalised answer about gang members (as a population) in relation to non-gang members (as a population)—as outlined in Chapter 4.

5.4 Conclusion

The current qualitative study documents offenders' lived experience of trauma and how this can be affected by the mode, chronicity, proximity, and intentionality with which it is experienced. The findings from this study also attests to the wide-ranging cognitive, emotional and behavioural responses, or lack thereof, that offenders can have as a result of experiencing a traumatic event. One of the most striking and seemingly counterintuitive findings was the inability of some offenders to recognise and accept that they had been exposed to a traumatic event, despite, in some cases, having experienced life-changing injuries, chronic childhood maltreatment, or killing their best friend. This matter-of-factness and "it is what it is" attitude signifies an underappreciation of their own psychological or emotional needs and the risk this places them at for experiencing future traumatic events and internalising and externalising problems

CHAPTER 6: General Discussion and Conclusions

6.1 Thesis Overview

The field of psychological trauma has grown and diversified considerably over the years, particularly since the 1980s with the admission of Posttraumatic Stress Disorder (PTSD) into the DSM-III, conceptualising our modern understanding of post-trauma mental illness. The expansion of this discipline can be tracked by the creation of increasingly sophisticated etiological and developmental models, and the application of this theorising to different types of trauma (e.g. chronic vs. acute), and populations (e.g. war veterans, natural disaster survivors, refugees, rape victims, victims of child molestation, and emergency services personnel, juvenile delinquents), but, until now, has not been extended to the study of gang members—arguably the most 'in need' of a traumatological research agenda given the nature, and diversity of violence they are exposed to as witnesses, victims, and perpetrators. The overarching purpose of this thesis was to further contextualise our understanding of trauma by exploring its effects in a new unexplored population—gang members. The study of psychological trauma has evolved over the years in reaction to some of the world's most horrifying and memorable events, atrocities and news stories—world wars, terrorist attacks, natural and manmade disasters, and social epidemics—that are now taught in history lessons and embedded in public consciousness, culture and everyday conversations. These events have been catalysts for learning in the academic community and have shaped what we know about, and how we treat, the psychological consequences of trauma (Davidson & McFarlane, 2006).

We are presently in a unique period of time, facing unique challenges associated with gang and youth violence (e.g. the use social media, accessibility of weapons, normalisation of violence), warranting a unique and tailored research agenda, and suite of interventions and

policy reforms with a trauma focus. It is hoped this thesis marks one of the first small steps towards new genre of trauma research and the next stop in trauma history timeline.

The intention of this thesis, through evaluation of the existing literature and new empirical exploration, was to provide a preliminary insight into the following three areas 1) the dimensionality of gang members' identities and roles as victims *and* perpetrators of violence through their experiences of psychological trauma, 2) whether gang members are a distinct subset of juvenile offender in terms of how they experience and react, psychologically and behaviourally, to traumatic events, and 3) whether the group processes inherently present in the gang are able to explain the potential differences in how gang members and non-gang members experience and react to traumatic events.

6.2 Summary of results

6.2.1 Study 1: The Internalising and Externalising Effects of Trauma Exposure: A Comparison of Gang-Involved and Non-Gang Male Offenders

Study 1, presented in Chapter 4, built on the theoretical foundations of preceding chapters and outlined the first empirical test of whether gang members can be considered a unique type of delinquent youth by virtue of their trauma profile. Five research objectives were generated in order to answer this question: 1) To compare the type, frequency and severity of traumatic events experienced by gang and non-gang offenders, 2) to compare the type, frequency and severity of internalising and externalising symptoms experienced by gang-involved and non-gang offenders, 3) to explore the *relationship* between trauma exposure and internalising and externalising symptoms in gang-involved and non-gang offenders, 4) to compare the levels of social psychological and group processes reported by gang and non-gang members, and explore the role these processes play in the manifestation

of symptoms across the two groups, and 5) to examine the presence and levels of dysfunctional personality characteristics between gang and non-gang members.

With reference to the first objective, gang members, compared to their non-gang counterparts experienced a greater variety of trauma types overall, and were more likely to experience traumatic events by witnessing, and hearing about them happening to others, but not by experiencing them directly as a victim or perpetrator. One of the most distinguishing features of gang members' trauma experiences was that of all the 17 individual trauma types listed in the LEC-5 questionnaire gang members were only more likely to have experienced 'assault with a weapon' and 'exposure to toxic substances' compared to non-gang members. Collectively, these findings indicate that gang members exhibit unique trauma characteristics in terms of the frequency and diversity of traumatic events they experience, which may reflect the violent nature of the gang lifestyle.

Regarding the second objective gang members, in line with expectations, reported higher levels of individual and group delinquency than non-gang members, but were no more likely to exhibit PTSD and depression symptomology – despite experiencing a greater number of different trauma types.

With reference to objective three, the expected dose-response relationship between trauma variety and internalising symptoms was exhibited by non-gang members only. That is, non-gang members who had experienced a greater number of different traumatic events experienced an associated increase in the severity of PTSD, depression and anxiety symptoms. Despite gang members experiencing a greater number of different trauma types compared to non-gang members, the 'total trauma score' predicted only anxiety symptoms, *not* PTSD or depression. In terms of externalising symptoms, the total trauma score predicted both individual and group-based delinquency for gang members, but only group-based delinquency for non-gang members. The absence of a 'typical' linear association between

trauma exposure and internalising post-trauma sequalae, but the presence of this association with externalising sequalae in gang members may point to a more convoluted curvilinear relationship, where other influential, unaccounted for, factors affecting the relationship were acting. These findings indicate that there may be something special about the transactions between trauma exposure and trauma symptoms for gang members that warrants further investigation.

The fourth objective sought to establish the presence of group processes and the effect this may have on trauma symptoms in both groups. Interestingly, gang members reported higher levels of moral disengagement, group identification, group pressure, and pluralistic ignorance, but not group belonging or social provision –the latter two, being distinctly positive processes. Despite this, group processes were not found to predict internalising or externalising symptoms in either group.

In relation to the fifth objective findings showed that gang members exhibited higher levels of antisocial and paranoid personality traits, but not CU traits. However, paranoid personality disorder was the only predictor of PTSD symptom severity in non-gang members, accounting for a significant proportion (53%) of the variance in the outcome. Interestingly, while gang members exhibited higher levels of paranoid personality characteristics compared to non-gang members, it was not a factor that contributed to the development of post-trauma internalising symptoms, such as PTSD.

Taken together these findings *do* indicate that there are distinctive features of the gang members' trauma and symptom profile that set them apart from similar non-gang individuals, but they are not able to identify and explain the mechanisms responsible for these differences. Only with further research and theory development will this become clearer and more targeted and effective interventions can be developed that tackle the root cause rather than the manifest symptoms.

6.2.2. Study 2: "It is what it is": A Qualitative Exploration of Gang-Involved and Non-Gang Offender's Experiences of Trauma

Study 2, presented in chapter 5, built on the quantitative trauma findings of study 1. The aim of this study was to undertake an unbounded phenomenological exploration of incarcerated gang and non-gang members' experiences of trauma to enrich the purely quantitative findings. An inductive thematic analysis identified two broad themes from the 20 qualitative excerpts: *Trauma Characteristics* and *Reactions to traumatic events*. Collectively the sub-themes: *trauma type*, *chronicity*, *intentionality*, *proximity of trauma source*, *modality*, and *positive reaction*, *negative reaction*, and *no reaction* respectively, that support the overarching themes highlight how the nature of traumatic events can influence how people think, feel and ultimately react in response to trauma. For instance, chronic exposure to violence may lead youth to deny or minimise events and subsequent symptoms; incarceration itself can be traumatising and can lead to a greater sense of fatalism and futureless in youth; and neglect at the hands of a parent may lead to greater feelings of anger and resentment. These themes and sub-themes emerged organically and map on to what the existing literature says about the effects of peri-traumatic characteristics on the development of posttraumatic symptoms. Although, it was not possible to draw conclusions about the uniqueness of these trauma characteristics and reactions to either gang or non-gang members, study 2 does provide an in-depth and contextualised understanding of trauma in incarcerated young men. Taken together these findings highlight not only the diversity of trauma experiences in this population, but also the diversity of reactions.

6.3 Key themes and findings

6.3.1 Patient or perpetrators: A place for gangs?

The hypothesis that gang members would be more likely than non-gang members to have perpetrated violent acts that they were subsequently traumatised by was tested in Chapter 5, but contrary to expectations gang members were no more likely than their non-gang counterparts to have caused serious harm, injury, or death to others, or experienced greater levels of internalising symptoms such as depression and PTSD as a result. It is possible that participants were reluctant to report the true nature and scope of their traumatic experiences, especially if this would mean admitting to a potential crime. Participants from this study were recruited from a remand prison where prisoners are waiting to be sentenced, released, transferred within or outside of the prison, or receive enhancement statuses. As such, participants may be especially concerned about the consequences of such an admission, and the fact that gang members exhibited higher levels of paranoid personality characteristics might have heightened their suspicion that this information would not be kept confidential by the researcher, and hence motivated a biased response.

It is also possible that prisoners were reluctant to admit perpetrating harm against others through fear of confirming the stereotype of themselves as "radically impulsive, brutally remorseless youngsters, including ever more pre-teenage boys, who murder, assault, rape, rob, burglarise, deal deadly drugs, join gun-toting gangs, and create serious communal disorders" (Dilulio, 1995). Which makes it all the more important to change the narrative around the terms 'perpetrator' and 'victim', and emphasising the possibility of traumatisation, and the need for treatment in both circumstances. The fact gang members did not report greater levels of victimisation or be more likely to perpetrate violence against others, directly counters the body of existing literature supporting the victim-offender overlap in this population (Pyrooz, Moule & Decker, 2014). However, qualitative data from chapter 6 highlights the hair trigger nature of violence in gangs and the stigma attached to being victimised, with one gang member (number 17) equating being a victim to 'being a punk'.

And, with one with of the key motivations of membership being reputation and status enhancement, being perceived as a victim is not conducive to this.

Speculating, it is possible that gang members are reluctant to describe their perpetrator and victim experiences because of their equally powerful, but polar, connotations around strength. As such, the qualitative data gives a possible insight into why the quantitative data did not report a difference between gang and non-gang members in victimisation and perpetration levels despite this difference being documented in the existing literature. Because gang members span both victim and perpetrator categories, but there is currently no theoretical and empirical bridge between the two, we risk proceeding with practices and policies that rest on an inaccurate unidimensional understanding of a complicated and multidimensional population.

6.3.2 The importance of being moral: Nature vs Nurture

In line with expectations gang members reported higher levels of overall moral disengagement, as well on seven of the eight subscales, bar 'distorting consequences', which was marginally significant $p = .062$. This shows that gang members do, at least superficially, appear to be morally disengaged, but whether this is a transitory conscious 'mode' that gang members can switch on or off to their benefit, a product of a traumagenic deficiency (e.g. secondary psychopathy or moral injury), or a form of atypical moral development or stunting is less clear. This uncertainty about the congenital or acquired nature of the callous, cold and unempathetic symptom profile feeds into broader psychological dichotomies of trait vs state, nature vs nurture – induced symptoms. However, the fact gang members reported higher levels of ASPD and moral disengagement, but not did not have higher CU traits, could suggest different causal mechanisms linking trauma exposure to these outcomes. It is clear that morality as it relates to trauma and gang membership is a complicated nexus that may

feed in to any one or more of the below theories and explanations: Kohlberg's theory of moral reasoning and motivation (1969, 1976, 1981, 1984); moral Injury (Litz et al., 2009; Shay, 2014; Jinkerson, 2016; Frankfurt & Frazier, 2016); moral disengagement (Bandura 1986, 1991; Bandura et al., 1996a, 1996b); or personality disorders such as, ASPD, psychopathy and CU traits (Weiler & Widom, 1996; Kerig & Sink, 2010; Tatar et al., 2009). Only with further research will we be able to establish whether the cause of immoral behaviours is something that can be treated—line with a state-based explanation—or managed—in line with a trait-based explanation.

6.3.3 Corruptive or Curative: Do the benefits of 'belonging' apply to a gang?

One of the key objectives this thesis aimed to explore was whether the social support offered by the gang is powerful enough to counteract, and protect members from the trauma-related symptoms caused by the gang. Existing literature speaks to alienation, normlessness, powerlessness, and estrangement as risk factors for PTSD, but as we have seen belonging to a group, should counteract this as it provides members with a sense of purpose, belonging and meaning, with group membership demonstrating significant physical and mental health benefits. As such it would be reasonable to conclude, based on this premise alone, that gang members, as group members, would be protected against trauma-related internalising/externalising symptoms. Indeed, results did show that gang members were no more likely than non-gang members to exhibit internalising symptoms—although they did report higher levels of group and individual delinquency—but they were also no more likely than non-gang members with friendship groups to report group belonging, social provision or perceived cohesiveness. That is, contrary to expectations gang members did not report experiencing any of the positive elements of belonging to group that would buffer against the harmful effects of trauma. However, gang members were significantly more likely to report

group identification, group pressure (e.g. feeling pressurised to commit violent acts by the group, and actually perpetrating violent acts *because* of the pressure they felt from the group) and pluralistic ignorance. That is, in line with hypotheses gang members were more likely to report experiencing negative features of the group that have been shown to promote violence and create painful cognitive dissonance. In sum, in contrast to other groups gang are more corruptive than curative.

6.3.4. Trauma as the norm

Although not all study findings supported the initial hypotheses, one of the most interesting and unanticipated interpretations pertains to the finding of gang members' increased violence exposure, with no commensurate hike in internalising symptoms, but greater level of externalising symptoms. This pattern of findings is characterised by the desensitisation hypothesis. As reported in chapter 4 desensitisation and emotional numbing in response to trauma can disrupt youth's ability to recognise, and respond to risk appropriately, increasing their likelihood of engaging in risky activities that may lead to involvement with the criminal justice system. This is mirrored in a study by Mrug, Madan & Windle (2016) who found that exposure to violence at age 11 was associated with lower levels of internalising symptoms at age 13. In turn, fewer internalising symptoms and more externalising symptoms at age 13 predicted violent behaviour at age 18. These results show that desensitisation to trauma in childhood contributes to the development of violent behaviour in adolescence. This unique pattern of findings may be a product of the chronic violence, such as weapons assaults, that youth are exposed to as part of their membership

6.4 Implications

6.3.1 Theory

This Thesis represents a theoretical advancement in the discipline of Gang Psychology by highlighting, through the collation of existing work and new empirical findings, the potential utility of applying a psycho-traumatological perspective to what is increasingly considered to be a psychological problem—gang membership and violence. Figure 3.2 shows an adjusted version of Kerig & Becker's TDM of Trauma and Delinquency that displays how delinquent youth become gang youth through selection, facilitation, or enhancement processes. Once in a gang the iatrogenic effects, transactional processes, and group processes maintain the cycle of risky criminal behaviour, increasing opportunities for encountering potentially traumatising events and leading to PTSD and dysregulated functioning in biological, emotional, cognitive and interpersonal domains, which leads to delinquency, and so the cycle continues.

The aim of this thesis was not to test or 'prove' this model, but rather to use this model to explain how trauma exposure *could* lead to gang-involvement. Not all of the findings in this thesis supported the initial hypotheses, nor map directly on to the model depicted in Figure 3.2, but there are certain touchpoints where the findings and theory overlap that could be useful for informing new policies and practices around preventing and intervening to stop youth from joining gangs in the first place and treating and rehabilitating them during and after they've left. This model acts as an untested blueprint that could be used by other gang or trauma researchers to test and develop, marking a small but new theoretical contribution.

6.3.2 Research

The findings from this thesis provide a 'first-look' into the trauma profile of gang and non-gang offenders and should be seen as a much-needed foundation for future trauma-oriented gang research. Each of the key themes identified in this present chapter: gang

members as patients *and* perpetrators, morality, group processes, and desensitisation, represent interesting and useful findings generated from this thesis, but that also require further, much more thorough investigation, but in addition to this there are other avenues of research that could be cultivated from this work.

Firstly, qualitative interviews were conducted as part of the extended version of the LEC-5 questionnaire. It provides a relatively contained, but rich, understanding of only one element the overall gang picture by asking participants to describe their work traumatic events. As such, more qualitative research is needed to truly understand the way trauma affects, or is affected by broader variables such as group processes, personality and mental health, and most importantly how this differs between gang members and similar others. Regarding the latter point, the qualitative data presented in Chapter 6 was not split or coded by gang membership; while gang-related themes emerged organically it was impossible to 'compare' experiences across groups. An important element of understanding trauma in relation to gang membership is exploring, qualitatively, the impact of group processes on gang members. Whilst, Chapter 5 presented quantitative data that demonstrated that there are differences in types of group processes gang members were more likely to experience we need to understand the intricacies of how these influence behaviour, and qualitative interviews are best placed for the of deriving a nuanced understanding of phenomena. One of the criticisms of Study 2 was that not all of the identified themes and subthemes were represented across all participants due to the infinite breadth of personal trauma experiences and reactions, combined with the limited sample size. Therefore, future qualitative research exploring trauma in gang members should consider the scope of the topic and recruit a larger sample size in order to reach full thematic saturation.

Secondly, the fact the findings from this thesis (i.e. that there was no difference in the levels of victimisation and perpetrated trauma between gang and non-gang members) do not

conform with that of the existing literature indicates that further research is required to detangle the complicated nexus between victimisation and perpetration, and the psychological and behavioural consequences of this. As mentioned before it is possible that these incongruous findings may be the result of a desensitised and normalised response to trauma in this population – gang members. However, it is also possible that gang members' responses were influenced by their motivation to present themselves in a certain way e.g. to deny being victimised or unwell because it's perceived a weakness. Therefore, further research into the role of stigma and self- and public perceptions as treatment barriers for gang members may yield useful findings about how best to engage this 'hard to reach' population and prevent them from becoming "lost boys" (James Garbarino in Greenwald, 2002, p. xix).

It should be noted that this collection of theoretical and empirical work not only aimed to bridge the gap between the fields of trauma and gang research, but to also provide a basis for developing appropriate prevention and intervention strategies. This thesis can be used as a springboard for kick-starting a new traumatological research agenda for gang membership, addressing the calls from academics, criminal justice, and health representatives to address the problem of gang violence and mental health.

6.3.3 Practice

As shown throughout this thesis the study of traumatised gang members spans two sub-disciplines of psychology: trauma research and gang research; the former being predominantly victim-centric and underpinned by a rehabilitative framework and the latter being predominantly perpetrator-centric and underpinned by a retributive framework. This is important because gang members are often understood and treated only in relation to the harm they cause others, despite evidence documenting the disproportionate levels of

victimisation they experience, and the psychological harm caused by their own offending (e.g. Peter et al., 2004; Taylor et al., 2007; Kerig et al., 2016).

Results from this thesis show that gang members were more likely to report experiencing (directly, witnessing, and hearing about) assault with weapons and exposure to toxic substances, indicative of acid attacks. Given the nature and potential severity of these types of exposures it is likely that they could result in hospitalisation. A&E departments or specialised (medical) trauma centres in larger hospitals offer a point of entry for not only lifesaving medical treatment but access to psychological help and referral to third sector organisations, such as charities, self-help groups and associations etc. as part of the hospitals safeguarding responsibilities. Hospital-based gang prevention/intervention initiatives are more widespread in the US, Operation PeaceWorks being a successful example (Duncan, Waxman, Romero & Diaz, 2014). Operation PeaceWorks is a multidisciplinary gang prevention programme that includes mentoring, mental health counselling, job training and educational support to increase chances of employment for gang members who present as (medical) trauma patients. Results from the evaluation show significant reductions in gang assaults, assault with weapons, and murders compared to the seven year before the programme started (Duncan, Waxman, Romero & Diaz, 2014).

A similar youth violence intervention programme, called Redthread is in place at four of London's major (medical) trauma units: Royal London Hospital, King College, St. Mary's and St. George's and is delivered by embedded youth workers. The aim of the programme is to disrupt the cycle of violence by targeting youth during their 'teachable moment'—an opportunity, created through youth worker and gang member interaction, where the salient features of their situation (e.g. being alienated from their peers, recovering from a life-changing injury, and worrying about potential involvement from the police, and potential re-injury) make them more susceptible to intervention and positive long-term behaviour change

(Flocke et al., 2014; Youth Violence Intervention Programmes). This is an established medical phenomenon that has been applied successfully to the rehabilitation of gang members.

However, the spread of drugs and violence, outside of large metropolitan cities, into rural and coastal towns by county lines gangs means A&E departments in local district general hospitals may not be an aware that what they are experiencing—i.e. increases in weapons-related injuries like stabbings and shootings—is a by-product of gang membership, or have the knowledge and resources to address the social and psychological aspects of these injuries. The fact that almost half of the participants in study 1 (presented in Chapter 5) were sampled from a local remand prison, outside of London, and classified as gang members, highlights that gangs are not just an urban problem, and that coordinated multiagency approaches, like that of Redthread and operation PeaceWorks, are needed in order raise awareness, and provide education, training and tools to identify vulnerable youth when they present at A&E departments in known county lines hotspots.

Furthermore, when *treating* gang members (i.e. encouraging gang desistance and pursuit of a healthy and prosocial life—not medical treatment), it is also important to consider co-morbid conditions and situational factors that may affect their readiness, engagement and responsivity to the treatment, such as personality characteristics, and peer influence. The results from this Thesis show that gang members were more likely to exhibit characteristics indicative of ASPD and PPD than their non-gang counterparts. This has important implications for practice because individuals with severe and dangerous personality disorders, like ASPD and PPD, are often reluctant to engage with treatment, partly because their dispositional characteristics (e.g. emotional reactivity, disruptive behaviour, and paranoid beliefs) undermine the development of a therapeutic alliance between themselves as the patients, and the practitioner (Howells, Krishnan & Daffern,

2007). And low 'readiness' for treatment can lead to low engagement and non-completion with the programme (Howells & Day, 2007).

Dysfunctional personality traits are not only a therapeutic challenge, but also a criminogenic need because they contribute to criminal and violent behaviour. Individuals with ASPD are more prone to violence, less responsive to treatment and more likely to recidivate than mental health in- and outpatients without ASPD (Logan & Johnstone, 2010). For gangs, group processes can also be criminogenic as pre-existing levels of violence, criminal activity, and trauma, are intensified by the gang milieu, meaning members' connections to their gang, and their motivations for joining must be targeted directly by any intervention. Findings from Chapter 5 show that gang members, compared to non-gang members were more likely to exhibit pluralistic ignorance, experience group pressure, and act violently in accordance with this pressure. In fact, gang members were only more likely to report negative group experiences; no significant differences were found between the two groups on group identification, group belonging, perceived cohesiveness, and social provision. This may point to two different type of gang member and their underlying motivations for joining or remaining in a group—those who believe in the group and those who believe they have no choice.

In sum, for gang members, receiving either community-based or residential (e.g. psychiatric facility, prison, or secure training centre) treatment, a tailored risk assessment, including known aggravating factors (e.g. trauma history, personality disorders, group affiliations and influences), that leads to effective risk management and treatment optimisation is essential if gang members are going to be able to engage with and benefit from the treatment they receive.

6.3.4 Policy

Findings from this thesis show that both gang and non-gang offenders had accumulated extensive trauma histories by the time they had reached prison, with many experiencing traumas in childhood. As outlined in Chapter 3 experiencing trauma, especially complex trauma can have profound and enduring bio- and endocrinological implications on children and adolescents' executive function, which in turn increases youth's propensity for criminal and violent behaviour. Typical biological immaturity (e.g. the age of the accused) has been recognised in American law through the abolition of the death penalty for child and adolescent offenders. This is based on the evidence suggesting that the brain is not fully developed until about 25 years of age (Beckman, 2004), and that the prefrontal cortex, responsible for executive functions such as impulse control, reasoning, planning and making decisions is one of the last regions of the brain to mature (Giedd, 2004). This raises important questions about traumatised offenders' capacity and accountability in the commission of their crimes, trauma as a mitigation for criminal actions, and how the criminal justice system evaluates and disposes of these individuals.

However, as outlined in Chapter 3 youth with personality disorders are less responsive to conditioning to punishment. That is, due to repeated trauma exposure early in life youth become biologically and emotionally desensitised to future painful or anxiety-provoking experiences, such as the threat of incarceration. Desensitisation leads to a behavioural profile characterised by the inability to recognise and respond appropriately to the emotions of others, poor decision-making, the need for external stimulation, impulsivity, and inattentiveness—symptoms that cross-cut several personality disorders including psychopathy, ASPD and PPD (Wilson & Widom, 2009; Gregory, Blair, Simmons, Kumari, Hodgins & Blackwood, 2015). This is especially relevant to gang members as the findings from Study 1 show that they exhibited higher levels of ASPD and PPD traits than their non-

gang counterparts. As such, incarceration is unlikely to deter them from criminal activity in the first instance or be an effective means of addressing gang-related crimes. This provides impetus for further developing a public health approach to preventing gang membership and violence, drawing on the emerging evidence in this area.

Gebo (2016) explored the utility of an integrated multi-agency public health approach to gang membership by mapping gang research and evidence-based practice into a conceptual framework. Analyses identified three specific entry points for policy and public health development: 1) primary prevention involves immunising youth against gang formation through comprehensive programmes that address the socio-economic needs of those living in deprived communities; 2) secondary prevention involves identifying individuals who are at-risk of joining gangs but who are 'asymptomatic' and using school and street-based outreach efforts to educate about the consequences of gang, and positive alternatives; 3) tertiary prevention is the criminal justice response where gang leaders, causing the most problems, are targeted for arrest. Incarceration is used as a form of quarantine to stop the contagion of violence, where the 'infected' host *should* be provided support rehabilitation and education to support their transition back into their communities.

In line with the adapted TDM of Trauma and Gang Membership depicted in Figure 3.2, Gebo (2016) highlights the potential iatrogenic effects of being labelled a gang member, and explains how labelled youth get caught in an inescapable self-fulfilling cycle that attracts the attention of law enforcement, which in turn leads to more severe criminal justice sanctions, such as lengthier sentences and special segregated detainment (Rios, 2011). As such, targeted gang programmes must be implemented with caution and careful consideration.

The conclusion from this body of work is that gang members are special a case of youth because of 1) the quantity and severity of violence, 2) the difficulty in engaging and

providing access to treatment for these individuals; and 3) the unique long-term consequences of gang membership. This therefore supports the need for a specially tailored public health framework for gang members and highlights the importance of adopting prevention and rehabilitation-based approaches that humanise gang members rather than solely retributive approaches that demonise and marginalise gang members, making it even harder for them to successful re-join society as a contributing citizen.

6.4 Limitations

There are several limitations that qualify the findings and conclusions of this thesis. Firstly, as outlined in Chapter 5 the restrictive prison environment and safeguarding procedures meant that those most at risk of hurting themselves or others were excluded from the study. High risk prisoners include those in mental health inpatient care, in the segregation unit, and those in active substance withdrawal. While this is necessary to ensure everyone's safety it is likely that these high-risk prisoners are those most likely to have experienced extensive trauma histories and whose views, had they been included, would have contributed rich meaningful data. Excluding these extreme cases does undermine the representativeness of the sample and generalisability of these findings. This criticism also applies to the qualitative study presented in Chapter 6 as data for both studies was collected at the same time. However, given the phenomenological nature of this chapter where the focus is on participants' lived experiences of trauma, concerns about generalisability are less detrimental.

Secondly, given the restrictions placed on when and how long prisoners are allowed out of their cells for education, work, and recreation, there was only a small window of time, approximately 1.5 hours for interviews to be conducted in the morning and afternoons. This meant that interview sessions with prisoners often ran over and some were conducted over several sessions on different days. This negatively impacted on the continuity of the

interview and meant participants had to be re-oriented to where they left off, potentially affecting the quality of the information provided.

Thirdly, the findings from this Thesis were all derived from self-report measures and were not verified by prison staff or case files. This means there is a possibility that the information provided by participants may be skewed in a way that presents them in the most favourable, but not necessarily honest, light. This is particularly likely for questions touching on offence history, gang membership and mental health. To offset this issue, all interviews were conducted on a one to one basis in a private room to promote rapport and trust with participants and to make them feel comfortable enough to speak openly and honestly about their past experiences and feelings. It was also made clear to participants at the beginning of the interview, both verbally and in writing, that the information they provided would not in any way affect their treatment within the prison or inform any decisions about sentencing, progress, release etc.

Fourth, Chapter 4 is limited in its scope and complexity and the type and depth of statistical analyses that were conducted aren't sophisticated enough to generate mediated and/or moderated relationships that may exist within and between all five sets of variables: Trauma exposure, internalising symptoms, externalising symptoms, personality characteristics, and social psychological processes. As such, this chapter provides a relatively superficial overview of the trauma characteristics and symptomology, and social psychological processes experienced by incarcerated gang and non-gang members. While this a significant limitation is does provide an albeit tentative springboard upon which others researchers can launch future iterative ideas.

6.5 Conclusion

Gangs are a present and real 21st Century public health concern. The effects of gangs and their propensity for violence, and the fall out of this, touches not only individuals, but whole communities, and society at large. Serious and organised crime is reported to cost the UK economy 37 billion pounds annually; how much of this can be contributed to gangs is not known, although it is likely to be significant ("Serious and Organised Crime", 2018). However, the psychological cost to the individual, while it can be felt and experienced, cannot truly be quantified. Aside from the direct harm gangs cause, they also increase public fear of violent crime and give rise to moral panics. The public perception of gang members as super predators has implications for what services they come in to contact with, and whether they are ultimately *treated* as patients or *punished* as perpetrators. The study of gangs and the study of psychological trauma has advanced over the centuries and decades, but has done so in isolation, meaning neither field has benefitted from the progress and achievements of the other. As such this Thesis is the one of first attempts at knitting two previous unconnected fields to scholarship together to support a pair of 'first-look' quantitative and qualitative studies exploring the trauma profile of incarcerated gang and non-gang members. The results of which showed that gang members, compared to their non-gang counterparts, were more likely to experience: weapons-related trauma; group pressure, identification and pluralistic ignorance; moral disengagement; greater levels of individual and group delinquency; and were more likely to exhibit antisocial and paranoid personality traits. Implications of these findings speak to biologically-informed criminal justice policies, with specially tailored risk assessment, management and treatment optimisation plans for members, all the under the umbrella of a public health response to gangs and gang violence. Finally, to answer the question whether gang members are patients or perpetrators, the answer is: both.

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9.0 Appendices

Appendix 1 Table 1: An Overview of Study Characteristics Captured in the Literature Review

Author(s)	Sample	Method	Variables	Findings
Adams, (2004)	N = 130 adolescent males aged between 14-17 years.	Cross-sectional	*Predictors*: Traumatic experiences. *Outcomes*: Gang-involved delinquent behaviour, PTSD, emotional numbing	Emotional numbing and low resiliency in juvenile delinquents were positively correlated with gang-involved delinquent behaviour.
Coid et al., (2013)	N = 4664 British men aged old (M_{age} = 25.6)	Cross-sectional	*Predictors*: Gang membership and violent behaviour. *Outcomes*: Psychiatric morbidity and service use.	Violent rumination, violent victimisation and fear of victimisation accounted for the high levels of anxiety, psychosis and service use in gang members and other violent men.
Corcoran et al., (2005)	N =231 detained adolescent males aged between 12-18 years	Cross-sectional	*Predictors*:gang membership. *Outcomes*: Mental health symptoms, and antisocial/criminal behaviour.	Gang members reported more mental health symptoms, external behaviour problems - including delinquency and self-destructiveness - and thought problems than non-gang members.
Echanove, (2013)	N = 17 incarcerated Latina males (M_{age} = 17.5)	Cross-sectional	*Predictors*: Complex trauma. *Outcomes*: Gang membership.	No statistically significant association was found between gang membership and emotional, physical and sexual abuse, and emotional and physical neglect.
Fernandez, (2000)	N =151 incarcerated adolescent males (M_{age} = 16.5)	Cross-sectional	*Predictors*: Gang membership, offense history, and sentence length. *Outcomes*: Depression.	Gang membership and offense history were both significantly related to depression. Gang-identified youth reported higher levels of depression. As offense history increased, level of depression decreased.
Harper et al., (2008)	N = 69 homeless African American adolescent males aged between 16-21	Cross-sectional	*Predictors*: Gang membership. *Outcomes*: Negative affect, antisocial and violent behaviour, and substance use.	Gang members reported higher rates of negative mental and physical health outcomes than did non-gang members.

Hoffer, (1991)	N = 81 Latino and Chicano gang members aged between 14-18 years	Cross-sectional	*Predictors*: Gang membership and traumatic violence. *Outcomes*: PTSD, other psychological symptoms, and substance use.	Highly identified gang members exposed to traumatic violence reported more PTSD symptoms than low-identifying gang members.
Tome, (1992)	N =78 Mexican-American gang members (M_{age} = 19.8).	Cross-sectional	*Predictors*: Childhood exposure to violence. *Outcomes*: PTSD.	No significant levels of PTSD were found among gang members, when the Derogatis Stress Profile was used.
Valdez et al., (2000)	N = 50 gang members (M_{age} =18.2), n = 25 matched non-gang members (M_{age} = 19.7).	Cross-sectional	*Predictors*: Gang membership. *Outcomes*: psychopathy.	Gang members had higher total psychopathy scores, as well as affective, and behavioural facets compared to matched non–gang members
Watkins & Melde, (2016)	N = 6,378 males aged between 11-21 years (M_{age} =15.3).	Cross-sectional (secondary analysis)	*Predictors*: Gang membership. *Outcomes*: Depression, self-esteem, suicidal ideation and attempts.	Gang-involved youth had significantly higher levels of depression and suicidal thoughts and behaviours than comparison youth.
Wood & Dennard, (2017)	N = 65 incarcerated men (M_{age} 23.5).	Cross-sectional	*Predictors:* Violence exposure *Outcomes:* Mental health problems and forced behavioural control.	Compared to non-gang prisoners, street gang prisoners reported higher levels of violence exposure, paranoia, PTSD, anxiety, and forcibly controlled behaviour
Wood et al., (2017)	N = 1,539 adult British males (M_{age} = 19.8 years).	Cross-sectional	*Predictors*: Gang membership *Outcomes*: Violent behaviour, psychiatric morbidity, traumatic events.	Core and peripheral gang members reported more suicide attempts, self-harm, violence exposure and homelessness than violent non-gang men.

Appendix 2: Table 1. Full DSM-5 Criteria for a diagnosis of PTSD

No.	**Symptom Type**	**Symptom Description**
A	Trauma Exposure	Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: 1) Directly experiencing the traumatic event(s) 2) Witnessing, in person, the event(s) as it occurred to others 3) Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental 4) Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).[1]
B	Intrusive Symptoms	Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred: 1) Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).[2] 2) Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).[3] 3) Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)[4] 4) Intense or prolonged psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event(s). 5) Marked physiological reactions to internal or external cues that symbolise or resemble an aspect of the traumatic event(s)
C	Avoidance Symptoms	Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following: 1) Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s). 2) Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s)
D	Negative Alterations in Cognition and Mood	Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following: 1) Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia, and not to other factors such as head injury, alcohol, or drugs).

		2) Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined") 3) Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others. 4) Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame). 5) Markedly diminished interest or participation in significant activities. 6) Feelings of detachment or estrangement from others. 7) Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
E	Alterations in arousal and reactivity	Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following: 1) Irritable behaviour and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression toward people or objects. 2) Reckless or self-destructive behaviour 3) Hypervigilance. 4) Exaggerated startle response. 5) Problems with concentration. 6) Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep)
F	Duration of the disturbance (Criteria B, C, D and E) is more than 1 month	
G	The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.	
H	The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition	

[1]*Note*. Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.
[2]*Note.* In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.
[3]*Note*. In children, there may be frightening dreams without recognisable content.
[4]*Note*. In children, trauma-specific reenactment may occur in play.

Appendix 3: Study Invitation

STUDY INVITATION

An Exploration of the Relationship Between Negative Life Events and Mental Health Symptoms

Dear participant ……

We would like to invite you to take part in a research project examining the impact negative life events can have on the mental health of people who belong to groups compared to people who do not belong to groups. This is a great opportunity for you to have your say on this topic and we would really appreciate it if you could take part.

Procedure:
If you decide to take part in this study your interview will be held on:

……..

- You will be interviewed in private by the researcher where you will be asked a number of questions – this could take approximately 1.5 hours.
- With your permission this interview will be recorded using a voice recorder your and NOMS records accessed.

Anonymity and Confidentiality
Your responses to questions will be anonymous and remain totally confidential unless you disclose something that is excepted. All exceptions will be explained to you before the interview begins

Voluntary participation and withdrawal:
Participation in this study is entirely voluntary. You can refuse to take part or to continue at any point without any penalty. You can also skip any questions that you do not feel comfortable answering.

Risks:
The questions will touch on potentially sensitive issues regarding your previous experiences and how you feel about your life. However, your responses will be totally confidential and anonymous and you may choose to withdraw from the study at any time.

Please indicate whether you would like to take part in this research by ticking the appropriate statement.

I **would** like to take part in this research ☐

I **would NOT** like to take part in this research ☐

Appendix 4: Participant information Sheet

Information sheet

An exploration of the relationship between negative life events and mental health

You have been asked to take part in a research project and the details of this are below.

Aims of the study:

The aim of this study is to examine the impact of negative life events on the mental health of people who belong to groups and people who do not belong to groups.

Procedure:

If you decide to take part in this research the procedure will be as follows:

- You will be interviewed in private by one of the researchers where you will be asked a number of questions – this could take approximately 1 hour.
- Once finished, you will be provided with further information about the study and given the opportunity to ask any other questions you may have.

Risks:

The questions may touch on sensitive topics. For instance, you will be asked about the presence of any mental health problems you may (or may not) be experiencing, as well as your involvement in any antisocial activities. However, your responses will be totally confidential and anonymous and you may choose to withdraw from the study at any time (more explanation of this is below). Given the nature of some questions you will be made aware of appropriate services within the prison should you wish to discuss further any of the mental health issues raised in this research.

Benefits of this study:

It is important to identify whether certain groups of prisoners have mental health needs that are not being met. Unidentified mental illness can negatively impact rehabilitative goals and hinder chances of prisoners leading successful, healthy and crime free lives. The information gathered from this study will provide a basis for the development of specifically tailored assessments and interventions that will benefit both prisoners and the wider community.

Confidentiality:

Your responses to the questions will be confidential unless the prison service has imposed exceptions – these will be made known to you before we begin the interview. We do not ask for your name during the interview. Instead, your questionnaire will be given a number, which you will know so that if you wish to withdraw your data your responses can be identified. The consent form you complete will *not* contain this number so your questionnaires and consent form cannot be linked. All records will be held securely by the researcher and will be available only to them.

Voluntary participation and withdrawal:

Participation in this study is voluntary. You can refuse to take part or to continue at any point without penalty. You can also skip any questions that you do not feel comfortable answering.

Questions and/or complaints:

If you have any questions about this study, would like to withdraw your data after the study has been conducted, or if you want to know the main findings of the research, you can contact the lead researcher (Hayley Beresford - below). Further details of how to contact the researchers will be held by the prison and will be given to you if you request them.

Lastly, if you have any concerns about the ethical conduct of this study, please contact the Chair of Psychology Research Ethics Committee (via the Psychology School office) in writing, providing a detailed account of your concern.

Lead researcher details:
Hayley Beresford
Keynes College
School of Psychology
University of Kent
Canterbury
Kent
CT2 7NP

Appendix 5: Consent Form

Consent Form

An exploration of the relationship between negative life events and mental health

I consent voluntarily to take part in the above research project. I have read the information sheet and have had the opportunity to ask questions about it. I have had the project explained to me, and I understand that agreeing to take part means that I am willing to:

- Be interviewed by the researcher
- Allow the interview to be audiotaped and transcribed for analysis purposes

- Allow questionnaires and other materials completed by me to be analysed as part of this project
- Make myself available for a further interview should that be required
- Allow records held on me to be accessed by the researcher

Data Protection

Information relating to the above will be held and processed for the purposes of evaluating this research project. I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published. The identifiable data will not be shared with any other organisation. Interview data and other data will be kept in accordance with the Data Protection Act in a secure environment.
I understand that the researcher will be obliged to pass on any information which I disclose during the interview process regarding:

- An intention to breach prison security
- If I disclose an intention to commit further offences
- If I break a prison rule during interview
- If I indicate a threat of harm to myself or others.
-

Withdrawal from study

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.
I understand that if I have any questions about this research or about my rights as a research participant I should ask Hayley Beresford. If I wish to ask questions about this research later I should contact Hayley Beresford.
Name: .....(please print)
Signature: .....Date:.....

Appendix 6: Debrief Form

Debrief: Please keep for your records

An exploration of the relationship between negative life events and mental health

Lead Researcher: Hayley Beresford
University of Kent

Thank you very much for taking part in this study. Below is more information about the purpose of this research and what we are looking at.

The aim of this research was to examine the type and frequency of traumatic life events experienced by two different groups of people – people who belong to gangs and those who do not belong to gangs. We wanted to see how these traumatic life events affect gang and non-gang members' mental health and whether there are any differences in the levels of mental illness experienced by these two groups. In order to find out why gang members may be different from non-gang members in terms of mental health we looked at processes that occur within a group environment (e.g. group identification and perceived cohesiveness). With the view of developing a deeper understanding of why some individuals are more likely to suffer the negative effects of trauma than others we examined the different types of social and emotional support that can protect against the psychological consequences experiencing trauma life events can have.

If you have any queries about this research please contact the lead researcher at the address below.

If you want to withdraw your data at any point after the researcher has left the prison you can do so by phoning 01227 823961 and giving your participant number and the lead researcher's name. Please bear in mind that you would need to do this within two months from the date of the interview - or your data will already have been included in the study.
If you have any concerns about the ethical conduct of this study, please contact the Chair of Psychology Research Ethics Committee (via the Psychology School office) in writing, providing a detailed account of your concern.

Once again, we would like to thank you for your time and valuable contribution to this study. Without the help of participants such as you, it would not be possible to examine these issues. So, your participation is greatly appreciated and what you have told us will contribute to a much better understanding of these important issues.

Yours Sincerely,

Hayley Beresford

Keynes College
School of Psychology
University of Kent,
Canterbury
Kent,
CT2 7NP

Appendix 7: The Youth Survey: Eurogang Program of Research (Weerman et al., 2009)

Youth Survey

In this questionnaire we would like to know what you think about life before you came in to prison. There are no right or wrong answers to any questions. All questions ask about the time before you came in to prison.

We are going to start with a few questions about you and your background. Please circle the response that best describes you.

1. I am: (1) Male (2) Female

2. I am _____ years old.

2a My sentence length is_____

2b My index offence was_____

2c I have committed _____offences to date

2d I have been convicted of_____ offences to date

2c My ethnicity is: please tick one

a. Asian/Asian British – Indian
b. Asian/Asian British – Other – (please specify)_____
c. Asian/Asian British – Pakistani
d. Black/Black British – African
e. Black/Black British – Caribbean
f. Black/Black British – Other – (please specify)_____
g. Mixed – Other (please specify)_____
h. Mixed – White/Black Caribbean
i. White – British
j. White – Irish
k. White – Other

3. Think of the place where you lived for most of the time before coming in to prison. Which of the following people lived with you? (Choose all that apply.)

(1)	Mother	(9)	Other adults (Please specify:_____)
(2)	Father		
(3)	Stepmother	(10)	Sister(s)
(4)	Stepfather	(11)	Brother(s)
(5)	Aunt	(12)	Stepsister(s)
(6)	Uncle	(13)	Stepbrother(s)
(7)	Grandmother	(14)	Other children
(8)	Grandfather	(15)	I live alone

4. What is the highest level of schooling your father completed?

(1) Completed primary school or less
(2) Some secondary school

(3) Completed secondary school
(4) Some university/higher education
(5) Completed university/higher education
(6) Graduate or professional school after college
(7) I don't know

5. What is the highest level of schooling your mother completed?

(1) Completed primary school or less
(2) Some secondary school
(3) Completed secondary school
(4) Some university/higher education
(5) Completed university/higher education
(6) Graduate or professional school after college
(7) I don't know

6. In what country were you born? _____

7. In what country was your father born? _____

8. In what country was your mother born? _____

9. Did you have a job for which you were paid during the 6 months before coming in to prison?

(1) No (2) Yes

9a. (IF YES) About how many hours a week did you work? _____hours

9b. How many weeks during the year did you work? _____weeks

Studies have found that many people break the rules and laws some of the time. Circle or check how often during the 6 months before coming in to prison you did the following things.

During the 6 months before coming in to prison, how often did you:

33. Play truant without an excuse?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

34. Lie about your age to get into some place or to buy something?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

35. Avoid paying for something such as movies, bus or underground rides?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

36. Purposely damaged or destroyed property that did not belong to you?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

37. Carry a hidden weapon for protection?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

38. Illegally spray paint a wall or building?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

39. Stole or tried to steal something worth less than £50?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

40. Stole or tried to steal something worth more than £50?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

41. Go into or tried to go into a building to steal something?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

42. Stole or tried to steal a motor vehicle?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

43. Hit someone with the idea of hurting them?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

44. Attack someone with a weapon?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

45. Use a weapon or force to get money or things from people?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

46. Involved in “gang fights”?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

47. Sell illegal drugs?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

48. Use illegal drugs?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

49. If so, which drugs did you use?

_____

_____

_____

Did any of the following things happen to you during the 6 months before you came in to prison?

50. Being hit by someone trying to hurt you?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

51. Being threatened or someone using a weapon or force used against you to get money or things from you?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

52. Being attacked by someone with a weapon or by someone trying to seriously hurt or kill you?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

53. Having some of your things stolen?

Never	Once or twice	3-5 times	6-10 times	More than 10 times
(1)	(2)	(3)	(4)	(5)

54. Feeling threatened by other groups of youths?

Not at all				Very much
(1)	(2)	(3)	(4)	(5)

55. If so, who were the people that threatened you?

_____

_____

_____

The following questions are about your friends or the people you spent time with before coming in to prison.

56. During the 12 months before coming in to prison, did you belong to any teams such as the scouts, sports club, or other formal groups either at school or in your neighborhood or city?

(1) No

(2) Yes IF YES, SPECIFY WHICH _____

57. In addition to any such groups or teams, some people have a certain group of friends that they spend time with, doing things together or just hanging out. Did you have a group of friends like that?

(1) No PLEASE ANSWER ONLY QUESTIONS 79-82.

(2) Yes PLEASE CONTINUE

If you belonged to more than one such group, answer for the one most important to you.

58. About how many people, including you, belonged to this group?

2	3-10	11-20	21-50	51-100	More than 100
(1)	(2)	(3)	(4)	(5)	(6)

59. How many of your close friends belonged to this group?

All of them	Most of them	About half of them	Less than half of them	None of them

(1) (2) (3) (4) (5)

60. Which of the following best describes this group?

All male	Mostly male	About half male, half female	Mostly female	All female
(1)	(2)	(3)	(4)	(5)

61. How old was the youngest person in this group? _____ years

62. How old was the oldest person in this group? _____ years

63. Which of the following categories best describes the people in your group? (CIRCLE OR CHECK ALL THAT APPLY)

(a) White British

All of them (1) (2) (3) None of them (4)

(b) Black (Caribbean and/or African)

All of them (1) (2) (3) None of them (4)

(c) Indian

All of them (1) (2) (3) None of them (4)

(d) Pakistani

All of them (1) (2) (3) None of them (4)

(e) European – state country _____

All of them (1) (2) (3) None of them (4)

(f) Chinese

All of them (1) (2) (3) None of them (4)

(g) Other _____

All of them (1) (2) (3) None of them (4)

64. Did this group spend a lot of time together in public places like the park, the street, shopping areas, or the neighborhood?

(1) No (2) Yes

65. Did this group have an area or place that it called its own?

(1) No (2) Yes

IF NO, GO TO QUESTION #69

66. IF YES, Was this area or place □

(1) A park or playground
(2) A street, street corner or square
(3) A drinking or eating place (such as a pub, café, restaurant)
(4) Living space (such as an apartment, house, flat)
(5) A neighborhood or area of the city
(6) Shopping area
(7) Other – Please specify:_____

67. Did your group let other groups come into this area or place?

(1) No (2) Yes

68. Did your group defend this area or place against other groups?

(1) No (2) Yes

68a. IF YES, how do they do that?

_____
_____
_____

69a. How long did your group exist?

_____

69b. Does it still exist?

(1) No (2) Yes

70. Did your group have a name?

(1) No (2) Yes

70a. IF YES, What was the group's name? _____

71. The following is a list of reasons that young people give for joining groups. Which of them were important reasons for you to join your group? (Circle all that apply)

(1) To make friends
(2) To feel important
(3) To feel like you belong to something
(4) To prepare for the future
(5) To keep out of trouble
(6) For protection
(7) To share secrets

(8) To get away with illegal activities
(9) To participate in group activities
(10) To have a territory of your own
(11) To get your parents' respect
(12) Because someone in your family was a member of the group
(13) To meet members of the opposite sex
(14) To get money or other things
(15) To get money or other things from selling drugs
(16) Because a friend was a member of the group
(17) For company
(18) Any other reasons for why you joined your groups? (Please specify)

_____
_____
_____

72. Which of the following characteristics describes your group?

(a)	Recognised leaders	(1) No	(2) Yes
(b)	Symbols	(1) No	(2) Yes
(c)	Boys and girls do different things	(1) No	(2) Yes
(d)	Regular meetings	(1) No	(2) Yes
(e)	Specific rules or codes	(1) No	(2) Yes
(f)	You have to do special things to get in	(1) No	(2) Yes
(g)	Special clothing	(1) No	(2) Yes
(h)	Tattoos	(1) No	(2) Yes

73a. Is doing illegal things accepted by or okay for your group?

(1) No (2) Yes

73b Does your group promote or support a particular political issue?

1. No 2. Yes

77a. IF YES, what political issues? _____

74. Do people in your group actually do illegal things together?

(1) No (2) Yes

75. How often are the following things done by your group?

(a) Threaten people

Never			Often
(1)	(2)	(3)	(4)

(b) Fight

Never			Often
(1)	(2)	(3)	(4)

(c) Steal things

Never (1) (2) (3) Often (4)

(d) Get protection money

Never (1) (2) (3) Often (4)

(e) Rob other people

Never (1) (2) (3) Often (4)

(f) Steal cars

Never (1) (2) (3) Often (4)

(g) Sell illegal drugs

Never (1) (2) (3) Often (4)

(h) Carry illegal weapons

Never (1) (2) (3) Often (4)

(i) Damage or destroy property

Never (1) (2) (3) Often (4)

(j) Beat up someone

Never (1) (2) (3) Often (4)

(k) Write graffiti

Never (1) (2) (3) Often (4)

(l) Use drugs

Never (1) (2) (3) Often (4)

(m) Use alcohol

Never (1) (2) (3) Often (4)

(n) Break and enter (burglary)

Never			Often
(1)	(2)	(3)	(4)

(o) Other illegal offenses (SPECIFY)_____

Never			Often
(1)	(2)	(3)	(4)

76. Do you consider your group of friends to be a gang?

(1) No (2) Yes

IF YES, go to 79

77. If you are not now, have you ever been in such a gang?

(1) No (2) Yes

78. If you do not use the word "gang" for your group, is there some other term you would use? For example, some groups call themselves clubs, bands, crews, posses, taggers, bikers, party crews, and so on. If your group uses a term other than "gang", what is that term? _____

79. Have any of your brothers or sisters ever been in a gang?

(1) No (2) Yes (3) I have no brothers/sisters

80. Have any of your friends ever been in a gang?

(1) No (2) Yes (3) I have no friends

81. Were there people living on your street who belonged to a gang?

(1) No (2) Yes (3) I don't know

82. Were there any gangs in your neighborhood or city?

(1) No (2) Yes (3) I don't know

The next set of questions is about the group of friends you mixed with before you came in to prison. Please circle or check the number that best represents how you feel.

83. Being in my group makes me feel important.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

84. My group provides a good deal of support and loyalty for each other.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

85. Being in my group makes me feel respected.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

86. Being in my group makes me feel like I'm a useful person.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

87. Being in my group makes me feel like I belong somewhere.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

88. I really enjoy being in my group.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

89. My group is like a family to me.

Strongly Disagree				Strongly Agree
(1)	(2)	(3)	(4)	(5)

The GI Scale

1. I would prefer to be in a different group/gang

Strongly Disagree	1	2	3	4	5	6	7	Strongly agree

2. In this group/gang members don't have to rely on one another

Strongly Disagree	1	2	3	4	5	6	7	Strongly agree

3. I think of this group/gang as part of who I am.

Strongly	1	2	3	4	5	6	7	Strongly

Disagree agree

4. Members of this group/gang like one another.

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

5. All members need to contribute to achieve the group/gang's goals.

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

6. I see myself as quite different from other members of the group/gang

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

7. I enjoy interacting with the members of this group/gang.

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

8. The group/gang accomplishes things that no single member could achieve.

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

9. I don't think of this group/gang as part of who I am

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

10. I don't like many of the people in this group/gang

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

11. In this group/gang, members do not need to cooperate to complete group tasks

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

12. I see myself as quite similar to other members of the group/gang.

Strongly Disagree 1 2 3 4 5 6 7 Strongly agree

The PC Scale

1.I feel a sense of belonging to my group/gang

Strongly

Disagree					Neutral					Agree
0	1	2	3	4	5	6	7	8	9	10

2. I feel that I am a member of my group/gang

Strongly Disagree					Neutral					Agree
0	1	2	3	4	5	6	7	8	9	10

3. I see myself as part of the group/gang

Strongly Disagree					Neutral					Strongly Agree
0	1	2	3	4	5	6	7	8	9	10

4. I am enthusiastic about being a group/gang member

Strongly Disagree					Neutral					Strongly Agree
0	1	2	3	4	5	6	7	8	9	10

5. I am happy to belong to my group/gang

Strongly Disagree					Neutral					Agree
0	1	2	3	4	5	6	7	8	9	10

6. My group is one of the best/most-feared groups/gangs in my neighbourhood

Strongly Disagree					Neutral					Strongly Agree
0	1	2	3	4	5	6	7	8	9	10

The GP Scale

8. Have you ever publicly agreed with the actions and words of other group members whilst privately disagreeing with them?

No	Yes
(1)	(2)

9. Have you ever gone along with the actions of your group whilst privately thinking it was wrong?

No	Yes
(1)	(2)

10. Have you ever felt pressure from your group to do something you didn't want to do?

No	Yes

(1) (2)

11. Have you ever felt pressure from your group to commit a crime?

No Yes

(1) (2)

12. Have you ever felt pressure from your group to commit a violent act against someone?

No Yes
(1) (2)

13. Have you ever committed a violent act against someone because of the pressure you have felt from your group?

No Yes
(1) (2)

IF YES, PLEASE SPECIFY:

PI Item

14. Do you think other group members have done things for the group that privately they didn't agree with?

Yes No Maybe
(1) (2) (3)

Appendix 8: The Life Events Checklist for DSM 5 with an extended criterion A assessment (LEC-5; Weathers, Blake, Schnurr, Kaloupek, Marx & Keane, 2013)

LEC-5

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it happened to you personally; (b) you witnessed it happen to someone else; (c) you learned about it happening to a close family member or close friend; (d) you were exposed to it as part of your job (for example, paramedic, police, military, or other first responder); (e) you're not sure if it fits; or (f) it doesn't apply to you.

Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't Apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)						
2.Fire or explosion						
3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)						
4.Serious accident at work, home or during recreational activity						
5. Exposure to toxic substance (for example dangerous chemicals, radiation)						
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)						
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)						
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)						
9. Other unwanted or uncomfortable sexual experience						
10. Combat or exposure to a war-zone (in the military or as a civilian)						
11. Captivity (for example, being kidnapped, abducted,						

held hostage, prisoner of war)						
12. Life-threatening illness or injury						
13. Severe human suffering						
14. Sudden violent death (for example, homicide, suicide)						
15. Sudden accidental death						
16. Serious injury, harm, or death you caused to someone else						
17. Any other very stressful event or experience						

PLEASE COMPLETE PART 2 ON THE FOLLOWING PAGE

PART 2:

A. If you checked anything for #17 in PART 1, briefly identify the event you were thinking of:

_____

B. If you have experienced more than one of the events in PART 1, think about the event you consider the worst event, which for this questionnaire means the event that currently bothers you the most. If you have experienced only one of the events in PART 1, use that one as the worst event. Please answer the following questions about the worst event (check all options that apply):

1. Briefly describe the worst event (for example, what happened, who was involved, etc.).

_____

_____

2. How long ago did it happen? _____ (please estimate if you are not sure)

3. How did you experience it?

____ It happened to me directly
____ I witnessed it
____ I learned about it happening to a close family member or close friend
____ I was repeatedly exposed to details about it as part of my job (for example, paramedic, police, military, or other
first responder)
____ Other, please describe:

4. Was someone's life in danger?

____ Yes, my life
____Yes, someone else's life
____No

5. Was someone seriously injured or killed?

____ Yes, I was seriously injured
____ Yes, someone else was seriously injured or killed
____ No

6. Did it involve sexual violence? ____Yes ____No

7. If the event involved the death of a close family member or close friend, was it due to some kind of

accident or violence, or was it due to natural causes?
____ Accident or violence
____ Natural causes
____ Not applicable (The event did not involve the death of a close family member or close friend)

8. How many times altogether have you experienced a similar event as stressful or nearly as stressful
as the worst event?
____ Just once

____ More than once (please specify or estimate the total # of times you have had this

experience _____)

Appendix 9: The PTSD Checklist for DSM 5 (PCL-5; Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013)

PCL-5

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something wrong with me, no one can be trusted, the world Is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or somone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4

14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being “superalert” or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep	0	1	2	3	4

Appendix 10: *The Beck Depression Inventory-II (BDI-II; Beck, Steer & Brown, 1996)*

BDI-II

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully and then pick out **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today.** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including item 16 (changes in sleep pattern) or item 18 (changes in appetite).

1. Sadness

0 I do not feel sad
1 I feel sad much of the time.
2 I am sad all of the time
3 I am so sad or unhappy that I can't stand it.

2. Pessimism

0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will only get worse.

3. Past Failure

0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back I see a lot of failures.
3 I feel I am a total failure as a person.

4. Loss of Pleasure

0 I get as much pleasure as I ever did from the things I enjoy.
1 I don't enjoy things enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. Punishment Feelings

0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. Self-Dislike

0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. Self-Criticalness

0 I don't criticize or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticize myself for all of my faults.
3 I blame myself for everything bad that happens.

9. Suicidal thoughts or wishes

0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. Crying

0 I don't cry anymore than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying but I can't

11. Agitation

0 I am not more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am do restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless
1 I don't consider myself as worthwhile and useful as I used to.

2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of energy

0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping pattern.
1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.
2a I sleep a lot more than usual.
2b I sleep a lot less than usual.
3a I sleep most of the day.
3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my appetite.
1a My appetite is somewhat less than usual.
1b My appetite is somewhat more than usual.
2a My appetite is much less than before.
2b My appetite is much greater than usual.
3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0 I have not noticed any recent change in my interest in sex.

1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

Total Score

Appendix 11: The Beck Anxiety Inventory (BAI; Beck, Epstein, Brown & Steer, 1988)

BAI

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each symptom during the **PAST WEEK, INCLUDING TODAY**, by placing an 'X' in the corresponding space in the column next to each symptom.

	Symptoms	NOT AT ALL	MILDLY It did not bother me much	MODERATELY It was very unpleasant, but I could stand it	SEVERELY I could barely stand it
1	Numbness or tingling				
2	Feeling hot				
3	Wobbliness in legs				
4	Unable to relax				
5	Fear of the worst happening				
6	Dizzy or lightheaded				
7	Heart pounding or racing				
8	Unsteady				
9	Terrified				
10	Nervous				
11	Feelings of choking				
12	Hands trembling				
13	Shaky				
14	Fear of losing control				
15	Difficulty breathing				
16	Fear of dying				
17	Scared.				
18	Indigestion or discomfort in the abdomen.				
19	Faint				
20	Face flushed				

21	Sweating (not due to heat)				

Appendix 12: The Inventory of Callous Unemotional Traits (ICU; Frick, 2004)

ICU
(Youth Version)

Instructions: Please read each statement and decide how well it describes you. Mark your answer by circling the appropriate number (0-3) for each statement. Do not leave any statement unrated.

	Not at all true	**Somewhat true**	**Very true**	**Definitely true**
1. I express my feelings openly.	0	1	2	3
2. What I think is “right” and “wrong” is different from what other people think.	0	1	2	3
3. I care about how well I do at school or work.	0	1	2	3
4. I do not care who I hurt to get what I want.	0	1	2	3
5. I feel bad or guilty when I do something wrong.	0	1	2	3
6. I do not show my emotions to others.	0	1	2	3
7. I do not care about being on time.	0	1	2	3
8. I am concerned about the feelings of others.	0	1	2	3
9. I do not care if I get in trouble.	0	1	2	3
10. I do not let my feelings control me.	0	1	2	3
11. I do not care about doing things well.	0	1	2	3
12. I seem very cold and uncaring to others.	0	1	2	3
13. I easily admit to being wrong.	0	1	2	3
14. It is easy for others to tell how I am feeling.	0	1	2	3
15. I always try my best.	0	1	2	3
16. I apologize (say “I’m sorry’) to persons I hurt.	0	1	2	3
17. I try not to hurt others’ feelings.	0	1	2	3
18. I do not feel remorseful when I do something wrong.	0	1	2	3
19. I am very expressive and emotional.	0	1	2	3
20. I do not like to put the time into doing things well.	0	1	2	3
21. The feelings of others are unimportant to me.	0	1	2	3
22. I hide my feelings from others.	0	1	2	3
23. I work hard on everything I do.	0	1	2	3
24. I do things to make others feel good.	0	1	2	3

Appendix 13: The Personality Assessment Inventor (PAI): Antisocial features subscale (PAI; Morey, 1991)

PAI: ANT Subscale

Read each statement and decide if it is an accurate statement about you. Mark your answer by circling the number on the answer sheet. Give your own opinion of yourself. Be sure to answer every statement. If you need to change answer, make an X through the incorrect answer and then circle the correct number.

ANT A

1. I was usually well behaved at school.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

2. I've deliberately damaged someone's property.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

2. I've done some things that weren't exactly legal.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

3. I used to lie a lot to get out of tight situations.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

4. I like to see how much I can get away with.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

5. I never got expelled or suspended from school when I was young.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

6. I've never been in trouble with the law.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

7. I've never taken money or property that wasn't mine.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

ANT E

8. I've borrowed money knowing I wouldn't pay it back.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

9. I'll take advantage of others if they leave themselves open to it.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

10. I'll do most things if the price is right.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

11. I can talk my way out of just about anything.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

12. I don't like being tied to one person.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

13. I don't like to stay in a relationship very long.

False, not true at all	Slightly true	Mainly true	Very true
1	2	3	4

14. I look after myself first; let others take care of themselves.

False, not true at all	Slightly true	Mainly true	Very true

1 2 3 4

15. When I make a promise, I really don't need to keep it.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

ANT S

16. I get a kick out of doing dangerous things.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

17. I do a lot of wild things just for the thrill of it.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

18. My behaviour is pretty wild at times.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

19. If I get tired of a place, I just pick up and leave.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

20. The idea of "settling down" has never appealed to me.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

21. I like to drive fast.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

22. I'm not a person who turns down a dare.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

23. I never take risks if I can avoid it.

False, not true at all Slightly true Mainly true Very true

1 2 3 4

Appendix 14: Millon Clinical Multiaxial Inventory (MCMI)-III Paranoid Personality Disorder Subscale (Millon, Millon, Davis & Grossman, 1994)

MCMI-III P Scale

1. People have never given me enough recognition for the things I've done.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
2. People make fun of me behind my back, talking about the way I act or look.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
3. If someone criticised me for making a mistake, I would quickly point out some of that person's mistakes.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
4. I never forgive an insult or forget an embarrassment that someone caused me.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
5. A long time ago, I decided it's best to have little to do with people.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
6. Since I was a child, I have always had to watch out for people who were trying to cheat me.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
7. I just haven't had the luck in life that others have had.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
8. Many people have been spying into my private life for years.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
9. I watch my family closely so I'll know who can and who can't be trusted.
   Not at all true Somewhat true Very true Definitely true
   0 1 2 3
10. Sneaky people often try to get the credit for things I have done or thought of.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3
11. Other people often blame me for things I didn't do.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3
12. I can tell that people are talking about me when I pass by them.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3
13. I always wonder what the real reason is when someone is acting especially nice to me.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3
14. I get very tense with people I don't know well because they want to harm me.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3
15. Someone would have to be pretty exceptional to understand my special abilities.
    Not at all true Somewhat true Very true Definitely true
    0 1 2 3

16. I take great care to keep my life a private matter so no one can take advantage of me.

Not at all true	Somewhat true	Very true	Definitely true
0	1	2	3

17. There are people who are supposed to be my friends who would like to do me harm.

Not at all true	Somewhat true	Very true	Definitely true
0	1	2	3

Appendix 15: Mechanisms of Moral Disengagement Scale (Bandura, Barbarnelli, Carpara, & Pastorelli, 1996*)*

MD Scale

Please indicate how much you agree or disagree with the following statements by circling one number between 1 and 5 that best reflects your answer.

1. It is alright to fight to protect your friends.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

2. Hitting and shoving someone is just a way of joking.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

3. Damaging some property is no big deal when you consider that others are beating people up.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

4. A gang member should not be blamed for the trouble the gang causes.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

5. If people are living in bad conditions, they cannot be blamed for behaving aggressively.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

6. It is ok to tell small lies because they don't really do any harm.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

7. Some people deserve to be treated like animals.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree

(1) (2) (3) (4) (5)

8. If men break rules in prison, it is the prison officers' fault.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

9. It is alright to assault someone who bad mouths your family.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

10. If someone is obnoxious, hitting them is just teaching them a lesson.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

11. Stealing some money is not too serious compared to those stealing a lot of money.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

12. Somebody who suggests committing a crime should not be blamed if others do it.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

13. If people are not punished, they should not be blamed for breaking the law.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

14. People don't mind being made fun of because it means they are getting attention.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

15. It is okay to treat someone badly if they behave like an animal.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree

(1) (2) (3) (4) (5)

16. If people are careless where they leave their things it is their own fault if they get stolen.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

17. It is alright to fight when your friends' or family's honour is threatened.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

18. Taking someone's car without his or her permission is just 'borrowing it'.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

19. It is okay to insult someone, because physically assaulting him or her is worse.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

20. If a group of people decide together to commit an offence, it is unfair to blame any one group member for it.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

21. Men cannot be blamed for aggressive behaviour when all their friends behave that way.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

22. Being verbally abusive to someone does not really hurt them.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

23. Someone who is being obnoxious does not deserve to be treated like a human being.

Strongly	Disagree	Neither agree	Agree	strongly agree

Disagree		or disagree		
(1)	(2)	(3)	(4)	(5)

24. People who get mistreated usually do things to deserve it.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

25. It is alright to lie to keep people out of trouble.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

26. It is not a bad thing to get 'high' or drunk once in a while.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

27. Compared to the illegal things people do, taking some things from a store without paying for them is not very serious.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

28. It is unfair to blame a person who only had a small part in the harm caused by a group.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

29. People cannot be blamed for committing crimes if their friends pressured them in to it.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

30. Insults among a group do not hurt anyone.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

31. Some people have to be treated roughly because they lack feelings that can be hurt.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

32. People are not to blame for committing offences if they are under pressure.

Strongly Disagree	Disagree	Neither agree or disagree	Agree	strongly agree
(1)	(2)	(3)	(4)	(5)

Appendix 16: *The Social Provision Scale (Cutrona & Russell, 1987)*

SP Scale

Instructions: In answering the following questions, think about your relationships with friends, family members, co-workers, community members, and so on. Please indicate to what extent each statement describes your relationships with other people. Use the following scale to indicate your opinion.

1 = STRONGLY DISAGREE
2 = DISAGREE
3 = AGREE
4 = STRONGLY AGREE

	RATING
1. There are people I can depend on to help me if I really need it	
2. I feel that I do not have close personal relationships with other people	
3. There is no one is can turn to for guidance in times of stress	
4. There are people who depend on me for help	
5. There are people who enjoy the same activities as I enjoy	
6. Other people do not view me as competent	
7. I feel personally responsible for the wellbeing of another person	
8. I feel part of a group of people who share my attitudes and beliefs	
9. I do not think other people respect my skills and abilities	
10. If something went wrong, no one would come to my assistance	
11. I have close relationships that provide me with a sense of emotional security and wellbeing	
12. There is someone I could talk to about important decisions in my life	
13. I have relationships where my confidence and skills are recognized	
14. There is no one who shares my interests and concerns	
15. There is no one who really relies on me for their wellbeing	
16. There is a trustworthy person I could turn to for advice if I were having problems	
17. I feel a strong emotional bond with at least one other person	
18. There is no one I can depend on for aid if I really need it	

19. There is no one I feel comfortable talking about problems with	
20. There are people who admire my talents and abilities	
21. I lack a feeling of intimacy with another person	
22. There is no one who likes to do the things I do	
23. There are people I can count on in an emergency	
24. No one needs me to care for them	

1 = STRONGLY DISAGREE
2 = DISAGREE
3 = AGREE
4 = STRONGLY AGREE

Appendix 17: Data extracts and codes

Participant ID	Gang Status	Data Extract	Coded for
Participant 1 (04/04/16) Recording ID: DS350003.D (19mins 26 secs)	Non-gang member	[…] I can sit here, and explain to you exactly the reason why I came here; right now, I could. It all starts from my mum […] because my mum drove my dad to try and commit suicide twice, and one of those times I actually went and found him, in the car, yeah I bought him home. […] she must of come round drunk; said she wanted to talk to my dad, she gone upstairs and I'm sat down stairs waiting for it, I knew something was going to happen. Next thing I know I heard a crash, she's thrown my dad's laptop on the floor, picked it up then smashed it around his head, and then that's it he'd lost it. He'd taken so much for the past 10 years, she was beating him up for about 10 years. That's why he left. He had to build up the courage to leave, and erm obviously she'd taken it too far. I've run upstairs and there he is, he's got her pinned up against the wall, she's going black and blue from strangling her […]. If it wasn't for me she would be dead, and my dad would be serving life in prison.	- Witnessed domestic abuse (mother to father) - Witnessed suicide attempt - Physically assaulted by mother - Chronic - Blaming mother
Participant 2 (20/04/16) Recording ID: DS350004.D (4mins 19secs)	Non-gang member	Er, yeah we was on bomb disposal in Afghan, and er there was an IED and three people got hurt, that was about it.	- trauma in the line of military duty - Witness - 'just part of the job' - minimalisation - Single event
Participant 3 (04/05/2016) Recording ID: DS350005.D (5mins 35 secs)	Gang member (Eurogang criteria only)	Basically we'd gone out to a rave one night in Birmingham, and we'd err been taking a few drugs and stuff, some Es, we'd come back, gone our separate ways and he'd carried on staying up like with a few people. And then erm because he was like really off his face his sister see him like that for the first time and obviously rung his mum whose never seen him like that, whose then rung the ambulance. Like, he's in a really bad way and the ambulance	- Hearing about the death of a friend. - Unintentional. - Had been with friend few minutes before

		have ended up shocking him with adrenaline and then he's had one heart attack there, another one on the way to the hospital and then one in the hospital. […] We been to loads of raves and stuff, done drugs and that. I've seen him like that loads of times like… Basically I was round the corner at my other friend's house and we was just sat there normal and I remember my friend was just sat there on his phone and I was on his armchair like nearly falling asleep…and err a really young kid who lived in the same block of flats come running round banging on the door and was like "quick, [Chris] has been taken in an ambulance", and that's all we knew. So obviously we've rung his brother and that, he said ring back, we sat there waiting, rung back, and then that's when he said he's at the hospital it's not looking good. So we tried driving up there. And then when we got there his brother came out and had obviously said that he'd passed. The autopsy say it was the drugs give him the heart attack, but I still seem to think it's got to be something to do with the adrenaline because when ecstasy is in your system your heart is beating stupidly fast anyway. I would have thought it would make it 10 times worse. It was like one of the biggest send offs I've ever seen. The headline in the newspaper was like "Much loved [Chris] 21" or something like that.	the incident (guilt) - Drugs. - Single event - Blaming others
Participant 4 (16/05/2016) Recording ID: DS350006.D (7mins, 55 secs)	Non-gang member	It happened years ago in Limerick City. One of my mates, he had a car, and he just got insurance. [Ben Johnson] was his name. And we drove into Garryowen to collect this one or two boys from Weston, just outside Limerick city and they said we're going for a spin in Limerick City and we said "yeah come on". We end up driving down on and marching down to Garryowen…. But I left my mate with the two of them, the two other boys from this place called Weston. He didn't know that they had a gun in the car and they pulled down the window and they shot a guy called [Michael Lockley], he was a mate of mine as well but they were from different sides of the city […]	- Hearing about the death of a friend. - 'Turf war'. - Intentional. - Had been with this friend a few minutes before the incident - Guilt - Weapons (Guns).

		He shot him, my mate that was driving the car, obviously the estate was all camera-ed up and all that. And he said "guys, what are you after doing?", he was totally innocent do you know what I mean? [...] And he said "guys, what are you after doing?", "what, do you want to get caught?". So they said come on back to Weston and we'll bury the guns. So they drove back to Weston and went into the field and gave him a shovel, and said dig the hole and we'll bury the guns. He was digging the hole and he didn't know he was digging his own grave. They dug the hole put him on his knees and blew his head off. […] I was with him 10 mins before. […] His mother committed suicide two years later she couldn't hack it. That's definitely a traumatic situation isn't it? It was two sides of a gang. One side of the city fighting with the other side of the city. But they were literally shooting each other for like…anyone was likely to get shot back then, do you get me. They were finding bodies every week. […] every week there was bodies getting found. within that feud alone I'd say there's over a 100 people that's dead, or at least 70 or 80 anyway.	- Heinous gratuitous violence - Single event - Hearing about suicide of friend's mother
Participant 9 (02/08/16) Recording ID: DS350007.D (9mins 19 secs)	Non-gang member	"Probably my offense Miss, to be honest. Me and my friend had a fight and I killed him basically, accidently."	- Offence/perpetrated-related trauma - Proximity to victim (friend) - Unintentional accidental - Guilt - Apparent (superficial) minimising - trivialising
Participant 10 (18/08/16)	Gang member (Eurogang criteria only)	"Err so I guess I'm over most of it now, so it doesn't really…. Err I don't…obviously when you remember it, or back then, like obviously, yeah, but in the here and now, nah."	- No most bothersome event

Recording ID: DS350008.D (5mins 41secs)			- Differentiation between life now and before - Minimalisation - Trivialisation - Did not identify a 'worst event'
Participant 11 (23/08/16) Recording ID: DS350009.D (12mins 49secs)	Non-gang member	"Oh yeah, I got stabbed in the back; er erm well me mate was at the same time as well, he got stabbed in the leg. Some crazy kid with a knife […] never seen him in our lives." "We was walking down the road and he just banged in between the both of us, and we both turned round to say "what the fuck", know what I mean? And obviously my mate was a lot bigger than me, and the kid's just turned round just pulled a knife out and tried to go for him, so obviously I've tried to protect my mate. So, when he grabbed him, I ran round the car, grabbed hold of him and in the struggle he must of stabbed him in the leg and me right by the spine, it was only a little knife but" "I didn't even know I'd been stabbed for about 10 minutes, like, after it happened we chased the kid, he ran and he locked himself in a shop but then we've left and walked off. And as I'm walking off my back's got a little tight, and I was like "what's this?", and I took me coat off and he'd done me as well." "I don't even know why I've even said this because when it happened we went to the hospital and said we both fell off a BMX […] life goes on"	- Single event - Victim - Weapons (stabbing) - Lying about true cause of injury - Communication of the triviality of events - Single event - Intentional - Community violence
Participant 12 (11/10/16) Recording ID: DS350010.D (5mins 59secs)	Gang member (Eurognag criteria only)	"It would be my mum's death. She died of Septicaemia."	- Unintentional - Witness family death - Interpersonal - Single event

Participant 14 (25/10/16) Recording ID: DS350011.D (18mins 43secs)	Gang member (Eurogang criteria only)	An explosion in Turkey, that's where I got that scar (points to scar). […] Err, me and my nan we were walking down the road in Turkey in Marmaris. And err when we got to the shop, and come out the shop a taxi blew up, and err it just exploded like a terrorist explosion and obviously part of the metal hit me in the head, and it stuck out my head. […] It was awful, I had blood all on my clothes. […] This was when I was about 12 years old. I always said to my nan I never want to get a Dove (an ice-cream lolly), and Doves are the white Magnums, we call them Doves, and err went to the shop got that, and the next thing we know the taxi blew up. […] there was a few bodies on the floor and everything. I'm walking down the road from work in Folkestone, they got a new shopping mall. And this woman was standing on top of the highest building in Folkestone and me and my mate were both walking down the road. Err the woman's jumped and gone head first straight on the floor and her head exploded; it was wrong. It was the most disgusting thing I've ever seen. My mate was laughing; my mate was laughing and I was throwing up. […] Her husband kept on abusing her, and err beating her up and beating the children up and everything so she committed suicide. It was fucking out of order to be honest, I felt sorry for her. I got beaten up really badly, I got hit round the head with, err, plank of wood, and my face got stamped on about 6-7 times, and err getting punched up. My face was out ere. I looked like Sloth (from The Goonies), straight up. […] I walked out and my mum saw me she was like "arghh". I felt like an inbred. I got stabbed. I got stabbed in the chin and lost 4 pints of blood and died, for 7 minutes. Stabbed there (points to chin). Hit an artery and I died for 7 minutes, and obviously I come back to life. I was sexually assaulted by my grandad. Oh, my nan passed away, she died in my arms.	- Multiple traumas - Terrorist attack - Childhood sexual and physical abuse - Victim of stabbing - Nonchalant attitude - Communication about triviality of events - Positive response - Learned to control emotion - Catharsis

		I've seen about 6-7 people die, physically dying, in my arms. I saved this woman before; I hate women getting hit, that's one thing I hate, is men hitting women. That's' one thing I've always been brought up not to hit women. And this woman was getting beaten and beaten and beaten and beaten, and I mean she got hit round the head with a traffic cone; this bloke tried to run her over with a car, so I stopped it, got in front of the car, dragged him out the car, beat the shit out of him, had her in my arms, rung the ambulance, and she died in my arms. And I started crying my eyes out. I didn't even know the woman ya know what I mean. […] Walking over the road one day and, err, I see two cars colliding and one person come flying out the window. My grandad, err, put a walking stick across my leg and it snapped in three pieces. Err, he held me over Dover cliff. He said have I been taking drugs; I said no. Erm my grandad used to spank me all the time so I'd bruise. Erm he done a lot of shit what I'm not pleased about, but what the heck, it's happened, it's happened, there's no point dreading on the past. […] He's dead and it don't really bother me to be honest. […] I told my nan, she asked me what was wrong with me, and obviously I told her, she started crying, started going sick so she rung the old bill. […] It started at the age of 8 until err 13, then after that…, I didn't know what was going on, I didn't know what he was doing to me, d'ya know what I mean. But, obviously, I've learnt more about myself, so I've learnt, like, how to control my anger, how to control my emotions; if I share it I feel much better, which I have and I feel much better in myself. Erm and there's no point in dreading up the past, if you keep dreading up the past you're just going to lead the road of crime or drugs to get rid of that pain inside of you. So I've stopped all that and started sharing it. […] If you keep dreading up the past you're just going to put yourself in a predicament that you're going to fuck your life up, but if you carry on with the future, and think about the future and what you want for your future you'll stop thinking about it. What's done it done, you can't change what's been done. All you can change is your future.	

		[…] it's like if you keep blaming people, the only person you can blame is yourself. if you've been blaming them other people the rest of your life, when actually it's you to blame because you're the one that's been putting yourself in that predicament in the first place. I'm not all bad person ya know. […] I'm not even supposed to be in jail now, I got banged for something, and here I am. And I got found Not Guilty because she was lying and now I'm just waiting on housing accommodation out there to get me out of here. Then after that I'll be going straight on to, erm, railways. And obviously I might want to go to university as well, to see what University does for me; but see what happens. Everything, everything, seeing people die, dying in my arms, what happened with my Grandad, everything really. But now it don't really hit me in the slightest place. […] it is what it is, at the end of the day. [Re: chin incident] It was just a random thing, he was pissed up, I was pissed up, got in to a bit of an argument err pulled out a knife and stabbed me in the chin. It was one of them Swiss army knives; stabbed me in the chin, then obviously I beat 2 ton of shit out of him and I've knocked him out, and err I've laid on top of him and piled blood on top of him and then obviously I bled right out. And err, I can't remember after that, after that I couldn't remember. […] Yeah I passed out, I lost too much blood, I lost 4 pints of blood, you only have 8 pints of blood in your body, and I lost 4 pints of blood and obviously they had to pump blood into me on arrival and everything.	
Participant 17 (14/11/16) Recording ID: DS350012.D (50mins 6secs)	Gang member (Eurogang criteria & self-nomination)	"I've had 2 neck shots, I've been stabbed in my neck twice, I got stabbed there (points to arm), stabbed in the back. I've been through a lot. I can't lie to you innit. But I don't really like talking about it. I didn't want all this." "There might be one year where you make like…make a lot of money, or you do something and, obviously everyone starts talking. So when they're talking and if your enemy hears that you've got certain things and he ain't got it, he's going to come for you. […] He's going to	-

		try and take them. So if that means stabbing you, or a bunch of cats shooting you or whatever, it will be done. Because right now everyone wants a name no one really wants the money. Everybody want to be known as 'ah that guy shoots his gun', I don't want to fuck with that guy because he's going to shoot me." "I didn't want to do none of this, none of these things, Like, my main thing was to join up do our thing, get money and go but you see it's never ever like that. Loads of other obstacles come. Like you could be going to do this but then you see another group and then this guy looks at that guy and that a whole war already because he got so much people around you. Like I don't really condone violence, if you understand what I mean, but sometimes…certain people might be pushing you, pushing it, pushing it, and you might think the only way I can deal with this now is if I do something. So that's what gets a lot of youths in trouble nowadays because no one wants to be a punk, no one want to be like he done this and I never done that […] like if I'm a victim of a crime I can't let it go."	
Participant 18 (21/11/16) Recording ID: DS350013.D (7mins 16secs)	Non-gang member	No 'worst event'	- Despite experiencing several different types of events - Normalisation of trauma
Participant 21 Recording ID: DS350021.D	Non-gang member	No 'worst event'	- Despite experiencing several different types of events - Normalisation of trauma
Participant 22 Recording ID: DS350022.D	Gang member (Eurogang criteria and	No 'worse event'	- Despite experiencing several different types of events

	self-nomination)		- Normalisation of trauma
Participants 25 Recording ID: DS350023.D	Gang member (Eurogang criteria only)	No 'worst event'	- Despite experiencing several different types of events - Normalisation of trauma
Participant 27 (29/11/16) Recording ID: DS350014.D (43mins 53 secs)	Gang member (Eurogang only)	The case, the reason why I'm in prison, the stabbing that I witnessed. […] I was accused of stabbing someone else, but I'm already sentenced so it doesn't change anything me lying to you, I'm being honest. It's not like you're a judge or something. […] Basically, this is how it happened. Me and my friend was coming back on the train, and as we was coming back from Gillingham an area I've never been to before; I've never been to Kent. I was on the train back to London, to my friend's house, and on the way back there was 2 drunk men, like, and they was drunk, drinking Budweiser and that. So one of them smacked the bottle on my head, I dropped to the floor on the train, and as I stood back up again to try and punch them, punch them, punch them, I see my friend with scissors, not even a knife, scissors, stabbed him, stabbed him, stabbed him, and as he's stabbed him, I'm punching someone, and he stabs me by accident. […] It's fucked up still, but he stabbed me in the hand and when he stabbed me in my hand I've noticed the other guy, he's bleeding out man, he's got all stab wounds all over him, and I'm just like 'whoah' [unintelligible], I'm just thinking 'Fuck, my life is over, I'm fucked, I'm going to prison innit'. So my blood is going on the floor, and my friend he started darking out, started running away and got in a cab, and he pays for the cab and because my blood was found there they blamed it on me and I didn't give up my friend, which was a stupid thing, but I didn't give him up. So that's the reason I'm in prison. You may not believe me, but it's the truth. There's no point in me lying to you, it won't change anything all. I gave you permission to check my record. I've never been in trouble with the police ever in my life before. This is my first time, and it's for something I didn't even do. And I'm in prison for something I didn't even do. It just feels mad, I don't even know how to explain it. It just feels fucked up, but I've just got to deal with it.	- Offence/perpetrator-induced trauma - Multiple modality (perpetrator, victim, witness) - Single event - Strong emotional reaction - Loyalty to friend - Feeling of futurelessness - Anger - fatalism - Blaming others

		[…] I didn't really know what was happening, I thought my friend was punching him as well, so I thought we was both punching him up in the corner for what he did, but then he was getting stabbed. And then I just felt that stab, and when I felt that stab yeah, and I dropped back to the ground, and then I see my man and he was wearing a shirt, so I just looked up like that, and I see all blood patches there, there, there, and his friend just standing in the corner saying "Alfie!!", erm, not Alfie, saying "Ryan, Ryan, Ryan!! And then they pulled the emergency cord, they got off the train, and they started blowing, then I started feeling the pain, and I was like "argh shit I got stabbed as well", and I was thinking they stabbed me, but then I realised later on, he told me, he stabbed me and It was by accident. I was angry, angry with him, we had a couple fights still […]. Yeah cause he fucked up my life basically. I've never seen him never stab no one, I didn't even think he had it in him to ever stab no one. So, I'm thinking 'why you doing it, when you're with me fam', like why are you putting me in this situation, when it's you, and you don't even want to admit what you done. I can't just give someone up innit, I can't be a snitch basically. But, it sort of will affect my life, and it has affected my life in a really negative way but it's a sense of, like, cold, but yeah he fucked me over.	
Participant 29 (06/12/16) Recording ID: DS350015.D (8mins 23secs)	Non-gang member	"[referring to his brother] Well, I found him dead last year. After like all the autopsy and that they said it was accidental, he died accidental but yeah […].I was happy really, ya know what I mean, that it weren't drugs. […] before, like, years ago he was a user, but he ain't now, he's been clean for years, but, like, that's what I thought it might have been, so does my mum."	- Witnessed death of a family member - Consolation it was an accidental not drug-relate
Participant 31 (15/12/16) Recording ID: DS350016.D (7mins 3secs)	Gang member (Eurogang criteria only)	When my brother died and my grandad died, that was the most traumatic time of my life. […] My brother took, got hold of my dad's sleeping tablets and he munched 'em all up and he didn't wake up the next morning. And my grandad, he didn't even know he was going into to hospital, went in for a bypass, come through the bypass, but caught a disease from the hospital and he died of an infection. [referring to brother] he was 4 years old d'ya know what I mean, he was crying all night long and I was the one that got him to sleep, but obviously I got up the next morning and didn't notice nothing really because I was only a kid, went	- Accidental death of brother - Guilt about not realising he'd passed away

		downstairs, had breakfast and then my mum was like 'go and get your brother'. And err went up there and couldn't wake him up, and then he came down in dad's arms and did CPR on the floor.	- Guilt about not being with grandad when he died
Participant 33 (22/12/16) Recording ID: DS350017.D (12mins 23secs)	Non-gang member	Childhood. […] She used to go out, I don't know how she managed to do it, probably whoring herself out or something, but she used to go out to get money, and she used to lock me bedroom, erm, with like a bottle to piss in, and she'd come back, like, sometimes a couple days later, sometimes a couple of weeks later. When I was 10 I went in to foster care, she had a social worker from when I was 8 to when I was 10, but they used to walk in step over all the beer cans and needles, tick all their boxes and walk back out like everything was alright. And one day I had a sleep over at someone's house, erm, up til that point I thought everything she done to me was what happened to everyone else behind the door; I thought it was normal, but after this sleepover I saw the way, how different my life was to them and I decided I had enough. And if they weren't going to take me away from her, I went down to the office, the social services office, I said I'm not fucking leaving until you sort it out, and they put me in foster care. […] I think of It as, all that stuff she done to me, she must of known that it was wrong, because an adult knows what's wrong don't they. All the stuff she done to me is unforgiveable, and I've got 2 kids of my own, and there's no way in hell, over my dead body, that I'd let her near them. I used to drop my kids of at school and worry all day about how they was getting on, things like that. I don't know how she could live with herself every day. […] I used to worry, like, she used to overdose like 2 to 3 times a week, and I used to have to call an ambulance out or something, and she'd have to go to hospital and I'd have to go with her. But I used to always worry that she'd do that somewhere else, outside, while I was locked in my house. And then obviously no one would know I was there. That used to worry me quite a lot. [unintelligible]. […] She used to beat me up a lot, erm, when she was drunk. Me her and my dad lived in Blackpool, and when I was 3 she got in debt with people for drugs, and she took me and	- Maltreatment and neglect - Complex trauma - Exposure to alcohol and substance abuse - Unable to forgive mother - Realising the extent of wrongdoing after having own children - Unable to comprehend action of mothers - Role reversal - Worry mother would overdose - Debt - Physical violence from mother - Transient lifestyle.

		moved to London to get away from the people she owed the money to. And err we moved in to like a hostel, like an emergency accommodation hostel for a couple of nights. I think it was quite a lot of money she owed cause they found out where we was living within like the same day, and err they kicked the door in a beat both of us up.	
Participant 34 (23/12/16) Recording ID: DS350018.D (9mins 58secs)	Gang member (Eurogang criteria)	My grandad got cancer and he died when I was young.	- Death of a loved one - Natural causes - No overt emotional reaction
Participant 35 (04/01/16) Recording ID: DS350019.D (38mins 46secs)	Gang member (Eurogang criteria)	I've been stabbed 7 times, I got stabbed right through my hand there (points to hand), stabbed right through my forearm there (points to arm), right through my side, in my back, through my leg, yeah, serious. […] 4 of them was related to my business, and 3 of them was an ex-girlfriend with bi-polar. She stabbed me through my hand, through my forearm, and through my side, yeah. Crazy girl. I didn't even know, I was seeing her for 2 years. I went round to the flat we had together, my mate Charlie come down from Medway, one of my friends from Medway, he come down. He said 'come on, shall we have a couple games of pool?', as I'm walking out, she says "babe I feel like my medication isn't working". I was like 'what do you mean your medication isn't working?', but I just brushed it over my head, which I fucking shouldn't of I know now. I've gone out with Charlie, come back with Charlie after being up the Snooker hall all night in Canterbury and she's just stood there crying her eyes out, and I'm like 'what is the matter with you?'. She was like 'I know you're with another girl rah rah rah'. I said "Louise darling, I left with Charlie to have a game of pool and I came back with Charlie, Charlie's going to sleep on the sofa tonight and get the train back in the morning because it's late, what the hell are you on about, seriously, what are you on about?!". And she started going mad, I said "look, I don't argue with girls, you're a woman, I don't get no satisfaction from screaming and shouting at a little woman", ya know what I mean, like, I've walked into the bedroom and said "look, seriously, you need to go and see a doctor or something, because you're just stood there crying your eyes out, I haven't done anything Lou, here take my phone". I give her my phone, I went 'have my phone, yeah', I'm going to	- Stabbed several times - Drug-related violence - Interpersonal violence with partner (she stabbed him) - Stabbed by in fellow prisoner

		get some clothes out the wardrobe, I'm going to go and book me and Charlie into the fucking Abode hotel, one of the hotels in Canterbury, I'm going to come back in the morning. I thought she'd be fine with that, she can go through my phone, she can ring every fucking number on the phone, she can do whatever she wants, d'ya know what I mean, you got 24 hours to do what you like with that phone. If there's anything on there, or any girls on there, you can ring every single fucking girl and say 'look I'm Aaron's girlfriend', you can research everything, do whatever the hell you like. I thought that would have been fine, d'ya know what I mean. As I've come out the bedroom with a pile of clothes, she's stood there with her hand behind her back, she's like "I know you've done something, I know you've done something!". The worst thing I did I laughed. […] I'm the sort of guy, If I've done something I will tell you. I'm not with a girl to go with another girl, d'ya know what I mean, I'm not like that. If I'm with somebody the day I look at another girl the way I look at you, then I'll you it's not going to work because I haven't got that attraction with you anymore. Life's too short to fuck around like that innit. My dad done it to my mum, and it ruined my mum, so I would not do that, after 15 years of marriage it killed my mum, like, it fucked my mum up, and I wouldn't put a woman through that. I had to hold my mum when my mum was on the fucking floor in pieces finding out that my dad was cheating. I wouldn't want to put a girl through that. So I said "I'm just going to go to the hotel alright, I'll be back in the morning", she said you "you ain't going fucking nowhere", and I went "what?!" and that's when I laughed and I went "what do you mean I'm not going anywhere?" Charlie is behind here doing this [making hand signals to stop] saying "no Aaron, no Aaron", and obviously Charlie knows she's got a knife behind her back, and I went "listen, I'm going out that door, OK, bye bye, Charlie c'mon". Charlie is in a predicament because I'm in the bedroom, then we got the hall way, then it's the front room slash kitchen, and he's in there so he's thinking 'Fuck, Aaron's going to walk out, she's got this knife'. She just come straight at me […] she rammed it right through my hand, and luckily my arm was like that otherwise if my arm was flat it would of went in to my artery and I would have been dead within 2 minutes. I would have been dead in 120 secs flat, and she stabbed me in the side, but luckily it didn't hit anything, d'ya know what I mean, I was like "fuck!".	

		[...] I got stabbed in the neck in here, in prison on the walkway outside healthcare, look. I got stabbed in the neck right there, with a made-up knife. All over nothing, absolutely nothing, I knew the kid my whole life, he lost his plot on spice. My mum took him in when he was 13 years old. I knew him from a kid, where we was brought up on the Spring Lane estate, his mum has mental issues, right. She used to chuck him out every other week. And this one week he was walking through our road crying his eyes out with 2 black bags. My mum went Benjamin get in here.	

Note. The names of those mentioned in these transcripts have been changed to protect participants' identity